Economic Research Institute for ASEAN and East Asia

Policy Brief

Dawei revisited: Reaffirmation of the importance of the project in the era of reforms in Myanmar

By Ikumo Isono and Satoru Kumagai

Myanmar has entered a new era of all-round reforms. Donors and foreign investors are mainly interested in Yangon, while there has been a delay in the Dawei deep sea project, the Dawei Special Economic Zone project and the road connection to Thailand. The change in circumstances poses a question about whether the Dawei project is still needed in the era of a reforming Myanmar. Our geographical simulation analysis clearly shows that the Dawei project has significant additional benefit for the whole Mekong region and points out the importance of international cooperation.

1. Introduction

Physical and institutional connectivity enhancement in ASEAN and East Asia is a key driving force toward deepening economic integration in this region and keeping a good status of the region as a growth center for the world. The connectivity also helps the region to achieve the narrowing of development gaps.

The Dawei project[1] and ASEAN-India connectivity have been noted as a promising scheme for development. ERIA (2009) proposed the Mekong-India Economic Corridor (MIEC) and analyzed the possible impact of the corridor development (Figure 1). The Comprehensive Asia Development Plan (ERIA, 2010) compared the economic impacts of the North-South Economic Corridor, the East-West Economic Corridor and the MIEC developments and concluded that the MIEC offers the largest potential contribution to regional economic growth. The missing links between Dawei and the Maesamee pass (Phu Nam Ron) was designated as a part of a prioritized project for ASEAN Connectivity (ASEAN 2010). The Comprehensive Asia Development Plan Phase II project (Kimura and Umezaki, 2011) highlighted several potential links in

Figure 1. Mekong-India Economic Corridor and Dawei

Source: Authors modified from ERIA (2009)

ASEAN-India Connectivity including the MIEC and the Trilateral Highways. All studies showed that Dawei and Myanmar were the weakest links in the corridors, which present high potentiality. There has, however, been a long delay in the implementation of proposed projects, including the Dawei deep sea project, the Dawei Special Economic Zone (SEZ) project and road construction connecting to Thailand.

The situation is now dramatically changing, as Myanmar proceeds with all-round reforms. On 19 June 2012, President Thein Sein declared that the government had entered into the second phase of reforms, which focused on economic and financial development. In January 2013 the Myanmar government held a donor meeting. The international community has changed its attitude to Myanmar and now strongly expects that the development of the country will be accelerated, especially in the Yangon and Thilawa area.

Under these circumstances, three research questions should be posed. First, in an era of reforms in Myanmar is the Dawei project still needed, especially when many donors/investors are focusing on the Yangon and Thilawa area? Second, if so, how does the Dawei project benefit Myanmar and the Mekong region? And third, what are the best combination of the projects for ASEAN and Myanmar to aim for high economic growth and narrowing development gaps?

We try to give answers to these questions by using the geographical simulation analysis as in the previous studies. The Geographical Simulation Model (IDE/ERIA-GSM), which was

jointly developed by Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO) and ERIA, is the only one methodology to identify economic impacts of a specific infrastructure project on other countries and favorable combinations of various hard and soft infrastructure projects to pursue both high economic growth and narrower development gaps (Kumagai and Isono, 2011). Our model has sub-national economic data and different modes of transport in logistics, i.e., highways, railways, sea shipment and air shipment. The geographical route of transactions between each pair of regions is determined by firms' modal choice which reflects the type of goods. The model also includes estimations of some other trade costs such as tariff rates, non-tariff barriers and transshipment costs. We estimate region-specific productivity parameter by industry. Therefore our simulation model is a comprehensive one for examining the impact of developing infrastructures and reducing broadly-defined trade costs.

2. Scenarios

In this simulation analysis, we present a baseline scenario and several alternative scenarios. Every simulation starts from 2005. In 2010, we assume that some infrastructure projects have been completed and apply their impact to all scenarios. In the baseline scenario, we assume that there are no additional hard and soft infrastructure projects and run the simulation toward 2030. In the alternative scenario, we assume additional projects and run the simulation up to 2030. We compare the economic situations, e.g. regional GDP (GRDP), between the baseline scenario and the alternative scenario and derive the economic impact of those infrastructure projects as a difference between the two scenarios.

Specifically, we set three alternative scenarios as follows:

Scenario 1 (Reforming Myanmar and Yangon Development)

In 2015, we expand the capacity of Thilawa port and develop the Yangon Special Economic Zone (SEZ) thus increasing the productivity parameter of Yangon. We assume that Thilawa and Chennai, India, Thilawa and Kolkata, India, and Thilawa and Colombo, Sri Lanka are connected by sea routes that are equivalent to other routes between internationally important ports. Aside from the Yangon development, we assume that Myanmar as a country reduces policy and cultural barriers by 3% per year.

