WORKING PAPER SERIES

INDUSTRIAL POLICY AS DETERMINANT OF LOCALIZATION: THE CASE OF VIETNAMESE AUTOMOBILE INDUSTRY

Nguyen Bich Thuy

Working Paper 0810
http://www.vdf.org.vn/workingpapers/vdfwp0810

VIETNAM DEVELOPMENT FORUM
July 2008

Industrial policy as determinant of localization: The case of Vietnamese automobile industry

VDF Working Paper No. 0810
July 2008

Keywords: local content, localization, automobile, industrial policy
JEL classification: L52, L62

Abstract

Localization have become the leading interest of many nations, especially developing countries where production mainly limited at labor-intensive and low-technology products with low added value. Therefore, many countries have used various industrial policy of tax, subsidy, trade measures, antitrust enforcement measure, standard-setting policy, etc. aiming at localization of domestically-produced goods.

Automobile industry is expected to become the key industry which has positive effect on the Vietnamese economy because of its spill-over effect on its supporting industries such as material industry, fuel industry, painting, plastic, etc. However, localization in Vietnamese auto industry did not happen as policy makers' expectation.

This paper tries to find out the relationship between industrial policy and localization on figuring out the various regulations that have possible effect on localization and discover the real state of localization. The research would include joint-ventures (JVs) and pure Vietnamese automakers (PVCs)

Both qualitative and quantitative research methods are utilized to understand responses of the automobile companies to the present. Questionnaires and surveys will be distributed to automakers belonging to VAMA (Vietnam auto manufacturers association). Qualitative research will be next step of researching that helps clarifying responses as well as implication of the automakers and auto-part makers which are showed in questionnaires and survey.

Nguyen Bich Thuy
Graduate school of Asia-Pacific Studies
Doctoral Degree Program
Waseda University.

1. Introduction

It is realized that increase of investment in quantity without improvement of investment in "quality" will not bring prosperity to a country's economy. Stimulation of localization in order to utilize more internal resources and contribute more added-value to the domestically-processed products would bring much more benefits to the economy, encouraging development of supporting industries and their respective workforces, technologies thus having a spill-over effect on the economy as a whole. Automobile industry is considered a key industry because it encompasses many fundamental technologies such as mechanical engineering, metallurgy, casting, modeling, electronics and so on.

In this paper, localization is defined as the sourcing of domestically produced parts or components to be used in the assembling of finished products. It refers to the proportion of parts and components that is not imported.

"Local content ratio or localization rate is defined as the percentage of produced parts or components to be used in the assembling of finished products.

"Domestically" in this study means inside a country.

It usually adopts local content ratio by value or by point list. Local content ratio by value is calculated based on price or production cost of the product. In the case of local content ratio by point list, each component or groups of components is assigned certain points which are then used as a way of counting local content ratio of finished products.

Vietnam now applies both ways of calculation of local content ratio by point list and that by value for automobile. Auto parts are divided into 100 groups and each group is assigned a certain local content ratio. In the case where products are produced domestically using imported semi-products, local content ratios are calculated based on value added to parts or part groups. For the components inside the parts, local content ratio by value is applied. At present, for example if all the parts and components are imported to be assembled locally, while only painting, welding, assembling operated locally, the output can be calculated as 12 percent local content ratio.

The Vietnamese automobile industry is still in early stage of development. There are many arisen controversies relating to its development and localization. Sturgeon (1998) did a research on the prospects for development of the automobile industry in Vietnam in globalizing economy; it covered the major problems in the industry and concluded with some recommendations. Takayasu (1998) discussed on the development of Vietnamese automobile industry, especially the problems concerning localization. The author analyzed the difficulties coped with by Vietnamese automobile industry in order to increase local content. He recommended measures to increase local content and asserted that National car concept would not be a good way to increase local content in Vietnam. Ohno (2006) analyzed the matters in Vietnamese automobile industry that hinders its development and suggested some measures to deal with. However, almost researches just limited at JVs and referred to localization as a part of the automobile industry development. This paper tries to find out the fact of localization in the relation with industrial policy, basing on the analysis of both JVs and PVCs' responses.

2. Objective

This paper tries to assess influence of industrial policy on localization as well as clarifying essential factors to promote localization.

3. Methodology

The research uses both qualitative and quantitative research methods. Questionnaires and surveys were developed to collect basic data of real state of localization, localization factors and clarifying responses to the present policies from the business side. Interview and field trips were conducted to more deeply understand well of localization and the essence of industrial policy in promotion of localization.

4. Overview of Vietnamese Automobile Industry

4.1. Development History

Prior to 1991, Vietnam imported cars mainly from the socialist countries or imported chassis from German Democratic Republic to build buses of 46-50 seats. There were no domestic companies invested in synchronous car assembly line. The main tasks of automobile companies only repaired imported vehicles. The domestic automobile industry in Vietnam consisted mainly of Auto Hoa Binh, Auto Cam Pha, and the Auto Mechanics…that were state-run manufacturer opened in the North during the war with the French. Some parts were supplied by the other state-run enterprises, located mostly in the Hanoi area, and others were imported. The tiny demand for passenger vehicles in Vietnam was met through the import of fully assembled Soviet-built sedans. A number of US military vehicles and civilian passenger cars were in use. Other state-run companies manufactured agricultural vehicles, freight trucks and construction vehicles.

