# FDI effects on industrial value-added:

# Evidence from Chinese and Thai government policies

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**Abstract:** This paper looks at the effects of foreign direct investment (FDI) on value-added in Chinese and Thai manufacturing sectors from 2000-2013. Value-added and FDI stocks in textile, electronic and telecommunication equipment, and machinery industries as representatives of low, medium and high value-added industries are examined. The employment structure in these sectors is also investigated. Firms are then divided by categories to study the FDI and government policies' effects on domestic firms. We find that FDI growth in medium and high value-added industries has greater overall effect than low value-added industries in China, compared to Thailand, due to Chinese government policies. (100 words)

Keywords: FDI, Value-added, Industrial sector, China, Thailand

## Introduction

International trade and FDI are referred to by mainstream economists and international organizations such as the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO) as the engines of globalization and important sources for economic growth and industrialization, especially in developing countries. The amount of foreign direct investment (FDI) has increased significantly and has even surpassed the amount of international trade since the 1990s. According to UNCTAD (2013), the nominal stock of inward FDI raised from $697 billion in 1980 to $20,380 billion in 2012. There is a rich literature about the effects of FDI on the industrial development of host countries as well as the preconditions which can lead to FDI positive effects for this sector of the economy. However, there is no consensus about positive effects of FDI on host countries' industrial development. FDI has positive impacts on industrial value-added through technology spill over, management know-how and increasing labor productivity. These positive externalities importantly depend on both the quality of FDI and the capacity of local firms. Government policies play an important role in channeling FDI into the proper direction to allow for benefits from positive externalities as well as absorption capacities of local firms.

After economic reform in 1978, China gradually became the first country among developing countries and second in the world after the USA in term of stock of inward FDI (World Bank 2012). Thailand is another attractive destination for FDI. According to the UNCTAD World Investment Report 2014, since 2012 Thailand has been among the 8 priority destinations for foreign investment for the period 2014-2016. It is the 7th largest FDI recipient in East and South-East Asia. Yet these countries do not follow same policies for attracting FDI which led to different spillover effects and economic performance. For instance, Chinese governments have openly stated that the new challenge for the country is to attract more "high quality foreign direct investment". In contrast Thai governments mainly follow standard trade liberalization policies for attracting more FDI.

## Theoretical and Literature Review

Free trade is a policy recommendation with general support amongst economists (Fuller and Geide-Stevenson 2003 and 2014). The basis of this support is the theory of comparative advantage where all nations can benefit from international trade, formulated by David Ricardo (1814). However the Ricardo standard case (wine and cloth as finished products) has been shown to be less relevant due to current features of the "new" wave of globalization.

The new wave of globalization, also referred as the second unbundling, started to develop in the 1990s due to the revolution in Information and Communication Technology (ICT), reduction in transportation costs and implementation of Washington Consensus policies[1] in developed and developing countries which followed market radical policies and opened up for international capital flows. These developments allowed Multinational Companies (MNCs) to break down their production process into different stages and outsource these stages to other countries to an extent not known before (Baldwin 2013). Although the history of outsourcing dates back to the industrial revolution and the development of a manufacturing sector, the rise of MNCs and creating GVC started to develop in the 1960s and has become a dominant strategy for MNCs since the 1980s (UNCTAD 2010).

The common belief among mainstream economists is that being part of a MNCs' global value chain (GVC), developing countries do not need to build wide and deep industrial base in order to be competitive in world market, as they can be specialized in certain stages and industries. The latter may accelerate the industrialization process in these countries (OECD 2012).

Based on the new economic geography theory developed by Krugman (1991) and Fujita et al. (1999), there is explanation of the reasons for geographical unbundling. The dispersion forces focus on outsourcing stages to different geographical locations. However dispersion forces are divided into two parts, namely vertical and horizontal specialization.

[1] Williamson (1990: 18) defined a series of "prudent macroeconomic policies, FDI open up policies, outward orientation, and free-market capitalism" that firstly were imposed to Latin American countries in the 1980s and 90s by Washington based institutions (U.S. Congress, International Monetary Fund, US Treasury, World Bank etc.). According to the Washington Consensus, development can be financed by large capital inflows, as it often is argued that developing countries have a financing gap. In this regard, FDI can play the role of external financing and leads to economic development in developing countries.

**Vertical Specialization:** The wage gap between unskilled and skilled workers determines the vertical specialization. Therefore, MNCs outsource the production stages which are labor intensive to low wage countries and outsource the skill intensive to countries with high skill workers with higher wages. The vertical specialization is the main explanation of North-South outsourcing.

**Horizontal Specialization:** explains the outsourcing of high value-added stages to developed countries. Thus, production factor costs are not important and specialization and production quality play the key role in choosing the location. For example, airplane companies such as Boeing and Airbus outsource engine production stages to companies like BMW and Rolls-Royce, not for their low factor cost but, because of their specialization and product quality.

Cost reduction is the main motive for MNCs in order to outsource their production stages to developing countries with lower factor costs. In addition, natural resource seeking, managing inventories, demands adjusting and efficiency seeking are other important factors that have effects on MNCs' outsourcing decision (Andreff 2009).

