

Vietnam's Industry after Three Decades of Renovation

Do Duc Dinh*

Abstracts: This paper will focus mostly on the development of Vietnam's manufacturing sectors since the Doi Moi (Renovation) which started in 1986. It analyze the fundamental change of the industrialization concepts from the 1950s to the mid-1980s, and the actual transformation of Vietnam's industries since the start of the renovation in 1986, including the growth of various sectors of import substitution industries like electricity, oil and gas, and mechanics, most of which are used in the domestic market, the booming of competitive export-oriented sectors such as electronics, textile and garment, leather products, wood products, food processing, and a seemingly non-competitive manufacturing sector such as automobile or vehicle; the role of various entities as the State Own Enterprises (SOEs), the private sector, the role of industrial zones; and the role of international integration, particularly the contributions of foreign trade, foreign direct investments (FDI) and Official Development Assistance (ODA) as engines of growth. The final part will introduce the future prospect of the Vietnamese economy as well as the industrial growth.

Keywords: Industry; Transformation; Growth; Vietnam; International integration; Renovation.

1. Introduction

The actual transformation of Vietnam's industries started in 1986 with the growth of several import substitution industries such as electricity, oil and gas, and mechanics, most of which are used in the domestic market. More attention has been paid to the booming of competitive export-oriented sectors, notably electronics, textile and garment, leather products, wood products, food processing, and a seemingly non-competitive manufacturing sector like automobile or vehicle. This raises the role of various entities (State Own Enterprises (SOEs), the private sector, the role of industrial zones, international integration, particularly the contributions of foreign

trade, foreign direct investments (FDI) and Official Development Assistance (ODA), etc.) as engines of growth. The future prospect of the Vietnamese economy and the industrial growth will also be carefully discussed.

2. Industrial transformation and growth

2.1. The change of industrialization concepts since the 1950s

Vietnam's industrialization process has passed two fundamental stages with the first started from the 1950s to the mid-1980s following the heavy-industry-based strategy, and the second from the mid-1980s to the present time adopting the new strategy that combined industrialization with modernization in a complementation

approach, or in the author's words, the dynamic comparative advantage enhancement industrialization strategy.

After the official Declaration of Independence in 1945 and the regaining of peace since the victory of the Dien Bien Phu Battle in 1954, Vietnam moved from the war time to the peaceful and reconstruction period in the North, while continuing the liberation struggle in the South. During this period, one of the most important tasks of North Vietnam was to industrialize the economy. In this context, the idea of industrialization had been raised with an aim to transform the agrarian economy with over 80% of its population living and working in agriculture and rural areas, and GDP per capita of less than US\$100 to an industrialized country.

During the 1950s, like several other developing countries, Vietnam was highly influenced by the Soviet model which took the heavy-industry-based strategy as their only choice without concerning about their poor conditions in comparative advantages, lack of capital, backward technologies and unskilled human resources. Most of the policy-makers at the time had over-assessed the internal national factors and highly expected the assumedly large aid from the Soviet Union. They did not sufficiently realize the serious difficulties waged by the three tough transitions which occurred all at one time in a small and weak economy: the change from a war-torn economy to a peace-time reconstruction, the transformation from a centrally-planned to a market economy, and the upgrading from an agrarian to an industrialized economy.

As a result of the rigid copy of the old Soviet industrialization model and the destruction by the war, the Vietnamese economy in general, the industry in particular, was very poorly developed. Moreover, by the end of the 1970s and the first half of the 1980s, Vietnam fell deep into a social and economic crisis characterized by a low GDP per capita of about US\$100, a high inflation of 1000 percent per year, a sharp decline in agricultural and industrial production, a serious shortage of food, essential consumer goods and foreign exchange. The living conditions of most of the people deteriorated, except for some speculators who benefited from the others' difficulties and those whose living was relatively subsidized. These problems became the strong pressures for the Doi Moi in 1986.

Having learned that lesson, since 1986, the starting year of renovation, along with the "renovation of thinking", Vietnam has adopted a new idea of industrialization which was reflected in the double-word concept, namely, "industrialization, modernization". Though this concept did not make clear about the concrete contents of industrialization and modernization, it surely confirmed that this time industrialization in Vietnam would no longer be based solely on heavy industries; instead, it combined the traditional industrialization with modernization, which not only embraced the traditional industries like those having been developed since the 18th century, but also covered the modern industries with high-tech and higher human resource, including the IT industries, to meet the new requirements of the

globalization process and the knowledge-based economy.

