

# ISSUE REPORT

ROK - Japan Joint Research Report  
Possibilities of Northeast Asian Economic Cooperation :  
Inter-City Cooperation, Energy, and Finance

한일 공동연구 보고서  
동북아시아 경제협력의 가능성:  
도시간 협력, 에너지, 그리고 금융

日韓共同研究報告書  
北東アジア経済協力の可能性  
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## Summary

### 1] Inter-City Cooperation

#### 1. Trans-border City Cooperation in the Pan Yellow Sea Region: OEAED Practices and Lessons for the Future (Japan)

The Organization for East Asia Economic Development (OEAED), established in 2004, is a leading organization in the promotion of city cooperation in Northeast Asia. Since its inception, the OEAED has promoted cooperation in the fields of manufacturing, logistics, the environment and tourism, based on five key projects including establishing a regional 'East Asia FTA' and turning the Pan Yellow Sea Region into a model environmental region.

In order to turn the OEAED's example into sustained city cooperation, it is necessary to respond to new demand for cooperation and reflect this in the organization's activities. Furthermore, each member city must share the burden of responsibility in a fair manner, and active support is required from the central governments of each country involved.

#### 2. Exploring the Viability of City Alliances: A Strategy for Promoting Multinational City Cooperation (South Korea)

Solving the contradictions of modern nation-states requires cooperation between not only countries but also between international cities. Nation-states establish social order, while cities enjoy economic freedom and a significant level of autonomy. Encouraging responsible civic participation by citizens and the creation of international networks helps to contribute to economic development and greater citizen welfare, while also unleashing creativity and promoting innovation.

When it comes to international city cooperation, there is agreement on the problems common to all cities, and cities are largely free from the military, security and political interests that limit the scope of cooperation on a national level. The first step is focusing on city cooperation between ports. Logistics port cooperation can be achieved through creating logistics networks based on train ferries that connect the land and sea, while cruise port cooperation can focus on linking cruise ports in South Korea, China, Japan and Russia. In terms of institutional cooperation, viable projects include simplifying immigration and visa procedures and adopting a system that allows vehicles from South Korea, China and Japan to be driven in all three countries.



## **2] Energy Cooperation**

### **1. A Proposal for Energy Cooperation in Northeast Asia (South Korea)**

Patterns of energy supply and demand are changing due to climate change and the response it necessitates, a revolutionary increase in electricity supply and the fact that the 4th Industrial Revolution requires the establishment of a new energy base. Accordingly, fossil fuels can serve as a bridging energy source during the energy transition in the mid-to-long-term. Minimizing the costs of this process is an important strategic goal for Northeast Asian countries when it comes to energy security.

Possible methods to revitalize the natural gas market in Northeast Asia include establishing a regional natural gas trading hub and pursuing cooperation on LNG bunkering. In terms of cooperation to establish an energy grid in Northeast Asia, building a natural gas network or power super grid are options to consider. Through cooperation, Northeast Asian countries need to play the role of market supporters rather than regulators, and energy consuming countries in the region need to form a consultative group or other joint entity to facilitate dialogue.

### **2. The Future of Energy Cooperation in Northeast Asia (Japan)**

Establishing a LNG spot market is key to the liberalization of electricity in Northeast Asia, and access to LNG terminal space is the most important factor in achieving this. Discussions are needed on how to create a rental market for LNG terminal space. Establishing an efficient market and effective mechanism for determining price is the first step towards assessing the viability of building a power super grid in Northeast Asia. Ultimately, Northeast Asian countries need to apply new methods to introduce a rental market for LNG terminal storage space in order to establish a LNG spot market. As part of this, Northeast Asia can learn from Europe, which is currently taking active steps to liberalize its electricity market.

## **3] Finance Cooperation**

### **1. The East Asian Community and the Butterfly Project (Japan)**

Regionalism is on the rise in the East Asian region, with greater substantive regional integration based on increasingly interdependent economic ties. In line with this, a plan to establish an East Asian



Community has existed since 2000, but there has been a lack of discussion on bringing this plan to fruition.

It is likely that the formation of a new economic community will be led by China. However, the development of new regional systems such as China's One Belt One Road initiative has led to competition between competing systems, creating a situation where some may be eliminated. Against this background, regional discussions are needed on the scope, goals and timeframe for establishing an East Asian Community. In addition to this, the private sector has an important role to play. Since the role of expert groups is growing in importance, private sector research in East Asia needs to be strengthened.

Meanwhile, Yeosijae has put forward the Butterfly Project as a vision for creating an East Asian Community. The Butterfly Project is a future vision that includes linking the North Pole Passage with the One Belt One Road initiative to create a new logistics network that connects the world. Yeosijae believes that this project should begin with cooperation in Northeast Asia, which lies at the heart of this connected world and would form the center of the 'butterfly'.

The viability of the Butterfly Project depends on the viability of establishing a regional community. The first step in assessing this is examining the circumstances surrounding plans for a regional community, what those plans contain and what steps have been taken to make such plans more concrete.

In light of the current state of plans to establish an East Asian Community, is the Butterfly Project viable? Answering this question requires comparing the Butterfly Project with a viable plan for an East Asian Community to clarify the goals and scope of the project. Furthermore, establishing framework for city, energy and finance cooperation is also important. To advance the Butterfly Project, discussions are needed on which country will serve as a linchpin of the project, as well as the scope and direction of cooperation on a government level.

At the same time, another question for consideration is whether financial cooperation to date in East Asia can be separated from existing cooperative frameworks and integrated with the Butterfly Project. Demand for development finance is high in this region, and if the North Korean issue was resolved and North Korea became integrated with the regional economy, it could be worthwhile for South Korea to consider taking the lead in establishing an independent financial institution. Ultimately, the Butterfly Project needs to focus on the task of actually establishing a regional economic community instead of simply discussing ideas on paper.

In particular, the study attempts to identify mutually win-win financial cooperation areas and focus on the importance of: financial market opening and development, developing global financial center, promoting currency internationalization, financing for investment in regional infrastructure



development and connectivity, and maintaining regional financial stability are identified as a mutually win-win areas of financial cooperation. Implications of regional financial cooperation are discussed not only for China, Japan and ROK, but also for Mongolia, Russia and the DPRK. It is emphasized that financing investment for regional infrastructure development and connectivity would be important to promote cross-border economic exchanges in the region.

## **2. The Current State of Financial Cooperation in Northeast Asia and Proposals for the Future (South Korea)**

Both the Chiang Mai Initiative Multilateralization (CMIM) and Asian Bond Markets Initiative (ABMI) have been implemented in East Asia (ASEAN+3). Through continued financial cooperation over the last 20 years, ASEAN+3 has made significant progress in developing regional institutions in this sector, but the region still lacks independent capability

Further policy and diplomatic efforts are needed to boost financial cooperation in East Asia. In policy terms, there is a need for South Korea, China and Japan to work together to overcome the problems caused by the influence of the US dollar in the global financial system, including the burden created by foreign currency reserves, the threat of being excluded from the system and the difficulty of implementing independent monetary policy. Possible methods to achieve this include 1) developing South Korean, Chinese and Japanese financial hubs, including cryptocurrency trading hubs, into international financial centers or 2) expanding public-private partnerships in infrastructure finance and establishing a development bank to prepare for unification and 3) expanding transactions and financial asset investment in regional trade with a view to globalizing the currencies of South Korea, China and Japan.

In terms of diplomatic efforts, 1) creating a sense of ‘we-ownership’ in Northeast Asian financial cooperation, 2) the necessity of reflexive contextualization of the “discourse of moral hazard” toward potential recipient and 3) creating a shared vision that allows the region to go beyond ‘institutional survival’ and make use of models of financial cooperation from other regions.

The long-term goals for East Asia are setting up a regional financial safety net, developing capital markets and establishing a new system of financial governance that incorporates the functions of development finance. Establishing an East Asia Financial Innovation Committee consisting of members from the both the public and private sector has been put forward as a suggestion for oversight of this governance system. Achieving these goals is largely reliant on the formation of a sense of community, trust and a shared vision.



## 요약

### 1] 도시간 협력

#### 1. 환황해지역에서의 국경을 넘어선 도시간 협력: OEAED의 실천과 앞으로의 시사점 (일본)

동북아 도시 간 협력을 추진하는 선구자 격 기구인 동아시아 경제 교류 추진기구 (Organization for East Asia Economic Development, 이하 OEAED)는 2004년 설립 이래로 지역 한정 동아시아 FTA 창설 추진, 환황해 환경 모델 지역 창출 등 5개 주제를 바탕으로 '제조', '물류', '환경', '관광'의 4개 분야에서 협력해 왔다.

OEAED의 사례를 지속적인 도시간 협력을 추진하기 위해서는 새로운 협력 요구에 관심을 가지고 조직의 사업 활동에 이를 반영하는 것이 필수적이다. 또한 각 회원 도시가 공평한 책임을 분담하고 각국 중앙 정부의 적극적인 지원이 요구된다.

#### 2. 도시연합의 가능성 모색 : 다국적 도시간 협력 추진 전략(한국)

근대적 국민국가의 모순을 해결하기 위해서는 국가 간 협력뿐만 아니라 국제적 도시 간 협력이 요구된다. 국민국가가 질서를 수립해주고 도시는 경제적 자유를 누리며 상당한 정도의 자율을 즐기며 책임 있는 시민의 참여를 활성화하여 국제적 네트워크를 구성하면서 경제적 발전과 시민의 복지향상에 기여하고 창의력을 발휘하고 혁신을 도모할 수 있다.

국제적인 도시 간 협력에 있어서 도시들만의 공통적인 문제들에 대한 합의가 존재하며, 국가 간의 협력을 제한하는 군사, 안보적, 정치적 이익에서 상대적으로 자유롭다. 일차적으로 항만협력에 중점을 둔 도시협력이 필요하다. 물류항만 협력에 있어 육·해상 복합수송인 철도페리를 통한 물류수송, 크루즈항 협력의 경우 한중일러 크루즈항만 협력구축, 제도 협력에 있어서 입국절차나 비자발급 절차 간소화, 한중일 3국간에 차량 상호주행 적용 등이



추진 가능할 것이다.

## 2] 에너지 협력

### 1. 동북아시아 에너지협력을 위한 제언 (한국)

기후변화가 야기하는 도전과 그에 대한 대응의 필요성, 전기 공급의 획기적인 증대, 새로운 에너지 기반의 구축을 요청하는 4차 산업혁명으로 인하여 에너지 수급 패턴에 변화를 불러왔다. 에너지 전환기의 ‘과도적 에너지원’으로서 천연가스에 대한 의존을 늘리는 것은 중단 기적 대안이 될 수 있다. 아울러 이 과정에서 소요될 비용을 최소화하는 것이 동북아 각국의 에너지안보를 위한 중요한 전략적 목표이다.

동북아시아 천연가스 시장의 활성화 방안으로 지역 내 천연가스 트레이딩 허브 구축과 LNG 병커링에 관한 협력을 공동으로 추진할 수 있다. 동북아시아 에너지 연계망 협력과 관련해서는 천연가스 연계망 구축 및 전력 슈퍼그리드 구축을 검토할 수 있을 것이다. 동북아 각국은 협력을 통해 시장 규제자가 아닌 지원자의 역할을 강화하며 동아시아의 에너지 소비국 간 대화체 혹은 협의체를 구축해나갈 필요가 있다.

### 2. 동북아시아 에너지 협력의 미래 (일본)

동북아 전력 자유화의 열쇠인 LNG 현물 시장을 형성하기 위해서는 LNG 기지 공간에의 접근이 가장 중요하다. 이 LNG 기지 공간의 임대 시장을 어떻게 만들 것인가에 대한 고민이 필요하다. 우선, 동북아 전력 슈퍼 그리드 건설의 채산성을 판단하기 위해 효율적인 시장의 건설과 가격 결정 방식을 판별하는 것이 선행돼야 한다. 결론적으로, LNG 스팟 시장의 형성에 있어 동북아는 협력을 통해 LNG 기지 공간의 임대 시장을 새로운 방식으로 도입할 필요가 있다. 동북아는 이미 활발한 전력 자유화가 진행되고 있는 유럽의 사례를



참고할 수 있다.

### 3] 금융 협력

#### 1. 동아시아 공동체와 나비 프로젝트 (일본)

동아시아지역에서는 깊어진 경제적 상호의존관계를 바탕으로 한 실질적 지역 통합이 이뤄진 가운데 지역주의가 고조되고 있다. 이에 따라 2000년대부터 동아시아공동체 구상이 제기되고 있으나 구축을 위한 협의는 아직 부족한 상태이다.

새로운 경제공동체는 중국의 주도 아래 등장할 가능성이 높다. 그러나 중국의 일대일로구상 등 새로운 지역제도의 전개로 추후 지역제도 간 경쟁과 도태가 발생할 상황이 전개되고 있다. 이러한 상황 아래 동아시아공동체의 범위, 목표로 하는 설립시기 등에 대한 지역적 논의가 필요하다. 이와 더불어 민간차원의 역할 역시 매우 중요하다. 전문가집단의 역할은 점점 더 중요해질 것이므로 동아시아지역의 다양한 민간 차원의 연구가 강화되어야 한다.

한편 여시재는 동아시아 공동체 비전으로 나비 프로젝트를 제시하였다. 나비 프로젝트는 북극항로와 일대일로를 연결하는 새로운 물류 네트워크가 전세계를 연결하는 미래 구사다. 이러한 새로이 연결된 세계의 중심은 나비의 중심에 있는 동북아의 협력에서 출발한다고 여시재는 전망하였다.

나비 프로젝트의 실현 가능성은 지역 공동체 실현 가능성에 좌우된다. 우선 아시아에서 지역 공동체가 어떤 경위로 구상됐는지, 구상의 내용은 무엇인지, 구상을 구체화하는 상황은 어떤지에 대한 검토가 선행되어야 한다.

동아시아 공동체 구상의 현재에 비추어 볼 때 나비 프로젝트는 실현 가능할까? 이에 대답하기 위해서는 실현 가능한 동아시아 경제 공동체와의 비교를 통해 프로젝트의 목적과 대상 지역을 명확히 해야 한다. 또한, 도시, 에너지, 금융 등 가능한 협력 분야에서의 협력 체제를 확립하는 것 역시 중요하다. 나비 프로젝트가 진행되기 위해서는 핵심이 될 국가와



정부 차원에서의 협력의 범위와 협력 방향에 대한 논의가 필요하다.

이와 더불어 기존 동아시아 지역을 대상으로 진전돼 온 금융 협력이 기존의 협력에서 분리돼 나비 프로젝트에 통합될 수 있는가에 대한 검토가 중요하다. 또한 지역 개발 금융에 대한 수요가 큰 이 지역에 북한 문제가 해결돼 북한이 지역 경제 공동체에 통합될 가능성을 전제로 한국이 이니셔티브를 가지고 독립적 금융 기관을 설립하는 것 역시 생각해 볼 가치가 있다. 궁극적으로는 나비 프로젝트가 단순 구상에서 그치는 것이 아니라 지역 경제 공동체를 실현하는 것에 초점을 맞춰야 한다.

구체적으로 봤을 때 동북아 금융시장 개방 및 개발, 글로벌 금융 센터의 설립, 한중일 통화의 국제화 추진, 지역 인프라 개발 및 커넥티비티에의 투자, 금융 안전망 강화 등은 유익한 협력 방안으로 검토할 만 하다. 중국, 일본, 한국 이외에 몽골, 러시아, 북한에 대한 지역 금융 협력의 함의에 대해서도 논의한다. 지역 인프라 개발 및 커넥티비티 투자를 위한 금융은 주변지역에서의 경제적 교류를 활성화시킬 수 있다.

## 2. 동아시아 금융협력의 현황과 제안 (한국)

동아시아(아세안+3)에서는 치앙마이 이니셔티브 다자화(CMIM)와 아시아채권시장 이니셔티브(ABMI)가 추진되었다. 아세안+3은 지난 20여 년간 지속적인 금융협력을 통해 일정수준 이상의 역내 금융협력의 제도적 발전을 이루어 냈으나 아직 독립적인 역량을 갖추었다고 보기가 어렵다고 평가한다.

동아시아 금융협력의 활성화를 위해서는 정책적 노력과 외교적 노력이 필요하다. 먼저 정책적 측면에서는 현재의 글로벌 금융시스템하에서 달러의 영향으로 발생한 문제(외환보유액의 부담, 시스템에서의 배제 위협, 독자적인 통화정책 수행의 어려움)를 극복하고 한중일 금융협력을 활성화해야 한다. 이를 위해서는 1) 가상화폐 거래허브 등, 한중일의 금융허브를 국제적 금융센터로 육성하거나 2)인프라금융에서의 민관파트너십 확대와 통일에 대비한 개발은행을 설립하는 것, 그리고 3)한중일 화폐의 국제화를 위한 역내무역에서의 거래 및



금융자산 투자 확대하는 것을 검토 할 수 있다.

외교적 노력으로는 1)동아시아 금융협력에 대한 “공동주인의식”(We-Ownership)의 확립, 2) 동아시아 금융협력에 있어 간헐적이지만 잠재적 수혜국을 향한 “도덕적 해이 담론”의 성찰적 맥락화와 회원국 간 신뢰 제고를 도모하는 외교의 전개, 3)동아시아 금융협력이 “제도적 생존”을 넘어 다른 지역의 금융협력에 모델로 제시될 수 있도록 비전을 공유하는 것이다.

동아시아의 장기적 목표는 지역내 금융안전망, 자본시장 발전, 개발금융 기능을 통합하는 새로운 금융 거버넌스 설립에 있다. 이러한 거버넌스의 컨트롤타워로 공공과 민간 회원으로 구성될 동아시아금융혁신위원회의 설립을 제시한다. 목표의 실행은 공동의식, 신뢰, 공유된 비전에 크게 의존할 것이다.



## 要約

### 1] 都市間の協力

#### 1. 環黄海地域での国境を越えた都市間の協力：OEAEDの実践とこれからの知見

(日本)

東北アジア都市間の協力を推進する、先駆者格機構である東アジア経済交流推進機構(Organization for East Asia Economic Development, 以下OEAED)は、2004年設立以来、地域限定東アジアFTA の創設推進、環黄海環境モデル地域の創出等、5つのテーマを基に‘製造’‘物流’‘環境’‘観光’の4つの分野において協力してきた。

OEAEDの事例を持続的に都市間の協力を推進するためには、新しい協力への要求に関心を持ち、組織の事業活動にこれを反映することが必要である。また各会員都市が公平な責任を分担し、各国中央政府の積極的な支援が要求される。

#### 2. 都市連合の可能性の模索：多国籍都市間の協力推進戦略(韓国)

近代的国民国家の矛盾を解決するためには、国家間の協力だけでなく、国際的な都市間の協力が要求される。国民国家が秩序を樹立し、都市は経済的自由を享受しながら、ある程度の自立を味わいながら責任ある市民の参与を活性化し、国際的ネットワークを構成しながら、経済的發展と市民の福祉向上に寄与すると共に、創造力を発揮し革新を促す事が出来る。



国際的な都市間の協力において、都市たちだけの共通問題に対する合意が存在し、国家間の協力を制限する軍事、安保的、政治的な利益から相対的に自由といえる。まず港湾協力を重点を置いた都市協力が必要だ。物流港湾の協力において、陸・海上複合輸送である鉄道フェリーを通じた物流輸送、クルーズ港協力の場合、日韓中露クルーズ港湾の協力の構築、制度の協力において入国手続きやビザ発行手続きの簡素化、日韓中3国間に車両相互走行の適用などが推進可能とされる。

## 2] エネルギー協力

### 1. 北東アジアエネルギー協力のための提言(韓国)

気候の変化が引き起こす挑戦と、それに対する必要性、電気供給の画期的な増大、新しいエネルギー基盤の構築を求める第4次産業革命によるエネルギー需給パターンに変化を及ぼしてきた。エネルギー転換期の‘過渡的エネルギー源’として、天然ガスに対する依存を増やすことは中短期的代案となる。同時に、この過程で必要とされる費用を最小化する事は、北東アジア各国のエネルギー安保において重要な戦略的目標である。

北東アジア天然ガス市場の活性化法案として、地域内天然ガストレーディングハブの構築と、LNGバンカーリングに対する協力を、共同で推進する事が出来る。北東アジアエネルギー連携網の協力においては、天然ガス連携網の構築及び電力スーパーグリッド構築を検討する事が出来るであろう。北東アジア各国は、協力を通じた市場規制者ではなく、支援者の役割を強化し、東アジアのエネルギー消費国間対話体、もしくは協議体を構築していく必要性がある。



## 2. 北東アジアエネルギー協力の未来(日本)

北東アジア戦略自由化の鍵となるLNG直物市場を形成するためには、LNG基地内への接近が最も重要である。このLNG基地内の賃貸市場をどのようにつくるかに対する探求が必要である。まず、北東アジア電力スーパーグリッド建設の採算性を判断するために、効率的な市場の建設と価格決定の方法を判別する事が優先されなければならない。結論的に、LNGスポット市場の形成において、北東アジアは協力を通じてLNG基地内の賃貸市場を、新しい方法で導入する必要がある。北東アジアは、既に活発な電力自由化が進んでいるヨーロッパの事例を参考とする事が出来る。

## 3] 金融協力

### 1. 東アジア共同体と蝶々プロジェクト(日本)

東アジア地域では、より親密になった経済的依存関係を基に、実質的な地域統合が形成された中で、地域主義が高まっている。これにより2000年代から東アジア共同体構想が提起されてきたが、構築のための協議は未だに足りない状態である。

新しい経済共同体は、中国の主導のもと表れる可能性が高い。しかし中国の一対一路構想など、新しい地域制度の展開によって、その後地域制度間の競争と転落が生じるという状況が発生している。このような状況下で東アジア共同体の範囲、目標とする設立時期などに対する地域的議論が必要である。これと共に民間次元の役割もとても重要となる。専門家たちの役割はより重要になってくるため、東アジア地域の様々な民間次元での研究が強化されなけ



ればならない。

同時に、與時齋は東アジア共同体ビジョンとして蝶々プロジェクトを提示した。蝶々プロジェクトは、北極航路と一対一路を連結する新しい物流ネットワークが、全世界を連結するという事を想定した未来ビジョンである。このような新しく連結された世界の中心は、蝶々の中心である北東アジアの協力から始まると與時齋は見たのである。

蝶々プロジェクトの実現の可能性は、地域共同体実現の可能性に掛かっている。まずはアジアにおいて地域共同体がどのような経緯で構想されたのか、構想の内容は何であるのか、構想を具体化する状況はどうなのかに対する検討が優先されなければならない。

東アジア共同体構想の現在と照らし合わせてみる時に、蝶々プロジェクトは実現可能であるのか。これに答えるためには、実現可能な東アジア経済共同体との比較を通して、プロジェクトの目的と対象地域を明確にする必要がある。また、都市、エネルギー、金融など、可能である協力分野での協力体制を確立する事もやはり重要である。蝶々プロジェクトが進むためには、核心となる国家との、政府次元での協力の範囲・協力の方向性についての議論が必要となる。

これに伴い、既存の東アジア地域を対象に進んできた金融協力が、既存の協力から分離し、蝶々プロジェクトに統合される事は出来るのかについての検討が重要となる。また地域開発金融に対する需要が高いこの地域に、北朝鮮問題が解決され、北朝鮮が地域経済共同体に加わる可能性を前提に、韓国がイニシアチブをもって、独立的金融機関を設立する事、これもまた考えてみる価値がある。究極的には蝶々プロジェクトが単純な構想として終わるのでなく、地域経済共同体を実現する事に焦点を当てなければならない。

具体的には、北東アジア金融市場の解放および開発、グローバル金融センターの設立、日中韓通貨の国際化、地域インフラ開発およびconnectivityへの投資、金融セーフティネット



の強化が有益な協力モデルとして考えられる。日中韓に加え、モンゴル、ロシア、北朝鮮に対する地域金融協力の意義も考慮すべきである。とりわけ、地域インフラ開発およびconnectivityへの投資は、周辺地域における経済交流の活性化を促進する。

## 2. 東アジア金融協力の現状と提案(韓国)

東アジア(ASEAN+3)では、Chiang Mai Initiative Multilateral(CMIM)とアジア債券市場イニシアチブ(ABMI)が推進された。ASEAN+3は去る20年余りの間、持続的な金融協力を通じて、一定水準以上の域内金融協力の制度的発展を成したが、未だに独立的な力量を備えたとみる事は難しいと評価する。

東アジア金融協力の活性化のためには、政策的努力と、外交的努力が必要である。まず政策的側面では、現在のグローバル金融システムのもとで、ドルの影響によって生じた問題(外為保有の負担、システムからの排除の恐れ、独自の通貨政策遂行の難しさ)を克服し、日韓中での金融協力を活性化しなければならない。このためには、1) 仮貨幣取引ハブ等、日韓中の金融ハブを国際的金融センターとして育てたり、2) インフラ金融での民間パートナーシップ拡大と、統一に備えた開発銀行を設立する事、そして3) 日韓中貨幣の国際化のための域内貿易の取引及び金融資産の投資を拡大する事を検討する事ができる。

外交的な取り組みとしては、1) 東アジア金融協力に対する“共同主人意識(We-Ownership)”の確立、2) 東アジア金融協力において、断続的だが潜在的な被援助国に向けた“モラル・ハザード”の省察的脈絡化と、会員国の間での信頼向上を促す外交の展開、3) 東アジア金融協力が“制度的生存”を超え、他の地域の金融協力にモデルとして提示されるようにビジョンを共有する事があげられる。



東アジアの長期的目標は、地域内金融安全網、資本市場の発展、開発金融機能を統合する新しい金融ガバナンス設立にあるといえる。このようなガバナンスのコントロールタワーとして、公共と民間会員で構成される東アジア金融革新委員会の設立を提示する。目標の達成されるためには、共同意識、信頼、共有されたビジョンに大きく頼る必要がある。



## I. Inter-City Cooperation



## Ch.1. Trans-border Urban Cooperation in the Pan Yellow Sea Region: OEAED Practices and Lessons for the Future

**Erbiao Dai**

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### 1. Background and Purpose of This Study

Over the past three decades, international exchange between countries in Northeast Asia, including Japan, China and South Korea, has expanded significantly as a result of globalization. This includes foreign direct investment by corporations, international logistics, international tourism and immigration. Issues which affect long-term development across this region and the world, such as pollution and global warming, have also become more severe. Against this background, international cooperation that goes beyond national borders is gradually becoming more important.

Until now, international cooperation has largely been led by central governments. However, cooperation between central governments is no longer sufficient to meet the rapidly growing demand for international cooperation. In particular, when diplomatic disputes arise between two countries, cooperation between the central governments of those countries is sometimes suspended. Furthermore, as South Korea, China and Japan have engaged in decentralization by delegating power to regional governments, the role of key cities in economic development and regional cooperation has significantly grown, although there are differences between levels of autonomy. Against this background, it is becoming increasingly important for trans-border urban cooperation to supplement international cooperation led by central governments (OECD, 2006; OECD, 2009). But what cooperative systems and projects are necessary in order to achieve effective urban cooperation? Until now, little research based on case studies from East Asia has been carried out.

This research is a case study on the achievements and challenges faced by the Organization for East Asia Economic Development (OEAED), a leading organization in the promotion of urban cooperation in Northeast Asia. The paper is divided into four parts. The second part introduces the history, structure and main business activities of the OEAED. The third part evaluates and discusses the achievements of the OEAED as well as issues which are holding back the effectiveness of the



organization's activities. The fourth part puts forward proposals for promoting more effective urban cooperation in the future, based on lessons obtained from prior research and the OEAED's practices.

## 2. Organizational Structure and Main Activities of the OEAED

### 1) Background to Establishment of the OEAED

The OEAED was preceded by the 'East Asian City Conference' and 'East Asian Entrepreneurs Summit' that were established in 1991 with the goal of promoting urban cooperation in the Pan Yellow Sea Region (PYSR). Both organizations originally consisted of six cities; Kitakyushu and Shimonoseki in Japan, and their sister cities of Dalian and Qingdao in China and Incheon and Busan in South Korea. However, Tianjin and Yantai in China, Ulsan in South Korea and Fukuoka in Japan were later added, and in 2004 the OEAED was created as a platform for economic exchange. Since Kumamoto (the third largest city in Kyushu after Fukuoka and Kitakyushu) joined as an additional member in 2014, the OEAED has consisted of 11 member cities.

Although there are no specific criteria to be eligible for membership, a city should (1) in principle be located within the PYSR, (2) have a traditional relationship (such as being sister cities) with other member cities and (3) be of equal or similar importance to other member cities from that nation. The three South Korean member cities are all tier one administrative regions within the country and are classified as 'metropolitan cities.' Among the four Japanese cities, Fukuoka, Kitakyushu and Kumamoto are all 'cities designated by government ordinance', which is close to the equivalent of a tier one administrative region, while Shimonoseki, which is classified as a 'core city', is slightly lower in rank. Among the Chinese cities, Tianjin is a '*centrally-administered municipality*', a provincial level (tier one) administrative region, while Dalian and Qingdao are 'cities listed independently in the state plan', which have the *de facto* status of tier one administrative region in term of budget authority while Yantai is an important 'prefectural level' (tier two) administrative region. The geographic location, population and level of economic development for each city are displayed in Figure 1 and Table 1 below.

All OEAED member cities are port cities with convenient freight transportation and their own unique industrial characteristics, but they each face different challenges.

In the three South Korean cities (Incheon, Busan and Ulsan), the manufacturing industry is becoming more competitive globally, and Busan Port and Incheon International Airport are expanding their service capacity, but the size of the domestic market is limited. South Korea's low birth rate and aging population are contributing to the deepening problems of low consumer demand and excess

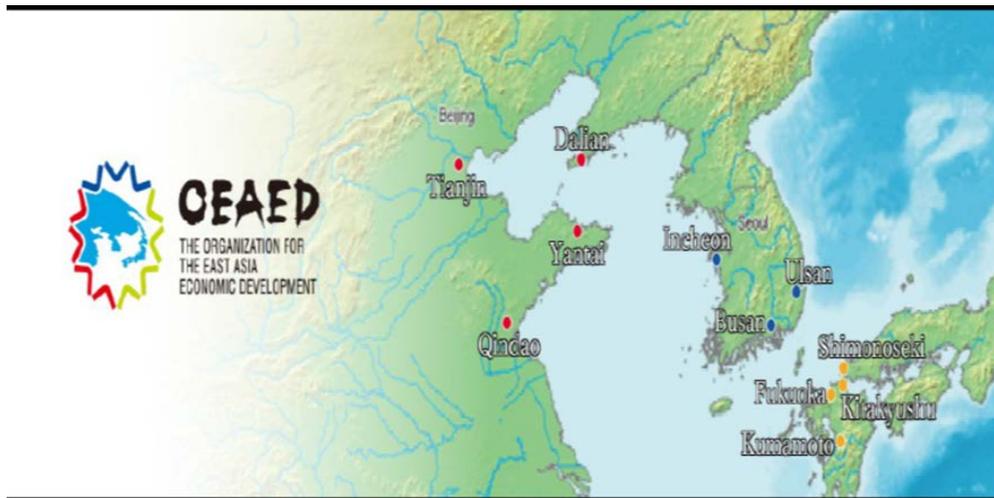


production capacity. This means that the country has no choice but to seek new markets overseas in emerging countries such as China.

In the four Chinese cities (Tianjin, Dalian, Qingdao and Yantai) industrialization and urbanization are taking place at a rapid pace, causing a high rate of economic growth led by investment and exports. However, these cities also face problems including ① excessive consumption of resources and energy, ② stagnating growth in exports due to low growth rates in export destinations, ③ environmental degradation and ④ industrial restructuring. These cities need to learn from the experience of advanced countries.

The four cities in Japan (Fukuoka, Kitakyushu, Kumamoto and Shimonoseki), which developed economically prior to the other two nations, are performing better than the Chinese and South Korean cities in terms of industrial technology and environmental protection policies, but have also been affected by the country’s low birth rate and aging population that are causing the domestic market to shrink. These cities need to take advantage of growth vitality in East Asia and cooperate with neighboring cities to seek mutual growth.

**Figure 1. Geographic location of the 11 OEAED cities**



Source: OEAED (2017)

**Table 1. Population, GDP and per capita GDP (PGDP) of OEAED member cities**



		Population	Population	GDP	GDP	PGDP	PGDP
		2005	2016	2005	2014	2005	2014
		1000 persons	1000 persons	million \$	million \$	US\$	US\$
福岡	Fukuoka	1,400	1,555	65,301	65,500	46,644	42,122
北九州	Kitakyushu	990	956	31,969	32,464	32,292	33,958
下関	Shimonoseki	290	270	8,115	9,300	27,982	34,445
熊本	Kumamoto	N.	733	N.	25,871	N.	35,294
大連	Dailian	5,650	6,838	26,132	119,314	4,625	17,449
天津	Tianjin	10,430	15,469	44,895	255,219	4,304	16,499
青島	Qingdao	7,410	9,097	32,732	143,314	4,417	15,754
煙台	Yantai	6,480	7,010	24,435	100,822	3,771	14,383
釜山	Busan	3,660	3,507	45,163	63,044	12,340	17,977
仁川	Incheon	2,640	3,000	37,002	59,398	14,016	19,799
蔚山	Ulsan	1,100	1,197	39,714	58,659	36,104	49,005

Source: Japan Statistical Yearbook, China Statistical Yearbook, Korea Statistical Yearbook, (2015-2017 edition, 2006-2007 edition) and official website of each member city

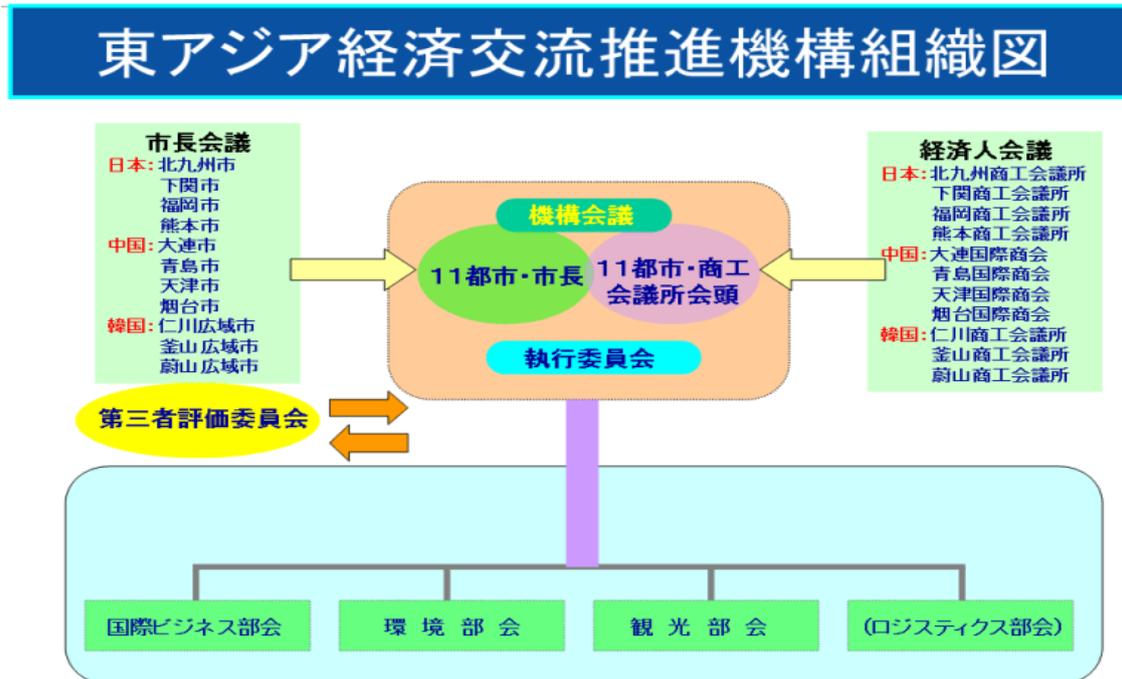
## 2) Organizational Structure and Main Activities of the OEAED

After being created in 2004, the Organization for East Asia Economic Development (OEAED) established the OEAED Council as a decision-making body, which is composed of the mayor and the chair of the chamber of commerce (or international commerce) from each member city. The Council Assembly is held biennially and hosted by member cities in turn. In addition, an Executive Committee was also established to prepare and support the Council Assembly. The Executive Committee is convened in years where there is no Council Assembly.

The OEAED takes a macro perspective and promotes the following projects within the region; ① establishing a regional 'East Asia FTA', ② turning the PYSR into a global environmental model region, ③ establishing a system for the creation of new businesses, ④ implementing a tourism brand strategy for the Pan Yellow and ⑤ creating a platform for technological exchange and fostering talented workers. Based on these five goals, four subcommittees were established to focus on manufacturing, logistics, the environment and tourism respectively. However, the International Business Subcommittee, which was re-organized in 2014, is an amalgamation of the Manufacturing Subcommittee and the One Stop Center Network Meeting that was launched in 2012. The current organizational structure of the OEAED can be found in Figure 2.