As mentioned above, cost reduction is the most important motivation for MNCs for outsourcing. In this sense, companies outsource low value-added stages to developing countries and higher value-added stages either stay at parent company's country or outsource to other developed countries due to specialization motives. The uneven distribution of value added through supply chain is the main feature of second unbundling.

High market power of MNCs allow them to choose a location that have the lowest factor costs, taking into account that many developing countries are willing to offer different incentive to attract foreign investors even for the low value-added production stages. This is the reason behind MNCs strategies for shifting outsourcing location from East-Asian tigers (Japan, Taiwan, Hong Kong, South Korea, Singapore and recently China) to other developing countries such as Vietnam, Bangladesh and Cambodia. When wages increased in above mentioned countries, MNCs started to outsource their activities to countries with lower wages (Baldwin 2013).

In this sense, developing countries that want to accelerate their industrial development may face the following risks of being locked in the low value-added stages of production. First, if developing countries only participate in fabrication process then the GDP contribution of GVC

will be limited. Second, the main part of GVC value-added is generated by MNCs' subsidiaries that can lead to low value capture because of price transferring or income repatriation. Third, if governments do not invest in education and improvement of local firms' absorption capacity, the technology spillover from MNCs would be unlikely that the latter prevent improvement of higher value-added creation in these countries. Fourth, the negative environmental impacts and social effects in absence of efficient regulatory framework are another risk for developing countries. Finally, the potential "foot looseness" of GVC activities may increase the vulnerability of local firms in facing external shocks (UNCTAD 2013b). Baldwin (2011) thus argues that economists and government should rethink the role of the manufacturing sector or at the least the fabrication stage with respect to economic development in the era of globalization.

This does not mean that countries which decreased their wage gap with developed countries are no longer competitive or that increasing wages in these countries reduced their economic growth. Instead of increasing wages, some developing countries could also improve their technology levels and human capital. The latter changes the previous vertical specialization driven by wage differences into horizontal specialization which can lead to trade in similar goods if it reaches to certain level of specialization. Furthermore, horizontal specialization leads to increase in trade volume as production stages that will outsource to these countries have higher value-added. The East-Asian Tiger countries are the best examples to illustrate this transition.

## Industrial Sector Government Policies

Moving toward higher value-added activities in developing countries depends on government policies. Designing and implementing sound industrial policies in line with national development plan has the main effect on pace and direction of moving toward horizontal specialization (Mudambi 2008).

Fragmentation of different production stages to different countries allowed various ways for MNCs to choose their suppliers. Basically, outsourcing refers to developing a supply source that is located outside of a parent company which is in charge of producing final goods or services. In other words suppliers provide raw materials, tools, spare parts, components, equipment and/or semi-finished products that need to go through other production stages to become final good. But in any of these stages, parts of final goods or services are produced in suppliers companies (UNCTAD 2010).

Another factor which has effects on technology spillovers is the market structure. If host countries' markets have high entry barriers, for instance high tariffs or the existence of dominant domestic (or foreign firms in case of latecomers companies) foreign investors have to enter into host countries with a large amount of investment and relatively high technology in order to be competitive in the market.

Access to markets, managerial skills, and advanced technologies are great motives for host countries to attract FDI. Indeed, foreign owned companies can have a higher technological standard, train local staff or secure export channels. Also local firms can benefit from the technologies and managerial skills of foreign firms through joint venture, reverse engineering and hiring workers that are trained by working in foreign firms. Foreign firms can also affect local companies through developing supply chain in host countries and force/control local firms to increase their quality and standards and/or help them to increase their managerial skills (Alfaro et al. 2010).

Companies with market seeking motivation may establish research & development centers in host countries in order to meet the special customers' demand in host countries via product localization. For doing so, usually foreign companies work with domestic experts and universities which allow them to use their expertise about tastes and preferences of domestic customers. Local experts could also benefit from working with new technologies and participation in processes of research and development and production of new goods. Their experiences can be used later in domestic companies (Damijan et al. 2003).

Suppliers can be domestic firms which can be divided in domestic subsidiaries of parent companies and other domestic suppliers based on market relations, or in companies in other countries that also can be divided in foreign subsidiaries of parent company (FDI) and other foreign suppliers (international subcontracting) (OECD 2007). In this paper, we only look at FDI. The majority of foreign companies' investments in developing countries are in low value-added stages of production, also the main feature of vertical specialization. If FDI mainly goes to developing countries for cost reduction motives, we should examine by what mechanism it leads to technology spillover and industrial upgrading.

## FDI

In general, there are two types of FDI: horizontal and vertical FDI, each of which has different effects on technology spillover and working conditions. Horizontal FDI occurs when a company produces a product with the same production line and value chain in the host countries as at home. Therefore, horizontal FDI can improve horizontal specialization in host countries. Vertical FDI take place when a company wants to optimize its production cost by fragmenting each part of the value chain in countries with least costs. Since 1990s, this type of FDI has become more and more popular among MNCs to decrease their production cost and to keep their high profit mark up[2] (Peng 2009).