Comparing to the two well-known industrialization strategies at the time, the import-substitution and the export-orientation, the new strategy of Vietnam did not follow exactly to any of them, it rather combined both, hence we may see later that Vietnam has moved to build both import-substitution and export-orientation industries as a pattern of complementation between the supply-side and demand side, and also using the internal and external advantages which are currently available, or preparing new advantages for the future development in a dynamic way.

2.2. The actual industrial transformation since the start of renovation in 1986

2.2.1. The overall development of industry

Though the concept of industrialization has altered, the fundamental role of industry keeps unchanged. Industrial growth continues to be identified as one of the most important tasks in the comprehensive social and economic development of Vietnam during the renovation period. The development of industries has been transformed from focusing mostly on heavy industries to a diversified structure to include consumer goods, food processing, export products, and heavy industries as a legacy.

The change has made remarkable development for Vietnam's industry during the last nearly thirty years compared to the previous three decades of stagnation. As a result, ten years after the renovation started, the average growth rate of the industrial sector reached 9.4% per annum through the

period from 1996 to 2014, though during the last 5 years the rates of growth have been lowered to around 6% and 7%.

The growth target for industry and construction from the year of 2015 to 2020 is to be 7.5% per year. Recent forecasts expected that Vietnam may soon become a world center of manufacturing with some strong sectors as steel, electricity, energy (oil, gas and coal), construction, mechanics, chemistry, electronics, garments, agricultural and fishery product processing, mine and mineral processing.

The industrial structure has been transformed in a positive way with the drop of the share of mineral industries, while the share of manufacturing and processing raised to 60% in 2015, though these two sectors only make up 18% of the total GDP in the same year. It is planned that by the year 2020, industry and construction will make up around 40% of GDP, of which manufacturing and processing industries will share 25%, and manufacturing alone making up 15%.

The forecasts were made as a reflection of the actual development of several important and relatively large industries producing production tools, consumer goods and export products, including the Pha Lai Power Plant, the Hoa Binh Hydro Electric Plant, Vung Tau Oil and Gas Production, the Bim Son Cement Plant, Hoang Thach Cement, Bai Bang Paper Mill. Some other large plants of the century long last significance are also being built such as Son La Hydro Electricity Plant with the capacity of 2.400MW, or the Cà Mau Gas-Electricity-Niter Industrial Complex, etc. To date Vietnam has been able to

produce some high-tech machines and equipments to serve the above plants. One of the examples is that 74% of the equipments used for the construction of the Thai Nguyen Cement Plant were produced in Vietnam. Beside the large and modern industries, handicraft and small industries have also grown drastically. These developments confirm the advance of Vietnam's industrial growth since the renovation adopted.

Not only producing to meet domestic requirements, industrial exports have grown quickly, making up 80% of the country's total export of US\$165 billion in 2014. However, the larger part of this growth has been made by foreign economic manufacturers, while the share of the domestic producers is only less than half of the value of industrial production and less than 1/3 of the total export.

2.2.2. The growth of competitive and non-competitive manufacturing sectors

After nearly thirty years of renovation, Vietnam has identified that the most competitive manufacturing sectors which have made large exports are those of intensive low-labor-cost and assembly industries, including electronics, textile and garment, leather products, wood products, food processing, and a seemingly non-competitive sector of automobile manufacturing, except crude oil as a mineral export.

One of the fastest growth of Vietnam's manufacturing sectors in recent years is electronics and computers which has been four times higher than the growth of the whole industry of the country. The main reason behind this development is the quick

growth of large scale exports in recent years. In 2014 alone, the export of these products reached over US\$35 billion. Most of the products have been produced under the form of assembly. The local content of these products makes up only 20-30% of the total production with the value added of 5-10%.

With the export of US\$30 billion in 2014, electronics is not only a big contributor to the total export of Vietnam, it also plays the leading role in the electronics manufacturing of ASEAN countries. Vietnam is currently planning to raise the export of electronics to US\$40 billion in 2017.

Playing the essentially important role in Vietnam's electronics is FDI enterprises which make up one thirds of the total number of electronics enterprises in Vietnam, but cover over 80% of domestic market and 90% of some exports. Samsung alone exported US\$20 billion last year and is expected to pass US\$30 billion a year in the coming few years.

