Singapore’s OFDI to China during SARS epidemic

EE406 GROUP9

Abstract

Severe acute respiratory syndrome (SARS) is a viral respiratory disease caused by a SARS-associated coronavirus.It was first identified at the end of February 2003 during an outbreak that emerged in China and spread to 4 other countries.SARS is an airborne virus and can spread through small droplets of saliva in a similar way to the cold and influenza. Symptom of SARS Fever of 100.5 F (38 C) or higher, Dry cough and Shortness of breath. The first case appeared in November and December 2002, Guangdong province began to see cases involving a mysterious and contagious ‘flu-like’ virus that PRC medical officials referred to as ‘atypical pneumonia’. Provincial officials took emergency measures and the PRC government sent medical teams to Guangdong to investigate the outbreak.

The epidemic of SARS affects the economy without suspicion. Each country would face a different impact of SARS depending on the foundation of the economic system of their country. SARS can affect the economy in many channels. First, fear of SARS infection leads to a substantial fall in consumer demand, especially for travel and retail sales service. Second, SARS undoubtedly increases the costs of disease prevention, especially in the most affected industries such as the travel and retail sales service industries. Third, an allocation budget in the government sector which covers the economic burden of an epidemic based on the private and non private medical costs associated with the disease. Last, the effect in the international financial market.

After the pandemic happened in China, one of the first things that we thought about was how China’s FDI would be impacted by SARS. FDI is A foreign direct investment (FDI) which is an investment made by a firm or individual in one country into business interests located in another country. Moreover, we also considered about OFDI in another country like Singapore which can be related to FDI in China. OFDI is an outward foreign direct investment (OFDI) which is a business strategy in which a domestic firm expands its operations to a foreign country. Singapore was picked up because it was another one country that suffered during SARS due to the pretty large number of patients who got infected by the virus leading to have many economic problems, for instances, visitor arrivals and hotel occupancy rates plunged, revenues at retail shops and restaurants dived, taxi drivers reported fewer passengers, stock prices fell, and more people lost their jobs, and all those impacts could sink down its OFDI during the year 2003. Since, Bilateral economic ties between Singapore and China have strengthened over the years since 1990. In 2017, Singapore’s largest trading partner was China, and Singapore was China’s top foreign investor from 2013 to 2017.Therefore, besides Political stability, Government of host country action, Labour skills / productivity, Health of the workforce that could affect China’s FDI in March to April in 2003, one of the possible reasons that also caused the drop of China’s FDI during SARS could be Singapore’s OFDI too. The government of China played an important role to solve the situation of its country. At first, there was a failure from the government about the concealment because they were worried about the economic stability, the exposure to the reality of health care, inadequate healthcare system, and the lack of preparedness for public emergencies. The government started to make decisions concerning SARS because of the aggressive Western media reporting. Things became better when the government held a meeting to discuss the SARS problem. An anti SARS joint team was for the political zeal, the quarantine of tens of thousands people, and setting up checkpoints to take temperature. The state council also set up an emergency headquarters to deal with any public health.

Introduction

As our world has globalization, there are many interactions across the countries such as the exchange, export and import, of capital from one country to another in order to create more value and make external benefits, on the other hand, to support and build the strong relationship between countries. Also, as China opened up to the world economy since 1997, the Foreign direct investment of China became an important role to drive the economy of China. However, there was an unexpected event which was SARs happened and first appeared in Asia at the end of February,2003 that obstructed China from the growth of its economy and also affected many other countries. Also, Singapore has 238 cases among which 14% died. This was over a period shorter than three months from February to May 2003. The first case of SARS in Singapore to be seen in a hospital had spread the disease to both her parents.

Therefore, in this report, we will firstly provide the SARs background to emphasize how bad the situation was that associated and forced the economy countries (we decided to provide China and Singapore) to be fluctuated during the crisis. Second, we will deeply focus more on FDI in China and OFDI in Singapore if they could be related during this situation. Both internal and external factors affected the decrease and increase of China’s FDI, indeed, for the internal factors are political stability and government action, and labor skills with the health of the workforce, for the external effect, we will provide the example of country that is also affected by the epidemic of SARs which is Singapore to clarify that it relevantly plays an important role in the sharply change in China’s FDI during 2002 to 2003 or not.

