Research Project

Synthesizing the Impact of Thailand's Logistics Infrastructure Management and Supply Chain Redesign within the context of the ASEAN Economic Community (AEC)

THAMMASAT BUSINESS SCHOOL

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Research Team

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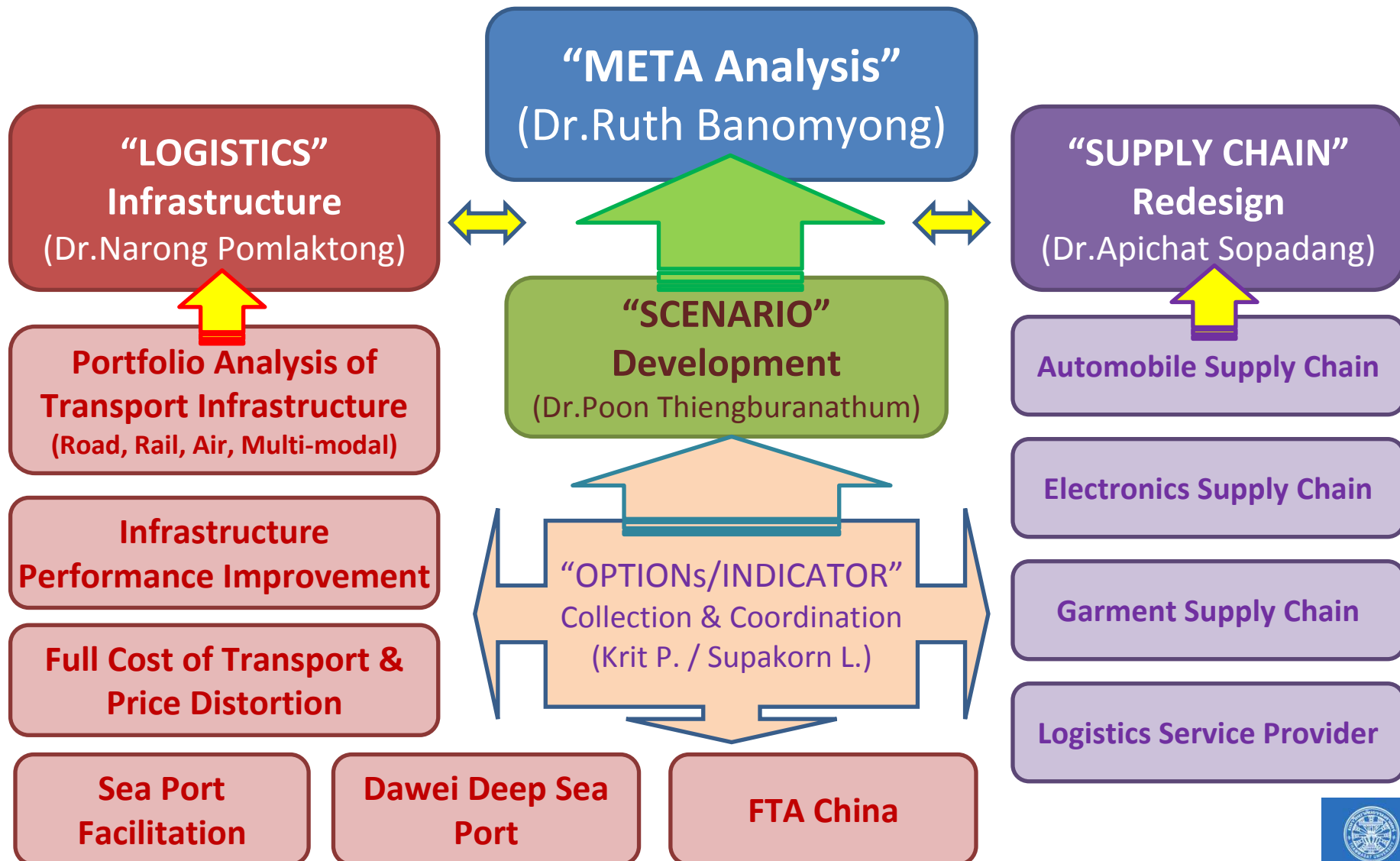
Krit Pattamaroj
Thammasat University