Figure 2. Organizational structure of the OEAED



Source: OEAED website

Under this structure, OEAED Council Assembly has been held biennially since 2004. Council Assembly is attended by the mayor, as well as the chair of each chamber of commerce (or international commerce) of each member city, and serve as an occasion for discussing and taking action on problems facing member cities as well as planning and implementing cooperative urban projects. In addition to the Council Assembly, the four subcommittees also meet once every year to discuss key issues in their respective sectors.

The Third Party Evaluation Committee, which consists of experts from Japan, China and South Korea, also meets annually. Members of this committee conduct periodic evaluations of all OEAED activities and offer suggestions for improvements or reforms.

### 3. OEAED's Achievements and Challenges

#### 1) Progress in the promotion of urban cooperation

Despite the many differences in systems, business practices and language between the three East Asian countries, the establishment and continued presence of the OEAED appears to have contributed



to the promotion of economic exchange, including international investment and trade within the whole Pan Yellow Sea Region, as well as the increase of urban cooperation. The achievements of four subcommittees can be summarized as follows.

Since being launched in 2004 as the Manufacturing Subcommittee, the International Business Committee has hosted three international roundtable meetings (in Tianjin, Incheon and Kitakyushu) and two joint exhibitions (in Tianjin and Yantai) in addition to annual meetings. The group also held ‘Member City International Business Officers’ Meeting’ to match businesses from each country together, helping to boost urban cooperation. Since 2012, the subcommittee has established One Stop Centers in each member city, facilitating the expansion of foreign direct investment (FDI) and international trade within the PYSR (AGI, 2017). In line with the current era of population aging, the subcommittee has recently been promoting growth of aging industry. In 2016, the subcommittee engaged in lectures, presentations of overseas case studies and inspections of health care and welfare facilities for the elderly during the 3<sup>rd</sup> international business meeting & exhibition held in Kitakyushu under the theme of nursing and welfare, receiving positive feedback from participants.

The Tourism Subcommittee has been holding an annual meeting every year in addition to conducting joint PR projects at international exhibitions since 2009, funded by a contribution of \$3,000 USD from each city. This joint participation project serves to promote tourist attractions in each city as well as improve the Pan Yellow Sea’s brand penetration. These PR activities and the establishment of a tourism information network have contributed to marked growth in international tourism between member cities and the three East Asian countries.

The Environment Subcommittee has held annual meetings and business roundtable meetings, as well as joint projects such as clean-ups of coastal areas and the ‘light down’ campaign. As part of a push to turn the PYSR into a ‘global environmental model region,’ Kitakyushu was involved in the construction of eco-towns in the Chinese cities of Qingdao, Tianjin and Dalian. At the same time, from 2007 to 2011, staff at environmental protection agencies in the four Chinese cities received special training in three Japanese cities (Kitakyushu, Shimonoseki and Fukuoka) as part of a joint project. These activities have produced real results in terms of urban cooperation on environmental preservation.

Meanwhile, the Logistics Subcommittee has worked to promote the establishment of a logistics information system between member cities and achieve seamless logistics integration between South Korea, China and Japan. At present, transporting goods made in a factory in one country to an export destination in another country requires approximately ten transshipments and modes of transport, which causes a significant waste of time and space (e.g., storage warehouses). In order to reduce this waste as much as possible and help to streamline international trade and logistics, OEAED member



cities are cooperating to establish a smoother logistics system between the three countries. In particular, since 2012, Japan and South Korea have made use of trucks equipped with a standardized container chassis and dual license plates that can be loaded on ferries to transport goods directly from factories to their final destination. This has enabled a streamlined (seamless) logistics chain between the port cities (OEAED member cities) of Japan and South Korea. The volume of container goods transported between the two countries in this manner has recently risen to 14,000 TEU, the majority of which consists of automobile parts imported by Nissan's Kyushu factory from South Korean suppliers.

The value of OEAED has also been recognized in fields outside of the four sectors described above. With the recent political and diplomatic tensions between South Korea, China and Japan, the OEAED's continued presence and exchange-based activities have contributed to mutual understanding and improved relations between the three countries and in the PYSR.

## **2) Challenges Facing the OEAED**

Although the OEAED has achieved a lot as a leading organization in the promotion of cooperation between Northeast Asian cities, it still faces the following challenges.

(1) The OEAED is run through municipal (city) governments in each country, and central government departments are not involved in OEAED Council Assemblies or meetings of the four subcommittees. This means that some trans-border cooperation urban projects which rely on legal reforms or deregulation on a national level may not achieve their desired results. For example, establishing a regional FTA in East Asia is one of the OEAED's important project goals, but little progress has been made on this project because local governments have no authority to set and adjust tariffs. The similar problem also exists in the cooperation of promoting seamless logistics. Although significant progress has been made between South Korea and Japan, cooperation between China and other two countries have stalled.

Discussions on seamless logistics between South Korea and China began in 2010, but the annual volume of goods transported in seamless way between the two countries still remains at about 200 TEU, with the majority of those goods being exported from South Korea to China. Seamless logistics between China and Japan were implemented in 2010, but eventually halted mainly due to Chinese side's regulations on the management of special freight vehicles and inspections of goods. Resolve these issues is taking a long time, and the Logistics Subcommittee has recently suspended its activities.

(2) In recent times, due to China's high growth rate and rapid rise of income level, Chinese demand for foreign direct investment in traditional industries has fallen, while an increasing number of South



Korean and Japanese companies, particularly manufacturers, have set their sights on Southeast Asia as a more attractive investment location because wage levels (labor costs) in those countries are lower than in China. Furthermore, anti-corruption campaign and continued diplomatic clashes between the three East Asian nations in recent years caused China to strengthen its regulations on overseas trips by high-ranking officials, leading to reduced interest and participation by city mayors in the biennial OEAED Council Assemblies.

(3) Since the OEAED's establishment, Kitakyushu has served as the effective secretariat and been the administrative center for all OEAED activities. However, economic progress in South Korea and China has significantly lowered the relative economic position of Japanese cities, including Kitakyushu, compared to other cities in the PYSR (see Table 1). As a result of these changes, Kitakyushu's leadership and unifying power within the OEAED appears to be waning.

(4) OEAED meetings are usually organized by the administrative departments of city governments, and these regional bureaucratic meetings attract little participation from private economic organizations, corporations, research institutes and media outlets. As a result, OEAED is still not well-known within East Asia or the PYSR, and the organization's activities lack impact expected.

## **4. Proposals for Effective Urban Cooperation**

### **1) Insights from Previous Research**

With increased globalization of economies, there is a rapidly growing need for trans-border regional or urban cooperation. According to previous research of OECD, the following four factors are necessary for making this form of international cooperation successful (OECD, 2006).

**A culture of cooperation.** This refers to a desire to cooperate and the ease of doing so, but it is also important that the political and economic systems of member countries, regions and cities are similar.

**Legal framework.** Clear rules are necessary to implement proper forms of cooperation.

**Financial support.** International cooperation involves a number of projects and activities including convening meetings, establishing systems and building infrastructure, and sufficient funding is needed to support such activities.

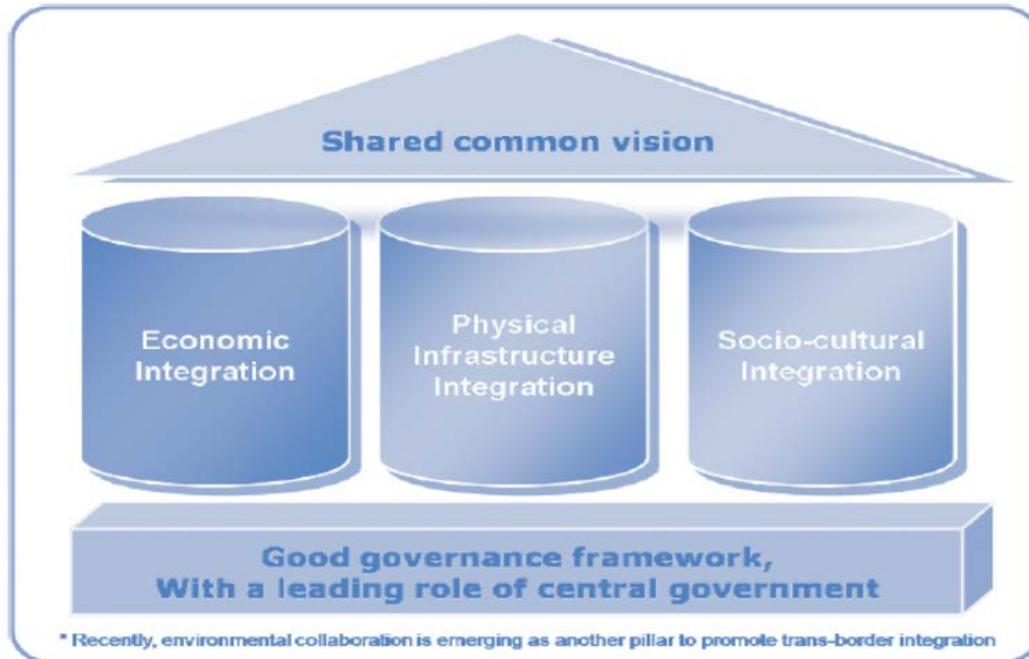
**Fair distribution of responsibility.** In order to create a cooperative community, responsibilities and duties must be clearly distributed to each member city.

In another research of OECD (OECD, 2009), it is stressed that in order to achieve integration on a regional level, it is important to have a shared vision among members, integration in three key areas



(the economy, physical infrastructure and society/culture), and involvement from central governments (Figure 3).

**Figure 3. Necessary framework for a fully integrated, borderless region (OECD, 2009)**



Source: OECD

The conclusions reached in these prior researches are based on case studies from around the world and can serve as a valuable reference for trans-border urban cooperation in Northeast Asia.

## 2) Lessons from OEAED Practices

As a leader in the promotion of trans-border urban cooperation in Northeast Asia, the OEAED has engaged in a number of activities since its establishment in 2004, based on five main project goals. As discussed above, the OEAED has made many successful achievements thanks to cooperation and hard work from each member city, but there are still many areas which need to be improved. The following proposals are based on the OEAED's practices over the past decade.

(1) Amidst economic globalization, there is strong demand for regional economic integration even between countries with different political and economic systems, and this can help to promote trans-border urban cooperation.

(2) However, differences in systems, culture and perceptions of history are still having a negative impact on trans-border urban cooperation that cannot be ignored. This means that promoting



cooperation in fields such as culture, education and research is also necessary for achieving effective, sustainable trans-border urban cooperation.

(3) To increase their appeal and influence, organizations that promote trans-border urban cooperation should take note of new demands for cooperation and incorporate such demands into their activities. Recently, OEAED's International Business Subcommittee has taken an interest in the aging population issue in all three countries and started a new project on aging industry, which is a timely and appropriate response to new trends.

(4) Responsibility should be distributed fairly amongst each member city. As discussed above, Kitakyushu is currently serving as the effective secretariat of the OEAED. This has boosted administrative efficiency, but has also led to a reduced sense of responsibility for other member cities. To ensure that all member cities carry a strong sense of responsibility, proactively put forward suggestions and engage in cooperative behaviour, the OEAED needs to engage in reforms and divide the cost of running the secretariat more equally.

(5) Since central governments have a large influence on national economies in East Asia, the effective implementation of trans-border urban cooperation requires involvement and policy support from central governments to some degree. Some OEAED cooperative projects will struggle to achieve their goals without central government involvement. For example, establishing a regional FTA in East Asia is one of the OEAED's five main project goals, but little progress has been made so far due to a lack of assistance from central governments.

(6) Where central government support is unavailable, organizations involved in trans-border urban cooperation should select cooperative projects that are important but also achievable. For example, rather than focusing on goals that require direct government involvement, such as establishing a regional FTA, it may be easier to complete projects such as building streamlined logistics systems between cities. The seamless system in the EU suggests that implementing a similar system between OEAED member cities could significantly expand trade within the region and possibly achieve an effect similar to the signing of an FTA.



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## Ch.2. Exploring the Possibilities of City Alliances: Strategies for Multinational Intercity Cooperation (Korea)

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### 1. Multinational Intercity Cooperation: Historical and Political Significance

#### 1) Multinational Intercity Cooperation

The international relations of today are excessively state-centered. Since the 1648 signing of the Treaty of Westphalia, the global order has taken shape around the nation-state unit. The nation-state's most crucial mission lies in ensuring the nation's survival in terms of foreign relations. Other duties include safeguarding the lives, property, and freedom of those living within the state.

In the European case, the period before the nation-state's establishment was one of feudal states and city-states. Feudal states practiced agriculture, while city-states practiced industry. While neither form had apparent difficulties achieving economic prosperity, both possessed weaknesses in terms of guaranteeing survival. The late medieval period brought a diminishment in the power of religion and an increase in the influence of secular monarchs. These monarchs wished to see their power extend



over larger territories, which resulted in frequent wars.

It was in this context that the nation-state emerged as an alternative framework. Larger in scale than the feudal state, the nation-state's advent led to a decline in small-scale warring. International cooperation among countries also contributed to establishing a peaceful global order in the wake of World War II.

The nation-state system is not perfect, however, and continues to require supplementation. First and foremost, conflicts involving nationalism, the nation-state's key ideology, have not only failed to be resolved but actually intensified. The emergence and flourishing of vast states is a source of anxiety for smaller states and peoples. In Northeast Asia, the level of conflict shows signs of intensifying as states have become wealthier. Rather than cooperation and integration, the situation is one of deepening competition for dominance.

The nation-state system is not omnipotent. While it must serve the individuals in the state, distances between the state and those individuals have not been bridged. Competition between countries only exacerbates the issue. In some cases, the state actually becomes an obstacle when individuals in one state wish to cooperate with those in another. Individuals are frequently oppressed in the name of state efforts to ensure individual survival and prosperity. Additionally, these conflicts between countries often escalate into international political conflicts. When two states enter a situation of conflict, cooperation in other areas stagnates. This is the contradiction of the modern nation-state.

We propose intercity cooperation as an alternative approach to resolving this issue. This is not to suggest eliminating the nation-state. The framework is still a valid one, and cities cannot take the place of states. At the same time, cities can achieve things that states cannot. They serve as a check against economic or cultural issues becoming excessively politicized or turned into issues of power or nationalism. While the state serves as an institution for managing political resources, the city's key resources have historically been industry, business, and culture. Cities are also relatively free from nationalist pressures. The state consists of the "people," whereas the city consists of "citizens." Citizens pursue property, freedom, and security in life. Economic wealth serves as their common denominator. As such, the city is capable of providing an opportunity and pathway for overcoming the obstacles that conflict between nations poses to economic cooperation.

The days in which the state enjoyed absolute authority are passing into history. The emergence of the power of the market with the advent of neoliberalism is but one example of this. In many cases, small-scale authorities have emerged to oppose large-scale authority. Developing nations have acquired a greater voice thanks to economic growth. Improvements in education and public health have led to an increase in the number of people equipped with knowledge. Developments in information technology have increased the power of the non-governmental realm and prevented the



state from monopolizing information. The spread of democracy has given citizens a greater voice. Habituated to peace, citizens do not tolerate their state accepting the risk of war.

The relationship between state and city is complementary rather than conflicting. In each case, professional fields differ and can be mutually contributory. This is a time when synergy must be sought in cooperation not only between countries but also between cities. The ultimate gains from this must be returned to the public. The promise of the nation-state is to ensure that these citizens are able to enjoy peaceful abundance. Crucially, this role from cities is by no means a new phenomenon. Prior to the nation-state's emergence to the historical fore, cities performed the role of political institutions conferring industrial prosperity and abundance for the public. There would have been no nation-states without the city-state era. Liberal and democratic elements of the city-state made important contributions to the emergence of the modern nation-state; the city-state provided the nation-state with the DNA lacking in the despotic feudal state.

## **2) History of Intercity Cooperation**

Historically, cities gave people the gift of secular freedom. Under the feudal order, individuals and land alike were mere adjuncts to the feudal lord. Advancements in business and trade with the Age of Discovery in the 15<sup>th</sup> century opened the gateway to modernity. The pursuit of individual profit, previously viewed as morally depraved, became accepted as something justifiable thanks to religious reforms. The emergence of a new paradigm of commercial development and respect for secular values introduced property rights and the concept of education to individuals. The result was the emergence of the "citizen." Citizens wished to protect their property rights, seeking participation in parliament and other political institutions as a way of achieving this. This was the birth of capitalism and modern democracy.

Modern political thought accepted the absolute monarch's authority to rule as a way of maintaining order in the state. At the same time, it also assumed the presence of an enlightened citizenry taking part in the state's political processes and serving as a counterweight to the monarch. The roots of this thought lay in the city-state, and it was also in the city that the liberal philosophy of competition and cooperation emerged.

The city-state is by no means a new phenomenon. City-states flourished and city-state culture took shape before the Common Era in Greece. The medieval era saw the emergence of an alliance of city-states in north central Italy, the Hanseatic League in Germany and Northern Europe, and a city-state league in Switzerland. The city-state's constituent elements were commercial development, a citizenry, and the rational pursuit of profits, which became the basis for a common identity. City-states



also sought shared prosperity through mutual cooperation in democratic or oligarchic alliances. Common identities were formed with other cities even amid strong loyalty to individual cities.

The factor that allowed these city-states to prosper was commercial development. While feudal states relied on agriculture, it was commerce and trade that developed in city-states. Italy's city-states played a leading role in international trading (between north central Europe and the Mediterranean Sea) in spices, wool, textiles, salts, and other commodities. Enriched citizens demanded customary and autonomous rights vis-à-vis the market. The cities' influence also extended beyond their borders. The knightly class joined forces with urban merchants and land-owners to form communes, an expanded concept of the city.

A similar situation was witnessed with the city-states of medieval Germany and the Hanseatic League (14<sup>th</sup>–15<sup>th</sup> century CE). There, cities such as Cologne and Hamburg emerged as places where craftsmen and merchants resided. These segments grew to become exclusive interest groups, using their material wealth to exert influence over feudal lords. True power in the cities was no longer in the hands of the aristocracy, but those of tradespeople.

It was into this environment that the concept of the “responsible citizenry” emerged. A citizen was defined as someone who contributed to sharing the financial burdens of the city. A definition solely in terms of residing within a city's borders is inadequate: citizens had to own a home and pay taxes. Citizens also monitored the transparency of the administrators' management of the city. In so doing, they sought to safeguard the commerce and security that were their chief interest.

Citizens also voluntarily took part in politics and administration. City councils worked with hired administrators to decide matters related to community life and urban legislation. In cases of particularly major issues involving property rights, war, and the coining of currency, the entire community participated in discussions. Consultations among cities within an alliance were subject to unanimous decisions; consensus presupposed compliance.

While city-states offered several advantages, they gradually disappeared with the emergence of nation-states. To begin with, they were unable to survive in conflicts with other city-states or with the emerging nation-states. They lacked the ability to wage war compared to nation-states, which could use their land and agriculture to command large human and material resources. Most significantly, they lacked mature citizen capabilities. Dominated by unenlightened merchants adopting the forms of republicanism, citizens did not have great regard for freedom or responsibility. Cooperation among constituents pursuing secular interests was impossible to achieve; factional strife intensified. Although the city-state form was maintained, the emergence of an oligarchy with the Medicis (1434) effectively spelled the end of the republican city-state era. In contrast, the nation-state engineered the ideology of nationalism and succeeded in using cooperation to marshal large resources.



The city-state offers us lessons that we must not overlook. Because it values economic liberty and autonomy, economic efficiency is very high. To be sure, this presumes good governance. Citizen participation must be voluntary and proactive. Free, transparent, and participatory governance is essential. Apart from security factors, the city-state model is still a feasible one today.

### **3) Political Strategies for Multinational Intercity Cooperation**

Achieving cooperation among cities requires political strategy. This does not mean strategies for the city's independence from the nation-state; rather, it is a strategy for establishing a complementary relationship between the city and nation-state. First and foremost, it is a strategy to convince the nation-state's government of the contributions that the city is capable of making. The message that cities must send the nation-state is simple: being relatively free from the obligation of guaranteeing the state and public's survival, cities should be allowed to work toward economic development and improved citizen welfare. Cities should also be allowed broader autonomy. In this regard, the following core elements may be identified.

#### **A. Economic Liberalization**

As noted above, cities are historically the environment in which modern capitalism was born. Economic liberalization is key to the city. The nation-state's obligation to maintain national integrity results in great burdens in terms of distribution and equity. If the nation's survival is considered an external security factor, then equity is an internal security factor: failure to achieve equity results in national divisions. Cities, in contrast, are able to focus on economic freedom. The city is an environment in which markets flourish. A desirable system is one in which large amounts of economic resources are produced and provided to the nation-state, which distributes them to disadvantaged regions and improves equity.

Freedom is formed in contexts where order is maintained. Establishing order is the role of the nation-state: the nation-state establishes order, and the city enjoys freedoms and pursues economic prosperity. Economic freedom is an essential element for the city. Liberty and order must be ensured for commerce and industry to actively pursue secular profits. Economic freedom is the lingua franca for the pursuit of intercity cooperation. Cities must engage in healthy competition to expand economic freedoms – a pursuit made possible by the order established by the state.

#### **B. Autonomy of Cities and Decentralization of Authority**

If cities and nation-states exist in a complementary relationship, then the state is obligated to



ensure a considerable degree of economic autonomy for cities. In many cases, the state tends toward strong bureaucratic involvement to regulate economic freedoms; this is particularly true in East Asia, where the state enjoys great authority. It is an approach that stems from concerns that an excess of freedom could cause order to collapse, as well as fears about the potential challenge that cities and markets could pose to state authority. The result of this is a paradoxical phenomenon of increased state interference and bureaucratic relations for the sake of economic freedom. Cities and markets grow fastest when they enjoy freedom and autonomy. A city without freedom sacrifices creativity and is unable to pursue innovation.

Cities and states should engage in more intensive discussions on ideas about decentralizing authority. Rather than being subjected to bureaucratic controls from the central government, cities should be granted autonomy. Cooperation between cities must therefore be allowed to occur directly in order to reduce transaction costs. The line of activity is too long when it passes through the central government. Cities are best equipped to understand their own individual circumstances. Autonomy must be permitted to cities so that they can evolve and adapt readily to changing situations.

To be sure, liberty and autonomy come with responsibility. The mistakes that cities make should be their own responsibility. Freedoms and responsibilities must be clearly defined, and cities and states must discuss the principles through which the resulting financial costs are assigned.

### **C. Citizen Participation**

A free city requires a responsible citizenry. Cities with flourishing markets exhibit great efficiency, but also intense greed. Left unchecked, selfishness and greed are damaging to the market order. While the state has the chief responsibility of providing order, a more efficient and desirable approach is one in which citizens are themselves responsible for producing order.

For this reason, active citizen participation is a necessary part of urban management and the pursuit of intercity cooperation. Citizens must be aware of the economic gains and responsibilities attendant on the city's autonomous decisions. They must also ensure transparency by participating in and monitoring projects carried out by the city government. Assigning responsibility for urban order to the nation-state's central government may result in diminished freedoms. Accordingly, citizen participation is essential as a means of minimizing central government interference and maximizing the autonomy assigned to cities themselves. The role of harmonizing private interests with the interests of the urban community is best performed by the citizens themselves rather than the government.

### **D. The Need for International Intercity Cooperation**



Cities must take advantage of their international networks to pursue cooperation. The most important reason for such cooperation is competition. Cities must seek their own development and provide mutual assistance through good-natured competition. They must come together to discuss issues of economic liberalization, autonomy, and decentralization and to develop arguments to persuade their respective central governments. To this end, we propose instituting intercity cooperative organizations. As will be discussed in greater detail below, cities should participate in the pursuit of competition and cooperation, engaging in “bandwagoning” by developing shared arguments and working to convince their respective central governments of their merits.

With intercity cooperative organizations, it is preferable that participating cities meet certain criteria. Extending member status without applying standards will prevent cities from achieving either competition or cooperation. Criteria for organizational participation must be set and used as guidelines in competition and cooperation. The criteria that we suggest for intercity cooperation include the extent of their economic growth and liberalization, transparency in city administration, sustainable development, and their level of city government responsibility.

## **2. Exploring the Potential for Multinational Intercity Cooperation and an Associated Governance Model**

### **1) Possibilities for Multinational Intercity Cooperation**

Due to their conflicting security interests, the countries of East Asia (South Korea, China, and Japan) and their neighbors have failed to respond appropriately to various cooperative tasks. A wide range of issues require cooperation among South Korea, China, and Japan, including promotion of regional economies and joint response measures for regional environmental issues such as yellow dust and fine particle pollution. Due to differences on historical issues, a complex security situation (including North Korea-related issues), and the conflicting interests of the countries involved, little progress has been made in terms of cooperation among the three East Asian countries to resolve joint issues. The current inadequacy of cooperation at the very time when demand for cooperation is growing only underscores the need for alternative forms of cooperation. In this context, we will examine the potential for intercity cooperation to serve as an alternative to international cooperation, as well as the theoretical foundation for that potential.

#### **A. Possibilities for Intercity Cooperation**

The growing demand for cooperation, along with the current failure of cooperation among countries



to meet that demand, further underscores the potential for international intercity cooperation to serve as an alternative approach. Cities have continued to experience quantitative expansion due to ongoing urbanization; as of 2017, over half the world's population lives in cities. This quantitative expansion in cities has naturally led to an expansion of their role. City population growth has led to larger urban budgets and an increase in the things that cities are capable of doing and obligated to do. Such things are obviously still only possible when authority has been assigned to the city government by the central government. Particularly in the case of government functions directly related to citizen lives, however, jurisdiction has been passed from the central to the urban government, increasing the number of decisions that urban governments are capable of making and implementing. In an increasing number of instances, city governments are using this increased authority as a basis for international cooperation of their own. Examples of this include international cooperative organizations among urban governments on environmental issues (C40, Climate Alliance, International Council for Local Environmental Initiatives); city government organizations for purposes of goodwill, interchange, and information exchange (Metropolis, United Cities and Local Governments, CityNet, Sister Cities International); organizations for cultural exchange (League of Historical Cities, Organization for World Heritage Cities); organizations for transportation cooperation (Cities for Mobility); and organizations for economic cooperation (the Organization for East Asia Economic Development).

### **B. Theoretical Basis for Intercity Cooperation**

We are far more optimistic about the potential for international intercity cooperation than for international cooperation, and we propose that the former may serve as an alternative to the latter. Ironically, the limited authority possessed by cities may be cited as a basis for this optimism. Whereas cooperation among countries must take into account security interests and concerns about a nation's survival in its interactions with other states, such security and international political interests do not have to be considered when international cities pursue cooperation. Cities may consider only the practical benefits of such cooperation, and cooperation may be achieved relatively easily as a result.

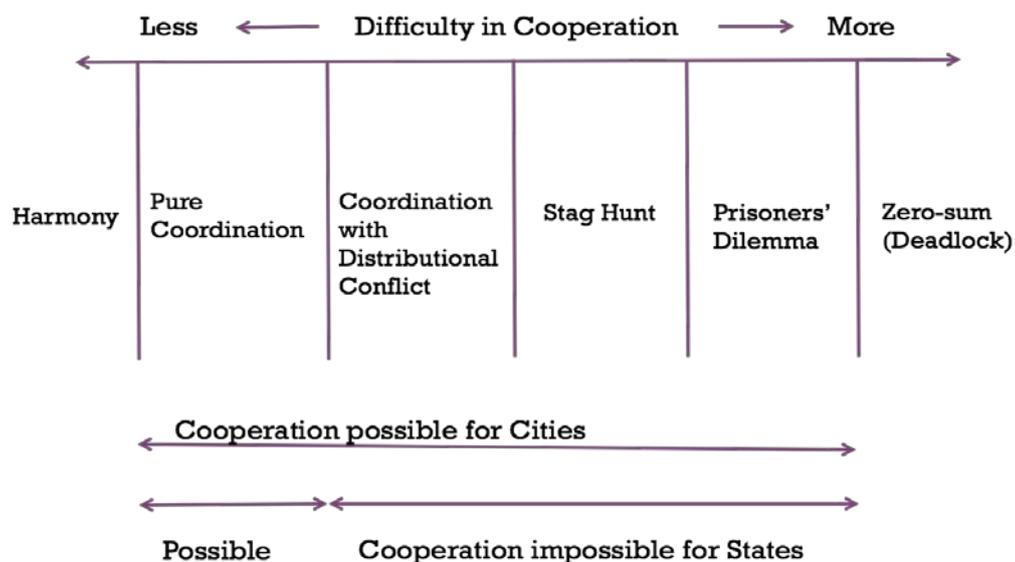
In both theoretical and empirical terms, cities contend with fewer conflicting interests than states. In addition to their being relatively free from the aforementioned security and national survival concerns, cities fundamentally share an awareness of the common issues specific to cities and are capable of using this shared understanding in seeking out joint solutions. An excellent example of this is that of organizations cooperating on environmental issues, such as C40, which has been cited as a model case of cooperation between cities. An organization of cities sharing an awareness of the importance of the climate change issue, C40 coordinates on policies that are within the authority of



cities, offering a new example of efforts to address global issues at the urban level. Where international cooperation has proven inadequate to resolve such issues, this new intercity cooperative organization has been able to produce a more effect joint response to them – stemming first and foremost from the fact that they harness perceptions among urban citizens, and by extension urban governments, of the climate change issue’s severity.

In theoretical terms, circumstances requiring and permitting cooperation are divided largely into those of “coordination” and “collaboration”. Game theory posits coordination situations in terms of coordination games and the “battle of the sexes”, whereas collaboration scenarios are described with the “stag hunt” and “prisoner’s dilemma”. The criterion for judging such scenarios is the presence or absence of an incentive to defect once cooperation has been achieved, i.e., to cheat the partner and unilaterally renege on the promise to cooperate. A situation where such an incentive is present may be categorized as a collaboration scenario; one where the incentive is absent may be categorized as a coordination scenario. Examples of coordination scenarios include situations where there is no reason to betray partners in cooperation once a policy has been decided upon, such as walking on the right side of the sidewalk or driving on the right side of the road. Examples of collaboration include numerous issues of collective action in which there is an incentive to “ride for free” on the goodwill of one’s partners, as with the provision of public assets. Generally, cooperation is easier to achieve through coordination than through collaboration and easier to maintain once formed.

**Figure 1. Difficulty in Cooperation for Potential Interactions among Actors**



As mentioned previously, the shared understanding of the common interests of cities increases the likelihood that potential cooperation scenarios among cities will involve coordination rather than



collaboration. In contrast, cooperation scenarios among countries are, with very few exceptions, likely to involve collaboration rather than coordination. In terms of the potential for cooperation, then, cities may be viewed as far more likely candidates than states, and the cooperation that they achieve is likely to be much longer-lasting in terms of continuity than between states.

Also, because cities are relatively free from the military, security-related, and political interests that constrain cooperation among states, they are able to focus their cooperative activities on the absolute gains that can be achieved in practical terms. In contrast, states must always take security-related and political interests into account; when pursuing cooperation, they are forced to consider solely absolute gains or relative gains with absolute gains removed from the equation. In the event that relative gains are taken into account, many potential cooperation scenarios become zero-sum games, dramatically reducing their likelihood of occurring. In the battle of the sexes, considered a representative example of a coordination scenario, there are various methods of achieving cooperation if only absolute gains are taken into account, and because there is no incentive to defect once cooperation has been achieved, cooperation is sustainable barring changes to the external environment. In contrast, from a relative gains standpoint, a coordinating situation becomes a zero-sum game in which gains to one actor lead to losses for others, making it impossible to achieve cooperation.

We have examined the practical potential for cooperation among cities and the theoretical basis underpinning this cooperation. A concrete illustration of this potential can be seen in the various forms of cooperative organizations currently formed among cities. At the same time, the current forms of intercity cooperation appear to be confined strictly to the level of coordination, and it appears that those cities desiring deeper levels of economic, administrative, or environment cooperation to serve as alternatives to cooperation among states will need a suitable form of governance to coordinate and facilitate such cooperation.

## **2) Developing a Governance Model for Multinational Intercity Cooperation**

While the previous discussion included examples of intercity cooperation, these existing examples are for the most part symbolic and cannot be viewed as having been effective in practical terms. While various reasons may be offered for this ineffectiveness, the discussion of ineffectiveness here will focus on governance issues, and a governance model will be provided for more effective intercity cooperation.

### **A. Existing Examples of Governance for Intercity Cooperation**

Most current examples of intercity cooperation adopt governance structures in the form of summits



or loose networks based on voluntary membership. These structures are decentralized rather than centralized, and although they present various advantages, they are inadequate for producing binding rules and for using such rules as a means of achieving more advanced forms of cooperation. In more theoretical terms, network-centered governance is only effective when the cooperative situation involves coordination and cannot function effectively when it involves collaboration. More serious cooperative areas such as economic cooperation or cooperation toward sustainable development involve greater potential for gains to cities to be divided up by the form of collaboration. Accordingly, we must examine a level of governance that is suitable to respond to collaboration issues.

### **B. Major Considerations**

Several factors must be taken into account when developing a governance model to achieve close cooperation that functions effectively in both coordination and collaboration scenarios.

First is the question of the procedures used to make policy decisions. This includes the actors capable of participating in policy decisions, as well as considerations about the allocation of policy-making authority and the policy-making process.

Second is the question of what form of bureaucratic organization to establish and how much authority to assign it. Developing and sustaining deeper forms of cooperation requires ongoing systems for monitoring and oversight and a bureaucratic organization capable of implementing the joint policies produced by the cities' policy-makers (as represented by their mayors). The question of how much authority to assign this organization appears to be one of the most important elements of the governance model alongside policy-making issues.

Third, a decision must be made as to the form of authority through which related central government agencies participate in governance on cooperation among cities, allowing them veto power when the city government's decisions are implemented and therefore requiring at least their tacit agreement. Because it is a city-centered form of cooperative governance, it stands to reason that mayors would have authority to make policy decisions. At the same time, at least some voice must be given to the central government, whose cooperation is necessary for the policies' implementation, and consideration should be given as to how to incorporate it into the governance structure.

Fourth, there must be consideration of how to include civil society and the epistemic community in the governance structure to address the "democratic deficit" issue in the decision-making process, which is one of the leading factors in criticisms of state-centered international organizations.

### **C. Viable Existing Models**

If the examination is confined to existing governance models for cooperative organizations among



cities, most cases involve simple cooperative organizations or networks. Because these models present the types of limitations described earlier, we will be examining not only the governance structures of current intercity cooperative organizations, but also the various kinds used by international organizations formed for cooperation between states and currently involved in active efforts, albeit with cities substituted as actors in place of states.

a. Loosely Knit Mayors' Network: The G20 Model

This model is based on the G20, a group of leaders from the world's 20 major states. As a governance model, it involves summits and other meetings held on an irregular and ad hoc basis when a situation requiring cooperation arises. This is the most frequently found model today for intercity cooperation.

b. Mayors' Club: The OECD Model

Based on the OECD model, this can be described as a cooperative organization for mayors pursuing cooperative projects. Members meet regularly, and the model includes a small-scale bureaucratic organization to oversee and assess how the policies developed at these meetings are put into practice and pursued by individual cities.

c. Mayors' Parliament: The UN General Assembly Model

This is a form of mayors' organization for producing joint decisions applicable to all member cities. Decision-making authority among actors is assigned on an equitable one-city, one-vote basis, and joint decisions can be made by a principle of super or simple majority according to a set standard. Mayors meet to decide on important policies, but the framework requires an international bureaucratic organization (along the lines of the UN Secretariat) to oversee and regulate implementation of the policies and their progress in different cities.

d. Multi-Tier Governance (Mayor, Citizens, and State): The European Union Model

At root, this is a multi-layered form of governance in which the policy-making body centers on mayors, with citizens and the state participating as needed. In terms of existing international organizations, this is most similar in structure to the European Union. Cities must meet specific standards to become members, and governance centers on a decision-making body that allows member cities to produce joint decisions.

e. Realpolitik among Cities: The UN Security Council Model



Centering on a joint decision-making body in which only a select few representative cities participate, this model may be seen as similar to the UN Security Council, in which the five permanent members exercise overwhelming influence on decisions. It is a model in which the few representative cities differ in decision-making authority from other participating cities, allowing cities with large populations or economic scale to make major decisions or to exercise veto authority on them.

