

## **International trade and environment (Aj Anin)**

Every economic activities have some impact on the environment, especially the issue these day is about climate change and greenhouse gas emission. In order to cut down the greenhouse gas emission, you have to trade off with the economic growth. The global export value has grown up exponentially which is the result from the globalization. Thailand, we used to be one of the tiger of Asia where is a lot of foreign direct investment that boost up the Thai economy. The value of the export goods as share of GDP has gone up. In 2014, Vietnam rely heavily on export the value is 85.95% of the GDP and Thailand come at the 3<sup>rd</sup> rank which is 60.39% of the GDP. The international trade, these day the global trade has gone up and the ship releases a lot of carbon dioxide.

In the middle of the 19<sup>th</sup> century, during the industrial revolution, the country began burning and created more carbon dioxide to the atmosphere. The increase in the emission is a main driver of global warming. The top emitter in 1868 is the UK. By the 1890, the USA moved to the world's largest emitter. Global emission continues exponential growth. By 2005, China overtook the USA for the greatest total emission.

To contain the acceptable impact of global warming, the scientist has agreed that we must control the warming less than 2 degree celsius. So, beyond that it is going to have a really bad or damages the world. Given that type of target, you actually have to limit a certain amount the gas emission that you release to the atmosphere to make sure that the temperature is not over 2 degree celsius. In 2012, the carbon budget has been used up by 60% already. By that time until now, we only have like 40% of the greenhouse gas emission that we can maintain the 2 degree celsius. Global warming comes from the stock of the greenhouse gas. So, the impact maybe show up 50 years later which causes the intergenerational problem. It means that the person who actually create the problem does not really bear the impact of the problem. Also the major contributors like the US and China, the impact of global warming might not hit them that hard compared with small countries like Thailand or Maldiv.

The shares of merchandise exports value as the percentage, the ASEAN export about 21.8% which is the highest amount followed by China (20.5%) and EU (9.2%) in 2018. The value of the US billion dollar of FDI into ASEAN has been gone up. The industries that the FDI flows into the manufacturing 35.6% which is the highest percentage and followed by financial and insurance activities, 27.4%. International trade is actually help in increase social welfare. At any given economic growth need to scarify the damage the environment quality. The environmental tariffs, if your product is produce with the lower environmental standard, you have to pay tax. It these policy can implement that would encourage firms or the countries to have better environmental standard. International trade theory, the economists believe that free trade

improves economic welfare and the assumption is no externalities. Based on comparative advantage theory, the country will produce the product that they have comparative advantage which means that produce the product at the lower cost. So, some country with the lower environmental regulation then the cost of the producing the product is lower. The Heckscher Ohlin (HO) theorem, the trade is determined by differences in factor endowments. The country will export those goods relatively intensive in its abundant factor of production. HO theorem implies that countries well endowed with environmental resources should specialize on the production of environmentally damaging goods. Environmental Kuznets curve (ELC) shows the relationship environmental quality and the economic growth (inverted U shape). It means that at early stages of industrialization are linked to relatively high pollution levels when growth is a priority but once you reach a certain income, people are more concern more about the environment. Environmental impacts of a North America free trade agreement Grossman and Krueger, the percentage change in emission is equal to the percentage change in the scale of output plus the percentage change in the share of the dirty commodity plus the percentage change in emission intensity of the dirty commodity. Impact of trade liberalization, the scale effect will increase emissions and technique effect will decrease emissions but the composition effect will increase or decrease emissions depending on production mix of goods after trade liberalization. So, overall impact is an empirical question.

The resource curse are the evidences in many countries that many oil, gas and mineral rich countries have failed to reach their full potential as a result of their natural resource wealth. The cause of resources curse is the lack of democracy, the conflict with the local people, the inefficient spending and borrowing, the dutch disease related to currency appreciation and limited government capture of benefits.

Environmental problem, consumers and producers only take into the account of private cost when they decide how much to consume and how much to produce. But actually there is a externality cost which they are not consider. In order to solve the environmental problem, firstly, the government need to issue the standards, law and regulations. Secondly, putting price on pollution for example tax.

## **Economics of multinational enterprises (Aj. Nessara)**

A precise definition of multinational enterprises is not required for the purpose of the guidelines. Each organization may have a little bit different definition. These usually comprise companies or other entities established in more than one country. FDI is a category of cross border investment made by residents in one country. The lasting interest, the investor owns at least 10% of the voting power of the direct investment enterprise. The reasons why foreign firms invest abroad, the first one is natural resource seeking FDI for example Singapore, they don't have the natural resources so they have to invest in Myanmar to get the natural gas. Another example, Chinese firms invest in rubber production in Thailand because our rubber price is cheaper. Second reason is market seeking FDI, the investor can seek the market in the host country for example Grab, Lazada and Shopee. They invest because they want to penetrate Thai market. Thirdly, efficiency seeking FDI, foreign investors may invest in the country that have a better infrastructures, cost of operation or low labor cost compared to other countries. For example call center, when you stay in the US and you call the call center, the one who answers your phone is actually Indian because they can speak English and cheaper cost. The last one, strategic asset seeking FDI, the firms may decide to invest abroad because they need some knowledges or abilities of the firms that already established abroad for example, you invest in a company in Laos, you may joint venture with the local firm because the local firm may have knowledge of their own country better than the firm in Thailand. Determinants of FDI, the first one is FSAs. Firms may invest abroad because they have firm specific advantages for example firms' knowledge, managing capability, managerial capability. Secondly, CSAs, you may invest abroad because they could have a country specific advantages. CSAs may include natural market factor endowments, factor prices, government regulations and market access. The impact of the FDI to host and home country. Firstly, resource allocation, in the past a lot of foreign firms invested in Thailand. So, we kind of allocate our labors. You can see that a lot of our labors move from the agricultural sector to the industrial sector. One of the key reason is that we have a lot of factories owned by the foreign companies who invest in Thailand. Secondly, technology transfers from the host country to the home country for example high speed trains. Thirdly, income distribution, it depends who benefits from that investment for example labors. Next one is the trade. It could affect the import substitution.

The FDI stocks in Lao (1998-2015) keep increasing over time especially with the recent year. When compared FDI flows with approved FDI in Lao, you can see that approved level is quite a lot higher than actual level which means what Lao government approved foreign firms to invest is higher than the actual investment that they receive. But in 2014-2015, the approved and the actual got closer from the Lao government did a lot of policy to make sure that what the firms promise to invest and the actual invest are equal. The key industries that the foreign invest in Lao

in 2011-2015 would be electricity generation and mining. Thailand, we used to be a key investors in Lao but now China comes at the first rank followed by Vietnam and Thailand. In Lao, the natural resource seeking FDI is mining, electricity generation especially in hydropower generation and agriculture. The market seeking FDI for example, service sectors, construction, electricity and agricultural sectors. The efficiency seeking FDI in Lao is the low labor cost and also the labor cost in neighboring countries increase such as Thailand. So, we move some production from Thailand to Lao. The strategic assets seeking FDI, a lot of firms jointly venture because they want to learn from the local partner. Positive factors that bring the foreign investors to Lao are political stability, rich natural resources, high level of economic growth, low labor cost, stable exchange rate, cooperation in the region and Lao has adjusted the country's trade and investment regulations. On the other hand, negative factors are small market size, limited amount of labor force and low labor productivity, investment regulations problems when they have been implemented, lack of some necessary and infrastructure, have problems of corruptions and practices of informal sector, institutions have been developed enough and lao government cannot fully deliver amount of land specified in concession contract.