Severe acute respiratory syndrome (SARS) is a viral respiratory disease caused by a SARS-associated coronavirus (SARS-CoV). It was first identified in Asia at the end of February 2003. This virus is speculated to be an animal virus from an as-yet-uncertain animal reservoir, possibly bats, that spread to other animals (civet cats) and humans by close contact, butchering or eating undercooked meat, and the main way that SARS seems to spread is by close person-to-person contact. The virus that causes SARS is thought to be transmitted most readily by respiratory droplets (droplet spread). Droplet spread can happen when droplets from the cough or sneeze of an infected person are propelled a short distance up to 3 feet through the air and deposited on the mucous membranes of the mouth, nose, or eyes. If someone else nearby breathes in the droplets, they can become infected. Nonetheless, the virus also can spread indirectly when a person touches a surface or object contaminated with infectious droplets and then touches his or her mouth, nose, or eye(s). Symptoms of SARS begin with high fever which temperatures more than 38.0°C and may include fever, chills, headache, muscle aches, dry cough , shortness of breath, and occasionally diarrhea.

The first case appeared in November and December 2002, Guangdong province began to see cases involving a mysterious and contagious 'flu-like' virus that PRC medical officials referred to as 'atypical pneumonia'. Provincial officials took emergency measures and the PRC government sent medical teams to Guangdong to investigate the outbreak. The Guangdong Provincial Health Bureau made the first official PRC announcement about the new illness that 5 had died and more than 300 had become sick. On February 12, 2003, the official Xinhua News Agency announced that the mysterious illness had been brought under control and no new cases had been reported. This remained the official story from the Chinese government through mid-March 2003, even as the World Health Organization (WHO) issued a global alert on March 12, 2003, following new outbreaks of atypical pneumonia in Hong Kong and Vietnam. On March 15, 2003, WHO issued a rare emergency travel advisory warning, for the first time referring to the illness as Severe Acute Respiratory Syndrome and saying that its further spread to Singapore, even to Canada and parts of Europe now made it a global health threat. On March 18, 2003, PRC officials admitted that the SARS outbreak was continuing in Guangdong, but had not expanded elsewhere in China. This was disputed by reports from Chinese doctors that two people in Beijing had died from the disease earlier in the month. With SARS cases continue increasing and expanding to other countries, including the United States. On April 9, a prominent Beijing surgeon publicly disclosed that the government was seriously under-reporting cases of SARS in Beijing, and that the number was more than 22 cases the government indicated. WHO officials also told PRC officials on April 17 that the SARS figures Beijing was reporting were unreliable. As of April 27, 2003, the number of confirmed cases in Beijing alone had passed 1,100 and SARS outbreaks had been reported in 26 of the PRC's 31 provinces, very likely an under- estimate. Although daily PRC announcements showed that confirmed SARS cases were now increasing on a daily basis, WHO officials on April 29 criticized the government as continuing to be unforthcoming with further details about the Beijing cases

Singapore has 238 cases among which 14% died. This was over a period shorter than three months from February to May 2003. The first case of SARS in Singapore to be seen in a hospital had spread the disease to both her parents, two grandparents, and her relatives within the period of 3 weeks or so between February 2003 and March. The patient lost both her parents and two grandparents during the time. The pastor also eventually died from SARS. This first patient also transmitted her illness to another patient in the same ward who would eventually spread the virus to another hospital as well as to a family member working in a food wholesale centre in Singapore. This patient transmitted the virus to 12 people before she was isolated a fortnight later.