Since 1991, the Vietnamese automobile industry has begun to change dramatically and gradually take shape owing to the open policy and various incentives of Vietnamese government. Foreign automakers started investing in Vietnam, they joint-ventured with some prominent state-owned auto enterprises to establish their production base in Vietnam. In 1991, Auto Hoa Binh formed a joint-venture partnership with Philippines Columbian Motors Group and Japan's Nichimen Corporation to found Vietnam Motors Corp. (VMC). Since then, there are 12 automobile joint-ventures in Vietnam including seven Japanese automakers (Daihatsu, Hino, Isuzu, Mitsubishi, Suzuki, Toyota and Honda[1]), one Korean automaker (Daewoo), one Korean-backed license assembler (Mekong), one Philippine-backed license assembler (VMC), one German automaker (Mercedez), and one American automaker (Ford). JVs are capable of manufacturing any kind of vehicles demanded by domestic market. Out of them, there is only Hino Vietnam specialized in heavy trucks. In these JVs, foreign partners usually possess majority capital share, so manager positions in the JVs belong to foreigners and some deputy manager position belongs to Vietnamese side. In the early stage of 1990s, JVs (FDI automakers) play the key role in Vietnamese auto industry. However gradually pure Vietnamese automakers actively joined in the industry and acquire their own position in the industry.

---

[1] Honda Vietnam received investment license on March 2005 and start its operation in this year. Therefore, in this research automobile joint ventures refer to 11 joint ventures excluded Honda Vietnam.

Since 2003 PVCs have particularly blossomed when Vietnamese government approved strategy of Vietnamese automobile industry development to the year 2010 vision 2020 in which the government encouraged all economic sectors participating in automobile industry. There were an aggressive move among pure Vietnamese automakers including state-owned enterprises and private enterprises. State-owned enterprises are well received support from government to implement series of projects of auto production. According to these projects, they mainly imported assembly line under the technology transfer contract with Korean and Chinese automakers to assembling truck, bus with imported chassis. Since 2003, private automakers which are 100% Vietnamese investment capital also have aggressively entered into the industry. Up to now, there are 40 CKD kit assemblers and repairers which are 100% pure Vietnamese companies, however only some of them have invested deeply in production, the other ones remains at the assembly level. The prominent pure Vietnamese automakers include four state-owned automakers listed in the strategy to develop the automobile industry and two private automakers.

4.2. Operation of Automakers

The first four-wheel vehicles which were assembled on modern assembly lines were on the market in the early 1990s, they are products of Mekong auto companies and VMC. Since then car sale volume continuously increase. In 1990s, auto products were mainly produced by JVs, pure Vietnamese companies had just produced some hundreds vehicles which were chiefly bus, truck, professional vehicles for their self consumption[2].

Since early years of the twentieth century, the Vietnamese automobile industry has started speeding up. The sale volume increased steadily in 2000, overcoming 10.000 units, achieving 14,490 units in 2000 (increase 89% in comparison with 1999), 18258 units in 2001 (increase 26 %) and 28,232 unit in 2003 (increase 55%). Especially, in 2003, the sale volume achieved 50636 units (increase 79% in comparison with the previous year). Although there were some slight downs in 2004 and 2006 due to the government's imported tax adjustment on auto parts and CBU (complete build up) vehicles, general tendency was still increase, sale volume in 2007 achieved approximately 80,000 units.

Although there were increase in sale volume over the past years, the automakers still operate their production lines under capacity. In 1990s, average capacity of the automakers just some percentage on total capacity of 11 JVs is about 149.000 units per year, for example, the rate in 1998 was 3.7%, in 2000 just 9.8%, in 2003 achieved 28.8% and in the year 2007 gained 30.5%[3]. It is very clear that capacity utilization rate in Vietnam automobile industry is extremely low and automakers all look toward to the prosperity of high growth rate of Vietnamese domestic automotive market to invest in building up their factories in Vietnam.

In 1990s, products of JVs accounted for majority of car market share, and pure Vietnamese companies only accounted a tiny rate just around 10%. However, since the year 2003,

---

[2] All pure Vietnamese automakers in this time were state-owned general corporations which both manufactured mechanic products and did business. For example, Samco both participates in car produced and manages transportation business, so majority of their buses are sold to their own business affiliates or Vinacomin which is a coal exploration company also uses their trucks and specialized vehicles in their coal exploration and transportation.

[3] Báo cáo về chiến lược phát triển ngành ô tô Việt Nam từ nay đến năm 2010, tầm nhìn 2020 trình Thủ tướng Chính phủ (*Report on Strategy to develop the Vietnamese automobile industry to the year 2010, vision 2020 submitted to Vietnamese Prime Minister. Vietnamese Ministry of Industry.)*

following the approval of the Strategy to develop the Vietnamese automobile companies to the year 2010, vision 2020, the pure Vietnamese companies have has big jump, their sale volume achieved approximately 20% of the total sale volume. With the participation of private companies since 2004, sale volume of PVCs accounted for 43% in 2007. However, JVs focus on passenger car production which serves high-income people or organizations in Vietnam, 100% passenger cars products in Vietnam are produced by JVs. They also manufacture busses and trucks, but their market shares on bus and truck are not big due to high price. PVCs mainly concentrate on assembling busses, light trucks, minivans and their products accounted for majority of market share of bus and truck, up to 80% of buses and 85% of trucks[4].

So far, it could be said that two main forces participating in the Vietnamese auto industry are PVCs and JVs. Each type of companies targets their own customers and their products have their own standards of quality, designs, thus they have different responses in localization

5. Results and Discussion

5.1 Overview of the Sample

This research bases on responses of automakers of localization to discover current localization and essential factors of localization and effect of current policy on localization.