With horizontal FDI, the probability of positive technology spillovers is higher than in vertical FDI as most production stages are outsourced to host countries including some R&D. Therefore, host countries can benefit from higher value-added production stages such as design and R&D. Most horizontal FDI is thus within developed countries. However, some developing countries also benefit from this type of FDI due to improving income levels and big domestic markets. Volkswagen in China is one of successful example for this. But it has to be kept in mind that China in a comprehensive way dictated the conditions for FDI and at the same time was because of its economic development an attractive investment location (Azarhoushang 2013). Moreover, horizontal FDI in developing countries even including research and development centers does not mean that foreign companies bring the newest technologies to developing countries. Key competences are kept in the country of the lead firm or the developed "North".

Vertical FDI, which especially dominates in developing countries, does not show such positive technology and skills spillovers as it is typically focused on low tech specialized tasks in a few number of industries. Technologically very underdeveloped countries with very low skill levels can to a certain extent benefit also from vertical FDI. However, after some upgrading of the technological and skill level there is no incentive for lead firms to improve technology and skills further.

However, benefiting from positive technology spillovers of FDI (vertical and/or horizontal) depends on different factors. First, technology spillovers highly depend on the development level

[2] Although it is really hard to statistically define difference between Horizontal and Vertical FDI, Alfaro and Charlton (2009) by using firm-level database of 650,000 companies found out that Vertical FDI is the dominant type of FDI among MNCs (more than 60 percent)

of the host country. If local companies do not have a relatively high technological and educational level, FDI not only will not lead to positive technology spillover but also may lead to crowding out of local companies due to their disability to compete with foreign companies (Singh 2011). Furthermore, if foreign companies invest in host countries only for exporting low value added goods and/or investing in labor intensive industries as well as natural resources, it does not have big positive effects on technology spillovers. Moreover, the type of FDI (e.g. wholly owned, joint venture or mergers and acquisitions) is an important factor. For instance, if foreign firms invest through mergers and acquisitions the level of technology spillover will be very low as usually foreign companies keep employees and production lines unchanged and only change the management. In addition in many cases foreign firms only invest for benefiting from cheap labour and other costs and/or government incentives and do not bring any positive technology spillovers.

## Government policies toward FDI

The last but most important factor is government policies. If governments of host countries do not design and implement sound industrial policies in order to absorb preferable and favorable FDI which has also significant effects on above mentioned criteria a positive technology spillover is unlikely to happen (Azarhoushang 2013).

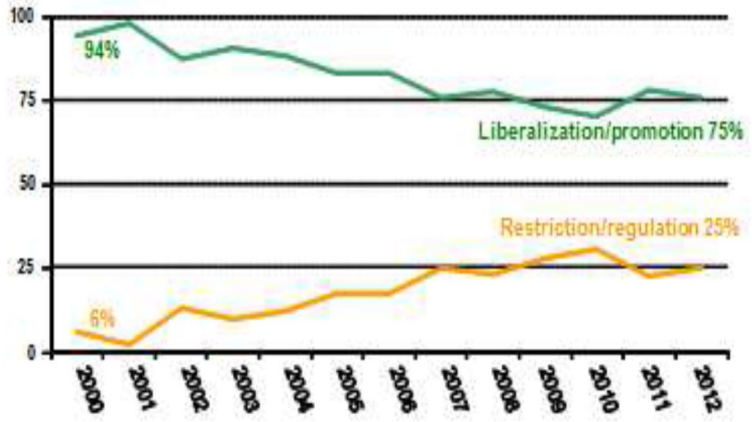
Industrial policy is the strategic plan for improving growth and development in manufacturing sector. Government design and implement series of policies in order to increase productivity, competitiveness and capacity of domestic firms. These policies are designed for different industries according to country's competitive advantages and/or priorities. However, mainstream economists do not believe in industrial policy and label it as government intervention in free market mechanism (Graham 1992).

After ending golden age in developed countries, many governments as well as some international organization followed the idea of neoliberalism and didn't pursue and/or suggest industrial policy. But successful experience of East Asian countries such as Japan, Taiwan and South Korea showed that industrial policy could improve economic performance and employment. It should be mentioned that all of developed countries which promote the free trade notion and are against industrial policies, all have the history of high protection and supporting their industries from end of 19th century until middle of 20th century (Chang 2003).

Industrial policy has a strong core in theoretical debates. The supporters of industrial policies argue that due to market failures, government should intervene with such policies to support the domestic industries. However, the counterparts believe although designing sound industrial policies can be helpful and have positive effects on economy growth, the low productivity in Stated Owned Enterprisers (SOEs) and bureaucratic procedure in government's institutions will lead to decline of country's competitiveness in international trade. Rodrick (2009) argued that low institutional quality and bureaucratic constraints is not part of the overall industrial policy debate and that policy makers should try to increase the effectiveness of institutions and their productivity.