Though Vietnam may be proud of the attracting a large number of FDI enterprises to invest in the electronics industry and creating large amount of jobs for the people through that activity, it still feels the weakness as most of their enterprises have up to the present time only been able to carry out the simple chains in the production line like assembly, and have to import large portion of the spare parts and materials, hence getting low benefits.

To continue to develop this industry, Vietnam is currently planning to strongly push the electronics industry to a higher stage, to bring Vietnam to be a large

producer of electronics equipments with new, smart and environmental protection technologies.

Aside from electronics, during the first 8 months of 2015, the export of telephones and spair parts was of US\$20.18 billion, most of which was made by FDI enterprises with US\$20.12 billion. The growth rate of this export was at 32.6% compared to the same period of 2014. This achievement shows that the export of telephones and spair parts has become the largest contributor to the growth of the country's total export. EU is the largest importer of Vietnam's telephones and spair parts, with US\$6.7 billion, growing at 22.3% and making up 33.2% of the total export of the country. Following EU is UAE with \$3.17 billion, growing at 23%; then the USA with US\$1.78 billion and 109.5% respectively; Germany with US\$1.2 billion and 42.2%.

Computer export during the first 8 months of 2015 was \$9.99 billion, in which the export to EU was US\$1.97 billion, growing at 57.9% compared to the same period of 2014; to the US\$1.74 billion and 60.2%; to China US\$1.72 and 31.3%; to Hongkong US\$1.15 billion and 141.3% respectively.

The electronics and computers manufacturing in Vietnam has become more and more attractive to foreign investors. Those large companies like Samsung, Nokia, Sony, Canon, LG has already invested and continue to invest large projects in Vietnam.

The second largest manufacturing is garment and textile with the total export of US\$24.5 billion in 2014, in which garments was US\$15.5 billion, textile thread \$1.9

billion, technical cloth US\$340 million and material US\$520 million. With the growth rate of 19% in 2014 compared to 2013, Vietnam's garment and textile export has been identified as the fastest growth and ranked number 5 among the largest garment and textile exporters in the world in 2014.

The most important markets for Vietnam's garment and textile exports are the USA with US\$10 billion, following by South Korea, EU and Japan. At present, over 60% of Vietnam's garment and textile exports are to the USA and Japan, members of the Trans-Pacific Strategic Economic Partnership Agreement (TPP). When TPP becomes effective, Vietnam's garment and textile tax rates to the US market will be reduced from 17% to nearly 0%, hence helping Vietnam to be one of the most benefitable countries entering TPP. It is estimated that with TPP, Vietnam's garment and leather product exports may reach US\$165 billion by 2025. Without TPP, the figure may stay at US\$113 billion. However, in order to obtain those benefits, Vietnam needs to pass considerable challenges such as the high dependence on non-TPP members like China and Korea. At present, about 88% of the materials used for Vietnam's garment and textile production have been imported from foreign countries with a large part from non-TPP members.

Though garment and textile has made great progress, there are still different ideas about its development. Those who are not positive to it complained that garment and textile is just a light industry of simple processing and assembly technologies with low value and low local content, while foreign dependency is too high. The

positive view shows another perspective which asks for a more comprehensive and balance understanding of the social and economic situation where garment and textile has provided jobs for nearly 4.5 million people who might not get an earning from high-tech industry which may promote high value industries but with few jobs. Of these 4.5 million people, 2.5 million are workers of 6,000 factories with a total annual income of around US\$6.7 billion, a really great contribution to the social and economic development of the country. Besides, this manufacturing sector has also provided about 2 million jobs for the indirect workers who got their earning from supporting industries, logistics, transportation and other related activities.

Moreover, during the last ten years, the share of the local content has made considerable advance, raising from 20-25% of the total export value of garment and textile in 2000-2001 to 49-50% currently, with about ten times larger of domestic materials used in the production of garment and textile exports. Besides, a considerable amount of local materials has also been exported which valued at about US\$2 billion a year. Another progress is that the share of garment and textile exports combining with local design meeting the international criteria of FOB and ODM has also increased, hence raising the high value chain of products and reducing the simple assembly of low costs.

Though there are still difficulties and challenges, Vietnam has been highly appreciated for its competitive capacity of garment and textile as more and more foreign manufacturers have come to invest in Vietnam. In 2014, nearly 20 FDI garment

and textile projects were registered. At present, over US\$2 billion of FDI was invested in Vietnam's garment and textile. FDI has become an important factor in the growth of Vietnam's garment and textile industry, it has made up 60% of Vietnam's garment and textile exports.