Questionnaires and surveys were distributed to all members of VAMA (Vietnam auto manufacturers association) (Table 1) which are the best automakers in Vietnamese automobile industry and also more aggressive in localization. There are 17 returns out of 18 distributed survey. 8 automobile companies were selected to do interviews with, including 4 Joint-venture, 2 state-own companies and 1 private companies. During the interviews, I met with 6 managers and 6 staffs of the companies to learn more deeply on the localization and policy suggestions which were unable to collect via surveys.

Table 1. Overview of the Sample

SURVEY		INTERVIEW	
Respondents		***Interviewees***	
Distributed	18	Managers	6
Returned	17	Staff	6
Type of company		***Type of company***	
State-own	5	State-own	2
Private	2	Private	1
JVs	10	JVs	4
Location		***Location***	
Hanoi	10	Hanoi	5
HCMC	7	HCMC	3

5.2 Real State of Localization in Vietnam

Localization is within the expectation of policy makers since the initial years of promoting foreign direct investment in the Vietnamese automobile industry. It was concretized in local content requirements specified in investment license in which JVs must increase

[4] Quy hoach phat trien nganh o to. *Plan to develop the auto industry*. Vietnamese Ministry of Industry. 2007

localization rate to 5% by the fifth year of operation and 30% by the tenth year of operation[5]. However, the fact seems go against expectation of the government, localization remains in low progress and automakers are not aggressive with it.

Local Content Ratio of JVs

Table 2 shows us local content ratio of 18 automobile companies belonging to VAMA. It is realized that joint-venture achieved modest local content ratios, mainly under 10%. While pure Vietnamese companies achieved higher local content ratio from 35% to 60%.

Low local content ratios

As could be seen on table 2, the local content ratio of JVs remains at low level, ranging from some percentage points to 25%. Many have local content ratio of less than 10%. As the current regulation[6], the local content ratio of under 12% means that the automaker does not source any parts and components locally, the companies' production just limit at assembling, testing, wielding and painting[7] that are very early stage of auto production. However many of JVs have not yet even achieved this rate. Toyota Vietnam and Honda Vietnam are the best among JVs with local content ratios in some products to 20% and over, meanwhile the other products of Toyota Vietnam achieve more than 15%. Toyota Vietnam achieved localization rate of as high as 25% in Vios which was just launched on September 2007 and 23% in Innova[8] which was launched on October 2006. And sedan of Honda Vietnam labeled Honda Civic achieved local content ratio of 23%, out of which 10% of locally-sourced parts and components including engine is assembled by itself, the others including battery is sourced from a foreign-invested autoparts company in Vietnam. Mitsubishi Vietnam produced vehicles under the brand name of Mitsubishi achieved higher local content ratio of 14% in bus and truck products while lower one in sedan. These companies including Toyota Vietnam, Honda Vietnam, Mitsubishi Vietnam tried to assemble or out source some tiny auto parts and components in Vietnam in order to add more local items to the outputs.

In the meanwhile, the other companies are mostly very unmindful with localization, their local content ratio mainly are under 12%. Mekong and VMC[9] automobile companies are the two first batches of automakers operating since the early 1990s but VMC only achieved 12 percent local content ratio with the local contribution of assembling, painting and welding, while Mekong only gained 4.6 percent. Isuzu Vietnam after 7 years in operation achieved local content ratio of 12 percent, which mainly includes bodywork stamping, painting, welding, testing, and locally-sourced parts limited at tires, exhaust pipes, and batteries.

[5] Local content requirement is not applied to pure Vietnamese companies because most of them start auto production in 2000s when regulation in AFTA and WTO make the government unable to apply local content requirement.

[6] As the current regulation stipulates, assembling stage is counted as 3%, welding 4% and painting 5%[6], so automakers need only assembling, welding and painting to achieve 12% local content ratio

[7] That some companies have local content ratio of less than 12% is because local content ratio is calculated depends on level of separation of imported parts and components.

[8] Innova is a MPV car of Toyota Motor Vietnam which is best sold in Vietnamese market

[9] In fact, VMC currently stops assembling cars in Vietnam, they mainly import cars for sale from Germany rather than production. Mekong also operates perfunctorily with low products.

Table 2. Local Content Ratio of Automakers in Vietnamese Auto Industry

	Automobile companies	Types of cars	Local content ratio (%)
JVs	Toyota Vietnam	Passenger cars, minibus	15-25*
	Ford Vietnam	Passenger cars, pick-up, minibus	6,45
	Mitsubishi Vietnam	Passenger cars, truck	10-14
	Isuzu Vietnam	Passenger cars, truck, pick-up	12*
	Vietnam Suzuki	Passenger cars, truck, van	10
	Daewoo Vietnam	Passenger cars,, bus	8
	Mercedez-Benz Vietnam	Passenger cars, minibus, bus	1.5
	Honda Vietnam	Passenger cars,	23*
	VMC	Passenger cars, truck	12*
	Hino Vietnam	Truck	2,06
	Daihatsu Vietnam	Passenger cars, truck, van	4
	Mekong	Passenger cars, pickup, truck, minibus	4.6
PVCs	Samco	Truck, bus	40
	Vinamotor	Truck, bus	40*
	Veam	Truck, bus	40
	Vinacomin	Bus	35
	Vinaxuki	Truck, bus	60
	Truong Hai	Truck, bus	40

Source: Field research on March 2006

Localization is mainly from assembling stage rather than locally-sourced autoparts

Despite long operation in Vietnam, JVs have little progress in localization, they mostly import parts and components under CKD1[10] and CKD2[11] kits and there were a limited number of companies which satisfied the condition of more than 10% locally-sourced parts in order to utilize incentive import tariff rate of IKD[12] set. Their local content ratios are added based on bodywork welding, stamping, painting (electrostatic painting is only used in some companies like Toyota, Ford, Mitsubishi, and the other assemblers must rent or do not use electrostatic painting technology), assembling, and testing rather than using locally-produced parts and components.