In our globalized world it is difficult to distinguish industrial policy from trade policy and other policies toward foreign direct investment since their boundaries have become increasingly blurred. Therefore, policies and regulation concerning FDI currently are considered as part of industrial policy. The number of FDI related regulations around the globe in 2012 rose by 25 percent indicating that government have also accepted the importance of industrial policy for increasing domestic productivity and value-added (Zhan 2013). Figure 1 shows changes in national investment policies from 2000 to 2012.

**Figure 1: National investment policies**




Source: Zhan 2013

For having sound industrial policies, first of all developing countries should look at their own resource, advantages and disadvantages of being part of GVC, the absorption capacity of local firms and country's competitive advantages. After evaluating above mentioned factors they can

design and implement industrial policy for answering the question of how to participate in global value chains. Developing countries should decide about promoting specific GVC segments which are in line with their national development strategy as well as their industries capabilities and government policy for improving certain industries' competitiveness. For doing so, government should build productive capacities in domestic companies and improve skill level of their workers. These efforts should take place within a strong environmental, social and governance framework, with strengthened regulation and enforcement and capacity-building support to local firms for compliance (Law and Tijaja 2013).

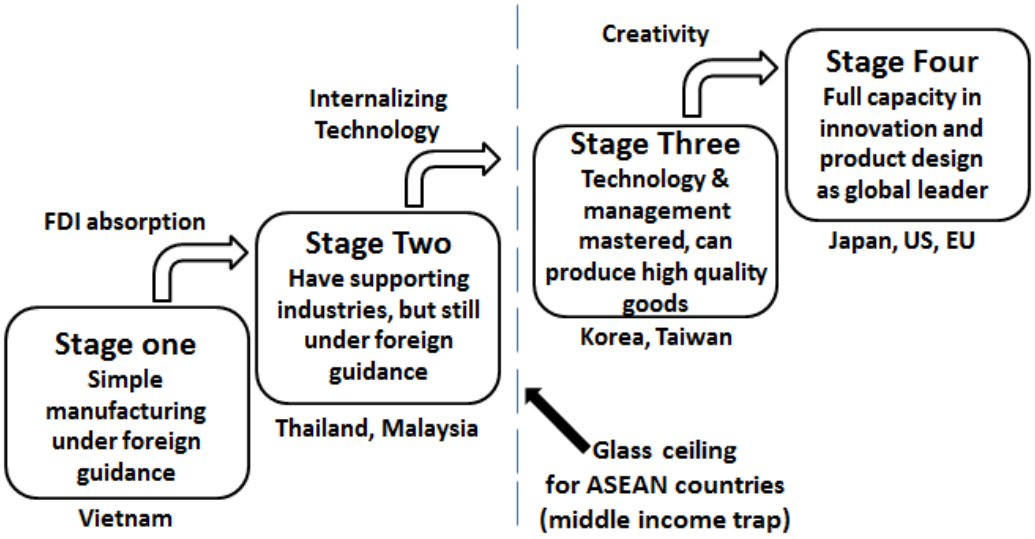
Greg Linden (2004) in his research about China industrial policy examined the designing and implementing industrial policy particularly for high tech industries. He argued that China was more successful compare to other East Asian countries because of her large domestic markets, supporting national innovation and pragmatic nature of her policies. Furthermore, he believed although China's industrial policy is politicized but, they doesn't add any extra costs to economy and in same time force domestic companies to increase their quality and productivity.

### A discussion of industrial policies

A study of industrial policy and its implication looking at macroeconomic factors such as FDI inflow and human capital as well institutional quality in Latin American countries and East Asian Tigers post WWI -1990, showed that these countries could benefited considerably from industrial policies during this period. Di Marion (2008) argues that although industrial polices' implications were different in selected countries, they were same in principals. For instance, investing on education and innovation, creating an effective control mechanism and competitive advantages were main pillars for all industrial policy (Di Marion 2008).

Therefore, there is a middle income trap or a glass ceiling for market based development even with a high level of FDI (see Figure 2 for Asian countries, Ohno 2008). FDI can lead to industrial upgrading in some developing countries to some extent under certain conditions which are mentioned above, but even in such an optimistic scenario self-market mechanisms will not lead to the same income level as in developed countries.

**Figure 2: Stage of industrial upgrading**




Source: Ohno 2008

For examining the validity of the theories we discuss here, China and Thailand are examined. Both countries are among attractive distance for inward FDI, yet China is a country that uses active industrial policy whereas Thailand follows liberal and Washington Consensus policies toward FDI. We looked at value-added and FDI stock in textile, electronic and telecommunication equipment and electric equipment and machinery industries, as examples of low, medium and high value-added industries under these circumstances.

## China

After economic reform in 1978, China gradually became the first country among developing countries and second in the world after the USA in term of stock of inward FDI in 2011 (UNCTAD 2014). Sustained GDP growth, high rate of capital return and brisk economic development made China one of the world leading manufacturers. Designing sound industrial policies according to her development plan in line with absorbing huge amounts of FDI helped China to increase its productivity, to improve its competitive advantage which is known as "China miracle", and to generate millions of new jobs for her people (Azarhoushang 2013).