Supakorn Limkhunthammo
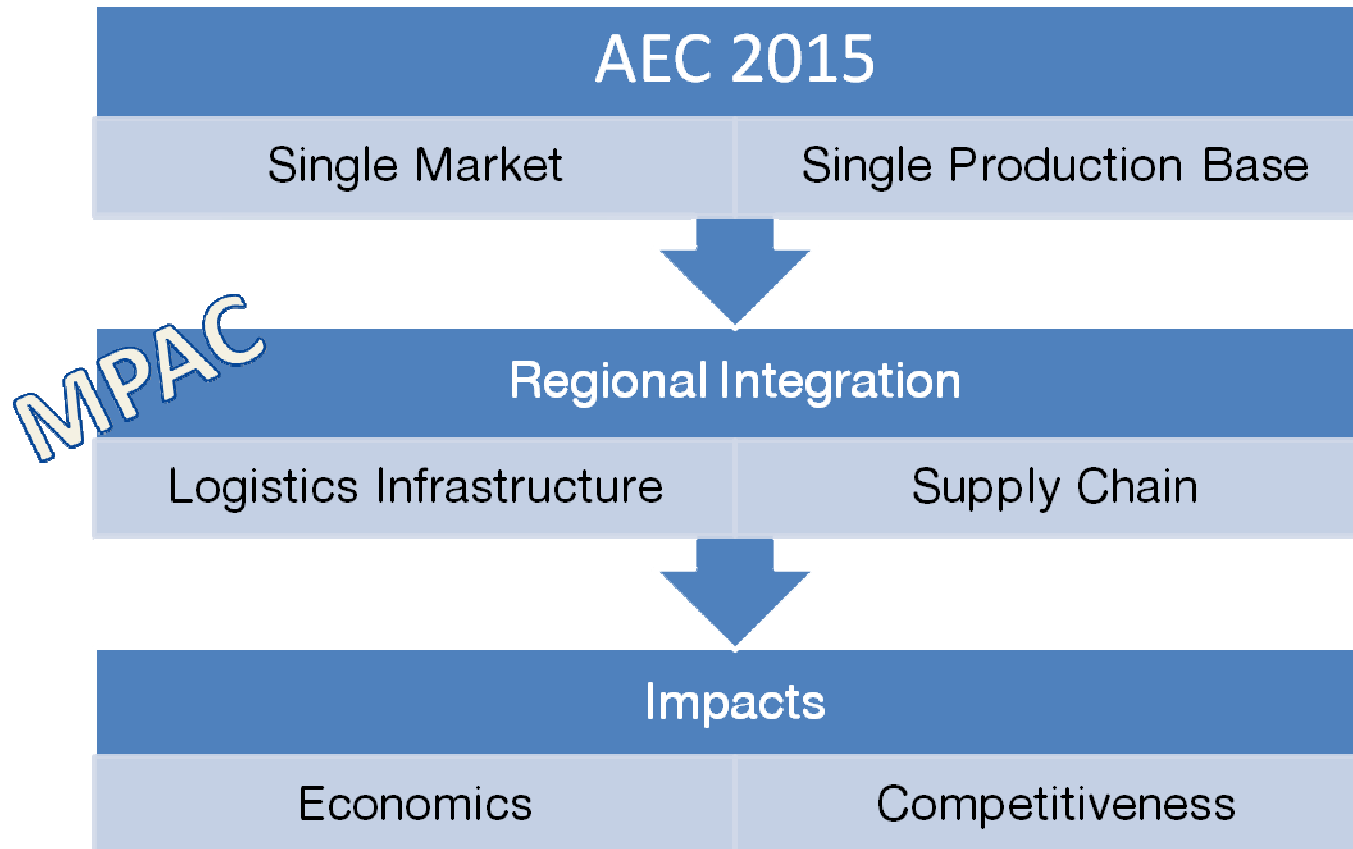Rajamankala University of Technology Suvarnabhumi

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Research Structure

"META Analysis"
(Dr.Ruth Banomyong)

"LOGISTICS"
Infrastructure
(Dr.Narong Pomlaktong)

"SUPPLY CHAIN"
Redesign
(Dr.Apichat Sopadang)

"SCENARIO"
Development
(Dr.Poon Thiengburanathum)

Portfolio Analysis of Transport Infrastructure
(Road, Rail, Air, Multi-modal)

Automobile Supply Chain

Infrastructure Performance Improvement

"OPTIONs/INDICATOR"
Collection & Coordination
(Krit P. / Supakorn L.)