Toyota Vietnam which has the highest sales in Vietnam and experienced 11 years of operation from 1996 is one of JVs who leads in localization in the auto industry, but it still wants to import CKD kits and there are a limited locally-sourced parts including seat sets, door console box, quarter trim, spare-wheel carrier, separator bar, wire harness, tool set, jack handle, alpine radio, manual antenna, battery, exhaust pipe, side members right hand/ left hand, roof side inner, wheel house inner & outer, floor panel, fuel & brake tube, instrument panel reinforcement bar, sensor assy, accelerator pedal, break oil pipe, seat ankle, mudguard, and air bag. Toyota Vietnam has had so far 9 part suppliers. Besides inviting Denso- and Harada- 100% foreign-invested companies to produce auto parts for exporting in Thang Long Industrial Zone, Toyota Vietnam opened the first ever stamping shop in Vietnam. 80% products of these autoparts companies including valve, antenna, are exported to Thailand, Indonesia, Philippines, Malaysia, India, Argentine, South Africa and Venezuela. Honda

[10] CKD1 means all parts imported, painting done in Vietnam
[11] CKD2 means all parts imported, painting done in Vietnam
[12] Greater than 10% of locally-sourced parts

Vietnam has its own well-established autoparts suppliers owing to its available parts network for motorbike products. most of local sourced parts of Mitsubishi Vietnam are assembled in its factory.

In the other companies, they almost do not source any parts and components domestically. What they do is only assemble CKD kits. VMC imported everything needed for assembly under CKD1 and CKD2[13] sets and nothing was sourced locally. Daewoo also sources locally no parts and components. CKD sets were imported for assembly from Korea. They also imported separate components and equipments such as seats, airbags, transport racks, leathers, side protectors & flaps for sale and service for repairing ore servicing.

There is almost no R&D operation in all JVs in Vietnam, although activities of experience exchange, initiative contribution among workers are still promoted. Designs are completely imported from their related companies located in the region.

Local Content of PVCs

Local content ratio

PVCs seem to achieve much better local content ratio than JVs, their minimum local content ratio is 35% gained by Vinacomin, while majority achieve more than 40%. Assembling, wielding, testing, painting are implemented in all pure Vietnamese companies. However, only some of them equipped electrostatic painting pools, the other must rent or do not use electrostatic painting. For stamping, almost pure Vietnamese companies have utilized labors and backward equipment to build up bodywork and framework.

Vinaxuki (a private automaker) even achieved highest local content ratio of 60%. Vinaxuki invested in forging, stamping, electrostatic painting, wielding, testing with technology imported from Germany, Italy, Japan, China. Especially Vinaxuki is the first PVCs which can make mould and stamp one-block framework.

Localization mainly from sourcing labor-intensive and low-technology auto parts

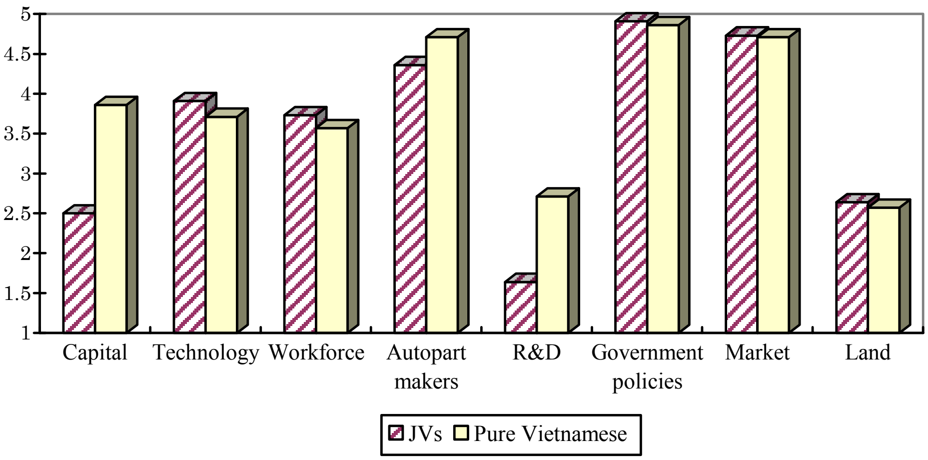
Although PVCs seem to be more successful than JVs in localization, local autoparts sourcing is mainly from labor-intensive and low-technology autoparts and components.

In all PVCs, assembling, testing, wielding, painting, stamping are implemented. However, only two private automakers-Truong Hai and Vinaxuki equipped electrostatic painting shops, especially painting shop of Vinaxuki is said to be the modernest one in the region. And only Vinaxuki invested in one-block framework stamping by modern machines, while the other PVCs can just stamp some parts of framework then weild them together. Vinaxuki also stamped successfully chassis of truck and produce cabin, carriage box. Samco can build up bodywork on the imported chassis. Besides these works, their local autoparts sourcing mainly interiors(such as glasses, seats, belts, carpet, so on), tire, tubes, battery, air-cons, shock absorber, antennas, leaf spring, coil spring, lamps, wire harness, seat, break, muffler, bearing, technical rubber parts, plastic parts. Vinamotor produced and assembled driving axle, engine. And in this year, Vinaxuki also plan to build up factory for engine assembling on the technology transfer with a German company.