#### **D. The Proposed International Intercity Cooperation Model and Its Reasoning**

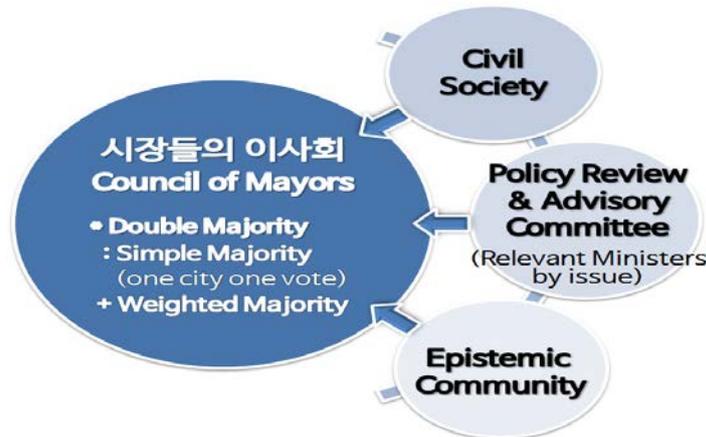
In consideration of the factors outlined above, the most rational form of governance model would be one distinct from the existing forms of international cooperation between states, such as the UNSC, UN General Assembly, or International Monetary Fund Executive Board. Given the multiple layers of the decision-making process, however, the most advisable governance model as we propose it would be most similar in structure to the EU.

We believe that the decision-making body for intercity cooperation should center on member city mayors. In terms of methods, we may envision a dual-voting approach in which policy decisions by the body (which may be called a “parliament,” “commission,” or “board”) follow the typical democratic decision-making approach, but with a weighted voting system applied to offset the weaknesses of the one-city, one-vote system. For example, we may consider an approach in which policy decisions require the agreement of a majority of participating mayors and at least two-thirds approval in terms of weighted votes for the cities represented by those mayors (as pre-determined by population or city scale).

In addition to this body for important decisions, we propose instituting a Policy Review and Advisory Committee in which ministers participate from relevant central government agencies. Potential roles for this committee include providing counsel during the policy discussion process; examining the actual feasibility of the policies decided upon by the Committee of Mayors; and providing active central government cooperation with implementation of the selected policies once they have been discussed and deemed practicable.



Figure 2. Rational Governance Model for International Intercity Cooperation



It also appears necessary to establish a concrete and systematic mechanism whereby civil society and the epistemic community can reflect their specialized and representative opinions in the mayors' decision-making process. Finally, a permanent bureaucratic organization will be needed to assume responsibility for the overall policy decision process and management of the consultative body.

Once this type of systematic cooperative organization is in place, cities will be capable of pursuing far deeper forms of cooperation than those seen in current intercity cooperation.

### 3. Cooperation Between Port Cities: Current Conditions and Proposals

#### 1) The Need for Cooperation Between Port Cities

In the above sections, the researchers have consistently stressed the importance of and need for intercity cooperation beyond the nation-state framework. The most effective means of convincing others of the need for intercity cooperation is to provide successful real-life examples of such cooperation, showing the positive effects that the cities involved have experienced. In that sense, an examination of existing examples of city cooperation shows that there have been numerous examples of cooperation between port cities in terms of proximity and accessibility between cities, and that these have been relatively successful. Accordingly, this study will focus on port cities and examples of cooperation among ports to illustrate the need for intercity cooperation.

Recent years have seen various changes to port environments around the world. Ships are becoming larger, while globalization has intensified competition among world ports, exposing cities to different port environments from before. Ports are seeking out cooperation as a way of responding to these changes. Small- and medium-scale ports and the ports located in their vicinity have pursued



cooperation to respond to the increasing focus on large ports; for these ports, cooperation has become an important means of survival.

Ports pursue cooperation for various reasons. While their motivations may be numerous, a few particularly representative ones will be discussed here. First, they pursue cooperation to boost efficiency through the sharing of port facilities and spaces. Ports cooperate to share facilities in instances where increased ship arrivals have left them short of space, or where they are seeking faster transshipment with cargo or passengers. Second, ports seek cooperation in order to cut costs and achieve rationalization rather than dispersing resources for the sake of mutual competition. Third, peripherally located ports in particular pursue cooperation to assign themselves centrality. Another important motivation for port cooperation is to increase port value in marketing terms.

Port cooperation exists in various forms, and the methods for categorizing it are similarly diverse. For the purposes of this paper, port cooperation is classified into three types according to the nature of the port and the type of cooperation. In terms of their nature, ports may be broadly classified into cargo ports and passenger ports; in terms of cooperation type, the category of “institutional port cooperation” has been added. By sharing successful examples of port cooperation in all three areas, this paper will underscore the need for such cooperation, using the factors accounting for existing successes and failures to offer several suggestions on the directions needed for Northeast Asian port city cooperation to be successful.

## **2) Examples of Multinational Port City Cooperation**

### **A. Distribution Port Cooperation**

To date, port cooperation has chiefly focused on distribution ports. For this reason, research on and interest in port cooperation has also been focused on cooperation among distribution ports. A representative example seen as one of the most effective instances of distribution port cooperation is that of the ports of Malmö, Sweden, and Copenhagen, Denmark. In 2001, Malmö and Copenhagen merged their respective port corporations. This type of integration, which is rarely achieved at the nation-state level, has resulted in the most advanced forms of port cooperation taking place between Malmö and Copenhagen. The chief characteristic of the two ports’ cooperation is its effective division of labor, with Malmö and Copenhagen each assuming responsibility for specialized areas: Malmö mainly handling ro-ro (car ferry), container, and mixed cargo shipping, and Copenhagen chiefly operating as an import cargo and cruise port. By each focusing on specialized areas, these two geographically close ports have maximized the effects of cooperation without issues of port function overlap.



Standing in contrast to the above example is that of the ports of Rotterdam, the Netherlands, and Antwerp, Belgium. Although various attempts were made in the past to establish cooperation and link their hinterlands, none ultimately led to cooperation. The biggest problem for the two ports was their differing scale. Rotterdam's dominant status as Europe's largest port meant that any cooperation with Antwerp would place it in a structural role of determining major cooperation-related issues and the direction for cooperation. Because the two ports focused on more or less the same areas, Rotterdam was structurally in a position to gain far more through cooperation, whereas Antwerp would be placed in the role of simply assisting it. For this reason, cooperation failed to occur.

### **B. Passenger Port Cooperation**

While most past port cooperation has predominantly involved distribution ports, the recent growth of the passenger service industry in Asia, and the cruise industry in particular, has led to great interest focusing on passenger port cooperation. In point of fact, cruise port cooperation can be seen as very minor compared to distribution port cooperation in terms of the level of cooperation and number of examples. To date, cruise port cooperation has remained at the level of cooperation on the establishment of cruise routes. In this context, the Asia Cruise Cooperation (ACC) may be cited as a relatively advanced example of cruise port cooperation. The ACC was launched in 2014 as the Asia Cruise Fund, established as Hong Kong, Hainan (China), and cruise ports in the Philippines and Taiwan joined as members. In 2015, the Chinese port of Xiamen also joined, giving ACC a total of five cruise port members. Together, they have attempted cooperation in various areas, including the establishment of cruise routes; promotion and marketing of cruise routes; encouraging international cruise routes to use member ports as a home or calling port; cruise port system improvements; and institutional cooperation on areas such as partner cruise port entry procedures and visa issuance simplification. Member ports have enjoyed various benefits; in particular, greater trust among international cruise companies has made the courting of international cruise routes significantly easier. This has been particularly beneficial for the Philippines.

### **C. Institutional Port Cooperation**

A representative example of institutional port cooperation may be the combined land- and sea-based transportation projects currently under way among South Korea, China, and Japan. In 2006, the three countries initiated discussions toward the establishment of integrated distribution in Northeast Asia. Combined land- and sea-based transportation efforts have been under way between South Korea and China since 2010 and between South Korea and Japan since 2013. The two projects are similar in nature and share many commonalities, but have differed significantly in their progress and results.



To begin with, the initial stage of combined land- and sea-based transportation launched by South Korea and China in 2010 is a project that involves transporting cargo-bearing towed trailers by car ferry before sending them over land to destinations in China and South Korea. It has been applied at a total of three ports in South Korea (including Incheon) and seven in China (including Weihai), with nine sea routes in all. Although the first stage of the South Korea-China land- and sea-based transportation project has been under way for seven years, its performance has been disappointing relative to initial expectations. First, successful shipping performance has only been observed with three of the nine routes, and mutual access performance has fallen far short of anticipated levels. Also, a severe imbalance exists between South Korea and China, which possesses only seven towed trailers.

In contrast, the South Korea-Japan project, which has involved mutual access with dual license plates (trailers with double numbers) since 2013, has yielded relatively positive results and performance. Towed trailer mutual access performance increased tenfold between 2013 and 2016, as did shipping volumes. The results can be attributed to the South Korea-Japan trailer access approach, which reduced product lead times and lowered distribution costs. At the same time, the South Korea-Japan mutual access project also faces a number of issues: the limited numbers of applicable products, project operators, and applicable ports and the additional costs of vehicle registration for towed trailers in both South Korea and Japan have had a negative impact on the project's growth.

### **3) Proposals for Multinational Port City Cooperation**

#### **A. Proposals for Distribution Port Cooperation**

From their examination of examples of distribution port cooperation (Malmö/Copenhagen and Rotterdam/Antwerp), the researchers concluded that two cooperating ports should not differ largely in scale, and that a division of labor between them is an important factor in successful cooperation. The aim of the researchers' port city classification was to categorize port cities according to various related indicators in order to identify ideal targets for successful cooperation. In this sense, it is crucial that researchers conduct additional studies in the future to identify the key elements necessary for port cooperation.

Ongoing efforts will be needed to identify other important port cooperation factors besides the aforementioned ones of port scale and port specialization and apply them to categorizing port cities in different respects. Another important project for the researchers is to expand the scope of analysis to include port cities around the world.

Additionally, the researchers wish to suggest increased train ferry distribution and shipment as an



especially important area in distribution port cooperation. The combined land- and sea-based transportation approach – in which trains for distribution and transport are first shipped over sea by ferry before being used for land-based distribution over existing railways – is a means of cargo shipment that does not require a transshipment process and may yield effects in terms of shorter times and reduced distribution costs. While train ferries are not currently in wide use, the active efforts to build a rail network over the Eurasian continent in China’s One Belt One Road Initiative suggest a strong likelihood that they will emerge in the future as an efficient means of transporting cargo directly from South Korea to Europe by rail.

### **B. Proposals for Cruise Port Cooperation**

Based on the ACC example, the researchers propose a similar form of cruise port cooperation in the Northeast Asian region, with South Korea, Japan, Russia, and China participating. Cruise industry growth in Northeast Asia has been much larger than in other regions, suggesting that cruise port cooperation in the region could yield substantial effects. Because several cities are often incorporated into a single cruise route, a greater synergy effect could be produced by multilateral cooperation involving several cruise ports rather than one between only two cities.

It should also be noted that past cruise routes in Northeast Asia have chiefly focused on the region linking the southern waters of Japan to Southeast Asia and on the eastern Chinese coast. In contrast, no cruise routes at all exist on South Korea’s East Sea coast. Cruise port cooperation among South Korea, Japan, Russia, and China may therefore contribute to diversifying available routes. In that sense, the researchers propose South Korea/Japan/Russia cruise cooperation that involves establishing new routes incorporating South Korea’s East Sea and developing it into a major cruise region. Recently, the Russian city of Vladivostok proposed developing the East Sea into the “Mediterranean of the East” by instituting a cruise route originating in Russia and including the South Korean cities of Sokcho and Pohang along with cruise ports in western Japan; as this shows, it is not only South Korea that has proposed ideas for developing the East Sea into a cruise industry hub for the Northeast Asia region. Once the East Sea and Russia have been linked together with the development of various cruise routes over the waters, it may become possible to develop various combined land- and sea-based route packages connecting Russia to Europe or to China by rail or air.

**Figure 3. Cruise Routes in the East Sea Region**



Source: Gangwon Research Institute (2014)

Additionally, the development of cruise products for different age groups and with different themes is essential for the promotion of the cruise market through port cooperation in the Northeast Asia region. Examples of such products include cruise packages modeled on the Eurail Pass for young people to allow for human interchange, as well as luxury cruise products to meet small-scale demand among retirees. Possible examples of themes include cruise products for school alumni, products focusing on hobbies and leisure (such as games or golf), and products for onboard academic conferences and seminars. To be sure, institutional cooperation in terms of simplifying entry and visa issuance procedures will be needed to demonstrate the value of creating Northeast Asia-centered cruise routes and developing various cruise products.

### C. Proposals for Institutional Port City Cooperation

Based on the current combined land- and sea-based transportation projects under way with South Korea/China, South Korea/Japan, and China/Japan, the researchers have a number of proposals. First, while the project is currently limited to towed trailers without tractor units, we suggest that it should be expanded in the future to trailers with tractor units as well. For this to happen, the countries involved will need to hold discussions toward standardizing vehicle safety and environment standards, among other areas. Second, while the project currently allows mutual access only between pairs of countries (South Korea/China, South Korea/Japan, and China/Japan), we propose applying mutual access among all three countries in the future to allow for unhindered distribution within the Northeast Asia region. This will also require legislative and institutional improvements in each country to enable third-country through transport over the partner countries' territory.



As suggested here, mutual access in all three countries for vehicles bearing a single license plate, combined with discussions among the three on vehicle safety and environmental standards and legislative cooperation to enable third-country through transport, would allow for unhindered distribution among the three countries of Northeast Asia. This could potentially serve as a foundation for future integration of the Northeast Asia region along the lines of the European Union.



## II. Energy Cooperation



### Ch.3. A Proposal for Energy Cooperation in Northeast Asia

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#### 1. The Energy Transition and Northeast Asia

##### 1) Challenges Arising from the Energy Transition

We are currently entering a new era of global energy transition. There are two main fields driving these changes. One is the challenge presented by climate change and the necessity of a response, while the other is the changes in energy generation and consumption patterns that are expected as part of the Fourth Industrial Revolution.

First, we are seeing continued fluctuations caused by climate change and our response to it.

The challenges presented by climate change are global. They are not limited to a single country or region, and the magnitude of the problem is growing. The international community launched the United Nations Framework Convention on Climate Change (UNFCCC) to respond to climate change. Within this framework, countries around the world have been working to solve the problem based on the Kyoto Protocol. However, when the limitations of the Kyoto Protocol became apparent, it was replaced by a new climate framework based on the Paris Agreement. Accordingly, the problems with the new climate framework represent the biggest challenges facing the energy sector today. Since two thirds of global CO<sup>2</sup> emissions come from the burning of fossil fuels, the energy transition is focused on finding alternative energy sources and developing new technology to reduce carbon emissions.

With the launch of the new climate framework, countries have been called upon to make fundamental changes to their energy policies. We are entering a new era in which countries will



compete with each other to lead the world in highly efficient and renewable energies. Changes to the energy mix are inevitable under the new climate regime, and cooperation on national and regional levels is gaining momentum. These changes can be understood as a divergence in the goals of energy policy. Until the twentieth century, energy security based on oil was the main goal of energy policy. Countries aimed to achieve energy security by securing an energy transportation network that would guarantee a sufficient supply of oil. However, a new goal has been added by the new climate framework in the twenty-first century. Energy policies must now focus on reducing carbon emissions in addition to maximizing energy security.

Of course, President Trump's announcement that the United States will withdraw from the Paris Agreement is expected to deal a large blow to the new climate framework. However, since the withdrawal process involves formalities and procedures that require approval from Congress, it will be a long time before the withdrawal takes effect. Furthermore, many are skeptical about the sustainability of these efforts, even taking into account the fact that oil remains one of the most important energy sources and the Trump administration is trying to revive the U.S. economy through hydrocarbons. Even if you discount the checks and balances provided by Congress, many local governments in the United States have already embarked on clean energy policies, and companies are taking the lead in developing green industries. In addition to this, Europe and China are adding to the momentum of the new climate regime. This means that the new climate framework is likely to remain a constant and have considerable structural impact on energy issues.

In this context, changing attitudes towards nuclear power are also worth taking note of. In the wake of the Paris Agreement, the urgent need to reduce greenhouse gas emissions has led to renewed interest in nuclear power as a cheap, low-carbon option that is viable as long as it can be safely managed. However, at the same time there is growing distrust in nuclear power due to safety issues and the cost of nuclear waste disposal. The Three Mile Island accident in the United States and the Chernobyl nuclear disaster in the Soviet Union dealt a severe blow to the credibility of nuclear power as an attractive low-carbon energy source, and this was further exacerbated by the Fukushima nuclear incident in Japan.

It is difficult to neatly summarize the direction of nuclear energy policies in Northeast Asian countries. Japan's movement away from nuclear power in the wake of the Fukushima accident has slowed down in recent times. The new Moon Jae-in administration in South Korea has decided to reduce the country's reliance on nuclear energy, while the Chinese government aims to expand nuclear power in order to reduce its reliance on coal to meet the demands of the new climate framework. There are currently no signs that any of these countries are likely to change their respective energy policies.



**Table 1. Energy comparisons from the 1st - 4th Industrial Revolutions**

	1st Industrial Revolution	2nd Industrial Revolution	3rd Industrial Revolution	4th Industrial Revolution
Core technologies	Steam engine	Electricity	Informatization Automation	Artificial intelligence, IoT, big data
Energy sources	Coal	Oil, gas, nuclear power	Renewable energy	Existing energy sources New energy sources?
Features	Mechanization	Division of labor, mass production/consumption	Automation, customization	Convergence and optimization
Basic industries	Coal, cotton	Electricity, steel, machinery, chemicals	ICT	New energy and robots?

Source: Compiled from presentation materials from “Energy Policy in the Fourth Industrial Revolution Era,” Korea Institute for Industrial Economics & Trade (February 6, 2017).

The next issue for consideration is the challenges and opportunities presented by the Fourth Industrial Revolution.

The Fourth Industrial Revolution involves a convergence between ICT and other fields such as new materials, life science, artificial intelligence, robotics, the Internet of Things (IoT), and big data. It represents a new industrial stage of development centered around automation and connectivity. This is based on the ICT revolution that began with the Third Industrial Revolution, but the level of change is expected to exceed that of previous industrial revolutions on a qualitative level. In the Fourth Industrial Revolution we will move towards a world where everything is hyper-connected and hyper-intelligent, causing exponential changes across all areas of society.

When it comes to understanding the Fourth Industrial Revolution, it is important to grasp the relationship between the revolution itself and the energy base. In other words, understanding automation through computers and demands for new energy sources in the context of the challenges presented by the new climate regime. In particular, we must pay attention to how the Fourth Industrial Revolution will lead to energy security challenges. This is because the technology and innovation brought about by the Fourth Industrial Revolution require a lot of energy. Experts believe that if technologies such as AI, the IoT, and big data become ubiquitous in our daily lives, by 2040 we will use one million times the quantity of data that we do now, and processing this data will require 100 times



the amount of energy that we currently generate. Leading semiconductor companies around the world are responding to this by developing new energy-saving semiconductors. However, energy conservation will not be enough. The Fourth Industrial Revolution will only be possible if we significantly reduce energy consumption while dramatically increasing supply at the same time. The Fourth Industrial Revolution cannot take place without revolutionary changes to the energy base, involving large increases in the energy supply and the establishment of an entirely new base. We have no choice but to rely on fossil fuels like oil and gas in the immediate future, but at the same time we need to gradually overcome the limitations of the current energy base and seek creative solutions. This is one of the main challenges presented by the Fourth Industrial Revolution.

It is also clear that these challenges cannot be overcome by a single country or government. From finding new energy sources to a shift in the energy security paradigm, the launch of new industrial developments and the creation of new systems for energy generation and consumption, all the preconditions for the Fourth Industrial Revolution require international cooperation. In particular, we need to pay attention to regional integration and connectivity in the energy sector.

## **2) The Main Direction of Energy Cooperation in Northeast Asia**

While it is clear that energy demand will continue to rise either steadily or exponentially until the mid-2040s, most analysts believe that significantly boosting the energy supply will not be easy. In the wake of the shale revolution, fossil fuels are able to provide comparatively greater amounts of energy. With the current trends of falling oil prices and expanding supply, will it be possible to reduce our reliance on fossil fuels while finding new clean sources of energy?

There are many approaches to this question. Many of these approaches involve technological innovation, such as increasing energy efficiency while reducing consumption, developing new renewable energy sources and developing new technologies such as nuclear fusion. However, there is also a lot of discussion about creating energy synergy through regional cooperation.

Our research team believes that natural gas cooperation and the establishment of a regional energy network should be at the top of the agenda for energy cooperation in Northeast Asia. Since electricity will make up the largest proportion of energy demand in the future, the role of natural gas and the establishment of a regional power grid are crucial when it comes to the energy mix for electricity production.

Based on calculations in 2015, the International Energy Agency reported that among the 23,318 TWh of electricity generated in 2013, coal accounted for 41% while oil made up 4%, natural gas 22%, nuclear power 11%, hydropower 16%, and renewable sources 5%. By 2040, a total of 39,444 TWh will



be generated with a mix of 30% coal, 1-2% oil, 23% gas, 12% nuclear power, 15% hydropower, 4% biomass, 9% wind energy and 4% solar power. While our reliance on coal and oil is set to decline, coal will still account for 30% of electricity generation. Though accounting for a small portion, gas is expected to continue replacing oil to become one of the key factors of change in the energy mix alongside nuclear power. In an era of low oil prices, the easiest option seems to be increasing the consumption of oil and coal, but increasing our reliance on these energy sources will not be easy under the new climate regime. This is why Northeast Asian countries are scaling back their use of coal-fired power plants to reduce emissions of pollutants such as fine particulate matter and greenhouses gases, since these plants are not environmentally friendly, though they may be cheap.

Although greater efforts will be made to expand the use of renewable energy, this will take time and require solutions to the intermittent nature of renewable sources. Accordingly, fossil fuels will have to act as a bridging energy resource during the energy transition and in the middle term, using more natural gas is a suitable solution because it is cleaner than other fossil fuels. When it comes to energy security, minimizing the costs of this process has to be an important strategic goal for Northeast Asian countries.

Following the shale revolution, the United States has begun exporting shale gas, a non-traditional fossil fuel, in the form of LNG. This translates into changes in the gas market and opportunities that cannot afford to be missed. Fluctuations in the global gas market after the shale revolution represent a large challenge but also an opportunity for Northeast Asian countries. With low oil prices and an influx of shale gas into the market, the price of gas is very low. The United States seeks to export shale gas to the Asian market while Russia also wishes to establish itself as a new supplier of traditional gas. As a result, Northeast Asian countries including South Korea will have to consider how to construct their portfolio of gas imports to ensure price stability as well as a stable supply. Countries should keep in mind that rapidly implementing policies to take advantage of low oil and gas prices on both a national and regional level is the best way to achieve an energy mix that guarantees energy security.

As mentioned above, the divergence of the goals that energy policy must pursue makes it difficult for a single country to achieve these goals on its own. This makes international energy cooperation even more important at present. International energy cooperation on climate change, developing renewable energy, finding new growth engines, and regional connectivity are necessary to meet these difficult policy goals. As time passes, it will only become more important for countries to seek mutual benefit through international cooperation rather than rely on national responses. This means that recent discussions about connecting power grids or establishing a regional natural gas network in Northeast Asia present a valuable opportunity for energy cooperation.



## **2. A Plan to Revitalize the Northeast Asian Natural Gas Market : Establishing a Natural Gas Trading Hub and LNG Bunkering Cooperation**

### **1) Establishing a Natural Gas Trading Hub**

There has recently been talk about the need for an LNG trading hub in Asia. This is related to the fact that the Asian market is the second largest LNG consumer in the world and that countries in this region are currently paying a higher price for LNG than other regions, the so-called “Asian Premium.” Since Asia lacks a natural gas trading hub like the Henry Hub in the United States, Britain’s NBP, or Germany’s BEB, it is difficult for the region to obtain a competitive price, which translates into less favorable pricing for Asia than North America or Europe. Since the price of LNG is linked to oil, the fact that the price is not determined by market forces exacerbates the problem for Northeast Asian countries. Accordingly, changes need to be made to the price-determining system in the regional LNG market. In particular, the region needs an LNG spot market and an LNG trading hub to support it. Asian countries must escape from the current system where they are heavily impacted by fluctuations in oil prices. The region is currently working towards establishing an LNG trading hub in the hope that a regional supply network will lead to lower prices.

However, several characteristics of the LNG market structure in Asia make it more difficult to establish an equilibrium price than in other trading markets. Since only surplus supply that cannot be disposed of through long-term contracts in the Asian market is being traded in the spot market at regional market prices, there is a structural lack of supply. In other words, there is a supply-side problem. On the other side, most demand comes at particular points in time for specific purposes. This is different from a structure where a large quantity of LNG is imported and then stored to be resold for commercial purposes. This results from seasonal changes in demand, production delays in supplier regions, and sporadic demand for replacement fuel when nuclear power plants are not in operation, leading to a lack of free supply for the market.

LNG hubs can be divided into physical hubs and trading hubs, also called real hubs and paper hubs. The term “gas trading hub” usually refers to a market where buyers and sellers trade gas, which also facilitates spot trading and futures trading. Gas trading hubs come in two forms—physical hubs and virtual hubs.

A physical hub is a network that determines the price of gas supplied to a particular region. Most of the 30 or so gas hubs in the United States are physical hubs. In particular, the Henry Hub in Louisiana sets the benchmark price for trading hubs across the entire North American region. The Henry Hub is



not a regulator, but serves as a node that connects other hubs because it is a key location for the exchange of gas ownership rights under the New York Mercantile Exchange (NYMEX).

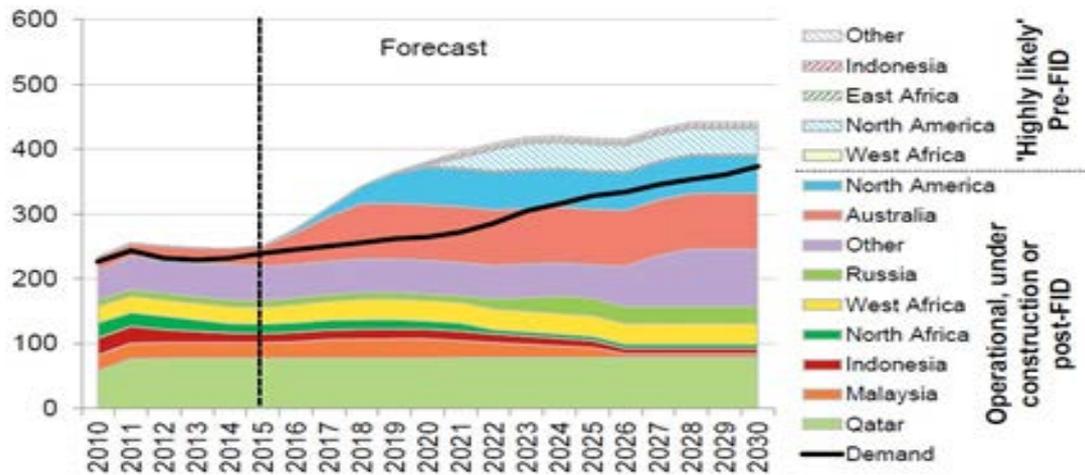
On the other hand, virtual hubs like the National Balancing Point (NBP) in the UK are trading platforms that determine the price in the region by balancing the market forces of supply and demand. The Dutch Title Transfer Facility (TTF) and Germany's Net Connect Germany (NGC) are other examples of virtual hubs. The NBP was established as a virtual hub to balance supply and demand for the entire British region. The NBP sets a price for the whole region without taking into account transportation costs between different areas. Instead, freight costs are levied by the Transmission System Operator (TSO), which manages the network and is overseen by higher authorities.

LNG trading hubs require several conditions. First, there must be a designated area that allows for an easy flow of natural gas and a dedicated consumer base. Second, risk management must be possible, and it has to be easy for market participants to choose between consumption, exporting/production, and importing. Third, large storage facilities are needed to manage buyer risk. Fourth, legal and fiscal support is needed to promote credibility and liquidity, and entry barriers should be low to allow new participants to access the market. The development of a trading hub usually goes through a process of several stages that include setting up facilities such as the LNG terminal, promoting spot trading, and finally promoting financial trading.

Recently, countries such as Japan, China, and Singapore have been focusing on market utilization and flexibility instead of securing long-term stability and adequate supply, with the goal of setting up a regional LNG trading hub that can span Northeast Asia. This represents a commitment to making it easier to deal with the surplus supply of LNG to acquire extra supply, or in other words liquidity, thereby helping to stabilize supply and demand. There are already several LNG trading hubs in operation in Asia, including Singapore's SGX, Japan's JOE, and Shanghai's SHPGX. However, these regional trading hubs are not very active due to regulations in each country and a lack of physical infrastructure. Furthermore, the lack of transparency and a "price evaluation system" for arranging transactions between buyers and sellers means that, unlike the NBP or Henry Hub, they are not recognized as legitimate determiners of prices in the region.

As can be seen in Figure 1, the global LNG market is expected to face over-supply over the next ten years. The supply glut will peak in 2020 with supply exceeding demand by approximately 107MMtpa, or 29%. However, after 2026 the situation is predicted to reverse, with the market facing a shortage of supply.

Figure 4. Global LNG Balance (unit: MMtpa)



Data: H1 2016 Global LNG Market Outlook (Bloomberg, June 2016)

Accordingly, Northeast Asian countries need to take advantage of this buyer-friendly market to obtain more favorable contract terms and set up a flexible market. There are several possible courses of action for expanding market flexibility and reducing the rigidity of contracts: taking advantage of the buyer-friendly market to renegotiate contracts, banding together with other consumer countries to demand the removal of unfavorable practices like destination clauses or take-or-pay contracts, expanding spot prices and short-term trading, linking hubs through the establishment of benchmark prices, and creating the conditions for establishing and growing a regional trading hub (loosening market regulations, liberalization, and so on).

Through cooperation, governments in Northeast Asia should act as market supporters rather than market regulators. This means joint efforts to establish price transparency, construct enough basic facilities to improve risk management and allow third parties to have unrestricted access to such facilities. At the same time, governments of consumer countries should also work to promote credibility and flexibility through the establishment of legal and fiscal systems that allow for re-exporting LNG and developing financial products. Lowering barriers to entry is also important, as is creating a transparent and credible price index that both states and companies can trust.

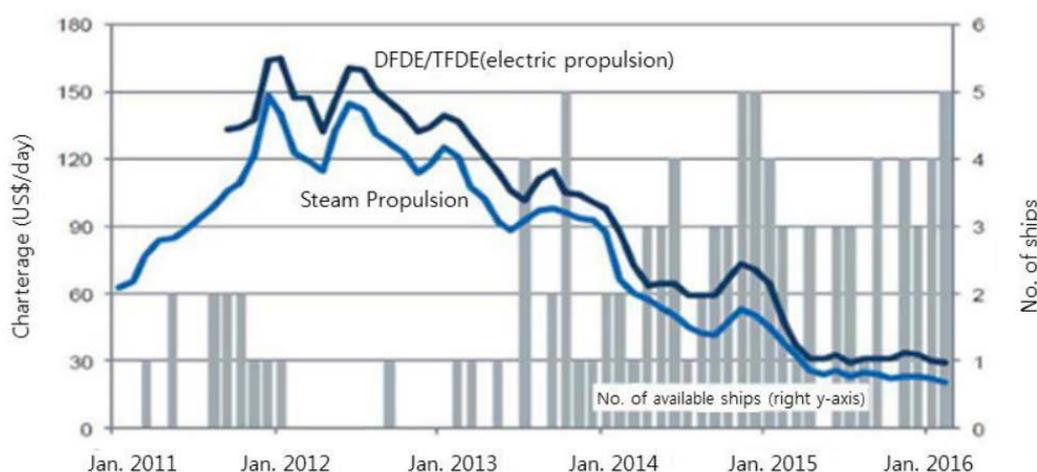
These efforts need to be combined with measures to take advantage of natural gas coming from not only traditional suppliers like the Middle East, but also from new LNG suppliers like North America and Australia as well as traditional LNG and PNG from Eurasia, which is quickly gaining momentum in the Asian market. Existing mechanisms for determining price need to be made more effective and expanded into regional cooperation that maximizes mutual benefit. Toward that end, natural gas consumer countries in Northeast Asia need to establish a group for dialogue and consultation.

## 2) LNG Bunkering Cooperation



One small but meaningful change related to the creation of the natural gas market is the forecast that the number of gas-fueled ships will increase. To correspond with the new climate regime, the International Maritime Organization (IMO) has released a new set of regulations on clean fuel use. It is clear from this that the demand for gas-fueled ships will rise. However, the over-supply of LNG carriers that began in 2014 continued to worsen in 2015, causing average freight charterage to fall by almost 50% year on year. The main reason for this is a decline in LNG demand due to global economic stagnation. Due to speculative construction of carriers and the large supply coming out of the United States and Australia, 29 new ships were delivered in 2015, while global trade volume only grew by 7.5 million tons due to delays in new projects in Australia.

Figure 5. Number of LNG Carriers and Short-term Charterage Trends



Data: IHS Energy

Most LNG carriers are tied to specific LNG projects, while long-term LNG contracts are hindered by Delivered at Place (DAP) clauses. Due to the nature of LNG trade, there are a lot of restrictions on the use of carriers, and it is difficult to promote short-term trading. There were 81 new LNG carriers commissioned in the period up to the end of 2016, 37 of which are not tied to specific projects. Although ships are being leased for long-term contracts, the situation shows that economic incentives exist in the LNG transportation industry that are likely to increase the flexibility of trading over the medium to long term.

LNG bunkering is another area that is worthy of attention. The 80,000 ships currently in commission around the world make up approximately 300 million tons of oil bunkering, with the market valued at US\$1.2 billion. If these oil-fueled ships were converted to LNG-fueled ships, it would create an LNG



market of approximately the same size. This has led to increased interest in bunkering for LNG-propelled ships in the shipping and port industries.

Belgium and the Netherlands are competing to gain a foothold in markets in Singapore, Japan, and China. In particular, Rotterdam Port has three 180,000 cubic meter storage tanks and a pier with two berths for 270,000 ton ships. Rotterdam Port has already created a set of guidelines for the management and operation of the LNG terminal and has rules pertaining to design, construction, management, and safety distances for LNG bunkering on both land and sea. Meanwhile, Zeebrugge Port in Belgium is a gas hub for Northern Europe with four LNG storage tanks and one berth at present. The port plans to add a new berth for 210,000 ton LNG carriers and an additional 180,000 ton storage tank.

Many countries also provide systems of support to promote the implementation of LNG bunkering. In Europe, the European Union provides 10% of the cost of building LNG bunkering ports. Under this program, the Gas Access to Europe (GATE) terminal in the Netherlands and Zeebrugge Port received ten million euros and five million euros, respectively. The E.U. also pays 10% of the cost for remodeling ships into LNG-fueled carriers. Companies such as Aga in Sweden and Teeport and Waterway in the United Kingdom have taken advantage of this funding. China also provides financial support of 1.4 million RMB (approximately 230 million won) per ship for the construction of new LNG-propelled ships, while Singapore offers a 25% lower port tax rate to LNG-fueled ships and has also created a \$8.2 million fund which provides \$1.4 million per ship. This is closely linked to Singapore's efforts to establish an LNG trading hub.

It is worth noting that an LNG trading hub and bunkering project can support each other by creating a synergy effect. Accordingly, energy cooperation where each country allows joint use of its natural gas facilities to expand the regional network is important for the establishment of an Asian natural gas market. This cooperation could serve as an important foundation for the creation of such a market.

Countries in Northeast Asia have recently begun competing to establish LNG bunkering infrastructure, which is expected to offer links to LNG trading hubs. Competition to build LNG trading hubs will pit these countries against each other. However, working together to implement and standardize areas such as LNG port bunkering standards and procedures, operational safety standards, eligibility of workers, technological standards for bunkering tanks and ships, the identification of explosion-proof areas and emergency procedures could serve as a starting point for cooperation. Accordingly, standardizing LNG bunkering projects and establishing a network of cooperation could be important agenda items for the consultative body made up of Northeast Asian LNG consumer countries that we suggested above.



### **3. Energy Network Cooperation in Northeast Asia : Establishing a Natural Gas Network and Electricity Super Grid**

#### **1) Establishing a Natural Gas Network in Northeast Asia**

As stated above, LNG is an attractive energy source in the context of the new climate regime, and there has recently been a large increase in the use of LNG. In a keynote address at the International Association for Energy Economics (IAEE) European Conference, IEA Executive Director Fatih Birol stated that natural gas was entering its second golden age and forecast that there would be large changes in the global trade of natural gas as new exporters like Australia and the United States enter the market.

Global production of LNG gas rose by more than 10% between 2010 and 2015 to reach 3,199.5 toe. The United States is the largest producer with 22% of the total, followed by Russia with 16.1%, Canada with 6.1%, Iran with 5.4%, and Qatar with 5.1%. Put together, these five countries account for 55% of global market share. On the other hand, Asia consumes vast quantities of natural gas while producing very little. As of 2015, Asia accounted for 20% of global consumption, and the figure continues to rise. Northeast Asian countries make up a large portion of this demand with China, Japan, and South Korea using 5.7%, 3.3% and 1.3%, respectively, of the total 6.31 million toe of natural gas produced worldwide in 2015.

