

## **2011 Flood in Thailand**

In 2011, Thailand faced a great flood in the summer season. It caused more than 800 deaths and affected approximately 13.6 million people. This disaster came from a tropical storm called "juaning". It was first founded in Vietnam. At the beginning, it had a lot of heavy rain in the northern and northeast of Thailand. There was continuously rain. As a result, there was a lot of water in the Chao Phraya river because the water from northern Thailand must go through the Chao Phraya river before going to the gulf of Thailand. In addition, there are plenty of important places nearby the river such as temples, hotels, and many companies.

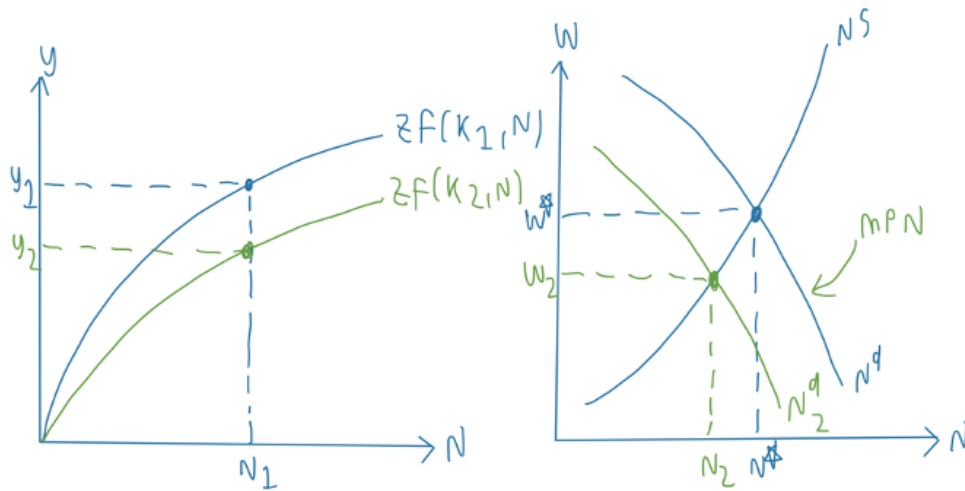
The flood impacted 4,039,459 households in Thailand. There were 2,329 houses which were destroyed from this flood. The factors which affected the most were industrial sectors. There were 1,000 factories had to shut. The unemployment rate was very high because of the closure of several factories. Tourism needed to stop for a while. Thailand also lost a lot of revenues from a closure of Tourism because it was the main revenue for Thailand.

### Analyze

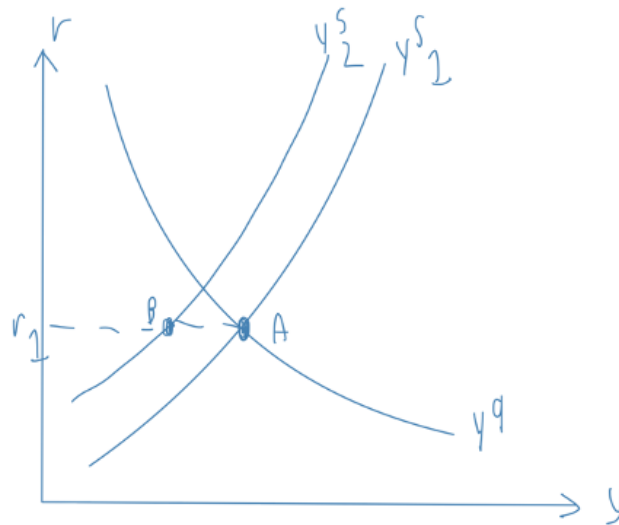
In this case, the firms couldn't open as usual. So, the firms could not produce goods for selling. The production function will shift down from  $zF_1(K_1, N)$  to  $zF_2(K_2, N)$ . As a result, the output will drop from  $Y_1$  to  $Y_2$ .

In addition, There were several affected factories. When the flood happened, it caused lots of damage, especially machines and equipment for production. Capital stock would fall down with the same labor amount. As a result, current MPN drops. When MPN drops, it causes  $N_d$  shift left from  $N_{d1}$  to  $N_{d2}$ . The number of labor will decline from  $N_1$  to  $N_2$ . At the same time, wages will drop from  $W_1$  to  $W_2$ .

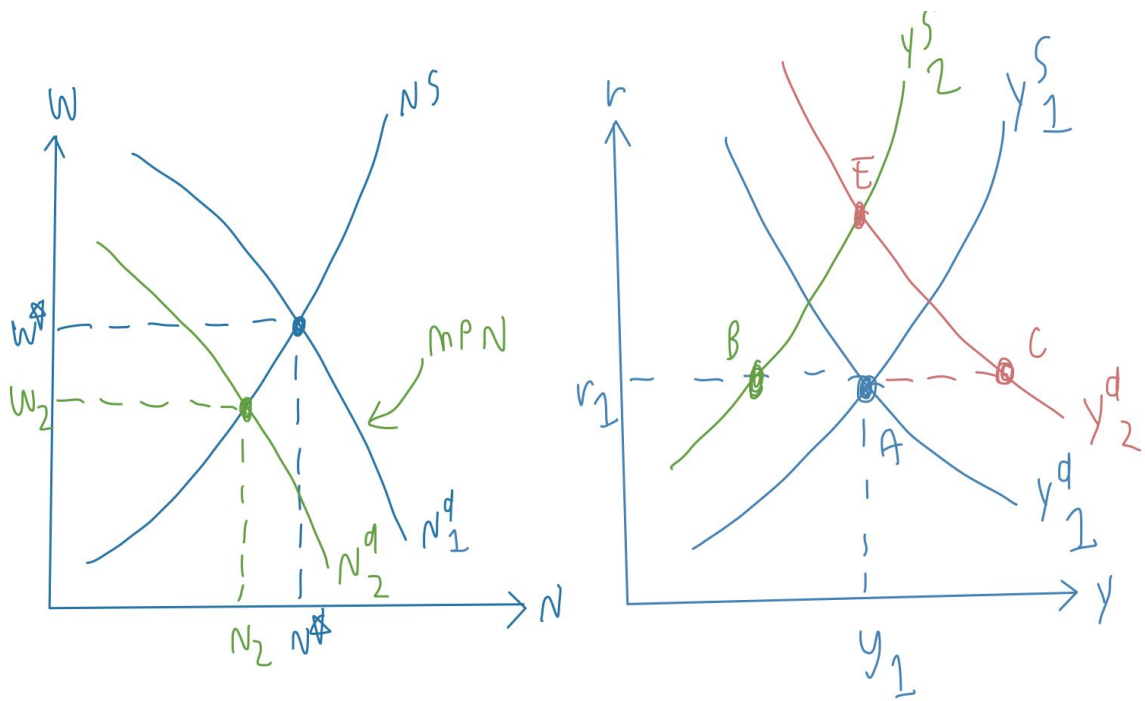
To conclude, when the company could produce less, the firms also preferred to hire less labor with the lower wage.