5.3. Role of Localization Factors

There are a lot of different factors that impact on localization of auto products in Vietnam such as labor, capital, technology, government policies and so on. Chart 1 shows self-assessment of the automakers on importance of localization factors in the current situation of Vietnamese auto industry by marking points from 1 to 5, in which 1 is least and 5 is the most. In general, both JVs and PVCs had the same valuation of significance of localization factors, however their responses in detail have some different. Among the factors, government policy, market, autoparts industry and supporting industrial services are considered as the most important factors of localization.

Chart 1. Role of Localization Factors



Source: Research result

JVs' Assessment on Localization Factors

Most JVs scored highest point to the significance of government policy on localization. All asserted that under the current policy of the government, there will be no improvement in localization. JVs criticized current policy, especially protection reduction, unstable and short-run policy make difficult for automakers in planning their business. Moreover, current policy has not yet created full incentives to facilitate automakers in localization. Survey results told that majority of the enterprises, particularly joint ventures agreed with the statements saying that "The government is not aggressive in creating favorable condition for localization" and "Policies is not suitable with requirement and expectation of localization", over 50% ideas said that the policy is not transparent and consistent". They also said that there was unfair treatment between JVs and PVCs when newly-approved policy gave more favor to PVCs in which the government levied low tariff rates on parts that PVCs could source domestically. The unfair treatment was also shown in capital incentives that the government granted to projects of the state-owned automakers.

JVs marked the market factor as one of top factors of stagnation in localization in the automobile industry. The automobile industry needs to have very big initial investment capital for the equipments, factories, technology, R&D and so on, so it is difficult for them to reduce production cost if sales volume is limited. With such limitation in the domestic market, further localization will be extremely costly, making price of car even higher. The current domestic market just under 80,000 unit per annum makes automakers unable to take advantage from economic scale. In fact, the JVs which have high sale volume are eager in localization. For example, Toyota Vietnam is the best seller in Vietnam with sales volume of 14, 784 in 2006, accounting for 43% total sale volume of JVs[14], it is also the company which has the best local content ratio and is more aggressive than the other JVs in finding more locally-produced parts and components as well as establishing its own suppliers around Toyota production base. Meanwhile, Hino Motor Vietnam with sales volume of 613[15] units in 2006 only achieved extremely modest local content ratio of 2%; and Daihatsu Vietnam which just closed their production in May 2007 due to its limited sales only achieved 4% local content ratio[16].

Autoparts industry factor is valued as the third importance among localization factors. JVs can only produce in-house at most 36-42 percent of the car. The others about 20,000 to 30,000 parts and components of a car must be bought from autoparts suppliers[17]. However, JVs face with difficulty in finding autoparts suppliers in Vietnam because the number of autoparts makers is very small, just around 100 companies registered as autoparts manufacturer in Vietnam, including 60 pure Vietnamese ones and 40 foreign invested ones[18]. However, many of them do not produce parts for auto industry but drastic-growing motorbike industry and quality of pure Vietnamese automakers do not meet with requirement of JVs. Currently, Toyota Vietnam self-assembled some auto parts such as exhaust pipe, roof side inner, wheel house, floor panel, fuel & brake tube, instrument panel reinforcement bar in their factory, and outsourced from eight other companies out of which only one battery supplier is pure Vietnamese company. Honda Vietnam tries to assemble in-house some parts including engine and source more from its affiliates that supply parts for motorbike[19]. Mitsubishi Vietnam tried localization by self-assembling some components inside their factory.

JVs appreciated the importance of technology in localization and consider it as hindrance of localization. They said backward technology in pure Vietnamese companies trigger them unable to find suppliers able to satisfy their quality requirements. Many of the local companies were equipped with backward technology and machinery before 1990s in order to produce auto parts for socialist countries' vehicles. They followed the socialist vehicle standards, therefore may not meet with standard of automobile companies from Japan, Germany or America. Furthermore, the renovation of outdated machinery is not comprehensive and consistent due to lack of funding and replaced machinery originated from different sources and is not synchronous. All these factors resulted in the inferior quality of products produced by these producers. Up to now only battery of a pure Vietnamese company is accepted by Toyota Vietnam, while no other JVs accepted products of pure Vietnamese companies.

Workforce factor is not considered a hinder to localization in Vietnam owing to its labors' characteristics of hard-working, skillfulness, patience, creativeness, high education. In many JVs, foreign partners chiefly hold executive position while local staffs can take remaining

---

14 Sale volume record of VAMA 2006
15 Sale volume record of VAMA 2006
16 Sale volume record of VAMA 2006
17 Sturgen, 1998
18 *Tổng kết cuối năm về đầu tư trong ngành ô tô –Report on Investment in Vietnamese automotive industry.* Vietnamese Ministry of Planning and Investment. 2005.
19 Before 2005 Honda Vietnam only focused on motorbike manufacture and was very successful in Vietnamese market. However, since 2005, Honda Vietnam started its automobile production base with first output of brand name Honda Civic.

positions. In most joint-ventures, there are no foreign technicians in the factories, 100% workers in the production base are Vietnamese. Capital factor is not also considered as hindrance in localization because so far it is not matter in mobilizing investment capital in this industry. Land for factories is available because JVs all have the state-owned partners which possess big land. R&D factor is not the obstacle in localization because in the early development stage of the Vietnamese auto industry, R&D is not expected to develop.