South Korea imports 96% of its energy but has poor energy security, ranking 77th in the world for energy security in data published by the World Energy Council in 2016. South Korea is one of the few OECD countries whose energy network is not connected to neighboring countries. South Korea also has no experience with energy cooperation despite being close to mineral-rich countries such as Russia and Mongolia. In fact, the scale of Russia's natural gas reserves, production, and trade volume is among the best in the world, and the country has put significant effort into exporting to Northeast Asia as well as Europe.

There are signs that a market for Russian natural gas will develop in Northeast Asia, with the possibility of a market for shale gas imports from the United States forming as well. Although it may be difficult in the short term, most experts believe that a natural gas trading hub will form in Northeast Asia in the long term. This is because although demand for natural gas has been steadily rising in the Northeast Asian region for some time, a market has not been created due to the low number of suppliers. Therefore, an influx of new suppliers and volume will naturally create the conditions for Asia to become a gas trading hub. In the middle to long term, the high likelihood of Russia developing the



Arctic Passage means that the optimal time for Northeast Asia to invest in natural gas projects is rapidly approaching.

South Korea, China, and Japan are seeking cooperation with Russia as the three countries aim to increase their reliance on natural gas. China has already successfully conducted some negotiations with Russia, while Japan has discussed linking Sakhalin to the natural gas network in summit meetings with Russia. Japan is also seeking to link the North American and Asian markets through the liberalization of its own natural gas and power markets. Meanwhile, South Korea has been discussing the possibility of a project to connect natural gas pipelines with Russia for more than 20 years. In recent times, this discussion has turned towards operating LNG pipelines as well as PNG pipelines. This reflects the growing importance of LNG in global gas trade and also sidesteps the issue of North Korea, which presents an obstacle to promoting regional trade in Northeast Asia.

Since South Korea, China, and Japan all need more natural gas, securing additional suppliers would go a long way towards boosting energy security for each country. Furthermore, if Russia began trading with key consumer countries in Northeast Asia, it would increase the number of local suppliers in the region, thereby contributing to the formation and growth of a regional market. At present, the physical conditions necessary for an Asian energy hub in the middle to long term are naturally coming together.

However, this is not without its problems. The biggest obstacle is Russia's high export prices. Although South Korea and Japan currently have the ability to purchase Russian natural gas in the form of LNG, little trading is taking place because of the high price. The expansion of LNG trade or the construction of a PNG network are unlikely to happen unless the price is adjusted. When it comes to the issue of North Korea, there are feasible ideas for circumventing potential problems. Building an energy network connecting South Korea, China, and Japan with Russia and Mongolia would involve connecting several existing networks rather than constructing a single network from scratch. Accordingly, with the exception of North Korea, the construction of natural gas networks could be a good starting point. In the future, it may be possible to gradually integrate North Korea into such a regional energy network.

Since the three Northeast Asian countries have high population density and few natural resources, it would be difficult for any single country to deal with energy security issues or adequately respond to the climate change accord on its own. To solve these problems, it will be necessary for each country to connect its power grid with those of its neighbors. Russia is the only country that can supply PNG to Northeast Asia, and the possibility of the opening of the Arctic Passage indicates that natural gas trade between South Korea and Russia will be a major driver behind bilateral cooperation going forward. Natural gas is the most environmentally friendly fossil fuel, and demand for this energy source is projected to increase. Gas is also likely to remain useful in the future as it can be linked to



hydrogen fuel cells. If three or more countries join forces, the long process of building a power grid would require continued investment in technological development and operating methods. To ensure that energy cooperation between South Korea and Russia is not tied to particular administrations in either country, international organizations should be brought in to assist in the allocation of roles.

When it comes to cooperation between natural gas consumer countries in Northeast Asia, two methods are possible. Market mechanisms can be employed for LNG projects, where trading usually takes place in the context of bilateral relations. Meanwhile, a regional approach can be adopted for PNG projects through the establishment of a regional natural gas supply network. The time has come for cooperation to integrate or link natural gas construction projects into a regional natural gas supply network through this two-track approach. This can ultimately also be applied to relations between energy producers and consumers in the Northeast Asian region.

## **2) Establishing a Super Grid in Northeast Asia**

In South Korea, the Moon Jae-in administration is moving away from coal and nuclear power in order to respond to climate change and improve air quality. The government's policy aims to expand the use of gas and renewable energy sources to meet the resulting electricity shortfall. The administration is attempting to find ways to supplement these energy sources, since power generation through gas relies on imports, which can be unstable. Furthermore, renewable sources suffer from intermittency because they are dependent on weather conditions and land space. Against this background, there is growing interest in Northeast Asia in an integrated power grid that would allow countries to import electricity directly from other countries with higher generation capacity and cheaper prices.

Under this broad initiative, countries are seeking to engage in a variety of bilateral and multilateral projects. China, Mongolia, and Russia are already cooperating in this way through bilateral electricity trading. For example, Mongolia and China are planning to link the power systems between the Gobi Desert and Tianjin. In 2016, Russia exported 3,320GWh of power to China, equivalent to 0.05% of China's total consumption. Despite the fact that Mongolia has great potential to export renewable energy, the country is still importing electricity from China and Russia. Mongolia raised its energy imports from 434GWh in 2012 to 1,760GWh in 2016, equivalent to 20% of the nation's total power consumption.

The proposals that would have the largest impact are establishing an integrated power grid between China, South Korea, and Japan, as well as Russia's plan to build an "Energy Super Ring." Considering the difference in electricity prices between South Korea, China, and Japan, transmitting



electricity from China to South Korea and then on to Japan would be the best option to satisfy consumers in all three countries.<sup>1</sup> Russian President Vladimir Putin is strongly in favor of building an Energy Super Ring in Asia that would link South Korea, North Korea, and Russia and also include a bridging project with Japan. This would establish an integrated power grid in Northeast Asia. Since it would be practically impossible to integrate the Korean Peninsula with cables that pass through North Korea, the most realistic plan at present would be linking South Korea and China, South Korea and Japan, and Russia and Japan through undersea cables. The Korea-China section would reach from Weihai to South Korea’s west coast while the Korea-Japan section would connect South Jeolla or South Gyeongsang Province to Matsue. The Russia-Japan section would stretch from Vladivostok to Kashiwazaki.

At the 2017 Belt and Road Forum held in May in Beijing, Putin stated that the Energy Ring will provide a basic framework for energy cooperation in Northeast Asia. At the 2016 2nd Eastern Forum, Putin suggested setting up a working group between the governments of Russia, South Korea, and Japan to discuss an energy bridge project based on undersea transmission cables. He mentioned offering a “competitive price” on electricity to both countries. Russia believes that establishing an integrated power grid to sell electricity by linking Russia, the Korean Peninsula, Sakhalin, and Japan is a better option than exporting fuels like coal, gas, and oil.

**Table 2. Characteristics of transmission networks between countries in a Northeast Asian super grid**

Transmission network	Volume (GW)	Distance (km)	Investment cost (billion USD)
Russia-Mongolia	8.9	1,250	3.7
Russia (Siberia)-China	4.1	2,000	2.1
Russia (Far East)-China	10.7	1,200	2.9
Russia-North Korea	3.3	1,700	0.9
Russia-Japan	5.3	2,000 (Undersea cables 220)	7.7
China-Mongolia	8.2	1,400	2.1
China-North Korea	15	450	2.7

<sup>1</sup> Electricity prices in the three countries differ as follows: South Korea 111 won/kWh, Japan 290 won/kWh, and China 100 won/kWh.



South Korea-North Korea	15	250	2.7
South Korea-Japan	15	900 (Undersea cables 250)	14.3
Total	85.5	11,150	39.1

\*Source: Podkovalnikov, S. "Proposed Schemes and Technical and Political Implications," The 3rd Northeast Asia Energy Security Forum, The Plaza, Seoul (December 17, 2015).

Accordingly, Northeast Asian countries need to take the following into account when seeking to establish a regional super grid.

1. As differences exist between countries in terms of peak demand in the summer and winter seasons, South Korea needs to take advantage of those differences to secure greater electricity reserves for responding to peak demand. This would offset the decline in power reserves that will result from moving away from nuclear power and be a significant advantage in the energy transition process.

2. It will be possible to greatly expand the output of renewable energy, including large quantities of wind energy and solar power from Mongolia and Siberia. Facilities such as the Bureya Dam, the largest hydropower plant in the Russian Far East and Maritime Province, are well-positioned to generate electricity due to the abundance of water in the Amur, Ussuri, and Bureya rivers. Expanding Northern Economic Cooperation to new areas could help to spread an ethos of cooperation on renewable energy beyond the Korean Peninsula and into Northeast Asia.

3. Since the domestic construction market in South Korea is heavily saturated, large-scale clean infrastructure projects could provide new sources of economic growth for the country by creating jobs in the construction and IT sectors. In particular, growth momentum could come from areas in which South Korean companies are already strong, such as energy storage facilities, superconductors, extra-high voltage DC transmission networks, undersea cable technology, and Wide Area Monitoring and Control systems (WAMACs).

4. Linking power grids in Northeast Asia would add an influx of power, helping to lighten the burden of reducing greenhouse gas emissions for each country. An influx of clean energy would allow countries to meet their energy needs without operating power plants, making it easier to meet emission reduction targets under the new climate regime. If South Korea and Japan reduce their reliance on nuclear power during the energy transition, it could make it harder to hit emission reduction targets, and the super grid would provide a solution to this problem. In 2014, South Korea was able to reduce greenhouse gas emissions by 0.8% over the previous year and the revival of nuclear



power played a significant part in this.

5. In order to make the most of this project, the most important thing is that leaders within the region reach a consensus on its necessity and effectiveness. The issue could be added to the agenda for summit meetings between South Korea, China, and Japan. Within South Korea, there needs to be agreement between political parties so that the project will not be halted whenever a new party comes to power. This is necessary for the long-term stability of the project.

6. More broadly, international organizations should be involved in integrating power grids in Northeast Asia by helping to determine the roles to be played by each party and mediating differences of opinion. On this point, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has an important role to play as a body dedicated to promoting international energy cooperation. In May 2013, UNESCAP launched the Asia-Pacific Forum on Renewable Energy (AFORE) with the goal of supporting energy cooperation and integration between member states. The organization's role in promoting power grid integration in Northeast Asia is slowly expanding.

This project is complex, involves many countries, and will take a long time. Accordingly, in order to advance joint projects, preliminary analysis must first be conducted on system design and the operation of power grids as well as their cost and economic and technological viability. Based on this preliminary analysis, governments should come up with a jointly determined schedule and roadmap and adopt the project as part of their policy agenda.



## Ch.4. The Future of Energy Cooperation in Northeast Asia

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This paper outlines two issues pertaining to international energy cooperation in Northeast Asia. Part I sets out the current circumstances and expected challenges surrounding the establishment of an LNG spot market. Part II discusses obstacles to constructing a system of international power cables (a super grid) in Northeast Asia and describes a transmission rights system that has been employed in Europe to overcome one of these obstacles. Part III contains the conclusion.

### **1. Establishing an LNG Spot Market**

Unlike in the West, there is no functional spot market for gas in Northeast Asia. If a gas spot market existed in Northeast Asia, gas could be rapidly transmitted in the event that a region suffered a gas shortage. Furthermore, it would allow even smaller power companies to obtain gas more cheaply on the spot market instead of being forced to rely on rigid long-term contracts.

#### **1) Natural Gas and the Liberalization of Electricity**

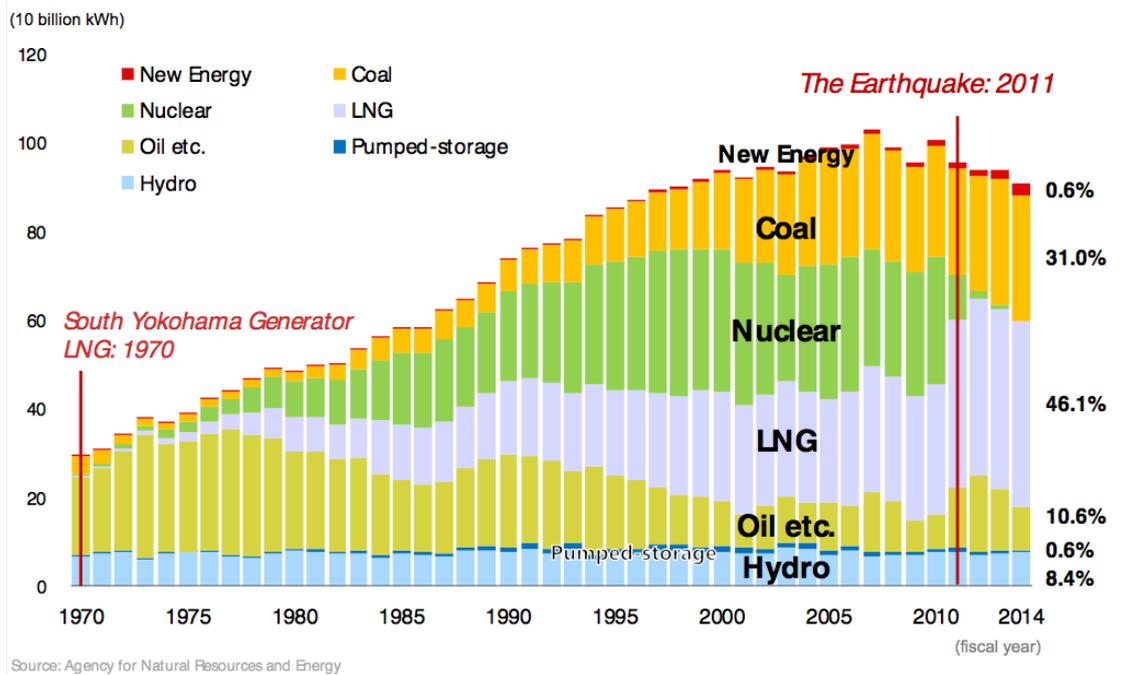
The development of turbines that could convert natural gas into fuel was one of the main contributing factors to the liberalization of electricity around the world.

One of the reasons why many countries adopted a single system of power generation and transmission in the past was that power cables, as well as hydropower or large-scale coal-fired power generation, required a certain scale of operations. This made it difficult for smaller power companies to compete. However, with the development of gas turbines in the 1970 and combined cycle gas turbines in the 1980s, efficient power generation became possible even in smaller power plants. This allowed many independent power companies to enter the electricity market.

In countries where gas fields are linked to areas of demand through pipelines, as is the case in the US and Europe, the equilibrium price of gas is determined hourly in exchanges such as the Henry Hub in Louisiana. This also creates a spot market, and the hub sets the price for surrounding areas. This



means that even smaller power companies can take advantage of the spot market to flexibly purchase gas for electricity generation.



In turn, this has helped to boost the pace of electricity liberalization and further the development of gas spot markets.

## 2) LNG and Power Generation

However, there are no pipelines connecting gas fields with areas of demand in Japan and South Korea, as these countries produce almost no natural gas. Accordingly, natural gas is imported on ships in the form of LNG. The LNG transported on ships is stored in liquid form in cold storage tanks called LNG terminals and then converted to gas before being sent to power generators through pipelines.

Electricity generation through gas turbines that converted LNG into fuel first began in Japan in 1971. In line with increasing demand for clean energy, LNG generation in Japan continued to rise and eventually replaced oil. Following the large earthquake in 2011, the country developed the capacity to replace nuclear energy with other sources. Figure 1 illustrates how LNG has replaced oil and become the most widely used fuel for power generation since the 1990s.

## 3) Reasons for the Non-Existence of an LNG Spot Market in Northeast Asia



In regions such as the US and Europe where gas fields are directly linked to areas of demand via pipelines, the equilibrium market price of gas in spot markets is determined by a hub connected to the pipeline. However, as mentioned above, there are no pipelines connecting South Korea and Japan to gas producing countries. This is the main reason why, unlike in the West, a spot market for trading gas has never been established in Northeast Asia. This serves as an entry barrier for new power companies.

Would small power companies in Japan be able to freely purchase gas if an LNG spot market existed? In fact, there are several major obstacles to this.

First, countries that produce LNG have asserted dominance over the market.

These countries collude to determine the price of LNG in the same way that Arab countries set the price of oil. Furthermore, LNG imports come with the condition that the gas cannot be resold. Gas producing nations are concerned that the price of gas could plummet if reselling was permitted. In this situation, the price is determined by exogenous forces and importers are prohibited from reselling gas purchased under long-term contracts. This makes establishing a spot market for gas very difficult.

Second, unlike in Europe, there are no underground tanks where imported gas can be stored at a low cost.

In Europe, spot markets exist for gas that is directly sent to producers through pipelines, but purchased gas can also be stored in underground tanks. These tanks are located in regions where gas used to be extracted from the ground. Such storage tanks exist because the reserves of natural gas were so large, and these facilities can be used to store LNG in gas form.

On the other hand, South Korea and Japan have no choice but to use LNG terminals for storage since there are no other facilities available. Building LNG terminals also costs a lot of money so it is difficult for new, small-scale companies to build such tanks. Accordingly, LNG terminals are monopolized by large gas and power companies that are reluctant to let newcomers use the facilities. This is why markets for renting storage space remain undeveloped or even non-existent.

#### **4) Platt's JKM (Japan Korea Marker) for LNG Benchmark Price Assessment**

Of the two issues mentioned above, the prohibition on reselling imported gas is fading. The situation is rapidly changing as the US begins large-scale production of shale gas, and gas prices have diverged from oil prices.

The advent of this market has also changed the way that contract prices are determined. Instead of being tied to oil prices, the price on gas exchanges is now used as a benchmark.

At present, a new index for LNG spot prices in South Korea and Japan called JKM (Japan Korea



Market) is being created, based on prices collated from free market transactions. This is also being used in Europe as a reference for LNG spot market prices in East Asia.

With the absence of pipelines in East Asia, LNG is transported via ships, and counter-trade prices are determined based on factors such as the size of the vessel, length of delivery time and type of gas. This means that there is no single equilibrium LNG spot price. Accordingly, the JKM index was created by determining a 'standard price' for standard vessel size, delivery time and gas type derived from actual prices from the past. This involved collecting a series of prices via surveys and turning them into an index. The estimate of the price for a specific transaction is adjusted based on how much the transaction details differ from the standard specifications. Since the large companies that own the LNG terminals have adopted JKM, spot transactions have now become far more fluid. In addition to this, a spot market for JKM is now forming in Europe as well.

### **5) Rental Market for LNG Terminals**

However, if storage space in LNG terminals is not freely available for rent, smaller companies cannot take advantage of JKM. Accordingly, it would be desirable if there were a way for small power companies to access these facilities. LNG terminals are essential facilities, just like power cables, gas pipelines and ports.

The second problem could be solved by making open access mandatory and preventing companies that build LNG terminals from monopolizing the facilities. This would allow rental prices to be determined by the market forces of supply and demand. Furthermore, if use of the most expensive facilities is encouraged, it would create liquidity in the LNG terminal storage space market. Accordingly, newcomers to the industry would be able to use LNG purchased on the spot market for power generation. This demonstrates that the existence of a spot market for LNG terminal space is crucial to the widespread use of the LNG spot market.

In Japan, LNG terminals are gradually moving towards open access. However, the first-come-first-served principle remains in place, and only remaining portions of gas are added to open access.

South Korea and Singapore have experience when it comes to renting LNG terminal space. Japan could learn from this and do a lot more to promote joint research on creating a neutral, open market for LNG terminal space, recognizing the essential nature of these facilities. Being able to take advantage of an LNG spot market would make life easier for small power companies in Northeast Asian countries.

## **2. Construction of a Super Grid and Transmission Rights**



## 1) Obstacles to Constructing a Super Grid

In the future, it could be possible to construct a super grid of power cables between South Korea and Japan, or Russia and Japan. A super grid would play an important role in boosting energy security between states. However, there are five obstacles to building a super grid.

First, let's imagine that there are two countries, H and L. The price of electricity in L is far cheaper than in H. In this situation, if a cross-border grid was established, H would import electricity. This would cause power companies in H to go bankrupt, creating the kind of problem that typically flows from trade liberalization. Accordingly, when H imports electricity, it would have to compensate local power companies and seek a free trade package deal which includes items that H wishes to export in greater quantities.

Second, let's imagine that electricity costs more in H because H has stricter regulations on greenhouse gas emissions than L. In this situation, electricity would be exported from the country that produces more CO<sub>2</sub> to the country that has stricter regulations. This is not a positive outcome for the world in terms of global warming policy. Accordingly, when promoting international trade of electricity, there needs to be either uniformity amongst CO<sub>2</sub> regulations or adjustments through tariffs to account for differences.

Third, the cost of constructing power cables will have to be borne by users. This means that the viability of constructing power lines can be determined by comparing the cost of construction with the benefits obtained. When trading begins, there will be a decisive gap between the price of electricity that required a large capital investment and products that can be traded more cheaply via shipping. In order to determine whether power cables will be able to pay for themselves, it is necessary to estimate how much electricity they can transmit and how much of the price discrepancy can be covered.

Fourth, when making such estimates, the competitive prices in both countries both before and after building the cables must be compared. As a prerequisite to this, discussions must first focus on institutional tools for calculating competitive prices.

Fifth, in order to recover the cost of cable construction, rules must be put in place about usage rights. In other words, how transmission rights will be sold. This means that effective rules of use for domestic cables in both countries must first be in place (Japan is currently attempting to undertake large-scale reforms of domestic cables between Hokkaido and Honshu, and Kyushu and Honshu). If this can be done, the next issue to tackle is inconsistency between rules on international and domestic cables. A futures market for power cable usage rights also needs to be established.



Accordingly, a number of systems need to be established to make the construction of international power cables possible.

## **2) Transmission Rights**

The following section examines one of such systems - the transmission rights system that exists in Europe serves to recoup the cost of international cable construction.

### **A. Indirect Auctions**

The term market coupling refers to exchanges making use of connecting power cables. When there is spare capacity in the cables, the price of exchanges in both regions will be the same.

However, when the cables are congested, it leads to a discrepancy in price between the exchanges in each region, and electricity will flow from the cheaper region to the more expensive region. This means that the TSO, the owner of the cables, will purchase electricity in the cheaper region and sell it in the more expensive region, keeping the difference in price as profit. The price discrepancy between the two regions can be viewed as the remaining difference when the connecting cables are used at full capacity and the price differential narrows.

When the price of transmission rights is decided through a direct auction, it is called an explicit auction. On the other hand, when the cables are congested, the price differential created between the two regions is called the 'price of transmission rights determined through implicit auction'. This is because even if there is no actual auction of transmission rights, the process of bidding at exchanges in both regions will indirectly determine the price.

### **B. Financial Transmission Rights (FTR)**

Financial transmission rights (FTR) refers to a futures market that exists for the price difference between exchanges in two regions connected by power cables. When there is no congestion and the price is the same in both regions, the futures price is zero. However, when congestion is expected, the futures price will rise to the extent of the price discrepancy between the importing and exporting region. However, once FTR have been purchased, it is possible to hedge against price fluctuations caused by congestion. In other words, FTR owners engage in trading based on the actual trading price in the region, but can claim the difference in price by later selling the rights back to the TSO. When FTR are purchased for a fixed amount of money, it is possible to hedge against price fluctuations caused by congestion.

More specifically, TSO puts FTR up for bidding one year in advance. The winning bidder can sell the



rights to TSO and in exchange receive the difference between the sale price and the actual price in the region as profit. For traders, buying FTR in advance is a kind of insurance against uncertainty caused by price differences. On the other hand, TSO does not incur any profit or loss from this process because although selling FTR in advance does generate income, this is the same amount that would be generated if TSO were to purchase the rights from FTR owners and then sell the equivalent volume via implicit auction. However, it can also be viewed as a way of obtaining guaranteed income instead of the uncertain income generated from market coupling. A certain portion of cable capacity must be set aside as margins for ‘primary reserves’, but the remaining capacity can be used for market coupling. In this situation, TSO will put a quantity of FTR up for bidding that is equivalent to the capacity provided for market coupling. This is because if the quantity of rights sold exceeds the remaining capacity, there is no way for TSO to recover the money later on from income generated through price differences.

Eligibility for bidding on FTR is determined via agreements with TSO that cover terms such as ability to pay, allowing not only electricity vendors but also finance companies to take part.

### **C. Physical Transmission Rights (PTR)**

Physical transmission rights (PTR) are a system where parties engaged in counter-trading between regions can use the cables to transmit volume equal to the quantity of rights purchased. Instead of being exposed to price differences between exchanges, the parties sign an agreement where a fixed amount is paid for a certain quantity of PTR, leading to certainty in financial obligations and transactions. In other words, this is another way of hedging against fluctuations in price differentials between the connected regions.

TSO has to set aside some of the capacity of connecting cables as margins for ‘primary reserves’, but part of the remaining capacity is divided into PTR. What is left over is allocated for market coupling.

TSO puts PTR pertaining to the allocated space up for bidding. When a buyer and seller, using PTR, confirm a deal all the way to gate closure, the right is said to be ‘nominated’. If the buyer is unable to exercise the nominated right, the PTR can be sold to TSO. TSO will buy the nominated rights based on the posterior price differential between the two regions and then increase the volume for market coupling by an equivalent amount.

If all parties that had purchased nominated rights sold these rights to TSO, the nominated rights would be the same as FTR. On the other hand, if a certain portion of these rights are not sold to TSO, the unsold portion can be used for trading between individual parties. In this case, the PTR can be said to partially include FTR in a special form. In the past, PTR were used more commonly in Europe, but recently there has been a switch towards FTR.



TSO sells PTR through bidding. Physical players (power companies, electricity consumers or retailers that connect these entities) can participate in bidding, as well as banks and pure traders. However, in order to be eligible to sell transmission capacity, these entities must meet the conditions specified by TSO.

If the bidding for PTR conducted by TSO one year in advance is called the ‘primary market’, then parties which have purchased transmission rights on the primary market can then later sell these rights on the ‘secondary market’. Those who purchase transmission rights on the secondary market have identical rights to those who purchase them on the primary market. In other words, it is possible to designate the buyer and seller who will exercise the rights, and they can be sold again on the secondary market. It is also possible to sell the rights to TSO at a later date for the implicit auction price.

This is referred to as the application of the ‘use it or sell it’ principle. This means that PTR owners have the following options.

- (1) Exercise the PTR
- (2) Sell the PTR on the secondary market
- (3) Sell the PTR to TSO

When rights are sold to TSO, TSO increases the volume for implicit auction by an equivalent amount and pays the seller an amount equal to the price difference determined via implicit auction.

#### **D. Physical Transmission Rights and Financial Transmission Rights**

When a party that has purchased FTR sells those rights to TSO, TSO will purchase the rights based on the difference in value between markets in the two regions. The amount paid by TSO to purchase the FTR is the same as the income generated from market coupling. However, since TSO generates income from putting FTR up for bidding, it is able to generate a guaranteed level of income instead of the uncertain level of income that flows from market coupling. Regardless of whether FTR holders purchased the rights in the original bidding or on the secondary market, they must all be sold to TSO in the end.

If the quantity of FTR sold in initial bidding exceeds the capacity of the cables, then TSO must pay the excess income generated from congestion charges to FTR holders, causing TSO to make a loss. Accordingly, TSO must ensure that the volume of rights sold is within the capacity of the cables. TSO needs to accurately assess the ratios for each year, half year, month and week, and gradually increase the quantity of rights sold as the time frame draws nearer based on estimates of how much capacity



will be available at each point in time.

#### **E. FTR and nominated rights cannot exist for the same cable.**

When futures trading takes place in the two markets connected by cables, in theory the price differential should revert to the FTR price. However, this must be based on accurate predictions of transmission space. Since TSO is able to make these accurate predictions, FTR markets operated by TSO tend to be more accurate. However, if futures markets already exist in both locations, it becomes easier to determine the starting point for pricing FTR. The price of FTR becomes more accurate as the date of transmission draws closer.

### **3. Conclusion**

This paper examined two issues pertaining to energy cooperation in Northeast Asia - the establishment of an LNG spot market and the construction of a super grid. From this analysis the following can be ascertained.

First, establishing an LNG spot market that small-scale power companies can access is key to electricity liberalization, but no such market currently exists in Northeast Asia. The biggest issue in establishing a spot market is determining how to open the floor for LNG terminals. Europe is able to use abandoned underground mines for gas storage, but in Northeast Asia there is no storage option outside of expensive LNG terminals. Accordingly, Europe cannot offer any guidance on how to create a market for renting storage space, and this is an issue that Northeast Asia will have to solve on its own.

Second, in light of the existence of user-paid international power cables in Europe, the profitability of constructing such a super grid in Northeast Asia can be ascertained based on the European model. Since constructing a super grid in Northeast Asia would be highly profitable for construction companies, it would be easy to create political pressure for state funding, but Europe has stuck to a user-paid model. However, the user-paid system was viable in Europe because international power cables were constructed on the premise of a highly liberalized electricity market and the adoption of effective pricing. When it comes to determining the economic viability of a super grid in Northeast Asia, the first issues to tackle are establishing an effective market and deciding how prices will be determined. Northeast Asia is currently going through the stage of implementing electricity liberalization. Fortunately, liberalization of the electricity market continues to take place in Europe, and Northeast Asia can learn from this experience in a short period of time.

In conclusion, Northeast Asian countries need to cooperate to reform the rental market for LNG



terminal storage space in order to establish an LNG spot market. Meanwhile, when it comes to the construction of a super grid, Northeast Asian nations need to learn from reforms in the European electricity market, including the establishment of a transmission rights system.



### III. Finance Cooperation



## Ch.5. Is the Proposal for a Regional Economic Community in Northeast Asia (The Butterfly Project) Viable?

**Masahiro Akiyama**

President, Akiyama Associates

**1 The Butterfly Project, put forward by the Future Consensus Institute (Yeosijae), is an attempt to promote regional economic cooperation and establish a regional economic community.** The proposal leaves aside difficult political issues, believing that in any circumstances, regional stability can be achieved through cooperation on economic issues.

The Butterfly Project ultimately aims to reach East and West Eurasia and North America. However, its policies target only the Northeast Asian countries (South Korea, Japan, China and Russia) that lie at the heart of the project. Is this project feasible?

For mere regional cooperation, there is no need to create an international organization. Accordingly, when appraising the viability of the Butterfly Project that includes more than cooperation, it is necessary to examine the feasibility of building a regional community. This is far from easy, as it would involve establishing a unified international body.

First, it is necessary to analyze the circumstances that led to the plan of establishing a regional economic community in Asia, what is the plan like, and what conditions would be necessary to make it a reality. A detailed discussion of these points can be found in 'The Outlook for Plans to Establish an East Asian Community' by Yona Kikuchi.

**2 The ASEAN community was first proposed in 1976 and came into existence in 2015.** However, since the community acknowledges that each member country retains its full sovereignty, the ASEAN community differs in nature from the EU, which places some limits on national sovereignty. Organizations described in the following section are all different from the EU.

The ASEAN+3 (APT) was established in the wake of the 1997 Asian financial crisis and has achieved concrete results in the financial sector. Since its inception, the APT has successfully launched the Chiang Mai Initiative (CMI) in 2000, the Asian Bond Markets Initiative (ABMI) in 2003, the Chiang Mai Initiative Multilateralization (CMIM) in 2010, and the ASEAN+3 Macroeconomic Research Office (AMRO) in 2011.



The APT engages in negotiations on a government level through APT Summit Meetings, ministerial meetings, including Foreign Ministers Meetings, as well as Senior Officials Meetings (SOM). The APT has focused on the economic and financial sectors, and additionally promoted cooperation in 24 fields on 68 cooperative issues.

The plan for an East Asian Community came about through the APT Summit Meetings. The first East Asia Summit was held in 2005, and several further meetings have been held since then.

The East Asia Vision Group II (EAVGII) was created at the suggestion of Former South Korean President Lee Myung-bak in 2012. This group later submitted a report entitled 'Realizing an East Asia Economic Community by 2020.' An East Asia Economic Community (EAEC) was also mentioned in the Manila Declaration on the 20th Anniversary of ASEAN +3 Cooperation, which was adopted in 2017. Following this, the issue of establishing of an East Asia Community has remained on the agenda, but current circumstances make realizing the proposal very difficult.

In the meantime, other proposals for a regional economic bloc have been put forward. The Free-Trade Agreement of the Asia-Pacific (FTAAP) was proposed in 2004 while a plan for the Regional Comprehensive Economic Partnership (RCEP) was put forward in 2012. However, it appears unlikely that these proposals will come to fruition. During this period, the Trans-Pacific Partnership has made concrete progress.

### **3 Let us consider the viability of the Butterfly Project in light of the background described above.**

The EAEC has not come to fruition but had some progress in the financial sector. When drawing up a plan for the Butterfly Project, it will be necessary to clarify both its goals and its geographical scope for the project in comparison with a viable EAEC plan.

It is not difficult to establish regional cooperative systems in areas such as city-to-city cooperation, energy cooperation, and financial cooperation. However, it is necessary to consider whether such forms of cooperation represent a meaningful cooperative framework for the Butterfly Project's lofty plan. Taking this into account we should further discuss the scope and way of cooperation for the Butterfly Project, based on these examples of regional cooperation.

ASEAN lies at the center of the background behind the plan for the East Asia Economic Community, and China and Japan have also exercised considerable influence. If the Butterfly Project is to be pursued, there needs to be a main driving force behind it. Which country or countries could play such a role? South Korea should be a player since it would struggle to implement the plan on its own. Japan could be another player as it exists, along with South Korea, in a center of the Butterfly. Another approach would be to utilize the existing cooperative framework between South Korea, Japan and



China.

In these cases, the important thing is to make governments involved in the discussion. Otherwise, the Butterfly Project could end up petering out.

**4 As demonstrated in Masahiro Kawai's presentation, financial cooperation in the East Asian region has already made concrete progress.** This means that one of the potential functions of an East Asian economic community has already been taken care of. Accordingly, it is necessary to consider whether this function could be separated so that it is incorporated into the Butterfly Project.

Another option is as follows. Launching a new dedicated body for Northeast Asia that would operate within the financial cooperation framework already established under the APT appears to be a viable plan. For example, a 'Northeast Asian Bond Markets Initiative' could be launched alongside the existing ABMI.

There is also considerable demand for development finance in the region. In particular, if the North Korean issue were resolved and North Korea became integrated into the regional economic community, this demand would continue to grow, and South Korea (perhaps in cooperation with Japan) could consider taking the initiative and establishing an independent financial institution.

Furthermore, considering that complete borderless financial cooperation made significant progress with the APT fulfilling the function of an economic community, further targeted discussions on the direction of financial cooperation in Northeast Asia should be possible.

Ultimately, what the Butterfly Project needs is further discussions with a view to actually establishing a regional economic community, instead of simply discussing ideas on paper.



## Ch.6. The Outlook for Plans to Establish an East Asian Community

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### Introduction

Since the signing of the Plaza Accord in 1985, regional integration in East Asia has made progress with deepening interdependent economic ties in the region and the establishment of a supply chain thanks to increased direct investment by Japanese corporations. Furthermore, a number of regional systems have been developed, including ASEAN, APEC, the ASEAN Regional Forum (ARF), ASEAN +3 (APT), the East Asia Summit (EAS), the Trilateral Summit between South Korea, China and Japan, and the ASEAN Defense Minister's Meeting (ADMM+). Based on this, functional cooperation is making progress in a number of sectors, while regionalism in Southeast Asia, the Asia Pacific region, East Asia, Expanded East Asia and Northeast Asia is on the rise. Against this background, a proposal for establishing an East Asian Community (EAC) was first put forward in 2000s. However, at present, it would be difficult to argue that negotiations to establish an East Asian Community are taking place on a summit level<sup>1</sup>. Nevertheless, the concept is often mentioned in summit meeting documents with a long term view towards establishing an EAC, and proposals for related organizations such as the East Asian Economic Community are also in the pipeline, helping to lay a foundation for advancement in regional cooperation and integration in East Asia.

This paper aims to examine the East Asian Community proposal, including the background behind the idea, its current status and possibilities for the future. More specifically, this study first looks at the changes in regional systems and regionalism that took place in the period between the 1997 Asian financial crisis and the announcement of the EAC proposal. The second part examines the changes in regional systems and regionalism in terms of regional cooperation after the EAC plan was put forward. Finally, this paper will discuss the current state of regional systems in East Asia, including the recently

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<sup>1</sup> At present, ASEAN+3 and EAS exist as regional systems with the long term goal of establishing an EAC, but negotiations on issues such as the scope and target launch date of such an entity are yet to take place.



proposed East Asian Economic Community, and analyze possibilities for the future of the EAC. Based on this analysis, this study also aims to assist in the study of economic and financial cooperation within East Asia.

## 1. The Birth of Regional Cooperation in East Asia

### 1) Advances in Southeast Asian Regional Cooperation

In the wake of World War II, when regional cooperation and integration were taking place in Europe, several plans for regional cooperation were put forward in the Asia Pacific region, including the UN Economic Commission for Asia and the Far East (ECAFE) and the Southeast Asia Treaty Organization (SEATO), but these ideas never became firmly established. Accordingly, the region was viewed as a wasteland in terms of regional cooperation. However, in the 1960s, regional cooperation began to gain some traction in Southeast Asia and the Asia Pacific region.