In recent years, Vietnam has increasingly called for foreign investments in the production of supporting industries, particularly textile, with an aim to raise the local content up to 60-65% and to raise the domestic consumption to a higher level compared to the current annual average rate of 10-15 per cent.

Ranking third is the shoe and leather product manufacturing. In 2014, this sector fulfilled the goal of US\$12 billion export, the first time passing the mark of US\$10 billion and making up over 10% of the country's total export. The growth rate of this sector in 2014 was 19.7%, nearly three times over the growth rate of the whole industrial sector. Over 500 factories of shoe and leather production have created jobs for about 650,000 workers, of whom 85% are women. With such growth, Vietnam's shoe and leather product manufacturing has grown fast during the past 20 years, currently ranks forth in the world after China, India and Brazil in total production, and third after China and Italia in value. Moreover, in 2014 the export of leather materials also reached for the first time over US\$1 billion, adding leather materials to the "club" of over US\$1 billion exporters.

The target for 2016 is 314 million pairs of shoes with the export of US\$16-17 billion. The share of localization for 2016 is expected to be from 60 to 65%.

Among 50 markets of Vietnam's leather products, the three largest markets are EU, the USA and Japan. In the coming years when the FTA with EU and TPP come into effect, the tax rates of Vietnam's leather product exports to EU will be reduced from 12.4% to 0%, and to TPP members from 3.5-57.4% to 0%, Vietnam will have more opportunities to expand the export to the EU market of 499 million people, and to the USA, Japan and the other 9 TPP members.

However, this industry is facing a number of tough challenges as nearly 100% of its production has been carried out under the form of processing with 80% of the materials and most of the machines and equipments imported and provided by foreign partners, the share of localization is just around 40-45%, most of the capital comes from the FDI sources, 90% of the capacity belongs to foreign and State own enterprises, the level of technology is not high, just at the medium level, the productivity is very low compared to regional competitors (1/35 of Japan, 1/30 of Thailand, 1/20 of Malaysia and 1/10 of Indonesia). These challenges are, to certain extent, the disadvantages of Vietnam's leather product manufacturing by which Vietnam earned low income for its low labor costs, while 77% of exports done by FDI enterprises with most of the value-added being taken in their hands. To overcome these challenges, Vietnam plans to increase the local content to 80% by 2020 and to raise the total export of leather products to US\$25 billion by 2025.

The forth competitive sector is food processing which has been well developed

to meet both the domestic market requirements and export. Today this sector contributes 20% of GDP. The annual consumption of food products is estimatedly around 15% of the total GDP. The total export of food products in 2014 was US\$30 billion. Some of the agricultural products are mainly used for export, their share of domestic consumption is low, for example, domestic use of cashew nuts is just 5%, catfish 5-7%, coffee 10%, rubber 25% and tea 50%.

As far as the creation of jobs is concerned, food processing is ranked second among the three largest sectors in need of human resources for the period of 2015-2020, hence confirming its very important role not just in the industrial sector alone, but in the overall social and economic development of the country as a whole.

According to the forecast of the Industry and Commerce Ministry, from this year to 2016, Vietnam's consumption of food will increase 5.1% annually, reaching US\$29.5 billion a year, with per capita consumption of about US\$316 per annum.

As a result of the growing requirements and competitiveness in both domestic and international markets, this sector has great potentials for expansion, since it owns certain advantages as a large share of its inputs is produced within the country with the high level of adoption and improvement of modern and safe technologies in accordance with the Vietnamese and international standards. The potential for Vietnam's food production is even bigger when the food requirements of the world increase year after year, estimatedly to be 1

billion tons of grain, 1 billion tons of beef, 460 million tons of meat and 1,048 million tons of other grain by the year 2050.

At present, the main kinds of food manufactured in Vietnam include beer, alcohol and other beverage; milk; vegetable oil; cakes and candies; and cigarette.

The production of beer, alcohol and other beverage has been quickly developed, making up 5% of the total value of the whole industry of the country, its income is high, it provides nearly 40,000 direct jobs for the workers. Most of the enterprises in this sector have applied modern technology and followed industrial scale, some of them have built the quality protection system of ISO 22000.

The milk and milk products manufacturing has grown at 20% per annum, in 2014 it achieved about US\$3.5 billion and created 10,000 jobs, profit ratio since 2000 to this year is of 15%, the profit growth is of 19.94% annually. Milk products have been diversified to about 300 types with much better and safe quality, meeting the domestic and export criteria as the technologies in this sector have been modernized up to the world level. However, the domestic production of milk and milk products can to date provide only 25% of the materials needed, while the rest of 75% being imported.