PVCs' Assessment on Localization Factors

PVCs also gave high score on government policy factor. They asserted that their survival as well as localization depends completely on government policy because they have just some years of operation and need more assistant. So far, their localization mainly utilized labor-intensive and low-tech parts and components, however to promote localization into higher level of localization high-technology and capital-intensive ones, they need more incentives. Currently, localization in PVCs seems to be slow down, some plan was drawn out but have not yet implemented. For example, stage 2 of plan of Vinaxuki to widen their production include building up autoparts center basing on technology transfer with German companies in 2007 has not yet deployed. Or Vinamotor planned to establish factory assembling engines in 2008 but it has not realized.

Market factor was marked high score. PVCs said market factor is very important for them to develop their businesses and improve localization. The same explanation as JVs, PVCs said small market prevent them utilizing economic scale and limit their investment in autoparts production. In fact, PVCs which have better market for their products are able to desire to increase localization. Vinaxuki and Truong Hai (two private companies) found out their market in light truck and minivan which are not covered by JVs. The other state-owned automakers rely on orders from the government or their own affiliates.

Autoparts industry factor have bad effect on localization. As said above, Vietnam had only auto repairers until 1990s, thus basically there are a few pure Vietnamese autoparts makers in Vietnam. They are mainly members of the state-owned automakers. At present, private automaker chiefly hold self-assembly of parts and components in house for their own products and have not yet exchanged their parts and components. While the state-owned automakers are big corporation, so they have their own autoparts suppliers. However, machinery and technology of these autoparts makers are rather backward. Additionally, private automakers hardly source parts and components from state-owned automakers and the state-owned automakers scarcely source from other state-owned ones. Moreover, there are modest products of foreign-invested autoparts makers are sourced by PVCs due to high price.

Capital factor was given higher score by PVCs. All said that they need mobilize more capital to invest in car assembly as well as modernize their autoparts production. Presently, Vinamotor has up to 42 affiliates, out of which more than 30 are autoparts makers. However, machinery and technology are rather out of date, so need to be upgraded. Recently, Vinamotor imported new machines for production of wire harness, seat, break, muffler, bearing, driving axle. Vinaxuki aggressively invested in high technology stamping shops.

For the technology factor, PVCs had different opinion from JVs. PVCs said that technology can easily be transferred from overseas companies (they did not emphasize backward machinery domestically). They said workforce was important, and Vietnam have good workforce to receive foreign technology.

Land factor is not the hindrance to the state-owned automakers because they still have many unused land around their factories. However, Vinaxuki and Truong Hai faced with difficulty in renting lands for their factories, especially in the beginning time of business foundation.

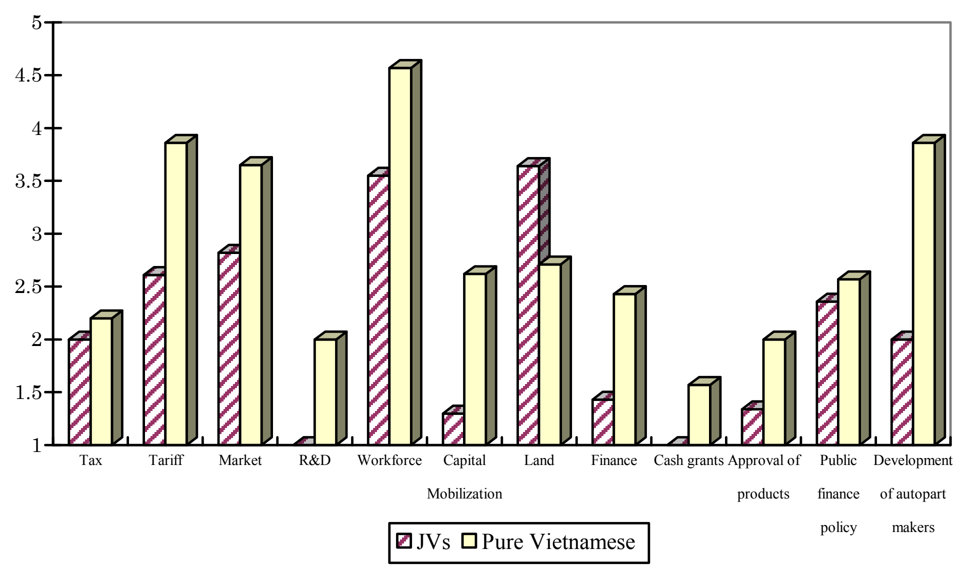
PVCs agreed with JVs in R&D factors. This time is still stage for learning, not for deeply research in Vietnam.

In conclusion, the most important factors of localization are government policy, market, autoparts industry. However, response of JVs to government policy seems to emphasize on protection, in the meanwhile, the PVCs focus more on incentives. For the autoparts industry, different standards between PVCs and JVs to the parts and components and lack of cooperation among automakers deepen the shortage of autoparts makers. Although appreciation of technology in localization, the JVs looks into the backward in the local industry as an obstacle of localization, while PVCs believed out-of-date technology did not impede localization because it can be transferred from overseas. Capital factor was considered as important factor in localization by the JVs, but PVCs believed it is necessary to improve their production of autoparts and components. Land is not matter for most automakers except for private automakers. For the R&D factor, all agreed that it did not effect localization now.