The epidemic of SARS affects the economy without suspicion. Each country would face a different impact of SARS depending on the foundation of the economic system of their country. The country that has a stable foundation of the economy could deal with the affection better than other countries that are feeble. SARS can affect the economy in many channels. First, fear of SARS infection leads to a substantial fall in consumer demand, especially for travel and retail sales service. People do not want to go out because they are trying to prevent affection for SARS. Then the expenditure decreases, especially in countries that have an epidemic of SARS. The adverse demand shock becomes more substantial in regions that have much larger service-related activities and higher population densities, such as Hong Kong or Beijing, China. The psychological shock also ripples around the world, not just to the countries of local transmission of SARS, because the world is so closely linked by international travel. Second, SARS undoubtedly increases the costs of disease prevention, especially in the most affected industries such as the travel and retail sales service industries. This cost may not be substantial, at least in global terms, as long as the disease is transmitted only by close human contact. However, the global cost could become enormous if the disease is found to be transmitted by other channels such as through international cargo. Third, an allocation budget in the government sector which the economic burden of an epidemic based on the private and non private medical costs associated with the disease, such as expenditures on diagnosing and treating the disease. Last, the effect in the international financial market, the pandemic creates instability in the market and unconfident of the foreign investor. The uncertain features of the disease reduce confidence in the future of the affected economies. This effect seems to be potentially very important, particularly as the shock reverberates through China, which has been a key center of foreign investment. The response by the Chinese government to the epidemic was fragmented and nontransparent. The greater exposure to an unknown disease and the less effective government responses to the disease outbreaks must have elevated concerns about China's institutional quality and future growth potential. Although it is difficult to measure directly the effects of diseases on decision making by foreign investors, the loss of foreign investors' confidence would have potentially tremendous impacts on foreign investment flows, which would in turn have significant impacts on China's economic growth. This effect is also transmitted to other countries competing with China for foreign direct investment (FDI) and Singapore (OFDI).

FDI (Foreign Direct Investment)

- **What is FDI**

A foreign direct investment (FDI) is an investment made by a firm or individual in one country into business interests located in another country. Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets in a foreign company. There are theoretical arguments that shed a light on the positive effects of FDI for economic growth and, therefore, for poverty reduction. Significantly, FDI can provide resources and save poor economies with much-needed injections of capital.

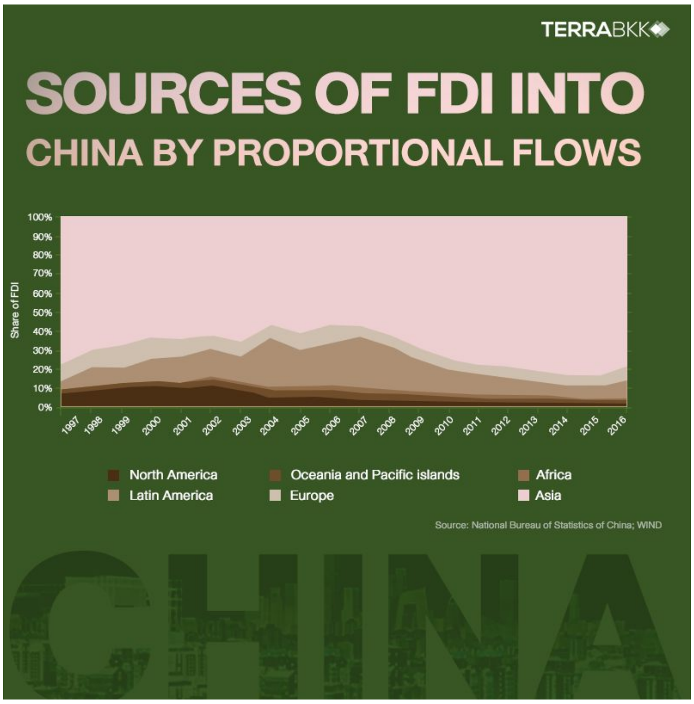
-What is OFDI

An outward foreign direct investment (OFDI) is a business strategy in which a domestic firm expands its operations to a foreign country.

- **Factors that have impact on change in FDI**

1. Political stability
2. Government of host country action
3. Labour skills / productivity
4. Health of the workforce
5. The effect on others' country OFDI that affect FDI in China

Which, in this report, we will focus on the linkage between Singapore's OFDI and China's FDI and How FDI of China might be affected by OFDI of Singapore during SARs crisis.



(figure 2)

As figure 2 given that the most share of China's FDI belongs to Asian countries which Singapore has been one of China's top foreign investment, first place from 2013 to 2017.

Bilateral economic ties between Singapore and China have strengthened over the years since 1990. In 2017, Singapore's largest trading partner was China, and Singapore was China's top foreign investor from 2013 to 2017. In 2017 alone, Singapore invested

US$4.8 billion (S$6.6 billion) in China. Joint economic ventures between both countries continue to develop through the years, with latest partnerships including collaborations for the Belt and Road Initiative (BRI) and the third government-to-government project known as the China-Singapore (Chongqing) Demonstration Initiative on Strategic Connectivity (CCI). Singapore companies, with their strong expertise in the areas of infrastructure, professional services and innovation, have much to contribute to these ventures.