In Vietnam, there are 37 enterprises producing vegetable oil with the capacity of refinery for 1.2 million tons of materials to produce 1.129 million tons of refined oil a year. The larger share of products is used for both domestic consumption, while a smaller part is used for export. The weak point of this sector is that over 90% of the

raw materials has been imported, the level of local production is still low.

Another area of food production is cakes and candies. At present, there are over 30 large domestic enterprises and hundreds of small entities producing cakes and candies in Vietnam. The total production is over 100,000 tons a year with the annual growth rate of 10% during the 2011-2014 period, much higher than the average growth rate of 3.0% in Southeast Asia and 1.5% in the world market. The income from cakes and candies production is roughly US\$1 billion a year. Beside domestic production, a large sum of cakes and candies consumed in Vietnam has been imported. Most of the imported cakes and candies has the same quality as domestic products, but often sold with much higher price.

A review of Vietnam's food industries shows that beside the great opportunities, these sectors have faced numerous challenges such as the shortage of capital, the dependency on imported materials, the technical barriers from importing markets, the poor technologies in some areas, the high level of handicraft and assembly, the un-well known trade marks, the low competitiveness, the diversified allocation and small scale of factories (most of the 3,500 food enterprises have provided services rather than production), etc. To overcome these difficulties and challenges, Vietnam is now preparing some new policies to reduce taxes, increase intensives, and to enter into several free trade agreements to support the food production enterprises to raise their production and expand their markets.

Apart from successful industries, there are also in Vietnam some industries having been considered as less or unsuccessful manufacturing like the automobile because of its slow growth and weak competitiveness.

The Vietnam Express on May 5th, 2015, published an article with the title confirming “Vietnam’s automobile has failed”. The reason is that after nearly 20 years of protection, the industry is still at its preliminary stage with the main performance as importing spare parts to assemble, though most of the people working in this field have been quite aware that the development of the industry would bring forward a lot of relating industries such as electronics, mechanics, metallurgy, rubber, plastics, helping the country to save billions of dollars and to create thousands of jobs.

The main objectives for this sector were to develop the supporting industries in Vietnam, localizing it to the level of 40-50%, to meet 60-80% of the local use and oriented to export vehicles and spare parts. However, up to the present time, most of the objectives have not been realized, the local content of the industry is still less than 10%. The cost of production in Vietnam is higher than that of Thailand and Indonesia about 20%. With such weaknesses, Vietnam will not be able to compete with the vehicles produced in neighboring countries as members of ASEAN when the tax rates will be reduced to 0% by 2018.

Aside from automobiles, there is some hope for motorbikes whose supporting industries have been better developed with about 70% of the spare parts produced in

Vietnam. The share of motorbikes used in the country is very high, making up 90% of the total transport facilities. In 2015, about 31 million motorbikes are in use, it is expected that the figure will be increased to 33 million by 2020. There are currently nearly 60 enterprises joining the manufacturing of motorbikes, including several large corporations coming from Japan, Italia and Taiwan. These enterprises produce 5 million motorbikes a year. One unfavorable matter is that the cost of motorbike production in Vietnam is high comparing to the neighboring countries.

Though there are some pessimistic assessments about the automobile manufacturing after 20 years of development, Vietnam is determined not to withdraw from this difficult task. Instead, she continues to make greater efforts to develop this sector. In July 2014, the Vietnamese Government issued the new Strategy for Automobile Industry Development to 2025 and Vision 2035 with an aim to develop the industry to be an important manufacturing sector to meet the rising domestic requirements, to participate in the world export market, and to enhance its competition. The concrete targets are to produce 227,500 cars by 2020, then 466,400 cars by 2025, and 1,531,400 cars by 2035. The domestic share of production will be from 67% to 70%, then 78% by the same period. The export targets will be 20,000 cars by 2020, the 37,000 cars by 2025, and 90,000 cars by 2035. To achieve these targets, the Government will make greater supports to the industry through the reduction of taxes, the increase of incentives and the promotion of both domestic and foreign investments.