Despite a variety of confrontations and conflict in Southeast Asia, the region gradually became more pro-Western, beginning with the Suharto administration in Indonesia, which led to the establishment of the Southeast Asian Development Ministers Meeting in 1966 and ASEAN in 1967. The Southeast Asian Development Ministers Meeting was a regional initiative originating from Japan, incorporating six member countries including pro-Western nations Malaysia, the Philippines, Singapore, South Vietnam and Thailand, as well as Indonesia and Laos as neutral observers. The organization was an attempt to institutionalize the framework for Japanese aid provision to Asia. However, there was a difference of opinion between Japan and the Southeast Asian nations regarding the scale and type of aid to be provided, and the establishment of ASEAN spurred the Southeast Asian nations to resolve their differences within their own jurisdiction. Accordingly, the Japan-led framework for Southeast Asia began to lose popularity and gradually faded away<sup>2</sup>. ASEAN was established with five founding members; Indonesia, Malaysia, the Philippines, Singapore and Thailand. The organization was not strictly anti-communist, and in the Bangkok Declaration adopted in 1967, a year after the group's establishment, ASEAN decided to focus on building a prosperous and peaceful community, promoting economic and cultural cooperation and incorporating other Southeast Asian nations. In 1976, the organization announced the goal of creating an ASEAN community in the Declaration of ASEAN Concord. This was followed by the adoption of the Treaty of Amity and Cooperation in Southeast Asia

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<sup>2</sup> For a description of the circumstances surrounding the launch of the Southeast Asian Development Ministers Meeting, refer to 大庭三枝『アジア太平洋地域形成への過程』、ミネルヴァ書房、2004年、98-100頁.



(TAC) and the commencement of dialogue with superpowers outside the ASEAN jurisdiction from the 1970s, which led to the convening of the Post Ministerial Conference (PMC) from 1979. This was a step forward for regionalism and regional cooperation in Southeast Asia<sup>3</sup>. With the addition of Cambodia in 1999, ASEAN now has ten members. The organization's charter was launched in 2008, and in 2015 the ASEAN community was officially established.

## 2) Advances in Regional Cooperation in the Asia Pacific

In 1966, the Asian and Pacific Council (ASPAC) was established, with South Korea playing a leading role. The parties to ASPAC were South Korea, Japan, Australia, New Zealand, the Philippines, Thailand, Malaysia, South Vietnam and the Republic of China, with Laos participating as an observer. This system was an attempt by South Korea to institutionalize anti-communism. However, the anti-communist nature of the organization was diluted by opposition from other member nations, and ASPAC instead focused on cooperation in areas such as politics, the economy, social issues and culture. As a result, unlike other regional systems, ASPAC lost its independent nature and eventually dissolved amidst changes in global politics, including reconciliation between the US and China<sup>4</sup>.

Instead of ASPAC, it was the Asia Pacific Proposal created by Japanese foreign minister Takeo Miki in 1960 and the Pacific Basin Cooperation Concept conceived by Japanese Prime Minister Masayoshi Ōhira that led to progress in the Asia Pacific region<sup>5</sup>. Australian Prime Minister Malcolm Fraser joined the Pacific Basin Cooperation Concept, and Japan and Australia took the lead in organizing the Pacific Basin Community Seminar in Canberra in 1980. At this event, negotiations about cooperation in the region were held between experts representing industry, government and academia from the US, Canada, Australia, New Zealand, Japan, ASEAN and South Korea. The representatives at this seminar established the Track 1.5<sup>6</sup> Pacific Economic Cooperation Council (PECC), which still serves as a venue

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<sup>3</sup> For a description of the circumstances surrounding the establishment of ASEAN, refer to Anja Jetschke, "ASEAN" in Mark Besson and Richard Stubbs ed., *Routledge Handbook of Asian Regionalism*, Routledge, 2012, pp. 327 - 337.

<sup>4</sup> For a description of the circumstances surrounding the launch of ASPAC, refer 鄭敬娥「1960年代のアジアにおける地域主義と韓国-アジア・太平洋協議会(ASPAC)会議を中心に-」、『大分大学教育福祉科学研究紀要』、34巻第2号、2012年、127-141.

<sup>5</sup> 寺田貴『東アジアとアジア太平洋 競合する地域統合』、東京大学出版会、2013年、39-47頁.

<sup>6</sup> Track 1.5 refers to an unofficial meeting attended by government officials and scholars. David Capie, Paul Evans, *The Asia-Pacific Security Lexicon, Singapore: Institute of Southeast Asian Studies*, 2002, pp. 211-212.



for discussing cooperation in the Asia Pacific region to this day<sup>7</sup>.

Regionalism in the Asia Pacific began to grow alongside the progress made by PECC. Australian Prime Minister Bob Hawke wrote the Asia Pacific Economic Community in 1983, based on PECC. This garnered the support of the US, who until then had shown little interest in building a regional community in Asia, and eventually led to the establishment of APEC in 1989 as an intergovernmental body. APEC began with nearly identical members to PECC, but in 1991, China, Taiwan and Hong Kong joined at the same time. In 1994, APEC set a timeframe for achieving free trade in the region through the Bogor Goals, with advanced nations aiming for 2010 and the other members aiming for 2020<sup>8</sup>. In this way, APEC promoted cooperation within the Asia Pacific region. With the addition of Peru, Chile and Russia in 1998, APEC currently consists of 21 members.

While APEC was making progress in its economic cooperation agenda, an additional plan focused on guaranteeing security in the Asia Pacific region was added in the 1990s following the end of the Cold War. In 1991, ASEAN-ISIS, a think tank linked with ASEAN, released a policy initiative called A Time for Initiative, which suggested making Asia Pacific Political Dialogues an annual event that would coincide with the convening of the ASEAN Expanded Foreign Ministers Meeting. Based on this proposal, the 1993 ASEAN Foreign Ministers Meeting decided to establish the ARF. ARF consisted of the six ASEAN nations, Australia, Canada, Japan, South Korea, New Zealand, the US, the EU, Russia, China, Vietnam and Laos, with the first meeting held in Bangkok in 1994. In the second meeting, held in 1995, it was determined that the ARF would work on building trust, preventative diplomacy and acting as a medium for conflict resolution. Since then, the ARF has served as a forum for promoting dialogue and cooperation on political and security conflicts, with 25 nations, regions and organizations taking part, including North Korea<sup>9</sup>. The ARF has taken several positive steps, including the Track 2<sup>10</sup> the Council

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<sup>7</sup> For a description of the circumstances surrounding the formation of PECC, refer 中山俊宏「アジア太平洋のトラックIIプロセス-CSCAPの事例」森本敏編『アジア太平洋の多国間安全保障』、財団法人日本国際問題研究所、2003年、191-202頁.

<sup>8</sup> For a description of the circumstances surrounding the launch of APEC, refer to 山澤逸平「APECの位置づけ」東アジア共同体評議会編『東アジア共同体白書二〇一〇』、たちばな出版、2010年、80-90頁.

<sup>9</sup> 添谷芳秀「東アジア安全保障システムのなかの日本」添谷芳秀・田所昌幸編『現代東アジアと日本1 日本の東アジア構想』、慶應義塾大学出版会、2004年、193-205頁.

<sup>10</sup> Track 2 refers to unofficial channels for dialogue on politics, the economy and guaranteeing security, in circumstances involving new issues that governments struggle to deal with or issues that cannot be discussed publicly due to contentious points that require resolving. These meetings consist of experts and leaders from academia and industry, as well as government officials who participate in an individual capacity, and involve negotiations and discussions about indirect routes to solving problems, helping to facilitate flexible and innovative responses. The division between Track 2 and Track 1.5 is often unclear,



for Security Cooperation in the Asia Pacific (CSCAP) established in 1993, writing a policy definition for preventative diplomacy and developing its function as a trust builder. This occurred alongside an expansion of the Track 2 role in the region<sup>11</sup>.

In this way, APEC and ARF made solid progress in the Asia Pacific region, but since then APEC has achieved little in terms of liberalization, and the ARF has failed to achieve cooperation on matters that go beyond trust building between nations.

### 3) Advances in Regional Cooperation in East Asia

The first step towards regionalism and cooperation in East Asia was taken by the Mahathir administration in Malaysia in 1991, with a proposal for the East Asian Economic Group (EAEG). EAEG intended to create a regional economic bloc in East Asia in response to the limitations of the GATT Uruguay Round and rising protectionism in the US and Europe. The proposal was also noted for identifying East Asia as a unified front consisting of both Northeast Asia and Southeast Asia. However, EAEG faced strong opposition from the US and Australia and was unable to win approval in some ASEAN countries. In the same year, the group's name was changed to the East Asian Economic Community (EAEC) following a suggestion by Indonesia at the ASEAN Economic Ministers Meeting. The proposal was then discussed at the 1994 ASEAN Foreign Ministers Meeting, but no further progress was made<sup>12</sup>. In this way, the EAEC ultimately failed to materialize, but regionalism continued to progress with the goal of integrating East Asia. In 1994, Singaporean Prime Minister Goh Chok Tong proposed a new plan, the Asia–Europe Meeting (ASEM), to French Prime Minister Édouard Balladur. With France representing Europe, the first ASEM meeting was held in 1996. At first, ASEM was attended by the same countries that had been party to the EAEC, including Japan, China, South Korea and the ASEAN nations, effectively serving as a framework for the EAEC.

With budding signs of regionalism beginning to show in East Asia, it was the 1997 financial crisis

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and distinctions are often drawn based on factors such as the level of participation from government officials (overall proportion and whether the issues on the agenda are decided by government bodies). David Capie, Paul Evans, *The Asia-Pacific Security Lexicon, Singapore: Institute of Southeast Asian Studies, 2002*, pp. 213–214.

<sup>11</sup> Sheldon W. Simon, “Evaluating Track 2 Approaches to Security Dialogue in the Asia-Pacific Region: The CSCAP Experience,” Desmond Ball and Kwa Chong Guan ed., *Assessing Track 2 Diplomacy in the Asia-Pacific Region*, Strategic & Defense Center and S. Rajaratnam School on International Studies, 2010, pp. 99–104.

<sup>12</sup> 大庭三枝「地域主義と日本の選択-日本はパートナーをどう選んできたのか-」、末廣昭・山影進編『アジア政治経済論 アジアの中の日本をめざして』、NTT出版、2001年、274-276.



that served as the tipping point. In the midst of the crisis, Thailand, Indonesia and South Korea requested support from the IMF, but the IMF was unable to properly fulfill its role at first, offering only a minimal amount of assistance. In addition to this, the IMF forced the three countries to engage in reforms to their economic and political structure, which caused economic chaos, leading to the resignation of Thai Prime Minister Chavalit Yongchaiyudh and the collapse of the Suharto administration in Indonesia. While this was taking place, Japan put forward a proposal for an Asian version of the IMF, the Asian Monetary Fund (AMF), which was discussed at the ASEAN Finance Ministers Meeting and G7. However, the idea was strongly opposed by the US and the IMF because of overlapping functions and the possibility of moral hazard caused by fundraising without proper monitoring of the economic situation. Accordingly, the AMF never came to fruition<sup>13</sup>. During these developments, an ASEAN+3 (APT) Summit was originally scheduled to take place in 1997 to commemorate ASEAN's 30th anniversary, with Japan, China and South Korea invited to take part. It was to be held in Malaysia in December. However, the Asian financial crisis brought the latent limitations of the Asia Pacific region to the surface for several reasons. As mentioned earlier, APEC had failed to achieve liberalization and the ARF had not made any progress beyond international trust building, while the IMF and the US failed to sufficiently respond to the crisis. Against this background, there was renewed demand for cooperation in the East Asian region, and at the second APT Summit held in 1998, it was decided to make APT Summit an annual event.

At the third APT Summit held in Manila in 1999, the organization's first declaration, titled the Joint Statement on East Asia Cooperation, was adopted. This document contained a commitment to cooperate in diverse fields including the economy, currency and finance, social development and educational training, science and R&D, culture and information, development cooperation, politics and security, and trans-border issues. In the wake of this, a number of meetings including the Foreign Ministers Meeting and Senior Officials Meeting (SOM) became annual events. The third APT Summit also featured a breakfast meeting between the leaders of South Korea, China and Japan, a tradition which has been continued in APT Summit since then. In 2008, this was formalized into an annual summit meeting between the three countries<sup>14</sup>. The first areas in which the APT made significant progress in cooperation was currency and finance. In 1998, the Japanese New Miyazawa Initiative, a

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<sup>13</sup> For a description of the circumstances surrounding the AMF proposal, refer to 岸本周平「アジア金融戦力の展開」、末廣昭・山影進編『アジア政治経済論 アジアの中の日本をめざして』、NTT出版、2001年、302-306頁。Also see Amyx Jennifer, "Moving beyond bilateralism? Japan and the Asian Monetary Fund," *Pacific Economic Papers*, no 331, ANU Research Publications, 2002, pp1-24.

<sup>14</sup> However, summit meetings between South Korea, China and Japan have been occasionally postponed for political reasons, and only six such meetings have been held as of 2017.



new proposal regarding support for the Asian financial crisis, led to \$30 billion of aid and the signing of the Chiang Mai Initiative (CMI), based on the existing ASEAN Swap Arrangement, at the APT Finance Ministers Meeting in 2000<sup>15</sup>. The CMI was a system to prepare for the possibility of another financial crisis, consisting of the ASEAN Swap Agreement and bilateral currency swap networks between APT member nations. It was designed to supplement the role of the IMF. Accordingly, a clause was added to restrict the exercise of the mechanism, stating that links with the IMF were required if 20% of more of the CMI's entrusted funds were to be used<sup>16</sup>. Nevertheless, the CMI represented the first attempt at cooperation on currency and finance in East Asia, and regional cooperation and regionalism continued to grow through the APT.

## 2. The East Asian Community and Advances in Regional Systems

### 1) The Advent of the East Asian Community

At the 2nd APT Summit in 1998, a new organization called the East Asian Vision Group (EAVG) was established at the suggestion of Korean President Kim Dae-jung. The EAVG was to serve as a venue for discussions about plans for possible cooperation in East Asia in politics, the economy, society and culture in consultation with experts from the private sector. The EAVG consisted of two experts from each of the APT countries and held five meetings between 1999 and 2001. The group's final report, titled *Towards an East Asian Community - Region of Peace, Prosperity and Progress*, was submitted to the 5th APT Summit in November 2001. As the title suggests, this EAVG report was the first proposal for the East Asian Community. The report contained proposals for cooperation across all sectors, including the economy, finance, politics and security, the environment, society, culture and institutions, with the goal of creating an East Asian Community. It put forward a number of suggestions including creating a free trade zone in East Asia and developing the APT into an East Asia Summit. At the third APT Summit, the East Asia Study Group (EASG) was established, also at the suggestion of Kim Dae-jung, as a venue for government bureaucrats to examine and evaluate some of the proposals in the EAVG report. The EASG later submitted its final report to the 6th APT Summit for review in November 2002. With the support of heads of state, this report proposed 17 short term measures and nine long term measures based on analysis of the EAVG report. Key issues from the EAVG such as

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<sup>15</sup> 田中明彦『東アジア共同体』論の背景と方向性」、伊藤憲一・田中明彦監修『東アジア共同体と日本の針路』、NHK出版、2005年、52-56頁

<sup>16</sup> Refer to 河合正弘「貿易・投資協力」、東アジア共同体評議会編『東アジア共同体白書二〇一〇』、たちばな出版、2010年、104-110頁などを参照.



creating an East Asian free trade zone and East Asia Summit were categorized as long term goals. The report was less emphatic than the original EAVG report regarding the goal of creating an East Asian Community but expressed fundamental agreement with the idea<sup>17</sup>.

As plans to establish an East Asian Community were being laid out, the 2003 APT Summit approved a plan to create a Track 2 the Network of East Asian Think tanks (NEAT), in line with the suggestions of EAVG and EASG<sup>18</sup>. This organization was launched the following year. The NEAT served as the executive office for designated think-tanks in each country, submitting policy suggestions to the APT Summit every year in fields such as disaster prevention, food security, the environment, finance and health, which are also mentioned in Chairman's Statements.

## 2) The Establishment of the East Asia Summit

Although this was categorized as a long term goal in the EASG report, efforts towards establishing the East Asia Summit progressed at a rapid pace since this was linked to expediting a regional FTA and East Asian Community. In 2004, with a view to bringing the EAEG plan to fruition, Malaysia expressed interest in hosting the 1st East Asia Summit in 2005. Later, China sought to host the 2nd East Asia Summit in Beijing in 2006, while Indonesia viewed the ASEAN alliance as more important and was less enthusiastic about the meetings. With differing intentions among member nations, Japan submitted a series of Issue Papers to the 2004 APT SOM and APT Foreign Ministers Meeting that summarized points of contention surrounding not only the East Asia Summit, but also the East Asian Community<sup>19</sup>.

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<sup>17</sup> A lot of research has been conducted on the details of EAVG and EASG, but for more details refer to 東アジア共同体『政策報告書 東アジア共同体構想の現状、背景と日本の国家戦略』、東アジア共同体、2005年、5-10頁.

<sup>18</sup> 日本国際フォーラム「東アジア・シンクタンク・ネットワーク設立会議、北京で開催さる」、『日本国際フォーラム会報』2004年冬季号.

<sup>19</sup> The Issue Papers contained sections titled The East Asian Community, Functional Cooperation, and The East Asia Summit. The East Asian Community section discussed the leading role played by ASEAN as well as approaches for promoting functional cooperation to form the community, the future introduction of institutional regional agreements and forming a sense of community. On the topic of Functional Cooperation, the papers discussed the appropriateness of diversity, one of the hallmarks of East Asia, as well as the fact that forming a community in East Asia was a natural choice for the region. It went on affirm that progress would be sought in a number of fields including trade and investment, IT, finance, trans-border issues, development support, energy, environmental protection, food, health and intellectual property rights. The East Asia Summit section noted the differences between the APT Summit Meetings and East Asia Summit, such as participating countries.



This caused a stir in discussions about the East Asia Summit. At the same time, FTA negotiations were also making steady progress in the region, with China and ASEAN agreeing at an ASEAN summit meeting in 2001 to establish an FTA within the next ten years. During an official tour of Southeast Asia in January 2002, Japanese Prime Minister Koizumi made a speech in Singapore in which he suggested moving towards a community that “acted together and advanced together.” He reiterated this suggestion during a visit to Australia in May the following year. In the same year, Japan and Singapore signed a bilateral FTA. Australia and New Zealand were included in this vision of East Asia, with the previous regional conception that covered only Northeast and Southeast Asia developing into a new ‘Expanded East Asia.’

Following this, several issues pertaining to the East Asia Summit were agreed upon at ASEAN Summit Meetings and ASEAN SOM during 2004 and 2005. The East Asia Summit (1) was to be held in Malaysia in 2005, (2) would be an entity separate from the APT, (3) required members to fulfill the three conditions of (i) having a working relationship with ASEAN, (ii) engaging in dialogue with ASEAN and (iii) being a member of TAC, (4) was to be attended by a total of 16 countries that met these conditions, including India, Australia and New Zealand in addition to the EAS and APT nations. In December 2005, the 1st East Asia Summit was held in Kuala Lumpur<sup>20</sup>.

### 3) APT and EAS Progress Towards an East Asian Community

Against this background, the 9th APT Summit and 1st EAS meeting were held in Kuala Lumpur in 2005. Both summit meetings adopted the Kuala Lumpur Declaration and agreed to serve as regional systems towards the establishment of an East Asian Community. The APT meeting adopted this as one of its long term goals, with the APT as a main vehicle, while the EAS also agreed to play a significant role. Through these two regional mechanisms, regional cooperation related to the EAC continued to make progress.

At the APT, it was decided that the APT Finance Ministers Meeting would play a stronger role in the CMI, leading to the launch of the Chiang Mai Initiative Multilateralization (CMIM) in 2010. In 2014, the ratio of funds that could be mobilized without linking to the IMF was raised to 30%. As a new measure in the wake of the Asian financial crisis, it was decided that the existing bank-reliant structure should be expanded to bond markets based on Asian currency standards, which led to the launch of the Asian Bond Markets Initiative (ABMI) at the 2003 APT Finance Ministers Meeting. Setting up a monitoring

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<sup>20</sup> For a description of the circumstances surrounding the establishment of the EAS, refer to 『大庭三枝『重層的地域としてのアジア—対立と共存の構図』、有斐閣、2014年、139-173頁.』



system was added as an additional goal, and in 2011 the ASEAN+3 Macroeconomic Research Office (AMRO) was established. The APT Finance Ministers Meeting then agreed to turn AMRO into an international organization in 2013, and it became an executive office in 2016.

In this way, while the APT continued to focus largely on economic and financial sectors, functional cooperation made progress in 24 fields, under 68 cooperative frameworks, with 17 Ministers Meetings and Track 2s. Notable achievements were made in food security with the adoption of the ASEAN+3 Emergency Rice Reserve (APTERR) at the APT Ministerial Meeting on Agriculture and Forestry in 2011.

At the 2007 APT Summit, which marked the organization's 10th anniversary, the Second Joint Statement on East Asia Cooperation and the ASEAN Plus Three Cooperation Work Plan were both adopted. This meeting served as an opportunity to reflect on the APT's achievements over the previous decade and reaffirm the organization's role as a main vehicle towards establishing an East Asian Community, while also promoting regional integration as a shared core value that would help to bring about peace, stability, democracy and prosperity within the region. Agreement was also reached on establishing the ASEAN+3 Cooperation Fund. In the 15th meeting, held in 2012, both the Leaders' Statement on Commemorating the 15th Anniversary of APT Cooperation and the Leaders' Statement on ASEAN+3 Partnership on Connectivity were adopted, strengthening action on regional connectivity.

However, to date the EAS has been unable to produce any concrete regional measures like the CMIM established through the APT. Nevertheless, progress has been made on policies in specific sectors. At the first meeting, discussions on broad strategic, political and economic issues were held, and energy, finance, education, avian influenza countermeasures and disaster prevention were selected as priority areas for cooperation. Similar to the APT, Ministers Meetings have also been held. At the 2nd meeting in 2008, the Cebu Declaration on East Asian Energy Security was adopted while the 3rd meeting in 2009 adopted the Singapore Declaration on Climate Change, Energy and the Environment. In 2010, the 4th meeting adopted the EAS Declaration on Disaster Prevention, while the 6th meeting in 2012 featured the adoption of the EAS Declaration on ASEAN Connectivity. Connectivity has also been boosted in priority sectors since 2011, and with the addition of the US and Russia, efforts to cooperate in politics and security have strengthened. The EAS has also conducted negotiations on issues such as the South China Sea conflict. In 2016, the Kuala Lumpur Declaration on the Tenth Anniversary of the East Asia Summit was adopted at the 10th meeting, and in addition to expanded cooperation in politics and security, the EAS agreed to establish a unit within the ASEAN secretariat to strengthen the organization's functionality.

In this way, the two regional systems both view establishing an East Asian Community as a long term goal, while taking ASEAN centrality into consideration. APT has a greater focus on making



progress in functional cooperation through bodies such as the CMIM and AMRO. Meanwhile, as an open regional system, the EAS has enlisted countries that take an interest in the region, such as the US and Russia, and seeks to increase its presence through measures including strengthening the handling of security issues in the region. At present, it is too early to judge which of the two organizations is closer to realizing an East Asian Community.

#### **4) A Proposal for a New Economic Bloc**

While the APT and EAS continued to develop, a new economic proposal for the region was put forward. As mentioned above, APEC had failed to make progress towards its objective of regional liberalization, as stipulated in the Bogor Goals. However, with a proposal for the Free Trade Area of the Asia-Pacific (FTAAP) put forward by APEC members in 2004, bringing the FTAAP to fruition is now a long term goal of other FTA plans, including the TPP. In line with these trends, the Comprehensive Economic Partnership in East Asia (CEPEA) and the East Asia Free Trade Area (EAFTA) Initiative have been proposed as frameworks for the formation of a new economic bloc<sup>21</sup>. The CEPEA proposal, led by Japan since 2006, would create an expanded East Asian economic bloc that includes the APT, India, Australia and New Zealand. Meanwhile, the EAFTA, led by China since 2005, seeks to create an East Asian economic bloc based on the APT. These proposals cover similar regions, and both have been discussed at APT Summit Meetings and the EAS. However, as China and ASEAN became concerned at the progression of TPP negotiations, the Regional Comprehensive Economic Partnership (RCEP) was proposed by ASEAN as a mechanism that would incorporate both of the above plans within the ASEAN+6 framework. The commencement of RCEP negotiations was announced at a series of ASEAN ministers meetings in 2012. Such negotiations remain ongoing, but since the TPP was a primary motivator of the RCEP, no further agreement on the RCEP has been reached since TPP talks stalled due to the withdrawal of the US.

### **3. Future Viability of an East Asian Community**

#### **1) Towards an East Asian Community**

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<sup>21</sup> For further details about CEPEA and EAFTA, refer to Takashi Terada, "ASEAN Plus Three Becoming more like a normal regionalism?" in Mark Besson and Richard Stubbs ed., *Routledge Handbook of Asian Regionalism*, Routledge, 2012, pp. 364-374.



At the 13th APT Summit in 2010, the parties agreed to establish the East Asia Vision Group II (EAVGII), based on the suggestion of South Korean President Lee Myung-bak. The goal of this body was to reexamine APT cooperation and its achievements over the 15 years that had passed since the APT's establishment, and the ten years that had passed since the submission of the original EAVG report. At the same time, the EAVII would set the direction for future regional cooperation, taking into account key achievements and the supplementary role adopted by the EAS and other organizations. Between 2011 and 2012, four EAVGII discussions took place, with one representative from each country, and the group's final report was submitted at the 15th APT Summit in 2012. One of the subsections of the final report outlined the goal of Realizing an East Asia Economic Community by 2020, stating that establishing an East Asian Community would require the four pillars of (1) a single market and economic base, (2) financial stability and guaranteed food and energy security, (3) equitable and sustainable development and (4) active engagement with the global economy. Support towards reaching agreement on RCEP and research on the establishment of an East Asian Monetary Fund were proposed as specific measures to help achieve these goals<sup>22</sup>. Unlike the EAVG, the EAVGII reduced the number of representatives per country from two to one, choosing former ambassadors or diplomatic officials. Follow-up measures to the EAVGII proposals were carried out at APT Summit thereafter, and at the 18th APT Summit in 2015, agreement was reached on the Final Report on the East Asia Vision Group II's Follow-up Measures. However, throughout this period, heads of state made few references to an East Asian Economic Community, and no concrete progress was made. In 2016, research on the EAEC commenced in Track 2 meetings, with China Foreign Affairs University establishing a working party titled The Road towards the East Asia Economic Community (EAEC) 2020, a proposal that was submitted to the 19th APT Summit in the same year. At the 20th APT Summit in 2017, Chinese Premier Li Keqiang gave a speech in which he stressed the importance of establishing the EAEC to advance regional integration<sup>23</sup>, and the EAEC was also mentioned in the Manila Declaration on the 20th Anniversary of ASEAN Plus Three Cooperation adopted at this meeting. In this way, although no concrete agreement between governments has been reached on the EAEC, the above actions indicate that there is a strong possibility of future progress led by China. However, many issues are still to be resolved, including how the EAEC would interact with plans for a regional economic bloc such as the RCEP or TPP.

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<sup>22</sup> The only private sector experts who participated were Professor Akihiro Tanaka from the University of Tokyo, Professor Zhang Yunling from the Chinese Academy of Social Sciences, Professor Yoon Young-gwan from Seoul National University and Jusuf Wanandi from the Indonesian CSIS Department.

<sup>23</sup> "Li calls for building East Asia community" *China Daily*, 2017, November 15.



## 2) New Regional Systems in East Asia

In addition to the APT and EAS, there have also been recent moves to introduce new economic proposals. The Park Geun-hye administration in South Korea put forward the Northeast Asia Peace and Cooperation Initiative (NAPCI), an attempt to strengthen cooperation on spot issues in the region and gradually move towards a regional community. Since then, the new Moon Jae-in administration has not mentioned the NAPCI, but proposed the Responsible Northeast Asia Plus Community in its place. Meanwhile, China has come up with proposals for the Asian Infrastructure Investment Bank (AIIB)<sup>24</sup> and One Belt One Road initiative. The AIIB launched in 2016, with 70 countries involved as of 2017. As mentioned above, both the APT and EAS have been developing slowly as regional systems in Northeast Asia, taking ASEAN's centrality into account. However, it remains unclear whether the new regional systems, especially those led by China, will lend such importance to ASEAN centrality. This means that the possibility of competition between systems, or one system being eliminated entirely, cannot be ruled out.

## Conclusion

From the above analysis, it can be seen that despite differences in speed of progress, regional cooperation in East Asia has advanced in the economic and financial sectors, especially through the APT, and functional cooperation is taking place in many other areas. Through these accumulated successes, it appears that the future establishment of an East Asian Community remains on the cards. Furthermore, although other regional systems and forms of regionalism have made progress, their expansion has been gradual, retaining a central focus on ASEAN. This has led to the establishment of a certain kind of regional order. However, as China continues to push ahead with new regional initiatives such as the AIIB and One Belt One Road, there is the possibility of competition between systems or the elimination of certain systems, which would cause considerable chaos. Against this background, what kind of response and actions are necessary? During the process of establishing the EAS, the Issue Papers submitted by Japan discussed many of the points of contention in the region,

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<sup>24</sup> The AIIB was first proposed by Chinese President Xi Jinping during a visit to Southeast Asia in October 2013. This was preceded by discussions in NEAT at China Foreign Affairs University's working party. Prior to this, a policy suggestion submitted to the 2006 APT Summit Meeting had already mentioned the idea of an East Asian investment bank.



which helped to direct discussions on regional cooperation and integration. This experience shows that it may be necessary to write a new set of Issue Papers to assist each country in developing a shared vision for the future of East Asia. Moreover, since the APT and EAS are not engaged in negotiations on the scope of an East Asian Community or a target timeframe for its establishment, further progress needs to be made on these points.

At the same time, the private sector has an important role to play in developing an East Asian Community. As discussed in the above sections, a number of policy suggestions from Track 1.5 and Track 2 activities, including the EAVG, are currently being employed. In particular, a number of bodies have contributed to the development of regional systems through establishing cooperative relationships and submitting policy suggestions, including PECC for APEC, ASEAN-ISIS for ASEAN, CSCAP for ARF and NEAT for APT<sup>25</sup>. Moving forward, the role of these ‘epistemic communities’<sup>26</sup> consisting of experts will continue to grow in importance. Accordingly, it will be necessary to strengthen research conducted by various private sector entities in East Asia.

Finally, the opinions contained in this paper are the personal views of the author and do not reflect the official position held by any organizations to which the author belongs.

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<sup>25</sup> Brian L. Job, “Track 2 Diplomacy Ideational Contribution to the Evolving Asia Security Order,” in Muthiah Alagappa ed., *Asian Security Order: Instrumental and Normative Features*, Stanford University Press, 2002, pp. 248-251.

<sup>26</sup> Peter M. Hass “Introduction: Epistemic Communities and International Policy Coordination” *International Organization*, Vol.46, pp.1-55.



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## Ch.7. Financial Cooperation in Northeast Asia

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### 1. Introduction

This paper discusses the current state of regional financial integration and cooperation in Northeast Asia and explores possibilities of more intensified financial cooperation in the region. It focuses mainly on China, Japan and the Republic of Korea (ROK), which are the core countries in Northeast Asia and have been deepening their economic and financial interdependence with each other over the last decades. To the extent possible, the paper attempts to discuss implications of regional financial cooperation for other regional countries, such as Mongolia and Russia which lag behind the CJK (China, Japan and ROK) in terms of their financial development, and the Democratic People's Republic of Korea (DPRK) which has been pursuing isolationist policies without significant market-oriented reforms.

We argue that financial market challenges are different across countries in Northeast Asia, and attempts to identify mutually win-win financial cooperation areas. We focus on the importance of: (1) financial market development, deepening, and opening; (2) transforming national financial hubs into global financial centers particularly for the CJK countries; (3) promoting currency internationalization, in particular for the Chinese yuan, the Japanese yen, and the Korean won; (4) financing for investment in regional infrastructure development and connectivity; and (5) maintaining financial stability through the Chiang Mai Initiative (CMI) and the ASEAN+3 Macroeconomic Research Office (AMRO).

The first, fourth and fifth areas of financial cooperation above are relevant not only to the CJK but also to Mongolia and Russia, although the second and third areas are relevant mainly to the CJK. In addition, as the CMI and AMRO play an important role for ASEAN+3 countries' financial stability, we also touch on Association of Southeast Asian Nations (ASEAN) countries. The paper takes up these five areas of financial cooperation one by one and then provides concluding remarks.

### 2. Financial Market Development, Deepening and Opening



The process of financial market development, deepening and opening is basically national but if countries make concerted efforts, they can achieve desired goals more efficiently and effectively. For example, the Asian bond market initiative within the ASEAN+3 framework is a joint cooperative effort to develop, deepen and integrate national local-currency bond markets together. Here peer pressure is applied to individual countries so that the authorities feel that they need to make progress in order not to lag behind their peers. Here, cooperative efforts would be useful among the Northeast Asian countries to pursue reform policies to develop, deepen and open national financial markets together.

### 1) Financial market development as an element of global competitiveness

Table 1 summarizes the global competitiveness index for Northeast Asian countries (excluding the DPRK). The global competitiveness index is defined by three sub-indexes, i.e., basic requirements, efficiency enhancers, and innovation and sophistication. Financial market development is one element defining efficiency enhancers.

**Table 1: Global competitiveness index for Northeast Asian countries, 2017**

	China	Japan	ROK	Mongolia	Russia
<b>Overall</b>	5.0 (27)	5.5 (9)	5.1 (26)	3.9 (101)	4.6 (38)
<b>Basic requirements</b>	5.3 (31)	5.7 (21)	5.8 (16)	4.1 (100)	4.9 (48)
<b>Institutions</b>	4.4 (41)	5.4 (17)	4.0 (58)	3.4 (108)	3.7 (83)
<b>Infrastructure</b>	4.7 (46)	6.3 (4)	6.1 (8)	3.1 (108)	4.9 (35)
<b>Macroeconomic environment</b>	6.0 (17)	4.3 (93)	6.6 (2)	4.4 (89)	5.0 (53)
<b>Health and primary education</b>	6.2 (40)	6.6 (7)	6.3 (28)	5.6 (85)	6.0 (54)
<b>Efficiency enhancers</b>	4.9 (28)	5.4 (10)	4.9 (26)	3.8 (91)	4.6 (38)
<b>Higher education and training</b>	4.8 (47)	5.4 (23)	5.3 (25)	4.5 (65)	5.1 (32)
<b>Goods market efficiency</b>	4.5 (46)	5.2 (13)	5.0 (24)	4.0 (111)	4.2 (80)
<b>Labor market efficiency</b>	4.5 (38)	4.8 (22)	4.2 (73)	4.2 (68)	4.3 (60)
<b>Financial market development</b>	4.2 (48)	4.9 (20)	3.9 (74)	3.0 (129)	3.4 (107)
<b>Technological readiness</b>	4.2 (73)	6.0 (15)	5.6 (29)	4.2 (74)	4.5 (57)
<b>Market size</b>	7.0 (1)	6.1 (4)	5.5 (13)	3.0 (104)	5.9 (6)
<b>Innovation &amp; sophistication</b>	4.3 (29)	5.6 (6)	4.8 (23)	3.1 (116)	3.8 (57)
<b>Business sophistication</b>	4.5 (33)	5.7 (3)	4.9 (26)	3.3 (123)	4.0 (71)



<b>Innovation</b>	4.1 (28)	5.4 (8)	4.8 (18)	3.0 (101)	3.5 (49)
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Note: The index is highest at 7 and lowest at 1. The number in parentheses is country ranking out of 137 countries. The orange highlight indicates very low score.

Source: World Economic Forum, *The Global Competitiveness Report, 2017-18*, September 2017.

<https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018>

By looking at the scores and global rankings for financial market development, it is clear that the financial market is a relatively weak sector for Northeast Asian countries. According to country rankings, the financial sector is the second weakest spot for China, the fourth weakest spot for Japan, and weakest spot for the ROK, Mongolia and Russia,

Table 2 provides details of factors contributing to financial market development. Again looking at country rankings, we can identify factors that lead to weak financial market development. In China, legal rights and soundness of banks are weak. In Japan, legal rights are weak. In the ROK, soundness of banks and ease of access to loans, and availability of financial services are weak. In Mongolia and Russia, most factors are weak. This suggests that Mongolia and Russia need substantial reforms in the financial sector, and the ROK, China and Japan are encouraged to address their respective weaknesses in financial markets.