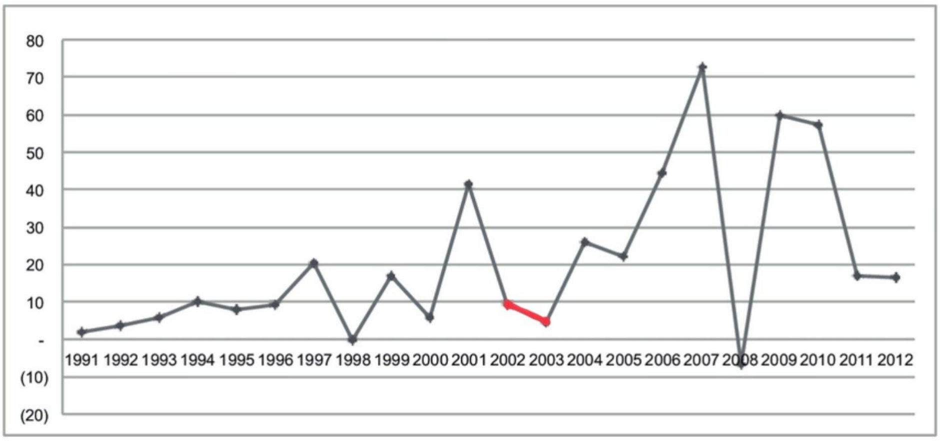
Hence, Outward foreign direct investment (OFDI) has been an important element in Singapore's economic strategy since the 1990s, with the government providing direct and indirect support to the internationalization process. Recent OFDI trends indicate that China has become an important destination for Singapore. Firstly, let's see how OFDI of Singapore was affected during SARs.

- **How is situation of SARs in Singapore**

<u>Background</u> : SARS first reached Singapore in late February 2003 with the return of three Singaporean women from Hong Kong. While there, they stayed at Metropole Hotel and caught the virus from an infected hotel guest who is a doctor from Guangzhou, China. The three women were hospitalised for atypical pneumonia between the first and the third of March, 2003. However, a chain of transmission developed when the virus spread from the youngest patient of the three women to 21 more of contacts. This is considered as the start of the outbreak in Singapore. The failure of the institutional practices in the healthcare-delivery-system was one of the factors that would have led to the rapid transmission of the diseases or at least the failure at arresting the spread of the infectious disease. Another factor that is a regional concern is the lack of an information network among health care as well as public health institutions located in globalising cities that are increasingly integrated in the world system of international travel and other business connections. In all, Singapore recognized 238 cases among which 14% or 33 patients died. This was a period shorter than three months from February to May 2003 with the first case identified on 25th of February. The spread of the SARS virus was mainly among locals in Singapore which only 8 or 3% of the cases had been imported from affected countries by travellers or else while in the case of a large number of European countries, 100% of the cases were imported, hence implying that the transmission among the locals was contained. In Singapore, the overwhelmingly large proportion of cases resulted from local transmission. The question and discussion about the lack of infection control measures to contain its spread among locals had occurred.

The unexpected outbreak of SARS led to greater uncertainty in the Singapore economy. Singapore's financial markets were severely affected due to the loss of public confidence and reduced floor trading. The main economic impact of the SARS outbreak was on the demand side, as consumption and the demand for services declined. The economic consequence caused fear and anxiety among Singaporeans and potential tourists to Singapore. While the impacts from SARs were intensely going to be fulfilled in Singapore, for instance, Visitor arrivals and hotel occupancy rates plunged, revenues at retail shops and restaurants dived, taxi drivers reported fewer passengers, stock prices fell, and more people lost their jobs. For the visitor arrivals, visitor arrivals in the fourth week of March have fallen by 57,400 or 30% from the corresponding period last year. This contributed to a 15% year-on-year decline in visitor arrivals for March. The situation worsened in April, with visitor arrivals dropping by 67%. All major markets registered double-digit falls in arrivals, with Japan(-75%), Malaysia (-72%), China (-64%) and Indonesia (-61%) recording the largest absolute declines.The outbreak of SARS has also resulted in the cancellation or postponement of a number of cruise ship calls, tourism events, conventions and exhibitions. Hotel Occupancy, the average rate had fallen to 20% to 30% in April 2003, compared to 75% in February 2003 and 74% for the whole of 2002. Moreover, the height of the outbreak in mid-April, the government cut Singapore's economic growth forecast for 2003 from 2–5 percent to 0.5–2.5 percent, reflecting the severity of the situation.