The above analysis shows that to develop an industry, Vietnam has had to overcome many huge difficulties such as the shortage of capital, the unskilled human resource, the large share of imported materials, the poor technologies, the high level of assembly, the un-well known trade marks, the tough competition, and many other big challenges. After thirty years adopting the renovation policy, though Vietnam has been able to develop some competitive manufacturings, not all of them were successful. The automobile is a typical example of the less successful manufacturing, or a failed effort, as some people claimed it. Even facing the setbacks, Vietnam is determined to move forward to fulfill the task of industrialization. With such determination and experiences, it is believable that Vietnam will get greater successes in the future.

3. Main factors behind industrial growth

There are three main factors that have influenced the growth of Vietnam's industry: the renovation policy transforming the economy from centrally planned toward the market performance and prepared necessary conditions for growth as capital, human resources and technologies; the contributions of various entities as the SOEs, the private firms, the FDI, the industrial zones; and the international integration through the entering into various multilateral and bilateral schemes as WTO, FTAs and regional bodies which helped facilitating the opening of markets and the attracting of partners like Japan, Korea, Taiwan, the USA, Russia and others to extend their business in Vietnam.

3.1. The fundamental role of renovation policy

The renovation policy in general, the economic renovation in particular, has not

only enabled Vietnam to overcome its social and economic crisis, but also helped Vietnam to develop from a low to a middle income country, in which the growth of industry is one of the most important parts. After thirty years of renovation, there are today sufficient evidences to confirm that the most important and fundamental factor behind the growth of Vietnam's manufacturing is the transformation of the economy from a centrally planning to market one, thanks to which Vietnam has been able to remove most of the barriers having been set up under the bureaucratic and subsidized system, and to create a favorable environment for business development, especially to prepare the prerequisites, including capital, human resource and technology, for industrial growth.

The first question each nation often asks when they want to develop the industry is how and where to acquire necessary capital to invest? The same question was raised for Vietnam during the 1980s when she started the renovation policy in the status a least developed country with the GDP per capita of just US\$100. In such a poor situation, the only way for Vietnam was firstly to raise domestic savings. The same as the other Asian late comers or late industrialized like Hong Kong, South Korea, Thailand, Malaysia and Singapore who raised their local savings up to 30% of GDP (in the case of Hong Kong) or 50% (Singapore) during the initial stage of industrialization, Vietnam also raised her domestic savings from 10% of GDP during the 1980s to 40% currently (Table 1). This high rate of savings plus the quick growth of export and tourism, the active attraction of FDI, ODA, remittance, etc. has become the typical pattern of Vietnam's capital formulation which allowed the country to quickly acquire the necessary capital for industrial

investment. In practice, domestic savings, trade, foreign investment and aid have become the engines of growth for Vietnam's economy and industry.

Table 1: Gross domestic savings as % of GDP (selected countries, 2000)

US	14
Germany	23
Japan	27
Hong Kong	31
South Korea	32
Thailand	33
Malaysia	46
Singapore	49
Vietnam ¹	40

Sources: ADB, IMF, Recited from FEER, May 25, 2000, p.66².

Though the capital is important, it will not be efficiently used if the human resource is not sufficiently prepared. Being aware of that, in Vietnam, the development of human resource is considered the decisive factor for social and economic development, including industry. Therefore, the investment for science and technology has been raised year after year, increasing by 16.5% per annum, making up 2% of the total Government budget, though it is just at 0.87% of GDP, and is still far from the target of 2% GDP. If we include the other sources of investment, the total social investments for science and technology already reached 1.3% of GDP by 2015.

¹ Vietnam: 2014.

² (See also Gross domestic savings as percentage of GDP in 18 years (1975 and 1993) of Asian countries (including Hong Kong, Taiwan, South Korea, Singapore, China, Indonesia, Malaysia, Philippines, Thailand, India, Nepal, Pakistan, Sri Lanka), FEER, Nov. 24, 1994, p.46.

As a result, the share of trained labor has made up 50% of the total labor force in 2015. The scientific and technological potentials have been improved with the continuing growth of both basic and applied sciences, particularly in the areas of agriculture, construction, health care, IT and telecommunication. The scientific and technological market has been developed, with the average transaction growth rate of 13.5% per annum and the number of people working in scientific research reached 700 over 1 million. The health care has been much improved, greatly contributing to the growth of living ages from 50 during the 1950s to 73.5 in 2015, and expectedly to 75 by 2020. All these improvements of the human resource have greatly contributed to the development of industry.

Furthermore, the development of human resource, trade, foreign investment and aid has improved the transfer of technology, one of the most important factors for manufacturing growth in Vietnam. Normally, technological change has often been developed through two steps: diffusion and innovation. In Vietnam, both of these two developments have been witnessed, though the former seems better than the latter. Any way, both have positively contributed to the growth of manufacturing.