**Table 2: Financial market development index for Northeast Asian countries, 2017**

	China	Japan	ROK	Mongolia	Russia
<b>8th pillar: Financial market development</b>	4.2 (48)	4.9 (20)	3.9 (74)	3.0 (129)	4.5 (107)
<b>8.01 Availability of financial services</b>	4.4 (54)	5.2 (19)	4.0 (81)	3.1 (120)	5.0 (101)
<b>8.02 Affordability of financial services</b>	4.5 (30)	5.5 (4)	4.2 (44)	3.1 (112)	4.5 (94)
<b>8.03 Financing through local equity mkt</b>	4.5 (31)	5.1 (15)	4.2 (47)	3.0 (103)	4.5 (90)
<b>8.04 Ease of access to loans</b>	4.5 (34)	5.2 (8)	3.5 (90)	2.9 (121)	4.5 (110)
<b>8.05 Venture capital availability</b>	4.4 (10)	3.6 (28)	2.9 (64)	1.8 (129)	4.0 (89)
<b>8.06 Soundness of banks</b>	4.5 (82)	5.8 (21)	4.3 (91)	3.4 (126)	4.9 (121)
<b>8.07 Regulation of securities exchanges</b>	4.5 (60)	5.8 (12)	4.3 (71)	2.8 (131)	4.7 (112)
<b>8.08 Legal rights index, 0-10 (best)</b>	4.0 (85)	4.0 (85)	5.0 (69)	5.0 (69)	6.0 (49)

Note: The index is highest at 7 and lowest at 1. The number in a parenthesis is country ranking out of 137 countries. An orange highlight indicates a very low score, a yellow highlight indicates a low score, and a blue highlight indicates a very high score.

Source: World Economic Forum, *The Global Competitiveness Report, 2017-18*, September 2017.

<https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018>



## 2) Financial market structure

Table 3 summarizes the financial structure of Northeast Asian countries (excluding the DPRK), by focusing on the banking sector, private debt (bond) market, and stock market, while data for several other countries are provided for international comparison. From this table, it is observed that the banking sector is the most dominant part of the financial market, followed by the stock market and debt market. The table also reveals that Mongolia and Russia face significant challenges in developing the financial market as the sizes of their banking sector, private debt market and stock market (as a ratio of GDP) are much smaller than those in the CJK. In addition, Mongolia has yet to develop its own private debt market.

**Table 3: Domestic financial structure of Northeast Asian countries, 1990-2015**

	Private credit by deposit money banks and other financial institutions				Outstanding domestic private debt securities				Stock market capitalization				Total			
	1990	2000	2010	2015	1990	2000	2010	2015	1990	2000	2010	2015	1990	2000	2010	2015
<b>China</b>	75.9	107.4	119.7	140.4	3.3	7.7	33.9	46.6	--	38.1	63.8	64.1	79.2	153.2	217.3	251.1
<b>Japan</b>	167.6	186.5	174.8	175.6	38.5	48.9	77.6	62.8	113.3	80.4	64.6	99.8	319.4	315.8	317.0	338.2
<b>Korea, Rep. of</b>	50.3	75.1	91.4	136.6	28.0	50.7	64.8	67.3	43.8	44.1	92.3	85.9	122.0	169.9	248.5	289.7
<b>Mongolia</b>	--	6.5	36.6	55.2	--	--	--	--	--	3.1	10.9	--	--	--	--	--
<b>Russia</b>	--	10.9	41.0	55.9	--	--	6.1	7.6	--	20.3	57.5	24.1	--	--	104.6	87.6
<b>United Kingdom</b>	100.5	114.3	190.2	134.7	12.8	18.3	15.1	--	80.1	162.8	121.8	--	193.4	295.4	327.1	--
<b>United States</b>	113.4	162.4	180.3	179.7	68.2	94.6	102.4	--	54.6	146.2	108.3	143.3	236.1	403.2	390.9	--
<b>Germany</b>	88.8	116.3	90.7	77.5	--	57.1	31.6	--	22.2	64.2	38.8	47.1	--	237.6	161.1	--
<b>Brazil</b>	30.9	30.7	57.1	71.3	--	8.4	29.0	--	2.5	33.5	69.6	31.1	--	72.7	155.7	--
<b>India</b>	24.1	26.6	44.1	50.3	0.3	0.4	5.2	--	9.7	34.2	89.6	71.5	34.0	61.1	138.8	--
<b>Indonesia</b>	38.0	17.7	24.7	36.0	--	3.6	4.5	3.1	4.4	26.5	39.9	42.0	--	47.8	69.1	91.1
<b>South Africa</b>	73.6	127.0	146.2	146.2	20.0	9.9	21.5	16.4	111.7	160.6	247.8	245.4	205.3	297.5	415.4	408.0

Source: World Bank, *Global Financial Development database*

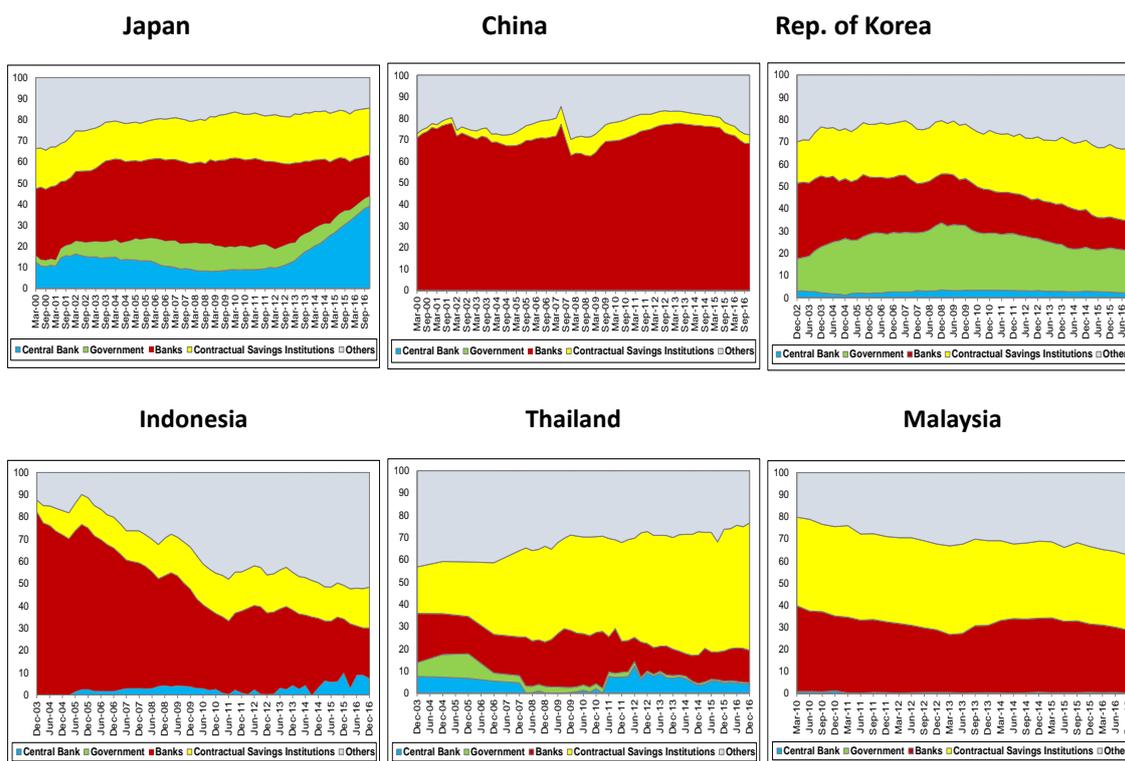
China now faces significant challenges in the financial sector, as its banking system is dominated by large state-owned commercial banks (SOCBs), its shadow banking activities have been widely spreading, and the corporate leverage has become high. So first, China needs to further nurture private banks, reduce the presence of SOCBs, limit favorable treatments extended to SOCBs, and start



privatizing SOCBs in order to make the banking sector a level-playing field for private banks. Second, China needs to address shadow banking by putting them under the supervision of financial sector regulators. Third, China needs to encourage highly indebted corporations to reduce their leverage and, if needed, to advise creditors to force exits of “zombie” firms.

There are some common challenges for Northeast Asian countries, particularly in further developing corporate debt (bond) markets. Mongolia and Russia have no or limited corporate debt markets and they need to develop and deepen them. In the case of China, the size of the private debt market as a ratio of GDP is relatively large, i.e., 47% in 2015, in comparison to other countries, but data for investor profile for local-currency government bonds (Figure 1) show a skewed picture. The figure shows that banks are the primary holders of government bonds in China, while contractual savings institutions play prominent roles in Thailand, Malaysia, the ROK, Japan and Indonesia. Given the population aging proceeding in China, it is vital to the country to nurture pension funds and other institutional investors as holders of local-currency debts.

**Figure 1: Investor profile of LCY government bonds**



Source: Constructed by author using data from ADB, *Asian Bonds Online*

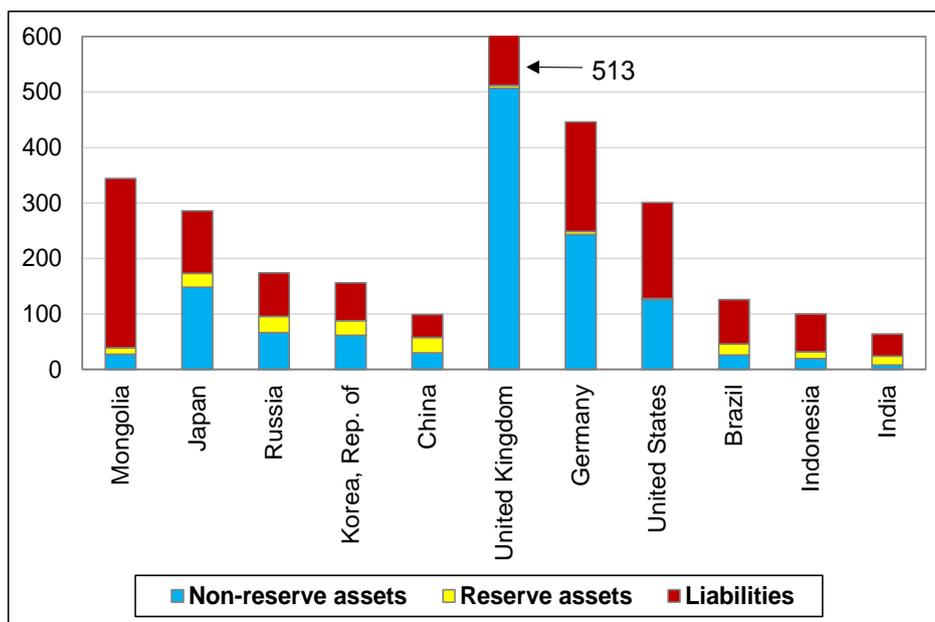
Northeast Asian countries also face challenges of how to benefit from fintech and digital currency without causing instability to the financial system. This is an area that needs further study.



### 3) International financial integration

Another challenge for Northeast Asian countries is to pursue further financial market opening. Figure 2 shows the degree of financial market openness for Northeast Asian countries (excluding the DPRK), measured by the size of external assets and liabilities as a ratio of GDP, for 2016. The figure reveals that Mongolia is the most open economy financially in Northeast Asia, followed by Japan, Russia, the ROK, and China. Mongolia is the most open because its external liabilities, rather than its external assets, are very large. The degree of international financial integration is limited for China; its size is slightly smaller than Brazil, about the same as Indonesia's and larger than India's.

**Figure 2: External assets plus liabilities in Northeast Asia (% of GDP), 2016**



Note: External assets are divided into non-reserve assets and reserve assets.

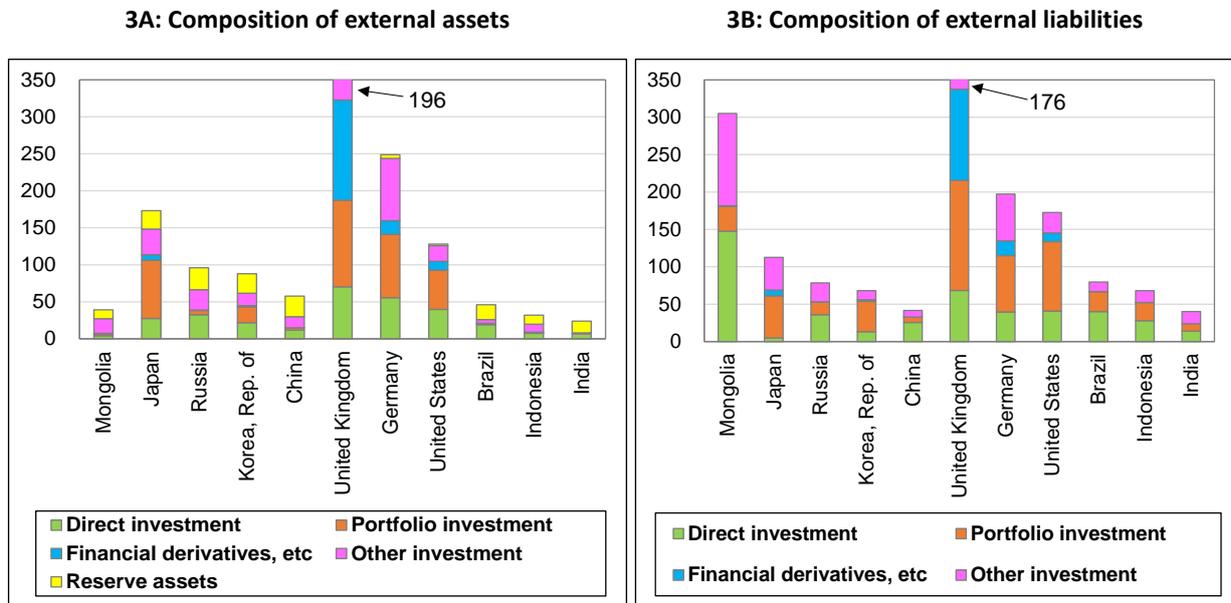
Source: IMF, Balance of Payments Statistics database

Figure 3 shows the size and composition of external assets and liabilities for Northeast Asian countries. The most noteworthy finding is that in the case of Mongolia, external liabilities far exceed external assets, making it a large net-liability country as a ratio of GDP. The major components of external liabilities are direct investment and other investment. Mongolia faced financial difficulties when it saw declining commodities prices and diminishing inflows of capital in 2016 and it would have to repay external debt soon. The country decided to seek financial assistance from the IMF, which was granted



in May 2017.<sup>1</sup> One of the factors behind such difficulties was the large external liabilities. Mongolia should have been advised not to accumulate large external liabilities and become a large net-liability country.

**Figure 3: External assets and liabilities in Northeast Asia (% of GDP), 2016**



Note: Data for Cambodia, India and Indonesia are for 2014.

Source: IMF, International Investment Position database

#### 4) Preconditions for financial opening

There are both benefits and costs to financial openness. In terms of benefits, a country can use foreign savings for domestic investment to expand productive capacity, smooth its consumption through international lending or borrowing, and achieve better risk sharing by diversifying its asset holdings. Indeed, a developing economy which lacks sufficient savings but needs long-term investment (such as infrastructure development) for economic development, can borrow foreign

<sup>1</sup> With minerals accounting for almost 90% of total exports, the sharp drop in commodity prices from 2011 onward severely affected Mongolia's balance of payments and fiscal position. Macroeconomic policy easing to buffer the economy from external shocks supported growth for a while, but raised public debt and weakened the balance of payments. By end-2016, the large fiscal deficit and the depreciation of the currency together pushed general government debt to nearly 90% of GDP. In addition, external debt of the Development Bank of Mongolia, amounting to US\$580 million, would be due March 2017 and there was a concern that the country would face repayment difficulties.



savings for such purposes. In terms of potential costs, a country can face greater risks of capital flow volatility, macroeconomic and financial instability, and a financial crisis. A surge in capital inflows and a sudden reversal of capital flows can induce crises and the pro-cyclicality and asymmetric borrowing in ‘good’ and ‘bad’ times can amplify capital flow volatility.

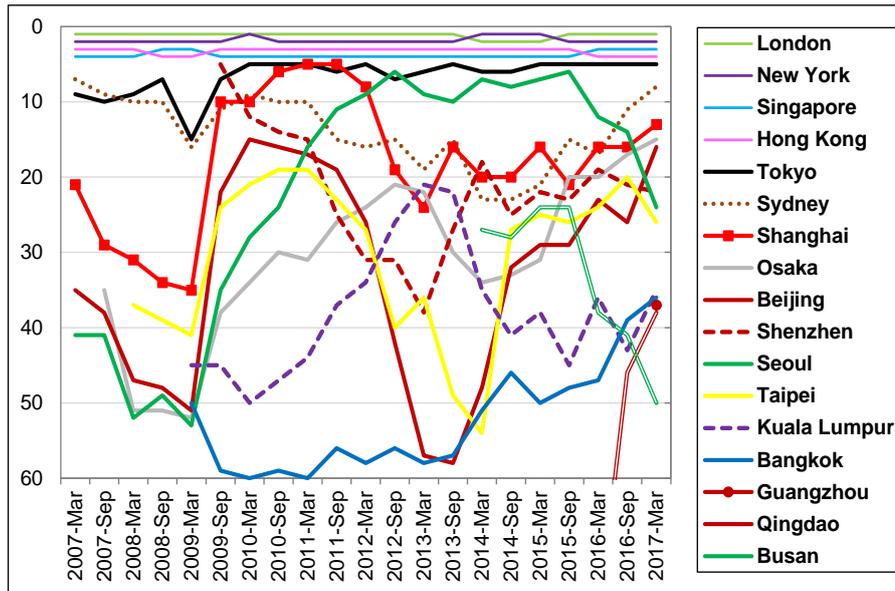
In order to maximize benefits and minimize risks to financial opening, a developing country needs to ensure that certain preconditions are met and proper sequencing followed for financial market opening. One of the most important precondition is that the country’s financial market is developed and fully market-based, in the sense of having market-determined interest rates and private commercial banks, which are supported by strong prudential supervisory and regulatory frameworks and sound legal and accounting systems. For a country to open up fully its financial market and/or make its own currency a truly international currency, it needs to satisfy such preconditions.

### 3. Global Financial Centers

The next area of regional financial cooperation is to make joint efforts at transforming financial hubs into global financial centers. Global financial centers are cities that have major functions in financial industries for banks, securities houses and insurance firms and that host securities exchanges, and money and currency markets. They attract internationally active financial institutions and investors who conduct businesses for foreign-currency funding, trade finance, hedging and derivatives transactions, long-term capital raising, and fund and asset management.

Figure 4 shows that top global financial centers are London and New York, followed by Singapore, Hong Kong, and Tokyo as ranked by Z/Yen Group. Among the top 50 global financial centers, the US hosts 7 financial centers and Asia hosts 16 financial centers, including Singapore, Hong Kong, 5 financial centers in China (Shanghai, Beijing, Shenzhen, Guangzhou, and Qingdao), 2 financial centers each in Japan (Tokyo and Osaka), Australia (Sydney and Melbourne), and the ROK (Seoul and Busan), and 1 financial center each in Taiwan (Taipei), Malaysia (Kuala Lumpur), and Thailand (Bangkok).

**Figure 4: World’s top international financial centers: Global ranking**



Source: Z/Yen Group, *Global Financial Centre Index 21*, March 2017

Considering changes over time in global ranking, Chinese cities such as Shanghai and Shenzhen have been rising as financial centers, with the former exceeding the ranking of Tokyo in 2011 and the latter even earlier in 2009. Seoul started to climb up sharply in 2010 and its ranking once exceeded Tokyo's in 2012, although it came down over the past several years.

There are several factors that are known to contribute to making financial hubs global financial centers. They are: competitive markets for financial services and innovation while preserving financial system stability; availability of skilled international professionals (investment bankers, lawyers, accountants, risk analysts, etc.) and English-speaking supporting staff; presence of high-quality business infrastructure (ICT and global transport links); and conducive environments for doing multinational business through tax and other incentives.

The region's authorities can make concerted efforts to transform their financial hubs into global financial centers through: aggressively opening financial services to foreign firms; reducing costs of doing financial businesses; attracting internationally active financial firms through stronger rule of law and legal certainty, improved regulatory effectiveness and transparency, and favorable business incentives; and attracting financial professionals and English-speaking supporting staff through more supportive immigration policy. Healthy competition among regional financial hubs can help improve the overall business climate, quality of their financial services, and their innovative capacities, and upgrade their status as global financial centers.

In this way, major cities in the CJK are advised to work together, in the form of state-to-state and/or city-to-city cooperation, to mutually promote their cities to become global financial centers. For



example, they can start trading their mutual currencies, issuing respective bonds, etc. Actually in Japan, Governor of Tokyo Ms. Yuriko Koike is now trying to further internationalize Tokyo as a global financial center by working with the City of London. Cities are competitors, but at the same time by working together, they can raise their attractiveness and quality as global financial centers.

#### 4. Currency Internationalization

Currency internationalization can be another area of regional cooperation. The Japanese yen is clearly an international currency with full capital account convertibility, but the degree of its internationalization is limited. The Chinese authorities have pursued the policy of internationalizing the yuan since the outbreak of the Lehman shock and succeeded in having the yuan included in the IMF's SDR currency basket in October 2016, but the yuan has yet to achieve full currency convertibility. The Korean won is close to being an international currency with a significant degree of convertibility, but more efforts are needed to make it a truly international currency.

Currency internationalization generates economic benefits to the country whose currency is internationalized. First, it allows firms and traders in the country to avoid exchange risk associated with international businesses (trade, investment, and financial transactions). Second, it reduces costs of currency trading as a result of the currency being traded more frequently. Third, it creates greater business opportunities for the country's banks whose funding cost in the currency is low. As in the case of global financial centers, the CJK can make concerted efforts to upgrade their respective currencies to become better international currencies. Again healthy competition will make their currencies more prominent international currencies.

##### 1) Use of international currencies in forex trading and as foreign reserves

Table 4 summarizes the currency distribution of foreign exchange trading in the world's major markets from 1989 to 2016. The table indicates that the share of foreign exchange trading involving the U.S. dollar has been high and relatively stable over the 27-year period, as the most dominant currency globally at 88% in 2016. The euro share has declined as a trend from 38% in 2001 to 31% in 2016, perhaps due to the eurozone debt and banking crisis in 2011–2015. The share of the yen also declined from 27% in 1989 to 22% in 2016, but is making a good recovery from the trough of 17% recorded in 2007. Its share is still higher than the share of pound sterling, which was 13% in 2016.<sup>2</sup>

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<sup>2</sup> The sum of the percentage shares of individual currencies totals 200% instead of 100% because two



The Australian dollar, the Canadian dollar and the Swiss franc follow as actively traded currencies. The share of the Chinese yuan in the global currency markets has risen substantially since the mid-2000s and achieved the number 8 position at 4% in 2016, exceeding the shares of all other Asian currencies such as the Hong Kong dollar, Singapore dollar, and the won. But relative to the shares of the US dollar, euro and yen, the yuan share is still limited.

**Table 4: Currency distribution of reported foreign exchange market turnover**  
(% shares of average daily turnover in April)

	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016
US dollar	90.0	82.0	83.3	86.8	89.9	88.0	85.6	84.9	87.0	87.6
Euro	-	-	-	-	37.9	37.4	37.0	39.1	33.4	31.3
Deutsche mark	27.0	39.6	36.1	30.1	-	-	-	-	-	-
French franc	2.0	3.8	7.9	5.1	-	-	-	-	-	-
ECU & other EMS currencies	4.0	11.8	15.7	17.3	-	-	-	-	-	-
Japanese yen	27.0	23.4	24.1	21.7	23.5	20.8	17.2	19.0	23.1	21.6
UK pound	15.0	13.6	9.4	11.0	13.0	16.5	14.9	12.9	11.8	12.8
Australian dollar	2.0	2.5	2.7	3.0	4.3	6.0	6.6	7.6	8.6	6.9
Canadian dollar	1.0	3.3	3.4	3.5	4.5	4.2	4.3	5.3	4.6	5.1
Swiss franc	10.0	8.4	7.3	7.1	6.0	6.0	6.8	6.3	5.2	4.8
Chinese RMB	-	-	-	0.0	0.0	0.1	0.5	0.9	2.2	4.0
Swedish krona	--	--	--	--	2.5	2.2	2.7	2.2	1.8	2.2
Mexican peso	-	-	-	0.5	0.8	1.1	1.3	1.3	2.5	2.2
New Zealand dollar	-	0.2	0.2	0.2	0.6	1.1	1.9	1.6	2.0	2.1
Singapore dollar	--	--	--	--	1.1	0.9	1.2	1.4	1.4	1.8
Hong Kong dollar	--	--	--	--	2.2	1.8	2.7	2.4	1.4	1.7
Norwegian krone	--	--	--	--	1.5	1.4	2.1	1.3	1.4	1.7
Korean won	--	--	--	--	0.8	1.1	1.2	1.5	1.2	1.6
Others	22.0	11.4	9.9	13.7	11.4	11.4	14.0	12.3	12.4	12.6
All currencies	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0

Note: The sum of the percentage shares of individual currencies totals 200% instead of 100%.

Source: BIS, Triennial Central Bank Survey: Foreign Exchange Turnover (Various issues).

Table 5 reports currency compositions of foreign exchange reserves held by all IMF reporting countries. It shows that the share of the US dollar, which was about 50% in 1990 rose to 71% in 2000

currencies are involved in a single transaction..



and then declined to 64% in 2016. The share of the euro rose substantially from 18% in 2000 to 28% in 2008 before declining to 20% in 2016. The share of the Japanese yen declined from a peak of 8% in 1990 to a mere 4% in 2016. Pound sterling and the yen are the close third and fourth largest reserve currencies in the world, respectively, following the US dollar and the euro. The Canadian dollar and Australian dollar play some limited role as reserve currencies. Information on the Chinese yuan as reserve currencies became available from 2016 after its inclusion in the SDR currency basket. The yuan accounts for 1% of global foreign exchange reserves. Thus it is not yet one of the most heavily held global reserve currencies, although its share is now higher than that of the Swiss franc.

**Table 5: Currency distribution of official foreign exchange reserves (%)**

	1990	1995	2000	2005	2010	2015	2016
<b>US dollar</b>	50.3	59.0	71.1	66.5	62.1	64.2	64.0
<b>Euro</b>	--	--	18.3	23.9	25.7	19.7	19.7
<b>Deutsche mark</b>	17.4	15.8	--	--	--	--	--
<b>ECU</b>	9.6	8.5	--	--	--	--	--
<b>French franc</b>	2.3	2.4	--	--	--	--	--
<b>Netherlands guilder</b>	1.0	0.3	--	--	--	--	--
<b>Pound sterling</b>	3.2	2.1	2.8	3.7	3.9	4.9	4.4
<b>Japanese yen</b>	8.2	6.8	6.1	4.0	3.7	4.0	4.2
<b>Canadian dollar</b>	--	--	--	--	--	1.9	2.0
<b>Australian dollar</b>	--	--	--	--	--	1.9	1.8
<b>Chinese yuan</b>	--	--	--	--	--	--	1.1
<b>Swiss franc</b>	1.3	0.3	0.3	0.1	0.1	0.3	0.2
<b>Other currencies</b>	6.7	4.9	1.5	1.7	4.4	3.1	2.5
<b>Allocated reserves</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>(\$US Billion)</b>	(n.a.)	(1,035)	(1,518)	(2,844)	(5,164)	(6,817)	(7,901)
<b>(Total, \$US billion)</b>	(n.a.)	(1,390)	(1,936)	(4,320)	(9,265)	(10,921)	(10,793)

*Note:* Figures are shares (in %) in allocated reserves.

*Source:* IMF, Currency Composition of Official Foreign Exchange Reserves (COFFER).

## 2) International currencies as trade invoice currencies

Next, we consider the use of the Japanese yen and the Chinese yuan as an invoice currency for trade. Table 6 compares the use of the yen and the deutsche mark (DM)/euro as invoice currencies for Japan's and Germany's exports, respectively. It is well-known that in the case of US exports, the US



dollar is the most dominant invoicing currency. From the table, we observe that the use of domestic currency is limited in the case of Japanese exports in comparison to German exports. The yen invoicing ratio for Japan’s exports rose from 9% in 1972 to 33% in the latter half of the 1980s and 38% in the mid-1990s but has stopped growing since then. In contrast, the DM/euro invoicing ratio was initially high at more than 80% in the 1970s and 1980s and declined in the 1990s and 2000s, still recording 65% in 2012, which was much higher than the yen invoicing ratio for Japan.

**Table 6: Shares of currencies used for export invoicing: Japan and Germany (%)**

		1972	1979	1987	1995	2005	2012
JPN	Japanese yen	8.7	24.8	33.4	37.6	38.9	39.4
	US dollar	82.8	70.7	55.2	51.5	49.2	50.4
	DM / Euro	1.3	1.6	3.0	2.4	8.4	5.5
DEU	Japanese yen	--	0.0	0.5	0.9	--	--
	US dollar	6.5	7.2	7.4	--	--	25.6
	DM / Euro	84.1	82.6	81.5	74.7	61.0	64.6

DEU = Germany; DM = Deutsche mark; JPN = Japan

Source: Ito and Kawai (2016).

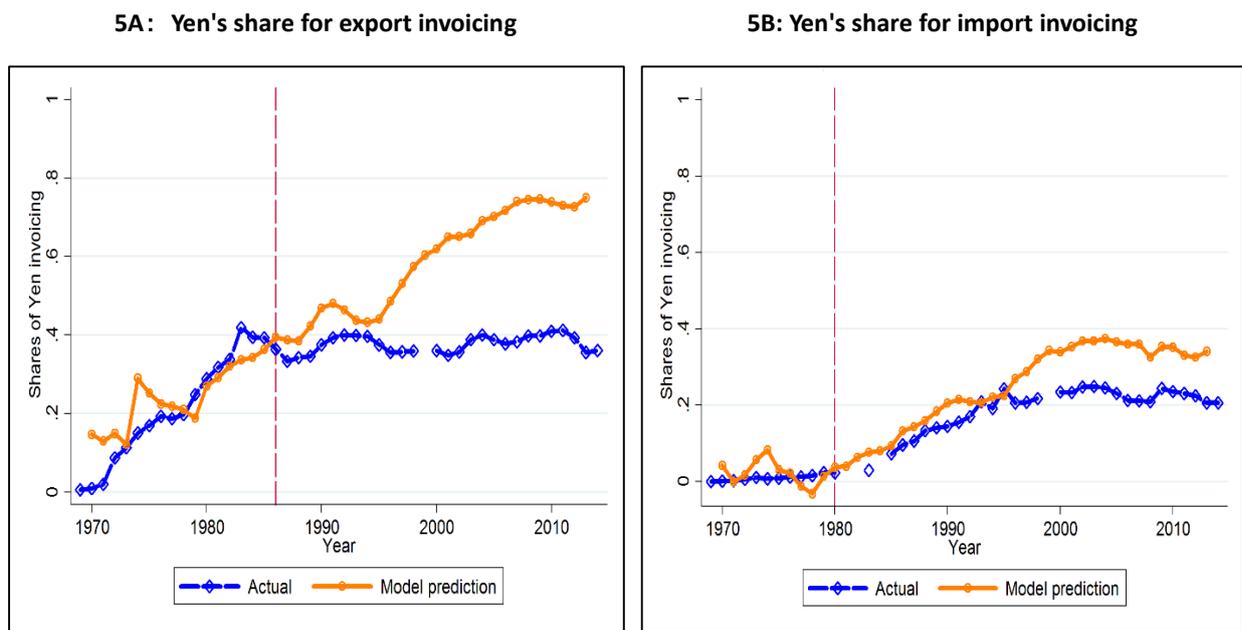
Several reasons can be pointed out as to why Japan’s yen invoicing ratio has been low. First, Japan achieved its economic growth in the post-war period as a US dollar zone country, and may have not fully gotten out of it. Second, Japan’s neighboring countries in Asia have been US dollar zone countries, with the preference to use the US dollar for their trade invoicing including trade with Japan. Third, Japanese trading companies and multinational corporations have the capacity to manage currency risks and have not have particular interests to invoice their trade in the yen. Fourth, there is the possibility that the stagnation of the Japanese economy after the bursting of the asset price bubbles in the 1990s reduced its trade, the presence of Japanese banks abroad, and thereby limited the use of the yen for invoicing trade.

Ito and Kawai (2016) studied the determinants of the invoicing ratios of major international currencies and examined factors behind low ratios for Japan. They concluded that the domestic-currency invoicing ratio is high for a major international currency country if the country has: (1) a large trade share in world trade; (2) high per-capita income; (3) a high degree of financial market openness; and (4) a low share of trade with US dollar-zone countries. Based on these findings, Ito-Kawai conducted counterfactual simulations to predict yen invoicing shares in Japan’s exports and imports under the assumption that Japan’s export and import shares in world trade as well as its per capita income had been at the peak levels in the years after their respective peaks were achieved. Figure 5



presents such counterfactual predictions. Interestingly, the yen invoicing share in Japan’s export would have been as high as 75% by the 2010s, while the yen invoicing share in import would have been more than 35%. This analysis shows that the diminishing presence of Japan in the world economy, in terms of its trade volume and its per capita income, contributed to the lack of further progress in the international use of yen for trade invoicing after the 1990s.

**Figure 5: Prediction of yen invoicing shares under the assumption of Japan’s economic variables maintained at their peaks**



Source: Ito and Kawai (2016)

What is the implication for the use of the Chinese yuan for trade invoicing? Considering that the Chinese economy started to show some sign of growth slowdown in 2015–2016, these results suggest that the slowdown of Chinese economic growth may negatively contribute to yuan internationalization. A more crucial issue for China in further promoting the yuan for trade invoicing is the extent to which the country develops and opens its financial market through market reforms and capital account liberalization. Given that China encountered massive capital outflows, downward pressure on the yuan exchange rate, and large losses of foreign exchange reserves during 2015-16, it is unclear how far Chinese authorities are willing to liberalize capital controls to further open the financial market. The results of Ito-Kawai (2016) signify the importance of financial market openness. In this context, the prospect of further yuan internationalization is uncertain. In addition, the presence



of the U.S. dollar zone in Asia stands as a major challenge to the greater yuan use for trade invoicing, because China's main trading partners are U.S. dollar-zone countries, particularly in Asia.

### **3) Measures to promote currency internationalization**

The CJK countries face similar problems with regard to currency internationalization. It would be their best interests to mutually promote their currencies as international currencies. One obvious measure is to use their own currencies for trade invoicing. Second is to promote mutual holdings of currencies as foreign exchange reserves. This is particularly important for Japan as Japanese government bonds (JGBs) are not actively held by non-residents. By encouraging the Chinese and Korean authorities to hold more JGBs, Japan can more easily manage its public debt. Third is to promote direct trading and settlement in the yen, yuan, and won in the CJK countries. Fourth is to promote the issuance of bonds denominated in the yen, yuan and won in their respective markets

## **5. Financing for Regional Infrastructure Investment and Connectivity**

Emerging economies in Northeast Asia, including China, Mongolia, and the Russian Far East, are growing. As a result, infrastructure investment needs are also growing in particular for transport, energy, telecoms, water and sanitation, urban, and so forth. In addition, investment for infrastructure connectivity would be important to promote cross-border economic exchanges, i.e., tourism, trade, investment, and business activities

Regional infrastructure connectivity can reduce economic distance and increase density and scale of economic activity, through agglomeration, within and between countries in a region. There are great opportunities for connectivity in Northeast Asia and neighboring countries. For example, infrastructure connectivity of China's Northeast (i.e., Liaoning, Jilin, Heilongjiang Provinces) with the Russian Far East, the ROK and Japan is useful as it is a less developed area compared to its national economic centers. Its connectivity with the ROK and Japan would be via Russia or the DPRK and require maritime routes. Mongolia as a land-locked country needs to work with China and Russia to have access to seaports and connections with the rest of the world. Japan and the ROK need air and maritime connectivity to expand economic exchanges with each other and the rest of the world.<sup>3</sup>

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<sup>3</sup> The ROK's land connectivity with China and Russia is blocked because of political reasons. This means the ROK needs maritime or air connectivity. If the DPRK comes back to the international community, the



### 1) Infrastructure investment needs in Asia

A 2009 study by the Asian Development Bank (ADB and ADBI 2009) projected that developing Asia (32 countries) would need infrastructure investment of \$8.3 trillion (in 2008 prices) during 2010-20, or \$750 billion per year. A new study by ADB (2017) shows that developing Asia (45 countries) will need to invest \$26 trillion (in 2016 prices) during 2016-30 or \$1.7 trillion per year if climate change mitigation and adaptation costs are added. The study also claims that the infrastructure investment gap, i.e., the difference between investment needs and current investment levels, equals 2.4% of projected GDP during 2016-20 or more than 5% of GDP if China is excluded. Also, multilateral development banks [MDBs] have financed only an estimated 2.5% of infrastructure investments in developing Asia.