5.4. Role of current government policies on localization of auto products

Chart 2 shows us assessment of automakers on effect level of governmental policies on localization. 1 is the least and 5 is the most. Rating results shows that JVs seems not to appreciate current policy, in the meanwhile PVCs are more optimistic with the policy.

Chart 2. Effect of Government Policies on Localization of Auto Products



Note: *Financing refers to interest cost or credit policy
* Public finance policy refers to investment in public projects such as power, water, telephone communication, transportation…
* Cash grants refers to cash subsidy for good projects

* Official approval of products refers to granting approved status to locally produced products which meet normal standards of quality

Source: Research result

JVs' Assessment

Tariff policy is always argumentative topic among the public, researchers and automakers because it has direct effect on the Vietnamese auto industry. Especially, recent consecutive adjustments on tariff on imported CBU and autoparts have made increasingly controversy. By 2004, tariff policy was approved in order to stimulate the local production, a high import tariff of 300 percent are levied on CBU (complete build up). High tariff was also levied on imported set of autoparts . Since 2004, tariff was consecutively changed toward decreasing protection. Tariff on imported CBU was reduced repeatedly. Tariff on set of autoparts was decreased too. Particularly, since 2006, tariff on separated parts and components has been applied instead of tariff on autoparts set.

In general, JVs did not appreciate effect of tariff on localization. Instead of source of local parts and components under pressure of high imported tariff, JVs added tariff on price of cars. Each time of tariff adjustments, JVs all increased price of their products. Presently, tariff accounted for 30% to 40% price of car. Some JVs which can not suffer this pressure of tariff even closed their production line such as Daihatsu Vietnam or VMC. Some JVs said newly adjusted tariff restrained them production of trucks, because it makes higher tariff on imported parts and components for trucks.

Similar to tariff policy, tax policy was not high valued on its effect on localization and it made higher price of cars. It was scored low and criticized not to support to the enterprises. Automobile companies are exempted from income tax for the period of 4 years, get 50% decrease in income tax for 8 years since making profits, get preferential income tax of 15% to 20% depending on their location (income tax is normally 25%). JVs particularly opposed newly-approved special consumption tax (SCT) in which Since 2004, special consumption tax (SCT) remission rate was decreased from 95% to 70% in 2004 and 50% in 2005. In addition, there is no tax incentive for automakers which achieve higher local content ratio.

Market policy is extremely interested by the automakers (as suggested above), however it appears inefficient. This policy was only praised at creating domestic market priority to local automakers. For quite a long time, imported cars including brand new ones and used ones have no room to enter in. However, policy makers limited domestic market due to the concern of imbalance between infrastructure situation and cars in circulation. The tiny market (under 80,000 units a year) which is shared with many assemblers narrowed down production volume of JVs to some thousand units a year. JVs said that they can not invest in autoparts production just for tiny domestic demand and they are also unable to attract autoparts makers because their orders have not yet satisfied minimum volume required by autoparts makers. Moreover, it is unable to expand market overseas due to over high price of car (1.5 to 2 times higher than in Thailand and 2.7 times higher than in Japan[20]). The export have not yet been withdrawn attention from policy makers. Although JVs suggested tariff award to enterprises which can export their products including cars and autoparts, it was not accepted.

Valuation of effect of policy of autoparts industry development was marked 2 by JVs. Up to now, there is no special incentive for encouraging autoparts makers. Autoparts makers follow

[20] Report on Vietnamese automobile development. Vietnamese Ministry of Industry.2006.

normal incentives such as free investment (100% foreign investment is accepted), no export tariff, no income tax for 5 years and so on. At present there are no projects of autoparts manufacture which is submitted to Vietnamese Ministry of Planning and Investment[21]. Toyota Vietnam just finds out 8 autoparts suppliers, Honda Vietnam has only 2, Mitsubishi Vietnam has 2, Ford collected 3, the other JVs have no local autoparts suppliers. So it could be said that policy of autoparts industry development has not yet had promoted localization in Vietnamese auto industry. Joint-ventures can accept a little products except for some low tech parts and components such as seats, wire harness, cassette, battery, exhaust pipes, carpets, brake oil pipes, seat ankle…manufactured by foreign-invested autoparts makers. There was only battery of one pure Vietnamese company was accepted by Toyota.

Workforce was appreciated. Local workers can take many type of positions in the factories. In many factories, there are no foreign technicians. However, JVs still need more assistance in training workers because Vietnamese workers are not well-educated in practice.

Land was appreciated by JVs. It is not difficult question to automobile companies because there are various industrial zones located in favorable sites around major cities and all JVs have one or some state-owned partners which posses plenty of factory areas.

Public finance policy was valued as not bad with available power, water, communication, transportation.

Capital mobilization policy, cash grant policy, finance policy, product approval policy were assessed to having almost no effect on localization. No JVs got any cash grant or benefit any from finance policy for promote localization. Particularly, there is no R&D section in JVs.

PVCs' Assessment

Almost PVCs started their production after a series of adjustments in tax and tariff, so majority of them were not benefited from protection period. However, they still found out their way to develop and are aggressive in localization.

PVCs appreciated tariff policy in localization. PVCs believed that tariff policy implemented good function in encouragement of utilization of parts and components that can domestically produced and stimulate them increase localization. In contrast to JVs' attitude to tariff adjustment, price of cars produced by PVCs kept stable and they even tried to improve localization in order to reduce production cost. So they can sold vehicles with price a half or one-third cheaper than products of JVs.