During 1970s, China suffered from lack of modern technologies and competitive advantages. After long period of isolation, they needed to import machineries and equipment from advanced

countries and at the same time they had to protect the domestic industries that were totally state-owned. But, they didn't have enough foreign exchange for trade (Naughton, 2007, 378-380).

After 1978, Deng Xiaoping as president of China started to open their economy for foreign investment with limited and gradual measures. In the first step, they allow foreign export oriented companies to come without giving them access to local markets. Foreign firms were not allowed to send their profit back to their own countries. However, obviously China couldn't attract many foreign firms with so many restrictions (Hou, 2011).

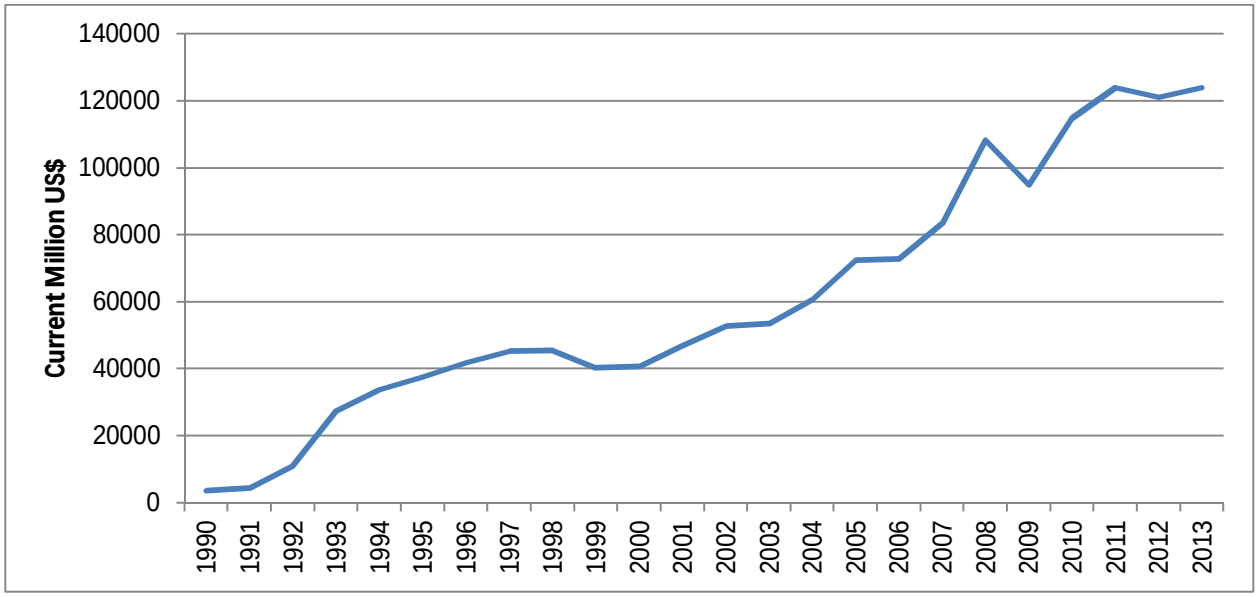
Investing on infrastructure, changing regulations and laws in favor of foreign investors, opening Special Economic Zones (SEZs), keeping high GDP growth (10 percent) and moving toward more liberalized market-based system, gave positive signal to investors.

For conserving economic growth and maintaining positive inward FDI trend, China decided to join WTO in early 1990s. Another wave of changing regulations and laws for foreign investors began that gave them more freedom to invest in different economic sectors and to access local markets. Finally after nearly 10 years, China joined WTO in December 2001. It was big event for China and the world that "People's Daily" stated in its front page in December 11 of 2001, one day after joining WTO, "This is a historic moment in China's reform and opening-up and the process of modernization" (BBC, 2001).

Institutional reforms and changes of regulations under WTO rules, stable political and social environment and optimistic perspective of economic situation encouraged increasing numbers of foreign firms to invest in China.

After the global financial crisis, China experimented with a dramatic decline in its inward FDI. Yet again, by keeping high GDP growth and increasing the domestic investment, China showed that it was not affected by the global financial crisis and still can be attractive for foreign investors. Figure 3 illustrates the amount of inward FDI from 1990 to 2013.