Thus a large amount of infrastructure investment would have to be financed for Asia, including Northeast Asia. Financing would come from various sources, such as domestic fiscal sources, domestic financial markets, and international sources including public and private sectors. The international public sector includes bilateral sources (such as Japan International Cooperation Agency [JICA], Japan Bank for International Cooperation [JBIC], Korea International Cooperation Agency [KOICA], China Development Bank, etc.) and multilateral sources (such as the World Bank, ADB and AIIB). As international public sector financing plays a less prominent role in Northeast Asia today, except in Mongolia, than in the past, private investment will be increasingly important. As a result, public-private partnerships become key instruments.

Although the role the MDBs play is not so prominent in Northeast Asia, they still can play a critical role for cross-border infrastructure projects, and in countries like Mongolia. Table 7 lists Northeast Asian countries' membership of MDBs (the World Bank, ADB, AIIB, and European Bank for Reconstruction and Development [EBRD]) and such subregional programs as the Greater Tumen Initiative (GTI) and the Central Asia Regional Economic Cooperation (CAREC) program. It is interesting to note that China and Mongolia are members of all of these and the DPRK is not a member of any of these.

**Table 7: Northeast Asian countries' membership of MDBs and GTI, 2018**

	China	Japan	ROK	DPRK	Mongolia	Russia
<b>World Bank</b>	✓	✓	✓	--	✓	✓

ROK gains enormously by extending land connectivity through the DPRK with China, Russia, and beyond.



<b>ADB</b>	✓	✓	✓	--	✓	--
<b>EBRD</b>	✓	✓	✓	--	✓	✓
<b>AIIB</b>	✓	--	✓	--	✓	✓
<b>GTI</b>	✓	✓	✓	--	✓	✓
<b>CAREC</b>	✓	--	--	--	✓	--

ADB = Asian Development Bank; AIIB = Asian Infrastructure Investment Bank; CAREC = Central Asia Regional Economic Cooperation; EBRD = European Bank for Reconstruction and Development; GTI = Greater Tumen Initiative.

*Note:* CAREC has a membership of 11 states, including the original eight members of Afghanistan, Azerbaijan, China (Xinjiang Uygur Autonomous Region joined in 1997; Inner Mongolia Autonomous Region), Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan, while Pakistan and Turkmenistan joined in 2010; Georgia in 2016. GTI members include: China, the Republic of Korea, Mongolia and Russia. GTI hosts the Northeast Asia EXIM Banks Association, including the EXIM Bank of China, Development Bank of Mongolia, EXIM Bank of Korea, and Bank for Development and Foreign Economic Affairs of Russia

## 2) China's Belt and Road Initiative (BRI)

A prominent initiative for Asia's infrastructure investment and connectivity is China's Belt and Road Initiative (BRI). The concept was proposed by President Xi Jinping in September and October 2013 to connect China with Central Asia, South Asia, West Asia, Southeast Asia, the Middle East, and Europe through land and maritime routes, called the Silk Road Economic Belt and the 21st-Century Maritime Silk Road. 65 countries are said to be BRI countries, including China, covering 4.6 billion people (61% of world total population) and US\$23.3 trillion of GDP (31% of world total GDP).<sup>4</sup> The BRI is also used for China's domestic regional development to enable various regions in China to be connected with each other and with other BRI countries. In this sense there is great potential for China's northeast region to connect itself with the neighboring countries through BRI connectivity projects.

The Chinese government organized the successful event of the BRI Forum for International Cooperation in May 2017. Heads of twenty-nine countries attended, as did the heads of many international organizations, including the United Nations, IMF, and World Bank.

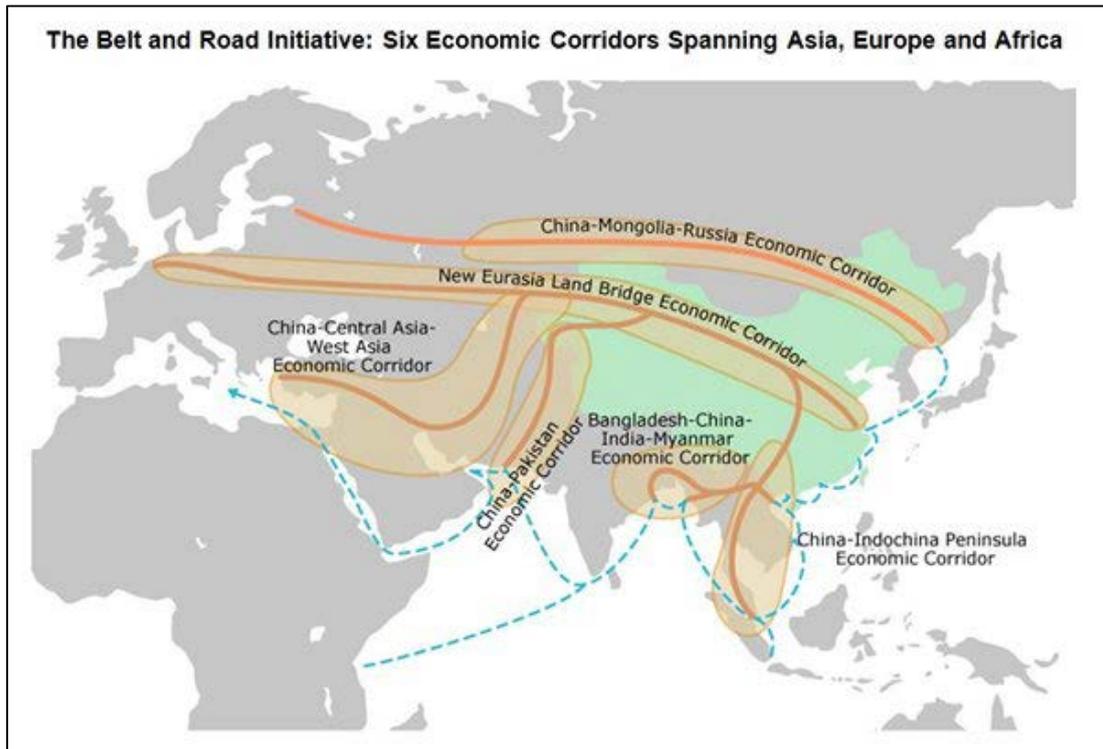
As part of the Silk Road Economic Belt, six major land economic corridors have been identified which are at various stages of implementation: New Eurasia Land Bridge Economic Corridor; China-Mongolia-Russia Economic Corridor; China-Central Asia-West Asia Economic Corridor; China-Indochina Peninsula Economic Corridor; China-Pakistan Economic Corridor; and Bangladesh-China-

<sup>4</sup> See Appendix Table 1 for the list of 65 countries, including China, and their economic indicators.



India-Myanmar Economic Corridor (see Figure 6). Of these the China-Mongolia-Russia Economic Corridor is the most relevant to Northeast Asia. Although most of these major economic corridors involve several countries, the BRI is in principle a collection of bilateral projects and agreements, which may pose a challenge as even a bilateral project can have spillover consequences for neighboring countries.

**Figure 6: Six major land economic corridors of BRI**



Source: Hong Kong Trade Development Council (HKTDC) Research

The BRI may have both positive and negative implications. The first positive implication is to further open up China to the BRI countries and the rest of the world through trade, investment, and finance. The second is for China to provide international public goods to the global community by using its rising economic and financial power. The third is for China to achieve more balanced national economic development through industrial adjustment and domestic regional development. And finally there is a potentially negative implication in the sense that China may use the BRI for expanding its sphere of geopolitical and even military influence, which is to be a concern for some countries including the United States, India and Japan.

There are several challenges for the BRI. First, the most important challenge is to address concerns that the BRI is intended to expand the geopolitical and even military sphere of influence of China. It is important for China to demonstrate that the BRI is not intended to expand China's geopolitical and



military influence but to provide genuine international public goods in the form of infrastructure and connectivity.

The second challenge is to rectify the bilateral nature of the BRI processes and ensure that the BRI benefits all countries. Currently the BRI is based on bilateral negotiations and agreements, and is not a multilateral process. For example, the China–Pakistan Economic Corridor has raised India's territorial concerns in Kashmir. If India could have expressed views in a multilateral framework, the project could have been designed differently. Multilateralizing the whole process would lead to better coordination of different countries' national interests and make the BRI more beneficial to all countries.

The third challenge is to introduce an effective framework for assessing or evaluating the performance of major BRI projects. There is no framework to assess the performance of even the six major economic corridors. The fourth challenge is to set international standards related to projects, trade, and investment, such as environmental standards, social standards, procurement transparency, and trade and investment rules including those for e-commerce.

To address these challenges, the World Bank is advised to help develop multilateral mechanisms to support China and the other 64 BRI countries in implementing the BRI. The ADB has been supporting Asia's subregional programs, such as the CAREC, Greater Mekong Subregion (GMS), and South Asia Subregional Economic Cooperation (SASEC) programs, as a trusted neutral broker and using clear results frameworks and various indicators to measure performance. Much like ADB's role in these subregional programs, the World Bank can play a similar coordinating role for the BRI by: (1) analyzing and evaluating BRI projects; (2) coordinating different countries' national interests as a neutral broker; (3) ensuring consistency of each country's national development strategy with BRI projects; (4) encouraging the adoption of international best practices on environmental and social safeguards and procurement transparency; and (5) conducting analysis of debt sustainability of borrowing countries. In this way, the BRI would be whole heartedly accepted by all countries concerned.

### **3) Role of the Asian Infrastructure Investment Bank (AIIB)**

AIIB was established at the end of 2015, with the subscribed capital of US\$100 billion, with its headquarters located in Beijing, and with its president being a Chinese national (Mr. Jin Liqun). Since AIIB started its operation on 16 January 2016, it has approved 24 projects for 12 countries and 1 region by the end of 2017, with the total amount of financing of \$4.3 billion. Of these, 9 projects were approved with the total investment of US\$1.73 billion in 2016 and 15 projects were approved with the total investment of US\$2.59 billion in 2017. In addition, 16 projects have been co-financed with the existing MDBs (World Bank, ADB, EBRD, etc.) for \$2,826 million (65% of total), while 8 projects have



been financed by AIIB as its stand-alone projects, but often with borrowing countries, borrowing entities, and/or other investors involved, for \$1,494 million (35% of total).

Table 8 summarizes country and sector distributions of projects approved by AIIB during 2016-17. It indicates that India has received the largest amount of financing, followed by Azerbaijan, Oman, Indonesia and Pakistan. Altogether 12 countries have received financing. The table also shows that the energy sector received the largest amount, followed by the transport sector.

**Table 8: Country and sector distributions of AIIB projects approved, 2016 – 17**

Country\Sector	Energy	Transport	Urban	Telecoms	Water	Multi-sector	Total
India	2 (160; 100)	2 (329; 335)				1 (up to 150)	5 (up to 1,074)
Azerbaijan	1 (600)						1 (600)
Oman		2 (36; 265)		1 (239)			3 (540)
Indonesia			2 (216.5; 100)			1 (125)	3 (441.5)
Pakistan	1 (300)	1 (100)					2 (400)
China	1 (250)						1 (250)
Bangladesh	2 (165; up to 60)						2 (up to 225)
Egypt	1 (up to 210)						1 (up to 210)
Philippines					1 (207.6)		1 (207.6)
Emerging Asia						1 (150)	1 (150)
Georgia		1 (114)					1 (114)
Tajikistan	1 (60)	1 (27.5)					2 (87.5)
Myanmar	1 (20)						1 (20)
<b>Total</b>	10 (up to 1,925)	7 (1,206.5)	2 (316.5)	1 (239)	1 (207.6)	3 (up to 425)	24 (up to 4,319.6)

Note: The figure outside brackets is the number of projects, and the figure inside brackets is the amount financed by AIIB in million US dollars. Orange-highlighted part refers to AIIB's stand-alone project. Yellow-highlighted part means that only the first project is AIIB's stand-alone project.



Source: Author's compilation from website of AIIB as of 19 December 2017

For projects co-financed with other MDBs, AIIB has been adopting the environmental and social standards set by these co-financiers, while for its stand-alone projects AIIB seems to be trying to develop quality projects. In addition, AIIB has 84 approved members, including 61 formal members and 23 prospective members, as of December 2017. As a result of these positive developments, AIIB has obtained the highest long-term foreign currency issuer rating (such as AAA) from three global rating agencies (Moody's, Fitch, S&Ps) in June- July 2017. This would allow AIIB to issue bonds in the international capital market at low interest rates in order to obtain funds for financing its member countries' infrastructure projects.

Thus, AIIB has been performing much better than expected as an international bank, rather than as China's bank. But such a judgement has been made largely based on its decisions and project documents. To fully assess the effectiveness and quality of AIIB activities, one has yet to see the completion of projects and evaluate the economic impacts as well as environmental and social consequences of such projects.

AIIB still faces challenges. Key challenges are to address remaining concerns over governance and decision making procedures, and over lending policies and standards. AIIB needs to show that it actually implements good practices and delivers quality infrastructure projects. AIIB needs to maintain strong communication and dialogue with all the stakeholders including international and domestic NGOs. This is a significant challenge for China as the authorities have not had positive experiences of working with NGOs which are often critical of government. From the perspective of Northeast Asia, AIIB is encouraged to design and implement cross-border projects connecting the region.

#### **4) Japan's approach**

Partly as a response to the forthcoming establishment of AIIB, the Japanese government announced a "Partnership for quality infrastructure: Investment for Asia's future" in May 2015 and indicated that government would provide US\$110 billion (10 trillion yen) during 2016-20 for Asian infrastructure projects. The plan represented a 30% increase compared to the 2011-15 period. About half the funds would be extended by JICA and JBIC and the rest provided in collaboration with ADB. For this purpose, JBIC was allowed to assume greater investment risks to support more risky infrastructure projects. In addition, the Abe administration would make use of such funds in order to spread "quality" and innovative infrastructure throughout Asia, taking a long-term view.

Japan then revised in May 2016 the plan on infrastructure export to emerging markets by expanding



the target regions from Asia to other regions such as Africa and raising the investment amount from 10 to 20 trillion yen to be spent for the next five years. The administration would continue to focus on export of “quality” infrastructure technologies. The government would assist private firms and investors to help expand their businesses overseas by funding through JICA and shortening the process of yen loan contracts from the then 5 years to 18 months at shortest. After announcing the “Free and Open Indo-Pacific Strategy,” which attempts to connect two oceans (Indo and Pacific) and two continents (Asia and Africa), the Abe administration considered Africa as a new targeted region.

The “Partnership for quality infrastructure” suggests that “quality” infrastructure has the following properties: (1) low life-cycle cost despite large initial investment cost, due to low maintenance cost with durability; (2) being environmentally sustainable, disaster resilient, and inclusive; and (3) consistency with each country’s development plan.<sup>5</sup> This means that “quality” infrastructure is “sustainable” infrastructure in that it is cost-effective from long-term perspectives (given the low discount rate), environmentally and socially sustainable, and supportive of development. The implication is that if developing country authorities have high discount rates, then Japan’s public funding at low interest rates could induce the country to adopt “quality” infrastructure projects that are low-cost from long-term perspectives.

Although Japan is not a member of AIIB, Prime Minister Shinzo Abe has shown a positive attitude toward BRI for the first time in 2017. He sent his official delegation, led by Takaya Imai, his executive secretary, and Toshihiro Nikai, Secretary General of the LDP, to the BRI Forum for International Cooperation held in Beijing in May 2017. Then in June, PM Abe gave a speech in Tokyo, where he lauded the BRI as having the “potential to connect East and West as well as diverse regions found in between” and said Tokyo was “ready to extend cooperation” with the BRI under certain conditions. These conditions were: (1) the BRI will be in “harmony with a free and fair trans-Pacific economic zone”; (2) the infrastructure to be built will “be open to use by all” and “developed through procurement that is transparent and fair”; and (3) the projects will “be economically viable and financed by debt that can be repaid, and not harm the soundness of the debtor nations’ finances.”

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<sup>5</sup> The “Partnership for quality infrastructure” states that elements of “quality infrastructure investment” are the following. “Quality infrastructure” may first appear costly; however, since it is easy to use and durable, as well as environmentally friendly and disaster resilient, “quality infrastructure” is indeed cost-effective in the long run. “Quality infrastructure” also contributes to enhancing connectivity among Asian countries, creating jobs for local people, increasing local skills and improving people’s lives. Japan has been a long-standing partner for Asian countries to invest in “quality infrastructure” based on each country’s development plan.



Following this conditional support for the BRI, PM Abe indicated that Japanese and Chinese firms might jointly work in third countries for BRI projects. Then, Japanese government produced a guideline to support joint business activities between Japanese and Chinese firms in November 2017. It indicated the following areas for cooperation: (1) promotion of energy saving and environmental cooperation, such as renewable energy development and high-efficiency gas and coal power generation; (2) industrial upgrading, such as joint development of the Thai East Economic Corridor; and (3) utilization of logistics for Eurasia transport, such as cooperation to improve the China-Europe railway system. PM Abe's positive attitude toward BRI is likely to encourage Japanese private firms to actively participate in some of the BRI projects.

PM Abe is now proposing summit meetings with President Xi Jinping, which is urgently needed. The year 2017 was the 45th anniversary of Japan–China diplomatic normalization, and the year 2018 is the 40th Anniversary of the Japan–China Peace and Friendship Treaty. At the same time, PM Abe has proposed the "Free and Open Indo-, and Pacific Strategy," to counterbalance China's BRI by working with the US, Australia, India and other countries.

Will Japan join the AIIB? The AIIB has been quite successful since the launch of its business in January 2016. This success is a positive factor for Japan to join AIIB. However, the lack of mutual trust between the two countries hinders Japan's participation. As China is the largest shareholder and has a strong voice at AIIB and Japan's voice would likely be limited if it joined AIIB, Japan must hold trust in China's leadership at the AIIB management. Thus, whether Japan will join the AIIB depends on whether PM Shinzo Abe and President Xi Jinping can establish mutual trust with each other. They have neither sat for long nor discussed the future of the bilateral relations, Asia and the world. The two leaders have to discuss these issues, exchange views, and build a sense of trust. Once this is done and mutual trust nurtured there is a possibility that Japan will join the AIIB. Until then, Japan will continue to encourage ADB to work closely with AIIB on various projects.

## **6. Financial Stability**

Financial stability is vital for any country to achieve sustained economic growth. Each country needs to maintain its financial health at home by avoiding financial imbalances domestically and externally, such as over-investment, excessive expansion of credit, asset price bubbles, and large current account deficits financed by large short-term foreign currency borrowing. Even when a country does not accumulate much of financial imbalances, external shocks could trigger large capital outflows and send the country to financial turbulence or even a financial crisis. For example, a faster pace of monetary



policy normalization by the US Fed than expected, a hard Brexit, or US President Donald Trump's protectionism could cause financial turbulence in emerging economies. Thus mechanisms of not only crisis prevention but also crisis response and resolution would have to be put in place

### **1) Financial safety nets through the IMF, MDBs and bilateral agencies**

As financial stability in Northeast Asia and in wider East Asia is of vital interest to the CJK, the three countries should be ready to support financial stability in other parts of Asia. In this context, provision of financial safety nets is key when an emerging economy faces a crisis or a risk of crisis. In Asia, financial safety nets can be provided by the country itself in the form of foreign exchange reserves, the IMF, the MDBs, the Chiang Mai Initiative (CMIM), bilateral donor agencies, and a combination of these.<sup>6</sup>

Many Asian countries have accumulated foreign exchange reserves as self-defense protection since the Asian financial crisis of 1997-98. A typical example is China which had accumulated US\$ 4 trillion, although it lost about US\$1 trillion between mid-2014 and early 2017. Other Asian countries have also accumulated reserves. The problem is that this is not the most efficient way of setting up financial safety nets as holding reserves entails large opportunity costs.

In May 2017, when Mongolia encountered external financial difficulties, the Mongolian financial support program was forged as a package of IMF and MDB programs and bilateral donor support, amounting to US\$5.5 billion. IMF provided a three-year arrangement under Extended Fund Facility (EFF) in a total amount of US\$434 million (or 435 percent of quota) to support the country's economic reform program. ADB, the World Bank, Japan, and the ROK committed to provide up to US\$3 billion in budgetary and project support, while the People's Bank of China agreed to extend its CNY15 billion swap line with the Bank of Mongolia to save foreign exchange reserves for trade settlement with China. This is an excellent example of crisis-support coordination between the IMF, MDBs, and the CJK.

Finance ministers and central bank governors in the ASEAN+3 region have been developing the CMIM and AMRO as a regional self-help mechanism since 2000 (see Figure 7). Its origin was the experience of the Asian financial crisis. When the crisis was unfolding in 1997, Japan proposed the creation of an Asian monetary fund. Although the proposal was supported by ASEAN and the ROK, Japan withdrew the idea because the US and the IMF were strongly against it and China did not provide

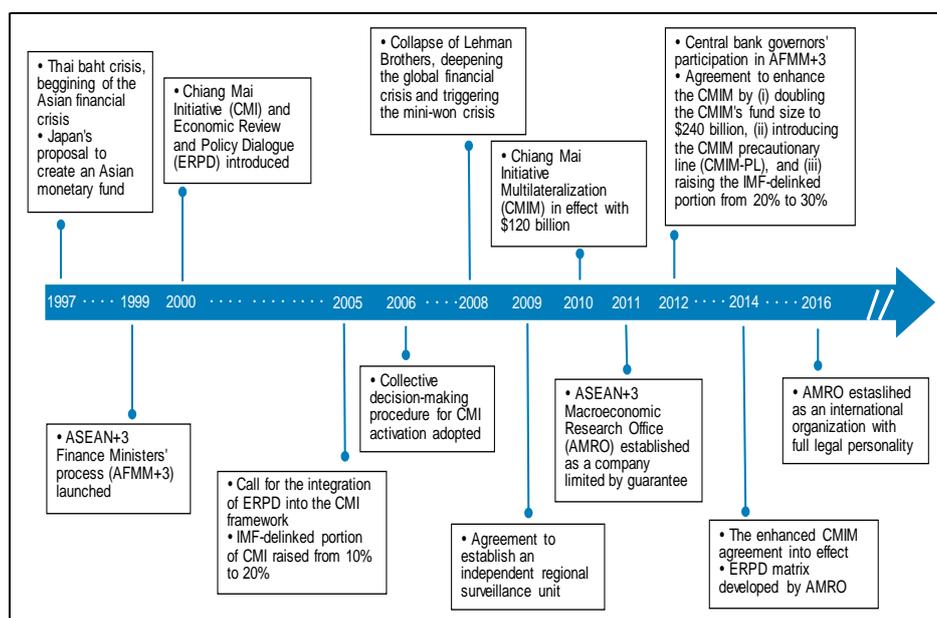
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<sup>6</sup> Usually the MDBs are not considered as providers of financial safety nets, but in crisis or near-crisis situations, the MDBs can provide fast disbursing loans which could also be utilized to buffer against financial crisis.



clear support. Instead, the ASEAN+3 finance ministers decided to launch the CMI as a network of bilateral currency swap arrangements as well as the Economic Review and Policy Dialogue (ERP) process. As no ASEAN+3 country wanted to go to the IMF for crisis support due to the IMF stigma, CMI was highly welcome and eventually multilateralized into the CMIM and a new surveillance unit, AMRO, was created in 2011. Starting in 2012, the CMIM precautionary line was introduced so that member countries became able to use CMIM for both crisis resolution and precautionary purposes. Now CMIM and AMRO constitute Asia’s prominent regional financing arrangement.

**Figure 7: Developments of CMI/CMIM, ERP, and AMRO**



Source: Author’s compilation from statements of ASEAN+3 finance ministers and central bank governors

Bilateral currency swaps are also useful as another type of financial safety net. For example, the ROK obtained a bilateral currency swap line from the US Fed in the aftermath of the Lehman shock when the ROK faced large capital outflows, won depreciation and a rapid loss of foreign exchange reserves. Immediately after the announcement that the ROK had made such an arrangement with the Fed, the currency and financial market stabilized.<sup>7</sup> Japan has forged several bilateral currency swaps

<sup>7</sup> Although Indonesia did not face a currency crisis in the aftermath of the global financial crisis, it had some difficulty funding its fiscal needs internationally and the rupiah depreciated sharply. In order to cope with potential financial turbulence, the approached the US Fed to obtain a currency swap arrangement but was denied. Instead the country turned to Japan, Australia, ADB, and the World Bank for financial assistance and obtained US\$5.5 billion in 2009 through a “standby loan facility”—or “deferred drawdown options”—with the funds provided by them. Thus, multilateral development banks



with Southeast Asian countries. It is advised that Japan forge currency swaps with the ROK and Mongolia. China has also set up bilateral currency swaps with many countries, which are intended to promote RMB settlement for trade and investment. China is advised to allow such currency swaps to be used for crisis prevention and response through the conversion of the yuan into US dollars in the case of a currency crisis or near-crisis.

## 2) CMIM and AMRO

Currently the total amount of resources available for CMIM is US\$240 billion. The maximum amount that each country can borrow is set (such as US\$38.4 billion for the ROK and US\$22.8 billion for a major ASEAN country), and the sum of all of these maximum amounts is US\$240 billion. CMIM is largely linked to an IMF program in the sense that if a country wants to withdraw more than 30% of the maximum amount of CMIM, then the country will have to be under an IMF program. Alternatively, if a country borrows only up to 30% of the maximum, then it does not have to go to the IMF. In either case policy conditions would be required if CMIM is used for crisis resolution purposes. If CMIM is used for precautionary purposes, the requesting country must pass qualification criteria and it is also subject to the same IMF-link rule as the crisis resolution CMIM.

AMRO, which became an international organization in 2016, is a surveillance secretariat and a support agency for CMIM. In non-crisis periods, it conducts surveillance, analysis and assessment, focusing on balance of payments and short-term liquidity, and publishes annual country consultation reports, regional surveillance reports, and thematic studies. In precautionary and/or crisis situations, AMRO analyzes the economic and financial condition of the CMIM requesting country, monitors the use and impact of the funds disbursed under CMIM, and monitors the compliance by the CMIM requesting country with policy conditions agreed. AMRO has also been conducting test runs on its own and together with the IMF.

CMIM and AMRO face challenges in improving their effectiveness. The most serious challenge is that CMI or CMIM has never been used and its activation may encounter unexpected difficulties. The second challenge is that the amount available to each country remains too small and there is a need to increase financial resources available to each member country. The third is that the CMIM's link with IMF programs is too tight and needs to be relaxed. The fourth is that the role and function of CMIM/AMRO are narrowly defined and there is a need to expand it and make it a more solid

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and bilateral donor agencies played a critical role in helping Indonesia to secure financial resources for budgetary support.



arrangement.

We provide the following recommendations. First, to avoid unexpected difficulties in the event of CMIM activation, it would be useful to continue and intensify test runs on its own as well as with the IMF and other potential collaborators (such as the MDBs and bilateral donor agencies).

Second, to increase the maximum amount of liquidity available to each member economy, several approaches are possible, such as the expansion of the total amount of available financial resources from US\$240 billion to, for example, US\$480 billion or more, and eliminating maximum limits available to each country except for Japan and China which do not have to receive any such assistance. Expansion of the total amount of resources would make sense as the currently available amount is relatively small in comparison to the European Stability Mechanism (ESM) arrangement in Europe as is indicated in Table 8.

**Table 8: Relative size of CMIM in comparison to ESM facility**

	GDP 2016 (US\$ Bill)	Maximum amount of lending	
		(US\$ Bill)	(% of GDP)
Euro Area	12,516	553	4.6%
Euro Area (1)	6,512	553	8.5%
Euro Area (2)	4,046	553	13.7%
ASEAN+3+HK	20,452	240	1.2%
ASEAN+ROK+HK	4,283	240	5.6%
ASEAN	2,551	240	9.4%

*Note:* Euro Area includes: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, and Spain.

Euro Area (1) includes: Cyprus, Estonia, France, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Portugal, Slovakia, Slovenia, and Spain.

Euro Area (2) excludes France from Euro Area (1) countries.

*Source:* Compiled by author.

Third, it will be useful to reduce the CMIM's IMF link over time, ultimately to zero. This should be coupled with the improved quality of AMRO's economic surveillance and its improved capacity to formulate independent policy conditions. But the complete delinking with the IMF does not mean that CMIM will never work with the IMF. In the event of a large-scale crisis or crises involving multiple countries, CMIM is advised to work with the IMF as its resources may not be sufficient and/or AMRO's analytical capacity may be limited relative to the magnitude of the problem. In the event of a small-



scale crisis, CMIM and AMRO may wish to tackle the crisis without IMF programs by developing independent conditionality. In this case, however, AMRO may maintain communication lines with the IMF. It would be useful to come to an agreement with the IMF on the rule of engagement at peace and crisis times and how CMIM and AMRO may work with the IMF in a given crisis situation.

Finally, it would be useful to transform the CMIM and AMRO into a more solid institution. Member countries' contributions to CMIM can be made capital or quotas so that foreign exchange reserves are physically pooled together. This would lock all member countries into financial commitments without opt-out possibilities. AMRO can be transformed into a permanent secretariat that handles all aspects of surveillance and CMIM. These changes would transform the CMIM/AMRO arrangement into a de facto Asian monetary fund, which would integrate the financing and surveillance functions into a single institution. This arrangement could allow the institution to issue bonds to obtain funding for lending for precautionary or crisis resolution purposes. In addition, membership could be expanded to include Australia, India, and New Zealand as well as Mongolia.

### **3) Responding to next crises in the ASEAN+3 framework**

The taper tantrum in May-September 2013 saw rapid capital outflows from some emerging economies, particularly the so-called "fragile five" countries (Brazil, India, Indonesia, South Africa, and Turkey), causing currency depreciations and stock price declines. Further hikes in the policy interest rate by the US Fed and other shocks (hard Brexit, protectionism, geopolitical risk, etc.) could cause financial turmoil particularly among the "fragile five" and others.

In this regard, AMRO is advised to play a more prominent role of a trusted policy advisor for member economies. It may advise members on: how to proceed with further capital account liberalization for members with limited capital account openness; how to reduce domestic financial imbalances, such as high real estate prices, high corporate and household debt, and high sovereign debt; how to design a policy package (macroeconomic, macroprudential, capital flow management, and structural) to reduce capital flow and exchange rate volatility; and how to strengthen financial sector supervision and regulation.

Once a financial crisis breaks out the CMIM needs to be quickly mobilized. If the next crisis is a small-scale one, the CMIM and AMRO can handle it, and this would be a good opportunity to test the effectiveness of the CMIM and AMRO. If the crisis is a large-scale one and/or involves multiple countries, CMIM and AMRO are advised to work with the IMF effectively. In this case, forming an Asian Troika, including IMF, AMRO/CMIM and ADB, would be useful to provide Asian inputs, drawing lessons from the eurozone crisis where IMF, European Union (EU) and European Central Bank (ECB) formed



the European Troika. The reason to include ADB as Asia's troika member is that it has provided short-term financing or contingency funding during past periods of financial crisis and turmoil and has been supporting the ASEAN+3 process as an Asian partner with analytical skill and financing capacity. This does not preclude the participation of other partners such as the World Bank, AIIB, bilateral donor agencies (JBIC, AusAID, Korea Eximbank, Eximbank of China, etc.) in crisis resolution.

## 7. Conclusion

This paper has examined the viability of Northeast Asian financial cooperation mainly focusing on China, Japan and the ROK and suggested ways to move forward. The paper has also attempted to discuss financial cooperation issues for Mongolia, the Russian Far East, and the DPRK to the extent possible. Cooperation among the Northeast Asian countries in the financial sector is a challenge given the political disputes over territorial and historical issues and the deployment of Terminal High Altitude Area Defense (THAAD) missiles among China, Japan and the ROK. A bigger challenge is the DPRK's isolationist policy and its development of nuclear and missile capabilities by regarding the US, the ROK and Japan as adversarial countries.

There is a clear benefit to strengthening financial cooperation in Northeast Asia through making joint efforts at: (1) financial market development, deepening and opening; (2) transforming financial hubs into global financial centers; (3) further internationalizing the yen, yuan, and won; (4) financing investment for regional infrastructure development and connectivity; and (5) and maintaining financial stability in Northeast Asia and beyond.

The level of development in financial markets differs greatly among the Northeast Asian countries. The Japanese financial market is characterized by low profitability and a high level of openness. The Chinese market remains dominated by large state-owned commercial banks, is facing declining growth rates and high corporate leverage. The ROK financial sector is one of the weakest spots of the economy and needs to resolve issues pertaining to mortgage loans and corporate restructuring. Mongolia's and Russia's financial sectors need to develop and deepen in a stable manner.

Thus, emerging Northeast Asian economies (China, Mongolia, and Russia) face the challenge of further developing, deepening and opening their financial markets. The establishment of an integrated financial hub and the use of regional currencies could help to promote cooperation among China, Japan and the ROK. If East Asia faces another financial crisis, the existing CMIM and AMRO framework would be useful to overcome a small crisis, but would have to work with the IMF to manage a large-scale crisis. Facing the recent Mongolian financial crisis, China, Japan and the ROK have jointly



provided financial assistance within the IMF program. In this sense, cooperation with the IMF would remain necessary even within the context of regional cooperation in Northeast Asia.

Regional financial cooperation on infrastructure investment and connectivity could give a positive message to the DPRK in inducing them to return to the international community. Once it makes a commitment to economic reform with marketization and trade-FDI opening, the country is expected to receive multilateral (through IMF, World Bank, ADB, AIIB and EBRD) and bilateral (from China, Japan and the ROK) support for its economic transition. This could further transform the Northeast Asia region into one of the most dynamically integrated growth centers of the world and contribute to more conducive political relations, and peace and stability among the countries in the region.