3.2. The changing contributions of various entities

In relation to ownership, from the year of renovation in 1986 to 1991 the Vietnamese economy was owned mostly by Vietnamese, with the public share accounting for 29.25 percent and the non-public 70.75 percent. To 1995, a new actor emerged: FDI started to play an important role in the economy, making up 6.30 percent of GDP, while public ownership

rose to 40.20 percent and non-public dropped to 53.51 percent. To 2005, FDI continued to rise to 15.5 percent, while public ownership dropped to 38 percent and the non-public reduced to 46.5 percent.

Looking at these changes one might think that the role of the various sectors would change in accordance to their shares of ownership. The practical situation in Vietnam showed a different picture. The SOEs produced over 40% of GDP, relatively in accordance to the share of their ownership, while the FDI makes up 15.5% of ownership, producing 18% of GDP and especially 46.3% of industrial production, the rest left to the domestic private and cooperative entities. This actual development shows that the State sector continues to lead the economy, mostly in the heavy, infrastructure and import substitution industries; the FDI quickly captures the new and export-oriented manufacturing, while the domestic private enterprises and cooperatives perform mainly as small businesses which provides large employment with low economic value.

To 2015, it is realized that the performance of the private domestic enterprises has been much improved, becoming more efficient and making greater contribution to the economic and social development, while SOEs not only become less and less efficient, but also make big losses. Under the new situation, it is projected that the role of the SOEs, private entities and FDI will be changed in the way that the SOEs are to be concentrated on the key areas of national defense, security and provision of public goods and services; the non-State sector is to be enhanced and expanded to contribute about 39% of the total social investment and 50% of GDP; and the FDI will be

encouraged and given bigger incentives to positively contribute to the development of the infrastructure and supportive industries, renewable energies, new materials, electronics, information technologies, biotechnologies, plantation, husbandry, human resource training, high quality health care, and establishment of research and applied centers in Vietnam.

Another contribution to the growth of manufacturing in Vietnam is the industrial zones. To the present time, there are about 300 industrial zones scattered in most of the provinces of the country which perform under the Government projection. These industrial zones operate in identified lots of land with constructed technical infrastructure and concrete legal regulations to ensure the proper economic, social and environment goals. The small zones are referred to as industrial clusters. The share of these industrial zones to the total industrial production and export has been raised from roughly 20% in 2000 to about 50% currently.

3.3. International integration

As it was analyzed earlier, the multilateral, regional and bilateral commitments have created favorable environment for the development of not only trade, investment and ODA, but also tourism, remittance and stocks. Among these areas, foreign trade, investment and ODA have truly become the engines of growth for the economy as well as the industry of Vietnam.

As a result of the expansion of international integration, Vietnam's commodity export has been raised from the rank of 50 billion in 2007 to 34 billion in 2014 in the world market, import from 41 billion to 32 billion, and service import and export from 59 billion to 54 billion in the same period. The development of

industries, trade, services and other sectors have created nearly 13 million of jobs for Vietnam since the country joined WTO from 2007 to 2014. Moreover, during this period Vietnam has sent 694,000 laborers to work abroad, positively contributing to the reduction of unemployment and the earning of foreign exchange.

Beside the opportunities, international integration has also caused tough challenges such as the pressure to adopt the high and international standards of labor, quality, clearness, environmental protection, technological processes, etc.. To certain extent, even these challenges are also opportunities as they help Vietnam to raise her capacity, otherwise she will continue her low growth with low living and working conditions.

In other words, international integration has created much greater opportunities for Vietnam than the challenges it caused. In the coming few years, as the commitments of the FTAs and TPP become effective, most of the tariffs will be reduced to 0%, new opportunities will appear while new challenges will also be tougher.

4. Future prospect

To enhance the achievements, Vietnam is currently planning to acquire an average GDP growth rate of 6.5% to 7% per annum during the period of 2016-2020, raising the GDP per capita to US\$3,200-US\$3,500 by 2020. To that end, the need for annual average social investment will be from 32% to 34% of GDP.