When the lower wage happened, employees didn't want to work anymore. As a result,  $Y_s$  will shift left from  $Y_{s1}$  to  $Y_{s2}$  at the same interest rate.

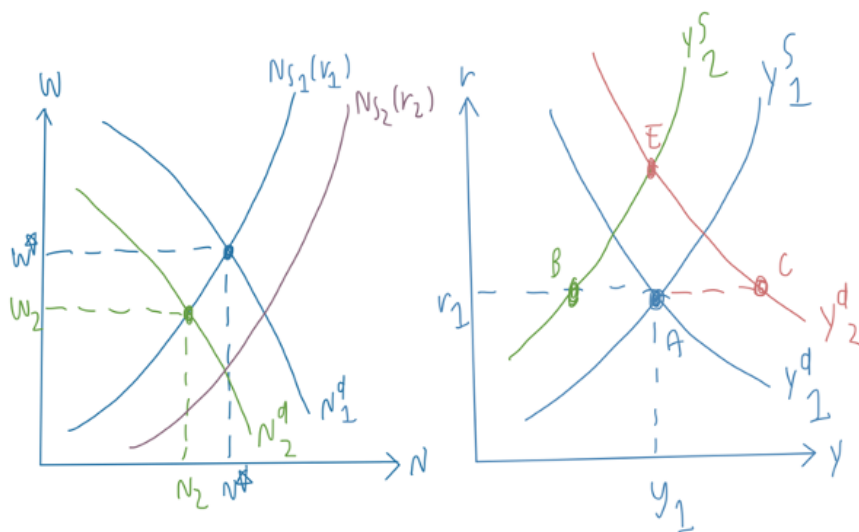


When the current capital stock ( $K$ ) is smaller, the future capital stock is also smaller too. On the other hand,  $MP'K'$  definitely increases. It means that the additional output from one extra unit of  $K'$  will increase. So, investment increases. Investment curve ( $I_d$ ) shifts to the right. It causes  $Y_d$  to shift to the right too.



A higher real interest rate will make consumers work harder because consumers will have less money to consume. So, employees preferred to have less leisure, consume less, invest less. In contrast, it will increase labor supply.

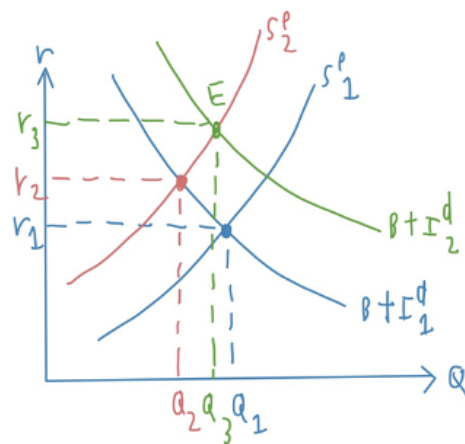
When interest rate causes firms want to invest less. But, MP'K' will attract firms to invest more. So, investment will raise.



### credit market

Suppose that the consumption declines less than output. (total  $Y >$  total  $C$ ). So, consumers didn't have a problem with consumption. But, they had less money to save. When consumers don't have more money than they want to consume.

They will save more. So, the investment demand curve will shift right. As a result, the real interest rate will increase, and the new equilibrium at point E.



## Reference

<https://www.thaiwater.net/web/index.php/ourworks2554/379-2011flood-summary.html>

[https://th.wikipedia.org/wiki/%E0%B8%AD%E0%B8%B8%E0%B8%97%E0%B8%81%E0%B8%A0%E0%B8%B1%E0%B8%A2%E0%B9%83%E0%B8%99%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B9%80%E0%B8%97%E0%B8%A8%E0%B9%84%E0%B8%97%E0%B8%A2\\_%E0%B8%9E.%E0%B8%A8.\\_2554](https://th.wikipedia.org/wiki/%E0%B8%AD%E0%B8%B8%E0%B8%97%E0%B8%81%E0%B8%A0%E0%B8%B1%E0%B8%A2%E0%B9%83%E0%B8%99%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B9%80%E0%B8%97%E0%B8%A8%E0%B9%84%E0%B8%97%E0%B8%A2_%E0%B8%9E.%E0%B8%A8._2554)

<https://www.bbc.com/news/world-asia-pacific-15381227>