Figure 3: China's inward FDI



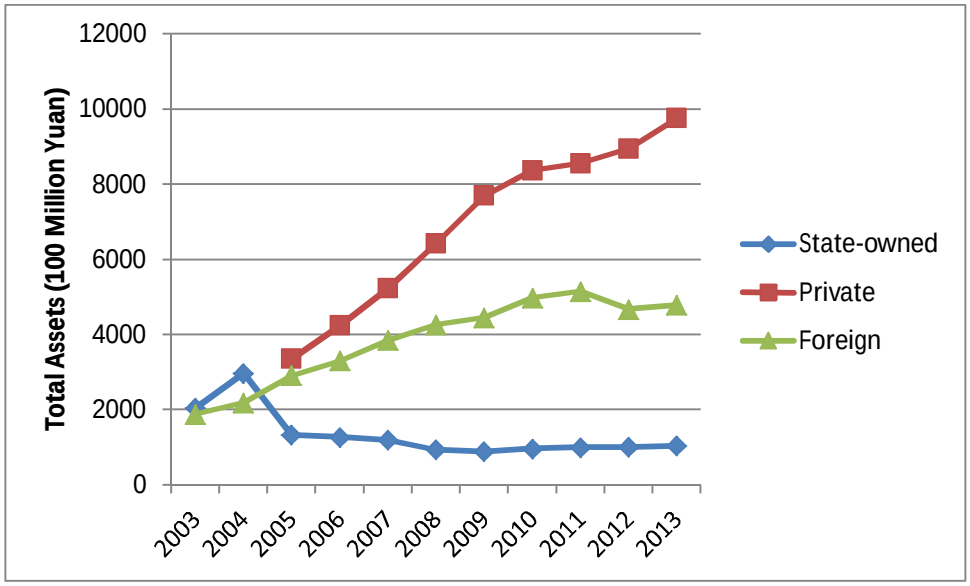

Source: UNCTADstat 2015

## Industrial sector

As mentioned earlier, FDI can have positive effects on industrial upgrading based on different preconditions. In this regard, we chose Textile, Electronic Machinery and Communication equipment, Computers and Other Electronic Equipment as examples of low, medium and high value-added industries to examine the growth rate of their value-added during 2003-2013. For doing so, we looked at amount of value-added tax payable and total assets of foreign founded companies and compare them with stated-owned and private Chinese companies.

Textile industry is among the low tech sectors which is categorized in supplier dominated industries. Supplier dominated industries include traditional sectors (such as food, textile, retail services) where internal innovative activities are less relevant, small firms are prevalent and technological change is mainly introduced through the inputs and machinery provided by suppliers from other industries (Bogliacino and Pianta 2011).

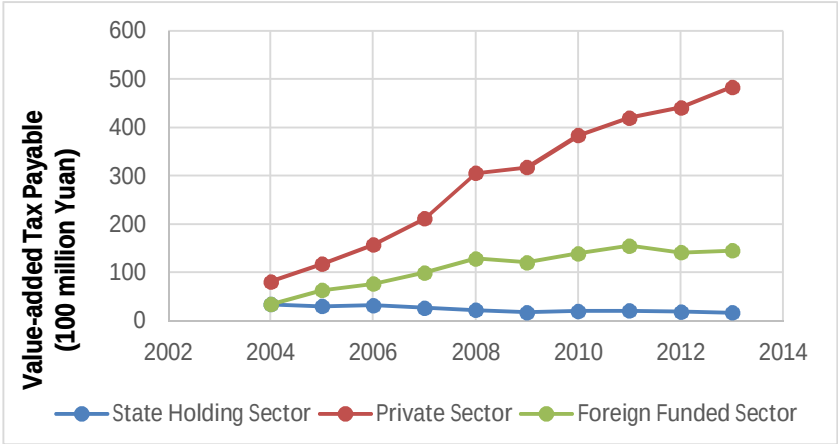
Figure 4. Total Assets in Textile




Source: Chinese Statistical Yearbook 2004-2013

Figure 4 illustrates that private Chinese companies have the highest total assets in textile industry and Chinese state-owned has the lowest amount. We can also see the same trend in their value-added (figure 5). These two graphs show that Chinese government did not invest in textile industry. Another point that these two figures illustrate is that foreign founded companies did not have any technology spillovers on local firms.

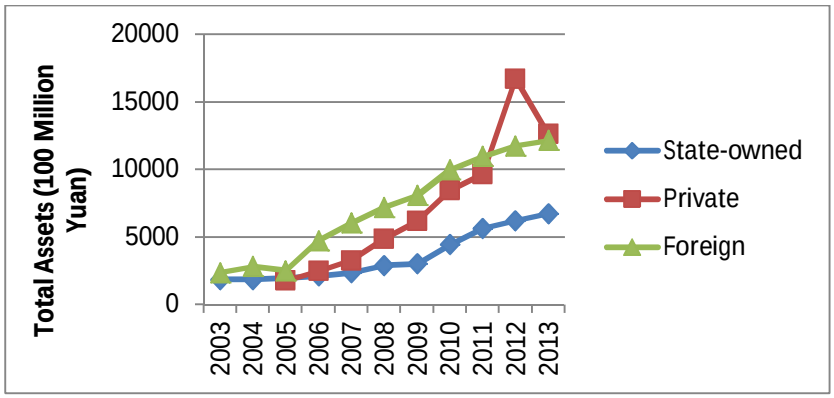
**Figure 5a: Value-added tax payable in textile industry**




Source: Chinese Statistical Yearbook 2004-2013

Electronic machinery is among high-tech industries categorized as specialized suppliers. This means that products are new processes for other industries. R&D is present although an important innovative input comes from tacit knowledge and design skills embodied in the labor force. Average firm size is small and innovation is carried out in close relation with customers (Bogliacino and Pianta 2011).