The structure of the economy will be transformed in the way that the share of industry and service will make up over 85% of GDP. The average growth rate of industry and construction will be 7.5% per year, with the share of these two sectors rises to 40% of GDP by the year 2020, the

share of manufacturing and processing to 25% of GDP, in which manufacturing makes up around 15%. The service sector is expected to grow at 7-7.5% per year, covering about 45% of the GDP by 2020, with the priorities given to the high-tech, advantageous, knowledgeable and high value-added services. The average growth rate of agriculture is expected to be from 3% to 3.5% per year. The ocean economy will be more developed, particularly in the areas of oil and gas exploitation and processing, sea ports, building and repairing ships, transportation, marine product exploitation and processing, logistics, and ocean tourism. There are also plans to build the coastal economic and industrial zones in connection with the development of coastal cities. The development of the ocean economy is closely linked to the protection of national sovereignty and territory and the raising of the living conditions of the people living on the islands and coastal areas.

In the Strategy for Industrial Development to the Year 2025 and Vision to 2035, Vietnam has planned to develop an industry with the major parts covering the high-tech sectors which produce products of international standards by the year 2035. Three sectors to be given high priorities are manufacturing and processing, electronics and telecommunication, new and renewable energies. From now to the year of 2025, new and renewable energies will include the wind and sun energies, and biomass energy. After 2025, the atomic energy will be developed for the peaceful purpose. The earth and ocean wave energies will also be developed during this period.

5. Conclusion

As mentioned above, the goals of the economy restructuring are to make share of

industry and service over 85% of GDP, annual average growth rate of industry and construction at 7.5% accounting to 40% of GDP by the year 2020. The share of manufacturing and processing is set to make 25% of GDP with manufacturing up 15%, service sector up 7-7.5% annually covering about 45% of the GDP by 2020. For such tasks to be completed, the priorities should be given to the high-tech, advantageous, knowledgeable and high value-added services.

References

- [1] Do Duc Dinh (2004), *Reform and Industrialization in Vietnam and other Developing Countries*, The World Publishing House.
- [2] Do Duc Dinh (2015), *Emergence and Human Development: Experience from Vietnam's Transformation Process*, Paper used for the International Conference on Emergence in Africa, Abidjan, Cote d'Ivoire.
- [3] Xuan Hai (2015), "Sau 8 năm Việt Nam gia nhập WTO: Được nhiều hơn mất" ("After 8 years Vietnam joins WTO: Benefiting more than losing"), *Labor Newspaper*, September 19th.
- [4] Pham Hang (2005), "Công nghiệp Việt Nam 60 năm xây dựng và trưởng thành" ("Vietnam Industry after 60 Years of Construction and Development"), *Communist Party of Vietnam Online Newspaper*, August 26th.
- [5] Thu Huyen (2015), "Cơ hội lớn xúc tiến xuất khẩu cho ngành da giày Việt Nam" ("Great Opportunities for Export Promotion of Vietnam Footwear Sector"), *Financial Times Online Newspaper*, July 8th.
- [6] Nguyen Dinh Luan (2014), "Thực trạng ngành công nghiệp hỗ trợ ở Việt Nam" ("Situation of Supporting Industries in Vietnam"), *Journal of Finance*, November 26th.
- [7] Nguyen Mai (2015), "Làm sao để kinh tế Việt Nam "sánh vai được với các cường quốc năm châu" ("How to Vietnam Industry make compete with other major powers on five continents"), *Dan tri News*, September 2nd.
- [8] Nguyen Minh Phong (2015), "Hội nhập toàn diện và sâu sắc với thế giới: Cần bản lĩnh, trí tuệ Việt" ("Comprehensive and Profound Integration with the World: A call for Vietnam bravery, wisdom"), *Labour Newspaper*, September 1st.
- [9] Truong Tan Sang (2015), "Lập nên những kỳ tích mới trong sự nghiệp xây dựng thành công nước Việt Nam dân giàu, nước mạnh, dân chủ, công bằng, văn minh" ("Establishing new miracles in successful building Vietnam State for rich people, strong country, democracy, fairness and civilization"), *Speech at the 70th year anniversary of the founding of the Socialist Republic of Vietnam*, *Nhan Dan Newspaper*, September 4th.
- [10] Bui Thu (2014), *Làm gì để phát triển ngành công nghiệp thực phẩm của Việt Nam (What to develop the food industry of Vietnam)*, Export Newsletter, VIETTRADE, Ministry of Industry and Trade, No.376, November 24th.
- [11] Nguyen Vu (2015), "Chỉ có 10% cà phê Việt được tiêu thụ trong nước", ("Only 10% Vietnamese coffee is consumed domestically"), *VnEconomy*, October 19th.