Electronics Supply Chain

Full Cost of Transport & Price Distortion

Garment Supply Chain

Logistics Service Provider

Sea Port Facilitation

Dawei Deep Sea Port

FTA China

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Research Background

AEC 2015	
Single Market	Single Production Base

MPAC

Regional Integration	
Logistics Infrastructure	Supply Chain

Impacts	
Economics	Competitiveness

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Key Transport Strategies
for Master Plan on ASEAN Connectivity

- ☐ As transport is viewed as a priority mode of connectivity, ASTP is expected to input several key strategies to enhance ASEAN Connectivity.

- ☐ Out of the comprehensive, though still tentative, list of goals and actions proposed in the Midterm Report of ASTP and its update, we would like to propose the followings as key transport strategies to enhance ASEAN's connectivity. <u>The order reflects the proposed priority</u>.

Strategies for Connectivity Master Plan	Goals proposed in ASTP Midterm Report	
Strategy 1	TF-Goal 1	Fully operationalize three Framework Agreements on transport facilitation
Strategy 2	LT-Goal 2	Establish integrated ASEAN Highway Network.
Strategy 3	MT-Goal 1	Accomplish the efficient and competitive maritime transport system.
Strategy 4	AT-Goal 1	Establish ASEAN Single Aviation Market (ASAM).
Strategy 5	LT-Goal 1	Accomplish the implementation of Singapore Kunming Rail Link (SKRL) project.
Strategy 6	TF-Goal 1 LT-Goal 10 MT-Goal 6	Establish harmonized, integrated, and seamless multimodal transport system.

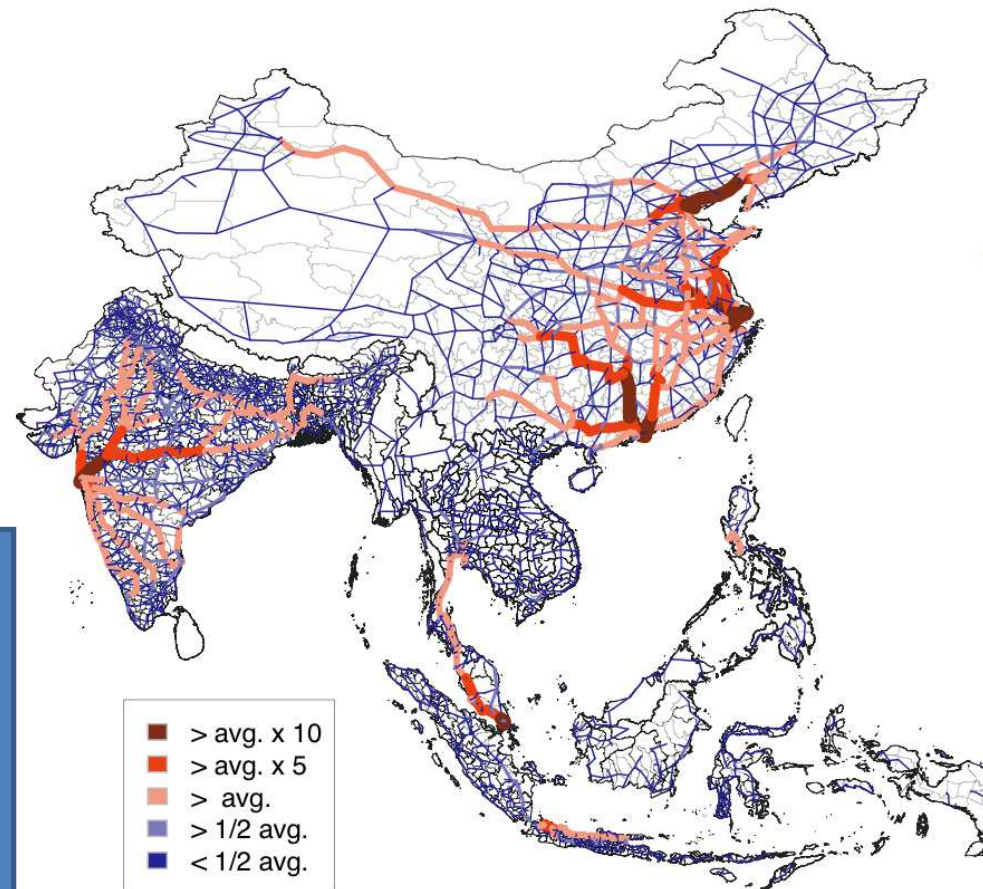Synthesizing the Impact of Thailand's Logistics Infrastructure Management and Supply Chain Redesign within the context of the ASEAN Economic Community (AEC)