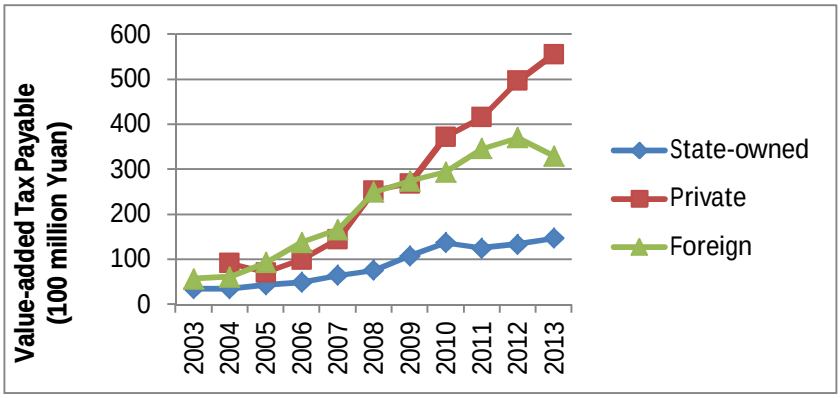
**Figure 5b: Total Assets in Electronic Machinery**




Source: Chinese Statistical Yearbook 2004-2013

According to figure 5, all companies had more or less same amount of total assets between 2003 and 2005. After 2005 foreign companies have higher total assets compare to two other type of companies except 2012. State-owned companies same with textile industries has the lowest total assets. Small size of companies in electronic machinery industry which is assumed based on above mentioned definition is the main reason for low investment of state-owned companies in this industry.

**Figure 6: Value-added tax payable in Electronic Machinery**

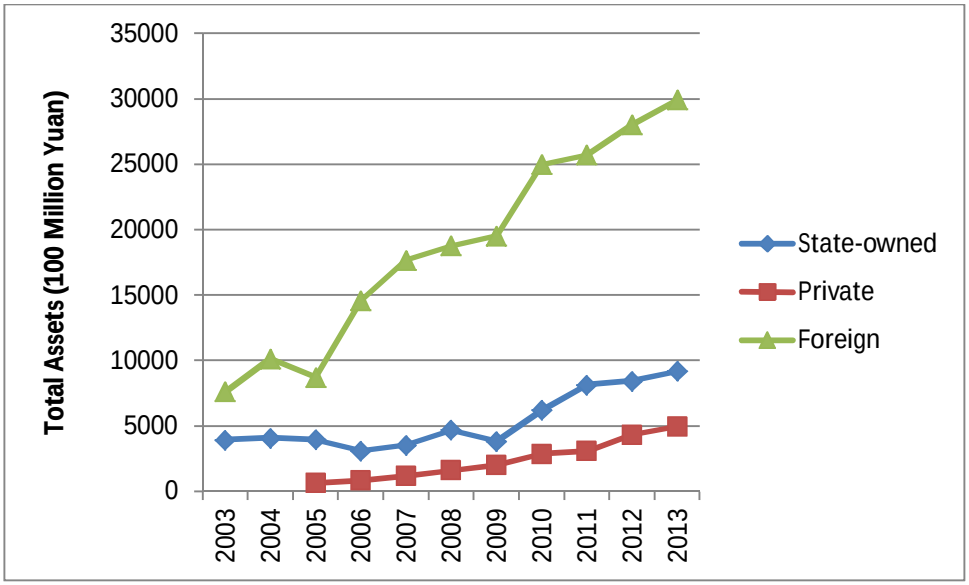



Source: Chinese Statistical Yearbook 2004-2014

Like textile industry state-owned companies have the weakest performance which is related to amount of their total assets. However, foreign companies had similar performance compare to private companies until 2009. In 2009, private companies catch up to foreign firms and show better performance (see figure 6).

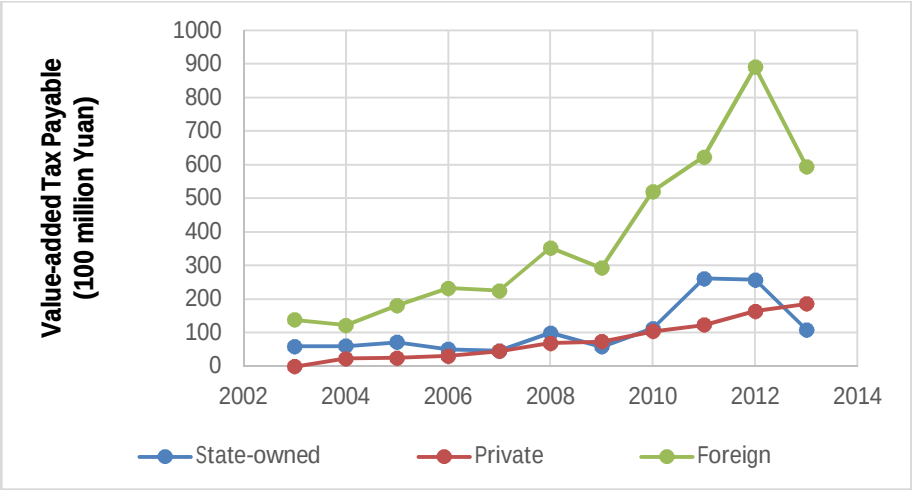
Finally, Communication equipment, Computers and Other Electronic Equipment is among high tech industries and categorized as Science-Based. This category includes sectors where innovation is based on advances in science and R&D where research laboratories are important, leading to intense product innovation and a high propensity to patent (Bogliacino and Pianta 2011).