(Figure 3)

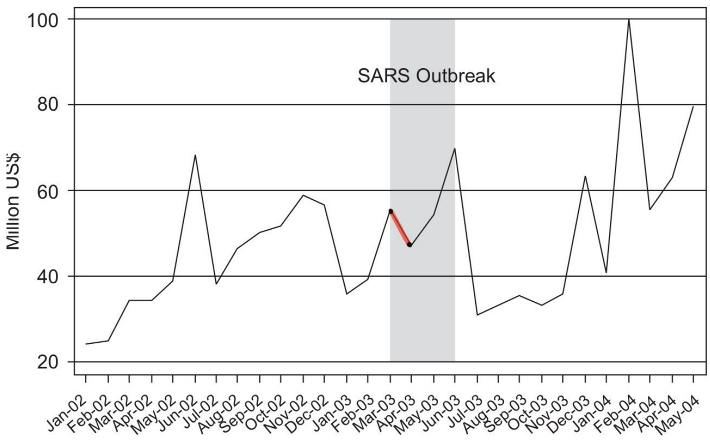


Singapore's OFDI Flow (S$ billion)

These consequences could be one of the factors that affected China's FDI to fell down at that moment not only from the situation in China itself but from the internal events of Singapore or exported-capital countries,which in the case, Singapore has faced this shock as well. Singaporian investors are not informed yet on the early event of how worse the outbreak can be. Thus, their confidence for their country's situation and for China might decrease. As a result, from the figure 3 during 2002 to the early period of 2003, you can see that the Outward foreign direct investment or OFDI of Singapore declined.

- **How poor health and government action during SARs crisis are related to China FDI**

Figure 1. **Time Trend of FDI Inflows to the PRC, Jan 2002-Jun 2004**



Source: *China Monthly Statistics* (CSICC various years).

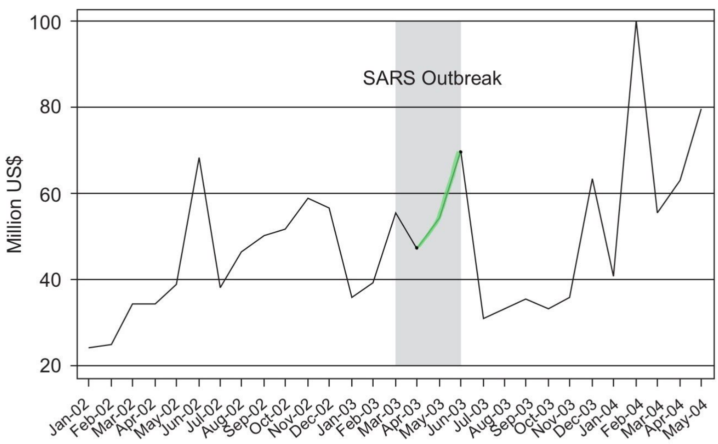
The outbreak of severe acute respiratory syndrome (SARS) in 2003 in Asia brought into the focus of linkages between health and the macroeconomy. The obvious circumstances are the decrease in tourism and consumer confidence including foreign investors confidence. Also, as the virus continued to spread, China's political leadership came under increasing domestic and international pressures. However, because of the prohibition against public discussion of the epidemic, 40.9 percent of the urban residents had heard about the disease through an unofficial informed source. As mentioned above, news of the disease reached residents in Guangzhou through mobile-phone text messages in early February, forcing the provincial government to hold a news conference admitting to the outbreak. Starting on February 11, the Western news media began to aggressively report on SARS in China and the government's cover-up of the outbreak. On March 15, the WHO issued its first global warning about SARS. While China's government-controlled media was prohibited from reporting on the warning, the news circulated via mobile phones, e-mail, and the Internet. On March 25, 3 days after the arrival of a team of WHO experts, the first time the government acknowledged and responded to the spread of SARS outside of Guangdong. This action of chinese government might lead to a very strong and more serious situation of the spread of the disease which is worse for the whole world and also shows how the government is dishonest and unreliable at that time.