Scenario 2 (Two-Polar Development + Domestic Connectivity Enhancement in Myanmar, excluding Dawei)

In addition to the developments mentioned in Scenario 1, we have

Mandalay development and connectivity enhancement in Myanmar. We reduce the time and monetary costs at the following national borders: Tachileik-Mae Sai, Mongla-Daluo, Tamu-Moreh, Kawthoung-Ranong, Myawaddy-Mae Sot, and Muse-Ruili. Connectivity enhancement includes upgrading the roads in sequence as follows:

1) Yangon-Mandalay
2) Muse-Mandalay-Kyaukphyu,
3) Myawaddy-Paan-Yangon,
4) Yangon-Mandalay second link on the western side of Bago Yoma,
5) Mandalay-Monywa-Tamu,
6) Yangon-Pathein,
7) Mongla-Kyinetone-Tachileik and
8) Mawlamyine-Dawei-Myeik-Kawthoung.

Scenario 3 (Scenario 2 + Dawei Development)

In addition to the development mentioned in Scenarios 1 and 2, we develop the Dawei deep sea port and the Dawei SEZ in 2020. Dawei and Kanchanaburi are connected by a road. Dawei and Chennai, India, Dawei and Kolkata, India, and Dawei and Colombo, Sri Lanka are connected by sea routes that are equivalent to other routes between internationally important ports. Special customs facilitation enables products from Thailand, Laos, Cambodia and other countries to be exported to India or the EU to go through Kanchanaburi to Dawei very smoothly, taking only 15 minutes and free-of-charge, and vice versa for the imports.

3. Simulation Results

Figure 2 illustrates the economic impacts of Scenarios 1, 2 and Figure 3 shows the economic impacts of Scenario 3 compared with the baseline where there are no infrastructure developments. The economic effects are measured as 'impact density' which is an index of gains/losses of GRDP in 2030 between the baseline scenario and an alternative scenario divided by the area of the region. The larger the impact, or the smaller the area of a region, the larger the absolute value of the impact density of the region becomes. Red regions have positive economic impacts where the additional infrastructure projects are favorable for the regions and blue regions have negative economic impacts due to outflow of industries/ households or fierce price competition.[2]

Scenario 1 depicts the currently on-going plan as of 2013 that Myanmar proceeds with all-round reforms. The simulation result of Scenario 1 shows that reforming Myanmar and completing the Yangon/Thilawa development will stimulate the economic activities of Yangon and the Irrawaddy delta areas, and those areas will attract firms from other regions, especially from Northern Myanmar, to Yangon.

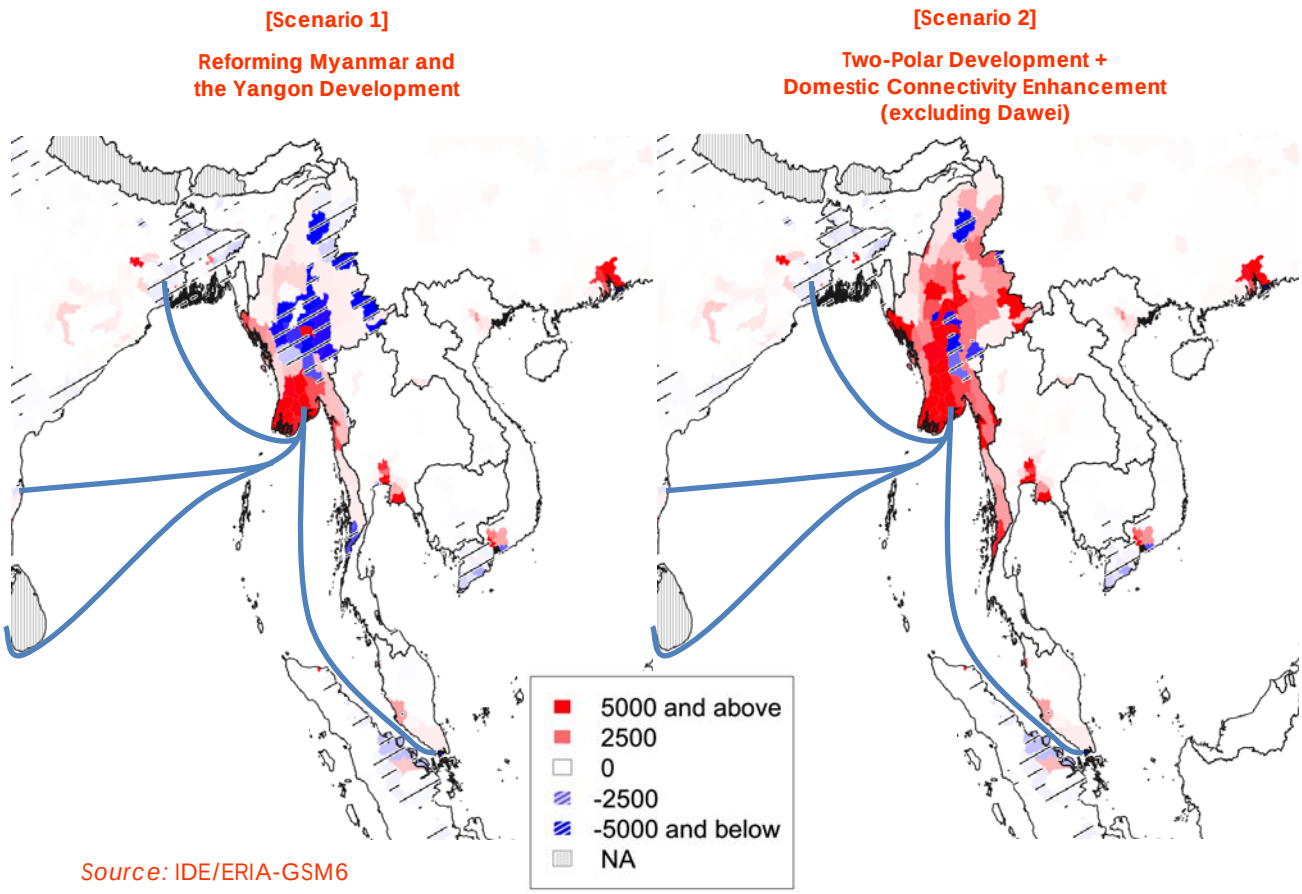
The hard and soft infrastructure development in Scenario 1 significantly increases Myanmar's net GDP. The impacts on other countries are relatively small because of the small economic size of Myanmar.