**Appendix Table 1 List of BRI countries, 2016**

Region	Country	Membership					World Bank	Nominal GDP (Billion US\$)	Population (Million)	Per capita nominal GDP (US\$)	GDP at PPP (Billion US\$)	GDP at PPP per capita (US\$)
		SCO	AIIB	ADB	EBRD	IsDB						
	<b>China</b>	✓	✓	✓	✓	--	✓	11,218.30	1,382.70	8,113	21,291.80	15,399
Southeast Asia	Brunei Dar.	--	✓	✓	--	✓	✓	11.2	0.4	26,424	32.5	76,884
	Cambodia	(✓)	✓	✓	--	--	✓	19.4	15.8	1,230	59	3,737
	Indonesia	--	✓	✓	--	✓	✓	932.4	258.7	3,604	3,032.10	11,720
	Lao PDR.	--	✓	✓	--	--	✓	13.8	7.2	1,925	40.9	5,710
	Malaysia	--	✓	✓	--	✓	✓	296.4	31.7	9,360	863.3	27,267
	Myanmar	--	✓	✓	--	--	✓	66.3	52.3	1,269	304.7	5,832
	Philippines	--	✓	✓	--	--	✓	304.7	104.2	2,924	805.2	7,728
	Singapore	--	✓	✓	--	--	✓	297	5.6	52,961	492.6	87,855
	Thailand	--	✓	✓	--	--	✓	406.9	69	5,899	1,164.90	16,888
	Timor-Leste	--	[✓]	✓	--	--	✓	2.5	1.2	2,102	5	4,187
Vietnam	--	✓	✓	--	--	✓	201.3	92.6	2,173	595.5	6,429	
South Asia	Bangladesh	--	✓	✓	--	✓	✓	227.9	161.5	1,411	628.4	3,891
	Bhutan	--	--	✓	--	--	✓	2.1	0.8	2,674	6.5	8,227
	India	✓	✓	✓	--	--	✓	2,256.40	1,309.30	1,723	8,662.40	6,616
	Maldives	--	✓	✓	--	✓	✓	3.4	0.4	9,554	5.5	15,553
	Nepal	(✓)	✓	✓	--	--	✓	21.2	28.9	733	71.5	2,479
	Pakistan	✓	✓	✓	--	✓	✓	284.2	193.6	1,468	988.2	5,106
	Sri Lanka	(✓)	✓	✓	--	--	✓	82.6	21.3	3,887	260.6	12,262
Central and West Asia	Afghanistan	(✓)	[✓]	✓	--	✓	✓	18.9	33.4	565	64.1	1,919
	Armenia	(✓)	[✓]	✓	✓	--	✓	10.5	3	3,511	25.8	8,621
	Azerbaijan	(✓)	✓	✓	✓	✓	✓	37.6	9.5	3,956	165.5	17,439
	Iran, Islamic Rep. of	(✓)	✓	--	--	✓	✓	14.2	3.7	3,842	37.2	10,044
	Georgia	✓	✓	✓	✓	--	✓	376.8	80.5	4,683	1,454.50	18,077
	Kazakhstan	✓	✓	✓	✓	✓	✓	133.8	17.9	7,453	451.3	25,145
	Kyrgyz Rep.	✓	✓	✓	✓	✓	✓	6.6	6.1	1,073	21.5	3,521
	Mongolia	(✓)	✓	✓	✓	--	✓	11	3	3,660	37	12,275
	Tajikistan	✓	✓	✓	✓	✓	✓	6.9	8.7	800	26	3,008
	Turkmenistan	--	--	✓	✓	✓	✓	36.2	5.5	6,622	95.5	17,485
	Uzbekistan	✓	✓	✓	✓	✓	✓	66.5	31.3	2,122	205.7	6,563
Middle East and Africa	Bahrain	--	[✓]	--	--	✓	✓	31.9	1.3	24,183	66.9	50,704
	Egypt	--	✓*	--	✓	✓	✓	332.3	90.2	3,685	1,132.40	12,554
	Iraq	--	--	--	--	✓	✓	167	36.1	4,631	647.2	17,944
	Israel	--	✓	--	✓	--	✓	318.4	8.5	37,262	300.6	35,179
	Jordan	--	✓	--	✓	✓	✓	38.7	7	5,554	85.6	12,278
	Kuwait	--	[✓]	--	--	✓	✓	109.9	4.2	26,005	303.7	71,887
	Lebanon	--	--	--	--	✓	✓	52	4.6	11,309	85.2	18,525
	Oman	--	✓	--	--	✓	✓	63.2	4	15,964	184.8	46,698
	Palestine	--	--	--	--	✓	--	--	--	--	--	--
	Qatar	--	✓	--	--	✓	✓	156.7	2.6	60,787	329.2	127,660



	Saudi Arabia	--	✓	--	--	✓	✓	639.6	31.7	20,150	1,750.90	55,158
	Syria	--	--	--	--	✓	✓	n/a	n/a	n/a	n/a	n/a
	Turkey	(✓)	✓	✓*	✓	✓	✓	857.4	79.8	10,743	1,988.30	24,912
	UAE	--	✓	--	--	✓	✓	371.4	9.9	37,678	668.9	67,871
	Yemen	--	--	--	--	✓	✓	27.3	29.1	938	69.2	2,375
Central and Eastern Europe	Albania	--	--	--	✓	✓	✓	12.1	2.9	4,203	34.2	11,840
	Belarus	(✓)	--	--	✓	--	✓	48.8	9.5	5,143	171	18,000
	Bosnia & Herz.	--	--	--	✓	--	✓	16.6	3.9	4,308	42.2	10,958
	Bulgaria	--	--	--	✓	--	✓	52.4	7.1	7,369	144.6	20,327
	Croatia	--	--	--	✓	--	✓	50.4	4.2	12,095	95.1	22,795
	Czech Rep.	--	--	--	✓	--	✓	193	10.6	18,286	350.7	33,232
	Estonia	--	--	--	✓	--	✓	23.1	1.3	17,633	38.5	29,313
	Hungary	--	✓*	--	✓	--	✓	125.7	9.8	12,778	270.3	27,482
	Latvia	--	--	--	✓	--	✓	27.7	2	14,060	50.6	25,710
	Lithuania	--	--	--	✓	--	✓	42.7	2.9	14,890	86.1	29,972
	FYR Maced.	--	--	--	✓	--	✓	10.9	2.1	5,263	30.3	14,597
	Moldova	--	--	--	✓	--	✓	6.8	3.6	1,901	18.9	5,328
	Montenegro	--	--	--	✓	--	✓	4.1	0.6	6,629	10.4	16,643
	Poland	--	✓*	--	✓	--	✓	467.6	38	12,316	1,054.10	27,764
	Romania	--	[✓*]	--	✓	--	✓	187	19.8	9,465	441.6	22,348
	Russia	✓	✓	--	✓	--	✓	1,280.70	143.4	8,929	3,799.70	26,490
	Serbia	--	--	--	✓	--	✓	37.7	7	5,376	101.8	14,493
	Slovak Rep.	--	--	--	✓	--	✓	89.5	5.4	16,499	170.1	31,339
Slovenia	--	--	--	✓	--	✓	44	2.1	21,320	66.2	32,085	
Ukraine	--	--	--	✓	--	✓	93.3	42.5	2,194	353	8,305	
<b>Total excl. China</b>								12,128.80	3,184.30	3,808.90	35,544.90	11,162.50
<b>Total excl. China &amp; India</b>								9,872.40	1,875.00	5,265.30	26,882.60	14,337.50
<b>Total incl. China &amp; India</b>								23,347.10	4,567.00	5,112.10	56,836.70	12,445.00
<b>World Total</b>								75,278.00	7,432.70	10,128.00	119,884.00	16,129.30

ADB = Asian Development Bank; AIIB = Asian Infrastructure Development Bank; EBRD = European Bank for Reconstruction and Development; ISDB = Islamic Development Bank; SCO = Shanghai Cooperation Organization.

Note: A checkmark in brackets ( ) for SCO means an associated member. A checkmark in square brackets [ ] for AIIB means a prospective member, and an asterisk \* for AIIB means a non-regional member. Highlighted in yellow are countries that sent their leaders to the first International Forum on the Belt and Road Initiative held in Beijing in May 2017.

Source: List of countries are taken from HKTDC Research. <http://china-trade-research.hktdc.com/business-news/article/One-Belt-One-Road/The-Belt-and-Road-Initiative-Country-Profiles/obor/en/1/1X000000/1X0A36I0.htm>

GDP and population are obtained from IMF, *World Economic Outlook database* (April 2017)



**Appendix Table 2:**

**AIB's capital subscriptions and voting powers of regional & non-regional members**

Regional members (40)						Non-Regional Members (21)					
Members	Membership date	Total Subscriptions		Voting Power		Members	Membership Date	Total Subscriptions		Voting Power	
		Amount (million USD)	Percent of total	Number of votes	Percent of total			Amount (million USD)	Percent of total	Number of votes	Percent of total
Afghanistan	13-Oct-17	86.6	0.09%	3,062	0.27%	Austria	25-Dec-15	500.8	0.53%	7,804	0.70%
Australia	25-Dec-15	3,691.2	3.89%	39,708	3.56%	Denmark	15-Jan-16	369.5	0.39%	6,491	0.58%
Azerbaijan	24-Jun-16	254.1	0.27%	5,337	0.48%	Egypt	4-Aug-16	650.5	0.68%	9,301	0.83%
Bangladesh	22-Mar-16	660.5	0.70%	9,401	0.84%	Ethiopia	13-May-17	45.8	0.05%	2,654	0.24%
Brunei Darussalam	25-Dec-15	52.4	0.06%	3,320	0.30%	Finland	7-Jan-16	310.3	0.33%	5,899	0.53%
Cambodia	17-May-16	62.3	0.07%	3,419	0.31%	France	16-Jun-16	3,375.6	3.55%	36,552	3.27%
China	25-Dec-15	29,780.4	31.35%	300,600	26.93%	Germany	25-Dec-15	4,484.2	4.72%	47,638	4.27%
Fiji	11-Dec-17	12.5	0.01%	2,321	0.21%	Hungary	16-Jun-17	100	0.11%	3,196	0.29%
Georgia	25-Dec-15	53.9	0.06%	3,335	0.30%	Iceland	4-Mar-16	17.6	0.02%	2,972	0.27%
Hong Kong	7-Jun-17	765.1	0.81%	9,847	0.88%	Ireland	23-Oct-17	131.3	0.14%	3,509	0.31%
India	11-Jan-16	8,367.3	8.81%	86,469	7.75%	Italy	13-Jul-16	2,571.8	2.71%	28,514	2.55%
Indonesia	14-Jan-16	3,360.7	3.54%	36,403	3.26%	Luxembourg	25-Dec-15	69.7	0.07%	3,493	0.31%
Iran	16-Jan-17	1,580.8	1.66%	18,604	1.67%	Malta	7-Jan-16	13.6	0.01%	2,932	0.26%
Israel	15-Jan-16	749.9	0.79%	10,295	0.92%	Netherlands	25-Dec-15	1,031.3	1.09%	13,109	1.17%
Jordan	25-Dec-15	119.2	0.13%	3,988	0.36%	Norway	25-Dec-15	550.6	0.58%	8,302	0.74%
Kazakhstan	18-Apr-16	729.3	0.77%	10,089	0.90%	Poland	15-Jun-16	831.8	0.88%	11,114	1.00%
Korea, Rep	25-Dec-15	3,738.7	3.94%	40,183	3.60%	Portugal	8-Feb-17	65	0.07%	3,446	0.31%
Kyrgyz Rep	11-Apr-16	26.8	0.03%	3,064	0.27%	Spain	19-Dec-17	1,761.5	1.85%	20,411	1.83%
Lao PDR	15-Jan-16	43	0.05%	3,226	0.29%	Sweden	23-Jun-16	630	0.66%	9,096	0.81%
Malaysia	27-Mar-17	109.5	0.12%	3,891	0.35%	Switzerland	25-Apr-16	706.4	0.74%	9,860	0.88%
Maldives	4-Jan-16	7.2	0.01%	2,868	0.26%	UK	25-Dec-15	3,054.7	3.22%	33,343	2.99%
Mongolia	25-Dec-15	41.1	0.04%	3,207	0.29%	Total non-regional members		21272	22.39%	269,636	24.15%
Myanmar	25-Dec-15	264.5	0.28%	5,441	0.49%	Grand Total		95,001.1	100.00%	1,116,367	100.00%
Nepal	13-Jan-16	80.9	0.09%	3,605	0.32%						
New Zeal'd	25-Dec-15	461.5	0.49%	7,411	0.66%						
Oman	21-Jun-16	259.2	0.27%	5,388	0.48%						
Pakistan	25-Dec-15	1,034.1	1.09%	13,137	1.18%						
Philippines	28-Dec-16	979.1	1.03%	12,587	1.13%						
Qatar	24-Jun-16	604.4	0.64%	8,840	0.79%						
Russian F.	28-Dec-15	6,536.2	6.88%	68,158	6.11%						
Saudi Arabia	19-Feb-16	2,544.6	2.68%	28,242	2.53%						
Singapore	25-Dec-15	250	0.26%	5,296	0.47%						
Sri Lanka	22-Jun-16	269	0.28%	5,486	0.49%						
Tajikistan	16-Jan-16	30.9	0.03%	3,105	0.28%						



Thailand	20-Jun-16	1,427.5	1.50%	17,071	1.53%
Timor-Leste	22-Nov-17	16	0.02%	2,356	0.21%
Turkey	15-Jan-16	2,609.9	2.75%	28,895	2.59%
UAE	15-Jan-16	1,185.7	1.25%	14,653	1.31%
Uzbekistan	30-Nov-16	219.8	0.23%	4,994	0.45%
Vietnam	11-Apr-16	663.3	0.70%	9,429	0.84%
Total regional members		73,729.1	77.61%	846,731	75.85%

Note: Data as of 19 December 2017

Source: Website of AIIB. <https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html>



**Appendix Table 3: AIIB’s prospective member countries (23)**

<b>Regional (8)</b> (Date membership application approved by the Board)	<b>Non-regional (15)</b> (Date membership application approved by the Board)
Armenia (23 March 2017)	Argentina (16 June 2017)
Bahrain (13 May 2017)	Belarus (19 December 2017)
Cook Islands (19 December 19)	Belgium (23 March 2017)
Cyprus (13 May 2017)	Bolivia (13 May 2017)
Kuwait* [04 December 2015]	Brazil* [29 June 2015]
Samoa (13 May 2017)	Canada (23 March 2017)
Tonga (16 June 2017)	Chile (13 May 2017)
Vanuatu (19 December 2017)	Ecuador (19 December 2017)
	Greece (13 May 2017)
	Madagascar (16 June 2017)
	Peru (23 March 2017)
	Romania (13 May 2017)
	South Africa* [03 December 2015]
	Sudan (23 March 2017)
	Venezuela (23 March 2017)

Note: \* refers to founding members. The dates AOA signed for founding members are in the square bracket [ ].

Source: <https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html>



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## Ch. 8. East Asian Financial Cooperation at a Crossroad

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### 1. Introduction

Despite the positive role of finance in boosting trade and investment worldwide, the downside of financial market liberalization is the frequent financial crises that have pummeled the world economy time and again. Accordingly, the institutionalization of financial safety nets to prevent and manage such financial crises has been seriously discussed since the 1980s. Currently, the prevailing neoliberal financial order and its supporting institutional arrangements that emerged in the 1980s are still reeling from the devastating blow dealt to them by the 2008 global financial crisis. The negative economic consequences and repercussions of the crisis continue to reverberate in the world economy. As such, it may not be surprised to find out that active discussions on establishing a regional financial crisis prevention mechanism like the European Stability Mechanism (ESM) are ongoing in Latin America, Africa, and the Middle East.

East Asia is also following the same trend.<sup>1</sup> As detailed below, the Chiang Mai Initiative (subsequently the Chiang Mai Initiative Multilateralization, the CMIM since 2010) represents East Asia's effort to construct a regional financial safety net. In February 2016, the AMRO (the ASEAN Plus Three Macroeconomic Research Office) became the first financial institution in East Asia with international institution status. A sister institution of the CMIM, AMRO's institutional purpose is to monitor and offer advice on member states' macroeconomic policy and performances as a regional surveillance unit. In regards to regional financial market development, ASEAN+3 has developed the Asian Bond Market Initiative (ABMI) since 2003.

The year of 2018 is expected to be a watershed moment in the history of East Asian financial cooperation for two reasons. First, that is the year when ASEAN+3 has agreed to carry out its first periodic review and revision of the CMIM agreement, which was reached in 2010. Second, the global

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<sup>1</sup>East Asia in this report is defined as the ASEAN plus Three (China, Japan, and Korea) countries that have collectively undertaken a substantial degree of regional financial cooperation.



and regional policy coordination on financial safety nets that the IMF has recently been spearheading could paradoxically weaken the function of and justification for East Asian financial cooperation. While it is true that East Asia does need to coordinate policy with the IMF, the current level and maturity of financial cooperation in East Asia suggests that such coordination could ultimately cause the institutions of East Asian financial cooperation to be operated as a junior partner for the IMF. Without doubt, ASEAN+3 has put strenuous efforts in building a distinctive regional financial landscape for the past two decades following the Asian financial crisis of 1997-1998. No serious observer can discount ASEAN+3's praiseworthy achievement in institutionalizing financial cooperation in East Asia where political and military tensions are never ceased. Nevertheless, it is still ironic to catch a glimpse of possibility that East Asia could find itself in the paradoxical position of being reincorporated into an IMF-led global safety net. After all, the ultimate mandate of East Asian financial cooperation was to develop an alternative to the IMF system when it ever began in 1997. The ASEAN+3 Finance Ministers' and Central Bank Governors' Meeting (AFMGM) in 2018 is thus likely to be a bellwether for the fate of East Asian financial cooperation.

## 2. Trend Analysis

First, we will examine the current status of the institutional development of the CMIM (CMI). ASEAN+3 launched the CMI in 2000. The CMI was based on bilateral swap agreements, with the total size of the swap amounting to US\$17 billion. The size of bilateral swaps continued to increase subsequently until the CMI reached \$90 billion in 2009, just before the CMI was multilateralized. The CMI had an initial IMF-delinked portion of just 10%, but this increased to 20% in 2005 and 30% in 2012. It has remained at 30% until the present.<sup>2</sup>

ASEAN+3 began discussing the multilateralization of the CMI in 2006. The idea of multilateralizing the CMI was a response to a practical, functional need. Since its inception, one of the core institutional purposes of the CMI was to ensure the rapid provision of short-term liquidity to crisis-affected states to more expeditiously and effectively to curb financial crises in their initial stage. As such, at stake is the CMI's capacity to enable rapid disbursement of necessary funds. The bilateral nature of the CMI's swap arrangements would not help to deliver on this particular institutional purpose. In order to activate a network of bilateral swap arrangements, a given state has to negotiate with partner states sequentially and thus a series of bilateral procedures takes considerable time. The protracted

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<sup>2</sup> There were predictions that the CMIM's non-IMF-linked rate would be increased to 40% at the yearly AFMGM in May 2017, but that did not come to fruition.



processes are likely to result in a situation where it is almost impossible for a crisis-affected state to receive timely financial support from the CMI.

In this context, ASEAN+3 reached the final agreement to multilateralize the CMI during the meeting in Bali, Indonesia, in 2009. In Bali meeting, ASEAN+3 reached an agreement on a number of important issues related to the operation of the CMIM, including the total size of the fund (\$120 billion; \$240 billion since 2012), the share of contributions (\$38.4 billion for Japan and China, \$23.8 billion for ASEAN, and \$19.4 billion for South Korea), the distribution of voting rights (28.4% for Japan, China, and ASEAN and 14.8% for South Korea), the fund's operational format (storing contributions as promissory notes in the central banks of the member states instead of making payments), and the method of deciding whether to provide a bailout (approval by two-thirds of member states). The CMIM officially took effect on March 24, 2010. As noted at the outset, the first major review and revision of the agreement is scheduled for 2018.

Another important topic in relation to the CMIM is the institutional development of the AMRO. The AMRO, which is based in Singapore, was opened in May 2011 by ASEAN+3 to assist with regional macroeconomic surveillance and to help CMIM function effectively in regard to devising bailout packages and their conditions. The AMRO was officially launched as an international institution in February 2016. As a result, the AMRO took its historical place as the first regional consultative body in the area of finance with international institution status. In order for the CMIM to be a fully functioning regional financial safety net, the role of the AMRO cannot be overemphasized.

On regional financial market development, the ABMI was the choice of ASEAN+3. During the AFMGM in August 2003, ASEAN+3 adopted the ABMI as a financial cooperative project for East Asia. ASEAN+3 envisioned the ABMI as an institutional backbone to reduce East Asia's dependence on external finance. As such, the ABMI was designed to cultivate a regional bond market operating in local currencies. Toward this end, ASEAN+3 has worked to build the institutional infrastructure necessary for the development of Asian bond market. The main achievements are as follows.

The Credit Guarantee Investment Facility (CGIF), an institutional mechanism designed to guarantee credit for bonds issued inside the region, was launched in 2011. ASEAN+3 has been actively discussing the establishment of a Regional Settlement Intermediary (RSI) to ensure smooth bond transactions and assist with transaction monitoring. In this vein, ASEAN+3 established the Cross-border Settlement Infrastructure Forum (CSIF) in 2013 to make these discussions more concrete. Finally, ASEAN+3 launched the ASEAN+3 Bond Market Forum (ABMF) in Tokyo in September 2010 to develop norms and standards for bonds in Asia. Concrete implementation measures are being pursued in the ASEAN+3 Multi-currency Bond Issuance Framework (AMBIF), the ABMF Sub-Forum 2, with the goal of standardizing regional bond transactions and regulations.



### 3. Challenges

The CMIM and the ABMI's short- to medium-term key challenges are as follows. One of the most urgent tasks for the CMIM to be substantially autonomous is to expand its IMF-delinked portion. In 2018, ASEAN+3 will probably have to consider increasing the IMF-delinked portion from its current rate of 30% to 50%. An IMF-delinked portion of 50% is not only a figure that could symbolically underline the degree of the CMIM's institutional autonomy. It would also practically ratchet up the independently available assets that ASEAN+3 could use in the event of a financial crisis.

It is also necessary to convert the CMIM fund's operational format (currently in the form of promissory notes by member states) to paid-in funding. Paid-in funding would be particularly advantageous for making the initial response effective and timely if a financial crisis should occur simultaneously in several member states. At this moment, the CMIM is the only regional financial safety net in operation without paid-in funding financial structure. The size of CMIM's fund—which was increased to \$240 billion in 2012 and remains the same today—will need to be expanded as well. In addition to the fact that \$240 billion is not commensurate to ASEAN+3's economic scale, CMIM's IMF-linked portion further limits its liquidity. Furthermore, ASEAN+3 has yet to specify CMIM's activation procedures and bailout conditionality in cooperation with the AMRO.

In this regard, the role of the AMRO cannot be overemphasized. The core issue of East Asian financial cooperation as a whole has been how to institutionalize an effective regional financial governance and system with "Asian" characteristics, complementing and even competing with the IMF's one-size-fits-all program. As such, were not for the establishment of different lending procedures and conditionality, which reflects unique socio-economic conditions in East Asia, there would be no sufficient rationale for the existence of, for example, the CMIM. In other words, it would likely just function as a regional office of the IMF. Flexibility (in terms of local economic needs and social conditions), accessibility, and speed of disbursement are to be key words surrounding the design of the CMIM conditionality. For all this to happen, the institutional growth of the AMRO would be vital. The AMRO has to grow to the extent that it matches up with the IMF in terms of research, surveillance capacity, quality of policy recommendation, and lending operations.

The key challenge for the ABMI is to complete the on-going process of the infrastructure developments for the Asian bond market, as we have already mentioned. This will involve strengthening the CGIF, launching an RSI, and substantiating the ABMF to standardize norms and regulations in the regional bond market. An agreement between South Korea and Japan is expected



to be crucial to the completion of the ABMF, let alone China's reaction from its concern over China's domestic financial stability.

#### 4. Solutions

As noted at the outset, financial cooperation in East Asia is at a crossroads. Institutional development of East Asian financial cooperation has basically been at a standstill since 2012. There have been no noticeable institutional changes at either the CMIM or the ABMI for the last five years. This report proposes the following three diplomatic efforts to rekindle the recently dormant East Asian financial cooperation (Technical issues related to the aforementioned short- to medium-term challenges are not addressed). The first effort is establishing "We-Ownership" for East Asian financial cooperation. The second is diplomacy that seeks to foster trust between member states. It emphasizes the necessity of reflexive contextualization of the "discourse of moral hazard" toward potential recipient countries. The third is for ASEAN+3 to transcend the logic of "institutional survival" for East Asian financial cooperation by sharing a global vision of making it a new model of financial cooperation for other regions.

The key to establishing "We-Ownership" is creating a virtuous cycle of competition over leadership between the members (especially China and Japan) to secure a new dynamo for East Asian financial cooperation. In the formation and operation of multilateral institutions, there exist two types of leadership competition. One is competition aimed at taking the initiative and gaining control that occurs inside a framework in which the development of the multilateral institution is a shared objective. The other is leadership competition that interferes with the major initiatives of rival states, which occurs when there are different attitudes about the institutional purpose of the multilateral institution itself. Unfortunately, the latter seems to be the type of leadership competition between China and Japan over the past five years. If this is prolonged, East Asian financial cooperation itself is likely to run aground. Not only China and Japan but also South Korea and ASEAN want to participate in East Asian financial cooperation not only as rule-takers but also as rule-makers. In other words, a variety of kinds of ownership exist inside ASEAN+3 framework, which signifies the absence of "We-Ownership". Establishing co-ownership depends upon finding a way to restore the original grand vision of securing financial autonomy for East Asia in the global economy.

The next effort is improving trust between member states through the reflexive contextualization of the discourse of moral hazard. Countries with large contributions (including South Korea, China, Japan, and Singapore) from time to time raise the issue of moral hazard in regard to the ASEAN states that are potential beneficiaries (for example, some argue that expanding CMIM's IMF-delinked portion



would create moral hazard). While it is important to address the issue of moral hazard on an institutional level, emphasizing moral hazard could reduce mutual trust between member states and thus have a negative impact on renewing progress in East Asian financial cooperation.

In fact, the issue of moral hazard is not as great as is generally thought. First of all, the difficulty for a government that has brought on a financial crisis to remain in power, regardless of the cause, has been demonstrated by previous financial crises (in South America, East Asia, and Europe). In other words, this means that the government of each state bears the primary responsibility for macroeconomic management, and since 1997 no government in East Asia has been exposed to moral hazard sufficient to provoke a financial crisis. Furthermore, all the countries of East Asia, including ASEAN members, have devised alternatives for handling financial crises themselves, such as accumulating massive foreign exchange reserves and making bilateral currency swap agreements. The priority, therefore, should be placed on strengthening CMIM's capabilities so that member states can confidently utilize it in a future financial crisis; we would be mixing up our priorities if we turned the CMIM into a mere scrap of paper because of the possibility that member countries may fall prey to moral hazard.

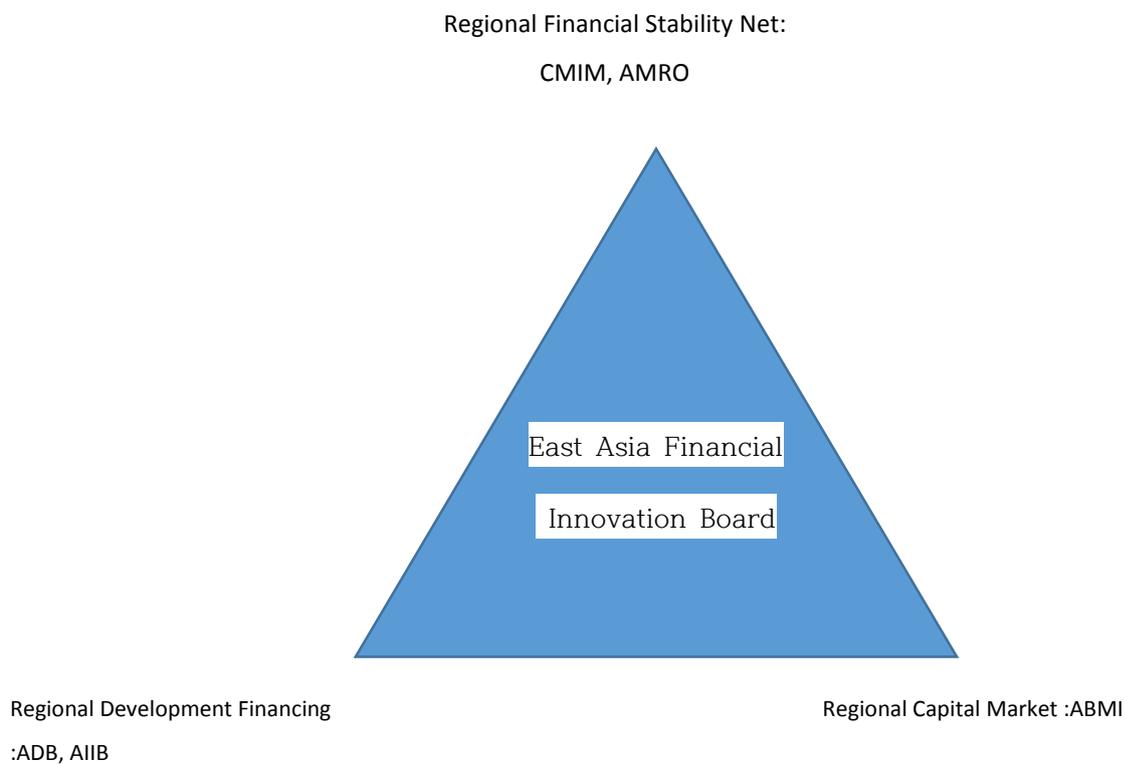
The final effort is sharing the vision that East Asian financial cooperation can be provided as a new model for regional financial governance. Global financial governance is proceeding simultaneously through centralization and through regionalization/decentralization. Through its combination of a regional financial safety net (CMIM) and the development of the regional capital market (ABMI), East Asian financial cooperation is standing at the vanguard of regional financial cooperation. Though the CMIM was launched as a regional financial safety net later than the Arab Monetary Fund (AMF) in the Middle East and the Latin American Reserve Fund (FLAR), it has gained an institutional lead through, for example, the establishment of the AMRO. In particular, the simultaneous development of a regional financial safety net and the regional capital market can be offered as a new model for regional financial cooperation. But Europe has started considering the idea of launching a European Monetary Fund—a regional financial safety net that would be at a higher level than the CMIM. With East Asian financial cooperation at a standstill, East Asia could find itself in the future being forced once again to learn from Europe's experience. By sharing the vision of exporting the East Asian model, ASEAN+3 can reinforce the conviction that the combination of the CMIM and the ABMI should be developed into a successful and globally competitive model of financial cooperation.

Against this backdrop, a major long-term goal for East Asia is to establish a new financial governance in East Asia. The new financial governance integrates the functions of financial safety net, capital market development, and development finance. The control tower of the new financial governance can be called "East Asia Financial Innovation Board" with membership of both public and private



sectors (see below Figure 1). Financial Stability Board (FSB), which was created in 2010 for global financial regulation, can be a useful reference to public-private partnership. Can East Asia be the first region successfully consolidating a comprehensive mechanism of financial cooperation? Can it set a precept for the world economy of cross-fertilizing financial safety net, capital market development, and development finance? Much will depend on the interplay of common interests, trust, and shared vision in constructing the mandate of financial cooperation. All of the three forces are not fixed. They are subject to intra- and inter-institutional negotiation and change among East Asian states often in partnership with private sectors. Making and guarding the virtuous cycle of financial cooperation would be long-term homework for East Asian states.

**Figure 1. Trilateral East Asian Financial Governance**





## Ch.9. The Financial Order in a Time of Change

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### 1. Three cases that illustrate the current financial situation in Northeast Asia

On September 12, 2017, U.S. Treasury Secretary Steven Mnuchin warned China that if it did not thoroughly implement the recent round of United Nations restrictions on North Korea, the United States may impose additional sanctions, perhaps even preventing China from accessing the American and international dollar system. In 2005, the U.S. banned all dealings with the Delta Asia Financial Group (abbreviated BDA because of its Portuguese name, *Banco Delta Ásia*) because it was providing illegal money-laundering services to North Korea. When this led to mass withdrawals, BDA froze accounts held by the Kim Jong-il government amounting to a total of US\$25 million.

On September 26, 2017, China's Anbang Insurance Group completed its acquisition of Allianz Global Investors Korea. In 2015, Anbang Insurance took control of Tongyang Life Insurance and Tong Yang Asset Management, and in 2016, Anbang acquired Allianz Life Korea (which changed its name to ABL Life). Through Tongyang Life, Anbang bought a 4% stake in Woori Bank. Having set up a holding company in South Korea, Anbang Insurance is known to be aiming to become a general finance group, and in the past three years its mergers and acquisitions here have amounted to KRW1.5 trillion. Currently, it holds the fifth-largest market share in the life insurance industry.

Capital knows no national boundaries. Capital is invested where returns are high relative to risk. Financial cooperation that pursues private interests is more likely to take place than cooperation among international organizations of countries that are slow to make progress.

In September 2017, China ordered all cryptocurrency exchanges to shut down and banned all initial coin offerings (ICOs). South Korea has also banned ICOs, but regulation of cryptocurrencies is still under discussion. On the other hand, Japan allowed payments in Bitcoin, the most common cryptocurrency, from an early point, and on September 29, the Japanese Financial Services Agency (FSA) granted 11 companies permission to operate cryptocurrency exchanges.



## 2. The present: Why financial cooperation is needed in Northeast Asia

In terms of 2016 global GDP, the U.S. accounted for 24.5% (China 14.8%, Japan 6.5%, South Korea 1.8%, China-Japan-Korea total 23.2%, ASEAN+3 26.7%). The U.S. dollar indisputably remains the dominant key currency. As of 2014, the dollar accounted for 87% of the world’s foreign exchange market and 63% of its foreign exchange reserves. From 2010 to 2012, half of the world’s payments for trade were made in U.S. dollars. This explains why it is possible for the U.S. to threaten to exclude China from the dollar system. In addition, the Bank of Korea currently has US\$40 billion in foreign exchange reserves, exceeding the country’s annual budget of KRW400 trillion. Excessive reserves of foreign exchange create a burden on countries whose currency is not a key currency in world trade. Also, effects on the liquidity of world financial markets caused by changes in American standard interest rates make it difficult for such countries to carry out their own currency policies. Such a global finance system gives the U.S. an incalculably high level of privilege.

**Table 1. The role of the U.S. dollar in international finance (Source: BIS)**

Selected indicators for the international use of key currencies

As a percentage of world total Table V.2

	US dollar	Euro	Pound sterling	Yen	Renminbi	Total (USD trn)
Forex market turnover, <sup>1</sup> daily, April 2013	87.0	33.4	11.8	23.0	2.2	5.3
Foreign exchange reserves, <sup>2</sup> Q4 2014	62.9	22.2	3.8	4.0	1 <sup>3</sup>	11.6
International bank deposits by non-banks, <sup>4</sup> Q4 2014	57.3	22.7	5.2	2.9	1.9 <sup>5</sup>	9.8
Outstanding international debt securities, <sup>4</sup> Q4 2014	40.4	40.9	9.6	2.0	0.6	21.9
International trade invoicing/settlement, 2010–12	50.3	37.3	...	...	1.4	.

## 3. What are the obstacles?

The main agents of financial cooperation in Northeast Asia in general and among South Korea, China, and Japan in particular can be largely divided into three categories: 1) the nations themselves, 2) international organizations, and 3) financial institutions. As can be seen in the example of China’s Anbang Insurance Group investments in South Korea, the pursuit of private interests stimulates cooperation in the private sector without the need for coercion. Of course, each country’s government



may devise measures to promote financial cooperation at the private level, but that is a peripheral issue.

Then why has financial cooperation between nations and international organizations been so slow? After the Asian financial crisis of 1997, ASEAN+3 was established in 1999 to provide a safety net for responding to such situations and developed the Chiang Mai Initiative, which was later augmented to the Chiang Mai Initiative Multilateralism (CMIM). Under the terms of the CMIM, any country wishing to withdraw more than 30% of its quota from the Stability Fund would be subject to IMF conditionality. In May 2017, Japan wanted to increase the non-IMF-linked share from 30% to 40%, but China opposed this on the grounds that the capabilities of the ASEAN+3 Macroeconomic Research Office (AMRO) were insufficient. China also proposed exchanges of the region's national currencies as an addition to the CMIM's existing multilateral system of exchange of dollars for regional national currencies, but Japan insisted that it was too early to institute such a change. The CMIM has not been activated at all since it first went into effect in March 2010. In its decision-making process, ASEAN+3 holds working sessions four times a year, meetings of deputy ministers three times a year, and an annual meeting of finance ministers. South Korea, China, and Japan also hold regular meetings of ministers, vice ministers, department heads, and working groups, but political and diplomatic friction between South Korea and China, South Korea and Japan, and Japan and China keeps expectations for real progress low.

#### **4. What should be done to solve the problem?**

Under the existing framework and in view of the past experience of financial cooperation between the nations and international organizations involved, political uncertainties and the difficulties of achieving diplomatic agreement indicate that we can expect progress to be slow. Therefore, from the South Korean standpoint, we need to change the way collaboration and discussions are carried out by presenting China and Japan with new agendas that can bring about financial cooperation among our three countries. In three international meetings held in 2017, the Future Consensus Institute has developed the following three proposals for cooperation that it judges to be of practical significance.

##### **1) Turning the Korea-China-Japan financial hub into an international financial center: a hub for cryptocurrency transactions**

Since cryptocurrency transactions are banned in China at present, for the time being, renminbi cannot be used to invest in cryptocurrencies. However, Japan and South Korea, which have advanced



systems of finance and supervision, are looking into safe, stable ways of introducing such transactions into the existing system to enhance the convenience and vitality of financial markets. Accurate statistics are not readily available, but analysts say that about 30% of Bitcoin transactions are conducted in China and 37% of Ethereum transactions are carried out in Korean won. Hong Kong and Singapore are trying to step in to fill the gaps, but in terms of shared agenda for financial cooperation, South Korea, China, and Japan seem to have the greatest appeal.

## **2) Establishment of a development bank in preparation for increasing and unifying private and public partnerships in infrastructure financing**

The populations of South Korea, China, and Japan have been aging and continue to age very fast. Under the circumstances, insurance and pension funds accumulate to the extent that overseas investment of such assets is unavoidable. Using some of those assets to supplement funding for infrastructure projects in Asia's developing countries would be mutually beneficial in the long term. According to the Asian Infrastructure Investment Bank (AIIB), infrastructure investments of US\$6 trillion are needed every year, but they have been falling US\$2.5 trillion short. In the case of newly developing countries, the shortfall for the US\$1.3 billion needed is US\$460 billion (equivalent to KRW526 trillion). It is predicted that South Korea's National Pension Fund will have reached KRW609 trillion by the end of this year, KRW924 trillion by 2020, and KRW2,465 trillion by 2043. This is the world's largest pension fund relative to the size of the national economy.

Depending on how they are calculated, estimates of the cost of reunification of North and South Korea range from KRW700 trillion to KRW2,000 trillion. Such amounts would be hard for South Korea to come up with on its own. There is a need to reconsider the ideas proposed by the Northeast Asia Development Bank that were based on the premise of North Korean denuclearization. This situation provides an incentive for South Korea, China, and Japan to move away from the divided system of the Asian Development Bank (ADB), centered around Japan, and the AIIB, with China at its center, to a new avenue of cooperation with united participation by all three parties.

## **3) Increased intraregional trade and investment in financial assets for internationalization of South Korean, Chinese, and Japanese currencies**

As mentioned above, in the dollar-centered world financial system, China and South Korea have no choice but to issue payments in dollars. Since its assets are classified as safe and of stable value and given its good relationship with the United States, Japan's dollar payments are relatively few, but there



is still incentive for greater internationalization of the yen. Considering their shared high level of dependence on economic remittances from overseas, South Korea, China, and Japan could jointly pursue the internationalization of their respective currencies, increasing their use in trade transactions and listing the value of their financial assets in terms of their own currencies. With its strong awareness of problems jointly faced by the three countries and its ability to provide incentives, South Korea is seen as being realistically the most appropriate to lead the discussion of these issue.