In addition, The health of the workforce in the host country is one factor determining returns to investment. The higher the productivity of workers, the more attractive climate for investment in general, FDI in particular. As Sars started to widely spread in China, foreign direct investment may protect its benefit by less investment in China due to risks related to high morbidity and mortality in chinese employees as poor health levels add up the operational burdens and risks in the form of uncertainty associated with health expenditure and insurance costs, health- related absentees, and costs related to employee turnover. Also, given information asymmetries, foreign firms are likely to view poor population health conditions in China as a signal of government ineffectiveness and institutional weaknesses.

As can be seen in the figure 1, the consequences from information covered by the government of China at the first place and from the situation itself lead to the decline in FDI in the immediate aftermath of the outbreak starting from March, 2003 to April, 2003 because of the poor investment's climate mentioned earlier that might play an important role to decrease the credibility and trustworthiness of Singaporian investors.

- **What might be the reason to raise FDI in China during the epidemic of SARs.**

Figure 1. **Time Trend of FDI Inflows to the PRC, Jan 2002-Jun 2004**



Source: *China Monthly Statistics* (CSICC various years).

From figure1, as we can see during April - June, the graph rapidly increased from about $50 billion to $60 billion. Therefore, we consider what the government does or provides some strict measures to the country to solve the epidemic of SARs.

On the other hand, people might think that FDI in China might have been completely affected by the epidemic of SARs, but due to efficient government policies after since in China resulting the rise up of FDI later on, starting on February 11, from the force of social in China due to the lack of trustworthy official information, Guangdong health officials officially had to report the disease and tried to comprehensively control the disease. Then, on 17 March, China provided a first brief report to WHO about the Guangdong outbreak leading to the WHO team arriving in Guangdong and starting work immediately. All requests for access to sites and interviews with health staff at all levels were granted on the 3rd of April. On April 20, Health Minister Zhang Wenkang and Beijing mayor Meng Xuenong were fired for their mismanagement of the crisis. The crisis also led the government to take measures to strengthen fundamental authority links within the system. As part of a nationwide mobilization campaign, the State Council sent out inspection teams to 26 provinces to scour government records for unreported cases and to fire officials for lax prevention efforts. According to the official media, by May 8 China had fired or penalized more than 120 officials for their delayed response to the SARS epidemic. It was estimated that by the end of May, nearly 1,000 government officials had been disciplined for the same reason . These actions shook the complacency of local government officials to jump onto the anti-SARS bandwagon. Driven by political zeal, they sealed off villages, apartment complexes, and university campuses, quarantined tens of thousands of people, and set up checkpoints to take temperatures. By May 7, 18,000 people had been quarantined in Beijing. The Maoist “Patriotic Hygiene Campaign” was revitalized. In Guangdong, 80 million people were mobilized to clean houses and streets. In the countryside, virtually every village was on SARS alert, with roadside booths installed to examine all those who entered or left.

The crisis also improved interdepartmental and interagency coordination and speeded up the process of institutionalizing China’s emergency response system to be able to handle public health contingencies. On April 17, an anti-SARS joint team was created for the city of Beijing, which included leading members from the Ministry of Health and the military . On April 23, a task force known as the SARS Control and Prevention Headquarters of the State Council was established to coordinate national efforts to combat the disease. Vice Premier Wu Yi was appointed as commander-in-chief of the task force, and similar arrangements were made at the provincial, city, and county levels. On May 12, China issued a set of Regulations on Public Health Emergencies. According to these regulations, the State Council shall set up an emergency headquarters to deal with any public health emergencies, which are referred to as serious epidemics, widespread unidentified diseases, mass food and industrial poisoning, and other serious public health threats.

Direct involvement of the political leadership also increased program resources and mobilized resources from other systems. On April 23, a national fund of 2 billion yuan ($US 250 million) was created for SARS prevention and control. The fund was to be used to upgrade county-level hospitals, to finance the treatment of farmers and poor urban residents infected with SARS, and to purchase SARS-related medical facilities in central and western China. This central government funding was complemented by an additional 7 billion yuan ($US 875 million) from local governments. Free treatment was offered to SARS sufferers anywhere in the country.These measures seemed workable. The epidemic started to lose its momentum in late May, and on June 24, the World Health Organization advised against travelling to Beijing. On August 16, with the last two SARS patients discharged from the Beijing Ditan Hospital, and eventually, China was free from SARs.