However, the Yangon development and Myanmar reforms generally will induce the formation of a cluster in Yangon and lead to an outflow of firms/households from northern areas of the country. The simulation result implies that the Yangon development and Myanmar reform would lead to a higher level of economic growth in Myanmar but not enough to achieve the narrowing of development gaps. Therefore, in scenario 2 we propose the strategy by ERIA (2012)[3] that includes Mandalay development in 2015, gradual connectivity enhancement in the country, and border facilitations at the main border crossings with surrounding countries, to achieve high economic growth and inclusive development in Myanmar.

Furthermore, Scenario 3 where we add the Dawei development plus border facilitation with Thailand to Scenarios 1 and 2 will bring about significant positive impacts not only on Myanmar but also on the Mekong region, the Malay Peninsula, Northeast India and Bangladesh.

Figure 2. Economic Impacts of Scenario 1 and Scenario 2

(Impact Density, USD per square kilometer, 2030)



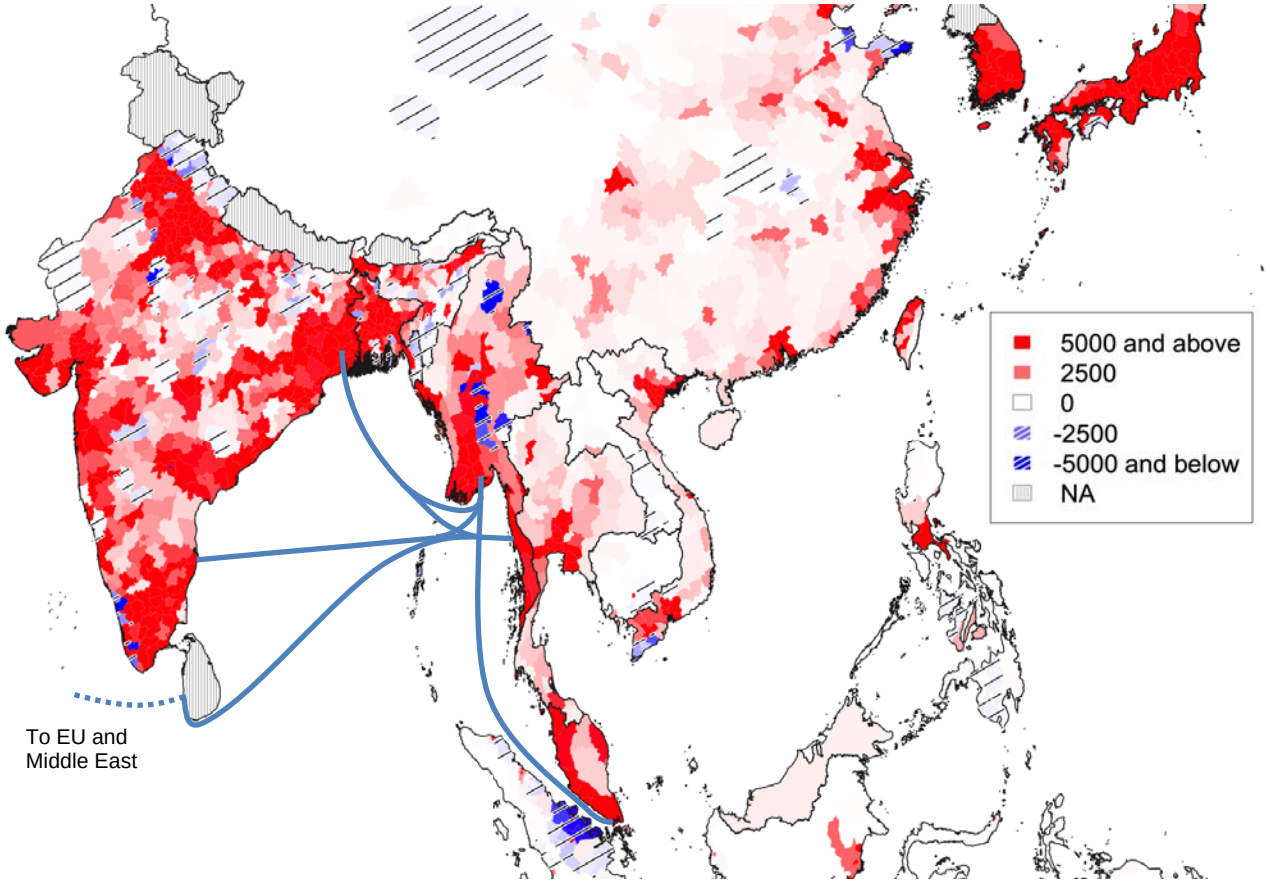
Source: IDE/ERIA-GSM6

Figure 3. Economic Impacts of Scenario 3

(Impact Density, USD per square kilometer, 2030)

[Scenario 3]

Two-Polar Development +
Domestic Connectivity Enhancement+
the Dawei Development



Note: NA for Bhutan, Nepal, North Korea, Sri Lanka, and Jammu and Kashmir due to the data availability.

Source: IDE/ERIA-GSM 6

4. Policy Implications

The simulation analysis clearly shows the different characteristics of the three major projects, i.e., the Yangon development, domestic connectivity enhancement, and the Dawei development, in two ways. The first difference is the development period. Some of the Yangon development can be implemented by 2015 while the total completion of the domestic corridors and the Dawei development needs longer period. The second difference is the beneficiary. The Yangon development and reforming Myanmar definitely benefit Myanmar, but main beneficiary is Yangon area. Domestic connectivity enhancement contributes to further economic growth of the country as well as inclusive development in Myanmar and to avoiding excessive agglomeration and congestion in