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Research Background

Logistics Infrastructure Research

Supply Chain Redesign Research

(Electronics, Garment, Automobile, LSPs)

Geographical Simulation Model: GSM

Competitiveness Model

Policy Recommendation for Government and Information for Private Sector

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- To simulate the dynamics of population and industries for long-term
- To analyze the effects of infrastructure projects and customs facilitation on the economic activities at prefecture level

13 Countries
1,650 regions
3,109 nodes
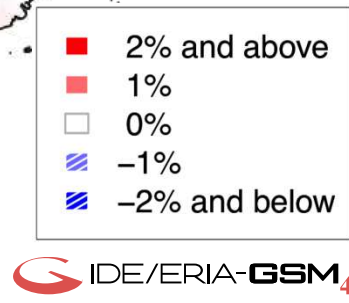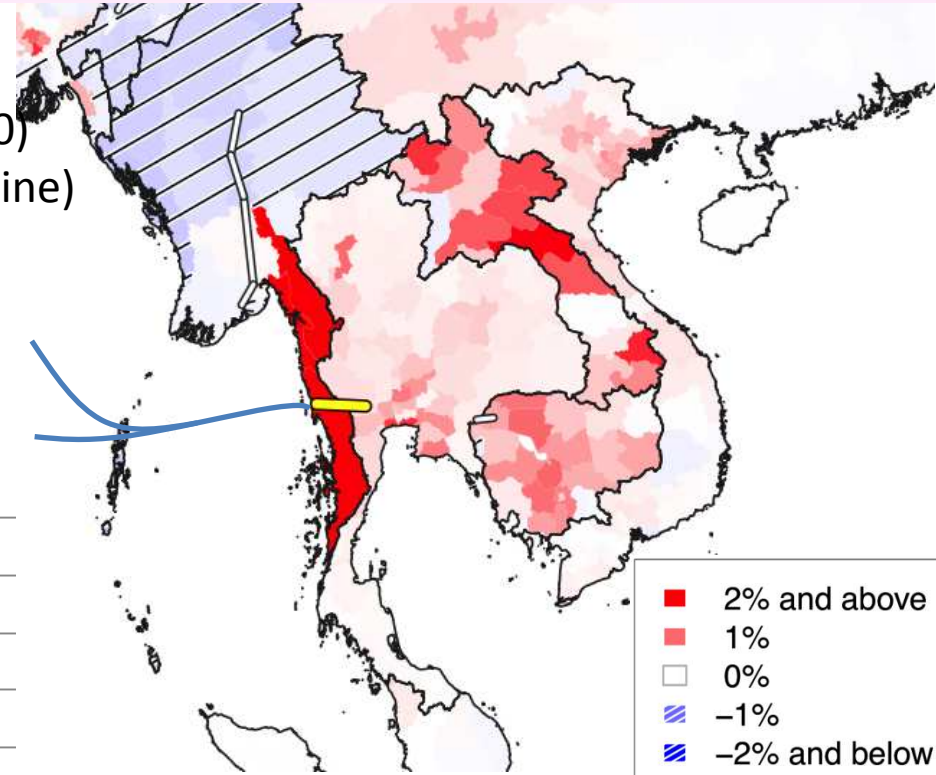5,099 routes
Road: 4,114
Sea: 535
Air: 332
Rail: 118

> avg. x 10
> avg. x 5
> avg.
> 1/2 avg.
< 1/2 avg.