**Figure 7: Total Assets in Communication equipment, Computers and Other Electronic Equipment**




Source: Chinese Statistical Yearbook 2004-2014

**Figure 8: Value-added tax payable in Communication equipment, Computers and Other Electronic Equipment**




Source: Chinese Statistical Yearbook 2004-2014

Based on the definition of this industry and figures 7 and 8, we can see that foreign companies have the highest total assets as well as the best performance. Unlike other two industries, state-owned companies has higher assets and better performance compare to private companies which shows that Chinese government prefer to invest in high tech industries which have higher value-added and can benefit from technology transfer.

In addition, gap between foreign and local firms increases more and more during our time period which illustrate that foreign firms use better technology and more skilled workers in this industry.

In sum, the result can prove the theoretical background that argued the probability of technology spillover would be higher in industries which need high technology.

## Government policy

A growing number of governments, around the world want to increase the inflow of FDI into their country since they have found out that it helps to improve their country in different aspects. They believe that the positive effects of FDI (i.e. poverty reduction, Technology spillover, growth and etc.) overweight negative effects (i.e. inequality, weakening trade union, crowding out effects and etc.). A country's FDI strategy is determined based on all these positive effects from FDI as well as the level of factor endowment and also the ability to choose the level of

policy intervention, after finalizing the FDI strategy they have a range of FDI policies affecting FDI (te Velde 2001).

In two and half past decades, China has passed a wide and almost complete range of laws and regulations regarding foreign direct investment, which include the law of People Republic of China for Wholly owned enterprises, Sino Foreign Joint venture and etc. those regulations also include several preferential policies for China's SEZs. As said whatever China is doing, is aimed to attract as much favorable FDI as possible. Consequently Foreign Invested Enterprises (FIEs) depends on the region and their industry really benefit from preferential treatment when we compare with domestic ones. In addition to this, China as called a portion of the country as special economic area which everyone is under a different set of rules and regulations. As well China has applied two policies which are called "Strategy of Reviving Industrial Bases" and "West at Full Blast" in order to canalize FDI toward northeast and west part of the country. These two policies provide foreign enterprises even with more benefit from preferential treatments. For China's government industrial guidance on DFI weights more. According to Guoqiang Long (Moran et al. 2005) by Guiding Directory, various preferential treatment were determined, granted especially for multinational enterprises in different industries. Guiding Directory has changed and improved twice. First December 1997 and second time, April 2002 due to China's accession to WTO. It actually creates for classification for FDI involving projects. First category includes projects which were encouraged, the second group those which are just allowed and third and fourth limited and forbidden ones. Concurrently China is utilizing FDI for these goals:

- ✓ To modernize traditional agriculture and to improve the modern agriculture.
- ✓ Some basic industries, including infrastructure for transformation raw materials and energy sources.
- ✓ As mentioned before developing industries in western part of China.
- ✓ Using more renewable resources as well as stimulating environmental protections policies.
- ✓ China is strongly motivating foreign multinational businesses and firms to use more advanced technology with the aim of improving some traditional industries likewise textile and consumption goods manufacturing industries.

Before joining the WTO, China had more restrictive FDI rules, including performance requirements, however it has since eliminated some rules and modified others.

## Thailand

Foreign direct investment plays an important role in Thailand's economy. The amount of FDI stock in Thailand was more than 50 percent of its GDP (UNCTAD 2015) which shows the importance of FDI in this country. Since 2012 Thailand has been among the 8 priority destinations for foreign investment for the period 2014-2016. It is the 7th largest FDI recipient in East and South-East Asia (UNCTAD 2015). Machinery (30.6 percent) and electronic goods (25.3 percent) industries are the top sectors which receive FDI (BOI 2015). Figure 9 illustrates inward FDI in Thailand from 1990 until 2013.

For years Thailand followed Washington Consensus policies toward FDI in order to attract foreign investors. Free capital flight, reduction of tariffs, tax incentives and openness to any kind of FDI are among policies that Thailand followed in all these years.

However, at the end of 2014, the board of investment in Thailand lunched a new strategy towards FDI which started from beginning of 2015 and will last for seven years. According to this Thai governments introduce more attractive incentive for foreign companies that will invest in high tech industries and industries which are in line with national development plans. In addition previous incentive for unfavorable industries has been reduced (The Government Public Relations Department of Thailand 2014).

## Conclusion

We find that FDI growth in medium and high value-added industries has greater effect than low value-added industries in China, compared to Thailand, due to Chinese government policies. Government policies importantly matter in the attraction of FDI.

Developing countries should decide whether the promotion of specific GVC segments is agreement with national development strategy, industries capabilities and government policy to improve certain industries' competitiveness. Further research should address the exact direction of FDI with respect to industrial development policy.

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