Since political and economic stability could facilitate an influx of FDI. In China, the act of instability was the SARS epidemic, therefore, China would employ an effective mechanism to reduce the problem and bring up investors' confidence again. So, one important solution was the measures that were provided during SARs according to the information above.

Also, as the research shows, the Singaporian government implemented a USD 132 million (SGD 231 million in 2003) SARS relief package to reduce the costs for tourism operators and its auxiliary services. On the other hand, an economic relief package worth USD 131million (SGD 230million) was created to aid businesses hit by SARS. In addition, the government incurred USD$109m (SGD 192m) in direct operating expenditure related to SARS, and committed another USD 60m (SGD105m) development expenditure of hospitals for additional isolation rooms and medical facilities to treat SARS and other infectious diseases. The government's economic incentives worked when seeking cooperation of other healthcare providers (such as public hospitals and local clinics) so that they would absorb additional cases of non-flu illnesses. To help SARS affected firms tide over the plight and minimize job losses, Singapore's National Wage Council widely consulted the private sector, and recommended SARS-struck companies adopt temporary cost-cutting measures to save jobs. These action of Singaporian government, particularly on helping affected firm, including the essential measures adopted from WHO measurement of preventing the disease was a good signal of financial improvement of many companies associated with the singaporian investors supporting the ability to increase Singapore's OFDI and hence the China's FDI which is one of an important destination of Singapore as well.

Conclusion

As the Sars affected the capital flows among countries, which in this report we are focusing on China and Singapore whose significant destination to export the capital is China, however, since there is no specific information that which country is actually the most one invested in China during 2002 to 2003 and as the information we have mentioned earlier, we will assume that Singapore’s OFDI might have played a significant role in China’s FDI during the outbreak of an epidemic. The spread of the disease has increased the number of mortality and quality of Chinese people, to be more specific, weakened of Chinese workers which is one of the factors that determined the environment of investment, moreover, there is the cover-up of the disease at the beginning of China’s government. These lead to the bad reputation and decrease of Singaporian direct investors’ confidence. Also, since there is globalization existing in our world, the cooperation among countries leads to the occasion that when one economy is facing a downturn due to any unexpected shock, other economies that are linked with the former might obtain the subsequent outcome. This can be applied to our case such that when the situation of Sars in China had occurred causing the temporary economic downturn immediately in China that can also be seen from the decline in FDI, however, from this situation, not only China was affected by Sars but many Countries including Singapore. Both events in both countries had played the role on each other such that the situation in Singapore also created fear and instability in their investors financially. This could lead to the decrease in exporting capital to China of Singaporian investors as the graph illustrated that OFDI of Singapore decreased. Nevertheless, as the cooperation of both countries with WHO to implemented the measures in order to deal with the disease, China’s government action such as quarantined tens of thousands of people, set up checkpoints to take temperatures, Patriotic Hygiene Campaign to clean houses and streets, set of Regulations on Public Health Emergencies, and etc. until the China was free from Sars. Noted that there is no relevant information on how the Chinese government deal with the decrease number of FDI, we will assume based on the information such that the measurement of the government on improving the health and condition of Chinese people associated with the better health of Chinese workers leading the climate of investment to be greater and brought back the confidence of Singaporian investors. Moreover, as on the part of Singapore’s government that also implemented such measures to fight with Sars especially on how the government spent the budget to boost up its economy and aid businesses hit by SARS. This could also create the capability of Singaporian businesses including investors to be able to continue to seek for external benefit from investing in China.

To sum up, in our report, we just try to clarify and try to link the consequences from the situation in both focused countries together as the cause and effect of change in China’s FDI and Singapore’s OFDI. This might not be completely accurate or there might be other reasons behind such that when the situation in Singapore worsened in April, 2003, we can see from the China’s FDI graph that in April and after, FDI of China had continually to rise which these were not consistent, therefore, other countries who have interaction or traded capital with China and might be less affected by Sars might be other reasons instead of Singapore to bring up the number of China’s FDI.

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Member

Group 9

Chaniakan Puntaranontaka 6204640194

Khainapa Anuntaruk 6204641465

Natkamon Musikanandana 6204640855