IDE/ERIA-GSM₄
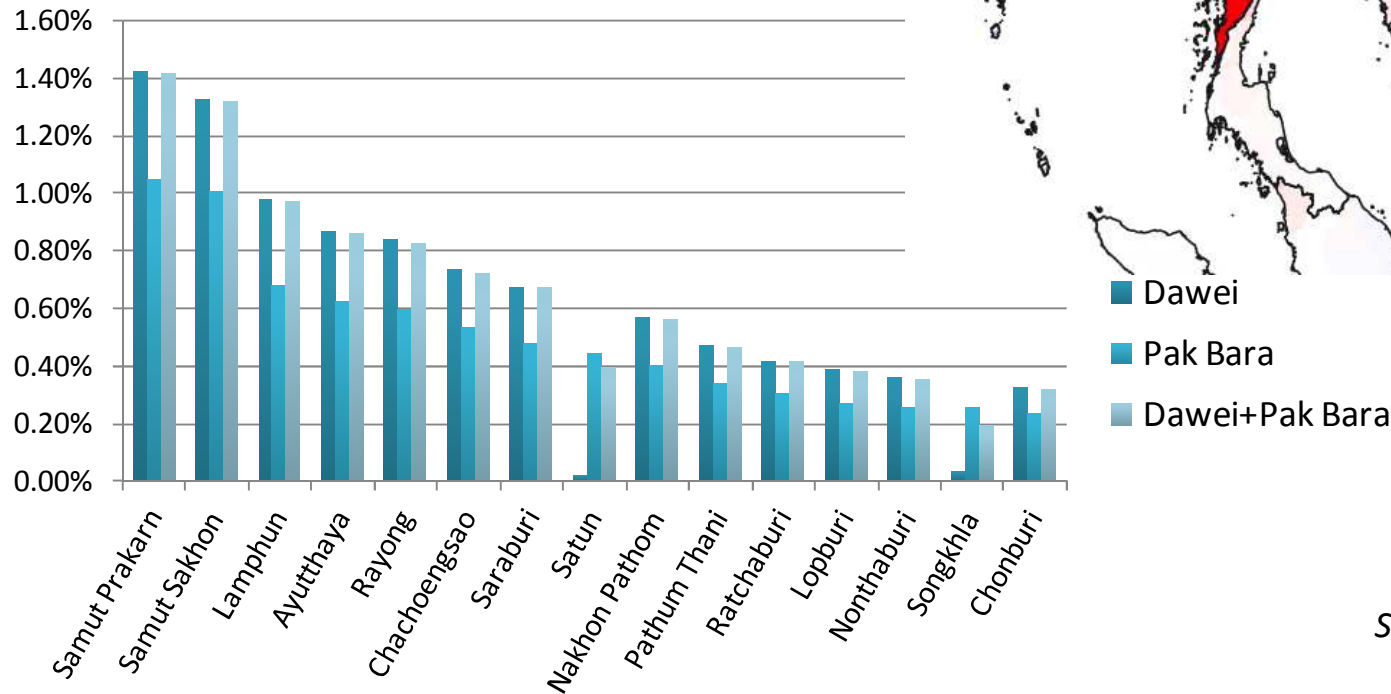
Source: ERIA Report

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Geographical Simulation Model: GSM

Economic Impacts of the **Dawei** (2030)
(Scenario 1, compared with the baseline)

Economic Impacts of the **Dawei, Pak Bara
and Dawei + Pak Bara** (2030)

Map legend:
- 2% and above
- 1%
- 0%
- −1%
- −2% and below

IDE/ERIA-GSM₄

Chart legend:
- Dawei
- Pak Bara
- Dawei+Pak Bara

Chart categories: Samut Prakarn, Samut Sakhon, Lamphun, Ayutthaya, Rayong, Chachoengsao, Saraburi, Satun, Nakhon Pathom, Pathum Thani, Ratchaburi, Lopburi, Nonthaburi, Songkhla, Chonburi

Source: ERIA Report

√ Economic Community (AEC)

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Sample of Competitiveness Model