Yangon area. The Dawei Project contributes to promoting inclusive development in Myanmar and high economic growth of the region as a whole. In sum, Myanmar and East Asia can achieve high economic growth and narrower development gaps by the combination of the Yangon and Mandalay developments, reforming Myanmar, domestic corridors and the Dawei project.

In particular, there is a strong policy implication that the Dawei project is vital to further development of the Mekong region, notwithstanding the current reforms in Myanmar. There needs to be international or regional cooperation in helping Myanmar and the Dawei project, because the economic impacts of the Dawei project will prevail in East Asia. There also needs to be the highest level of border facilitation between Dawei and Kanchanaburi so that trucks belonging to Thai logistics companies are able to come directly to the port at Dawei.

[1] The Foreign Ministers of Thailand and Myanmar agreed a Memorandum of Understanding (MoU) on the implementation of the Dawei deep sea port and an industrial estate in May 2008, followed by another MoU between the Italian-Thai Development Company (ITD) and the Myanmar Port Authority in June 2008. Thailand and Myanmar agreed to sign an agreement to establish a special purpose vehicle (SPV) to manage the Dawei deep-sea port and its special economic zone in May 2013.

[2] Readers should be reminded that blue regions have smaller GRDP than the baseline scenario in 2030 and that this does not mean that they will have smaller GRDP than the current values.

[3] The strategy is one of the core components of the Myanmar Comprehensive Development Vision (MCDV). The MCDV was referred to in the 3rd Mekong-Japan Summit on 18 November 2011 to be implemented using the Japan-ASEAN Integration Fund (JAIF) and is expected to make an important contribution to the enhancement of intra Mekong and ASEAN Connectivity.

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