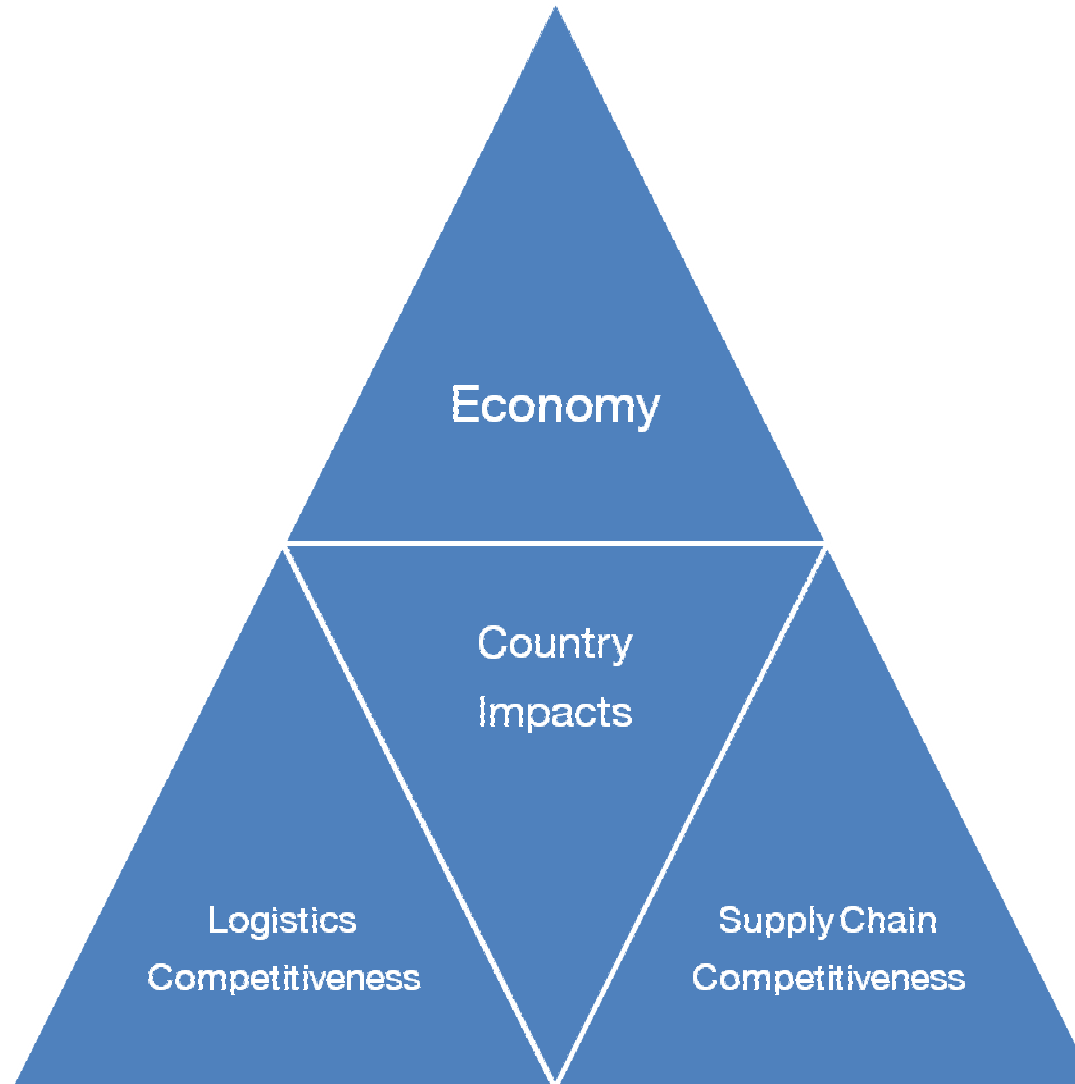**Transport Infrastructure:**
Thailand
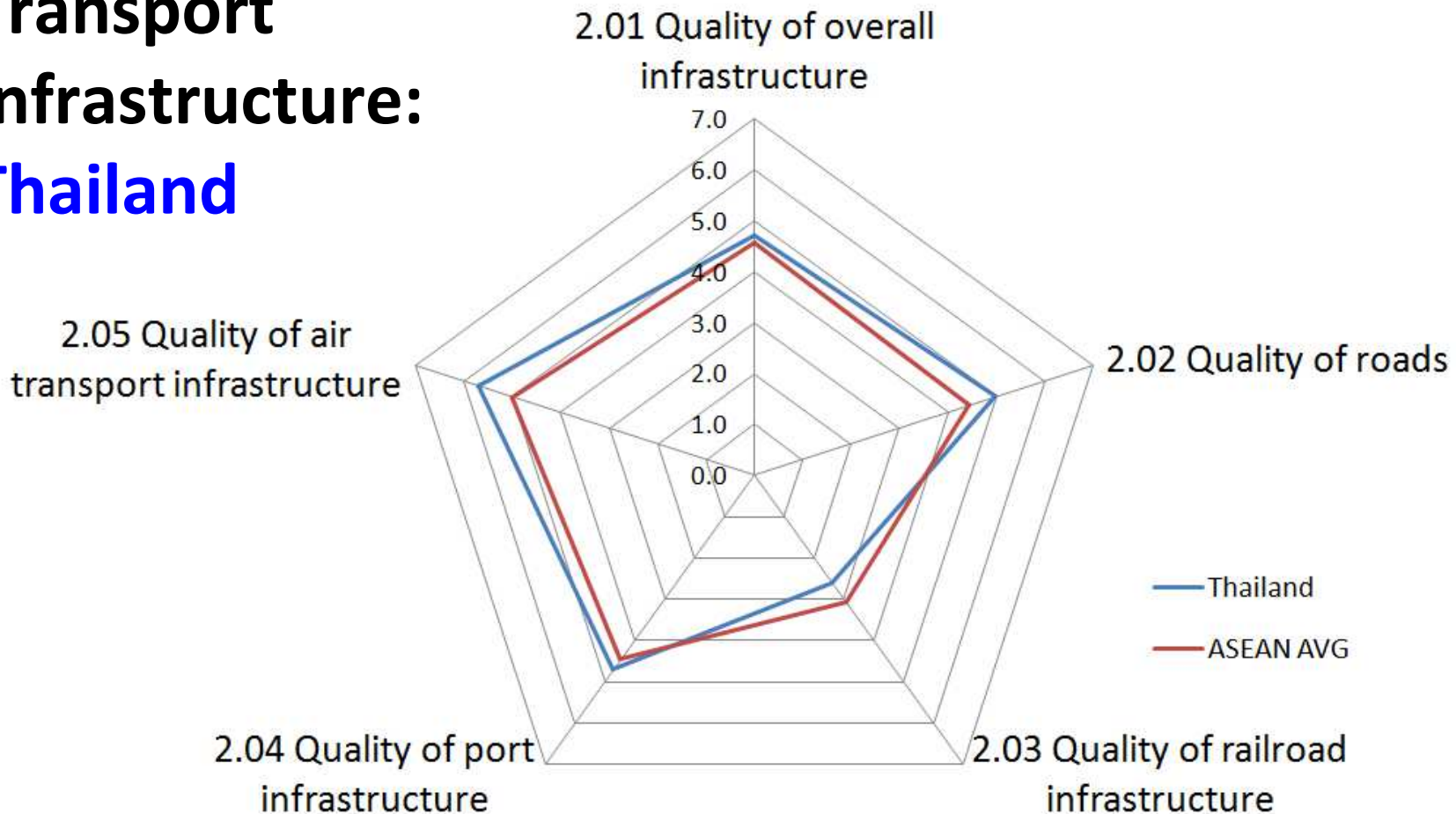
Source: World Economic Forum, (2011) The Global Competitiveness Report 2011–2012

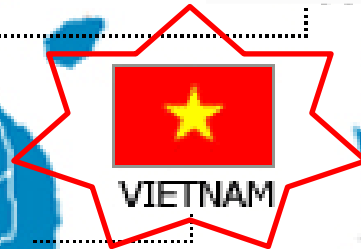Synthesizing the Impact of Thailand's Logistics Infrastructure Management and Supply Chain Redesign within the context of the ASEAN Economic Community (AEC)

Research Journey....

2013

THAILAND

2013

VIETNAM

2013

PHILIPPINES

2012

2013

SINGAPORE

2013

INDONESIA

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Q & A

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