Similar to the answer of JVs, PVCs' assessment on tax policy, accurately SCT and VAT, was not appreciated. They said tax policy seems not to have effect on localization. It only push price of cars up.

Market policy was appreciated at creating domestic market for local automakers. Especially market of minivan, bus, truck are in favorable condition for PVCs. State-owned enterprises can supply cars to their affiliates which operate transportation services or production or some can get order from government (for example projects of replacement of out of date cars or agricultural vehicles).

---

[21] Report on Industrial investment projects. Ministry of Planning and Investment. 2007

PVCs had not so bad assessment of policy of autoparts industry development as JVs. They said that although pure Vietnamese autoparts makers just focused on labor-intensive and low-technology products in Vietnam, current policy encouraged them further investing to modernize production and they can supply better products. In some recent years, there are much changes in autoparts makers, especially state-owned enterprises. In the private sector, there is no one investing in autoparts production, however, private automakers held autoparts production in house or order their mechanical affiliates.

As JVs' opinion, workforce was appreciated owing to hard-working, smart, skilled workers. In all factories of PVCs, there is no foreign technicians, technology were transferred to local workers and then they can operate production line independently. In some enterprises, Vietnamese workers self-designed, self installed factories, machines, testing rooms, painting pool and so on, help saving a half fees for construction.

Land is not the matter to the state-owned automakers because they have available lands provided by the government. However, private automakers criticized land policy. They said that it is difficult for them to stable their factories. Vinaxuki must move their factories some times until they rent the current factory. It did not get any support from the government on settling down their production.

Public finance policy was also valued not bad. Capital mobilization and Finance policy facilitated the automakers in production expansion, new investment in modern machines and so on.

Cash grant policy was not appreciated by PVCs. Even the state-owned automakers which were thought to be easy to get this kind of subsidy said that they did not get much subsidy from government in cash. For their project of engine production, they hope to get subsidy, but so far they did not get approval. In almost projects of car assembling, they did not get money from the government.

Approval of products policy were said not to be effective in unifying standard of products. So far, each automaker has their own standard, so each autoparts makers can only satisfy requirement of one or two automakers and automakers are quite independent in localization, they scarcely exchange autoparts with each other. R&D policy also have a little effect on research operation in the factory. Creation just limited at application of imported technology into production and improvement of machines and equipments. although the government plan to give financial support for research and development activities, in fact, no projects is approved and financed, also enterprises do not care it much.

6. Conclusion

Vietnamese automobile industry has started since 1991, however, car manufacture is just limited at simple assembling and localization remains rather low and restrains at labor-intensive and low-technology autoparts. It is necessary to influence on key localization factor to break down this stagnation in localization. However, the industrial policy has not yet been proved their positive effect on localization.

Stagnation in localization process seems to be the result of automakers' hesitation toward sourcing more local parts. JVs mostly source a tiny locally-produced parts and components. There are even some JVs which do not source any locally-parts and components. In the meanwhile, the PVCs seem to be more aggressive in localization which are proved in their local content ratio. However, their localization just utilized labor-intensive and low-technology parts and components such as interiors, bodywork, tires, tubes, etc. Localization progress seems to be slow down when newly-targeted parts and components are more complicated, requiring higher technology.

The automobile industry clearly needs an encouragement to overcome the current situation. Among localization factors, both JVs and PVCs agreed that government policy, market, autoparts industry factor are the key points. The study proved that automakers look upon move from policy makers to decide their strategy, thus, government policy must be built up basing on long-run strategy. it must be transparent, concrete in order to create a fine business environment to automakers. JVs tend to look for protection from the government to stable their localization plan. However PVCs need both protection and incentives to localize more. The market factor is believed to be the central one because present small market obstructs them taking advantage economic scale. A small number of autoparts makers, technology and production cost gap among them narrow down chance of sourcing locally-produced parts and components. Technology factor and capital factor were considered carefully, however, JVs believed that improvement of technology is essential, while PVCs believed that it can be imported and what they need is capital to cover expenses for learning.

Amid the current situation, industrial policy is useful and helpful to facilitate localization in the auto industry. However, JVs did not appreciate effect of industrial policy on localization. Especially, policy of market and policy of autoparts industry development which were the most important localization factors were not high valued. Only workforce and land are valued more positively by JVs. In the meanwhile PVCs proved more optimistic response. Industrial policy mostly were scored higher by PVCs than by JVs. Tariff, market, autoparts industry development, workforce, land, capital mobilization, finance, public finance were assessed to have positive effect on localization. Only R&D, cash grant and product approval were not appreciated. Thus, current policy seems to facilitate PVCs, but miss requirement of JVs.

In conclusion, to deal with the current situation in localization, industrial policy needs to be wisely utilized. On the one hand, it must promote market expansion, autoparts industry development, technology improvement and capital collection. On the other hand it must create a fair business environment for automakers.

References

Aswicahyono, Haryo; Anas, Titik and Yose, Rizal. *The development of the Indonesian automotive industry*. Centre for strategic and international studies, Jakarta. July 1999.

Audet, D. and C.Van Grasstek. *Market access issues in the automobile sector. OECD proceddings, Paris.* OECD. 1997.

Bora, Bijit; Lloyd, Peter J.; Pangestu, Mari. *Industrial policy and WTO.* United Nation Conference on Trade and Development. 2000

Brooker Group. *Automotive Industry export promotion Project.* Thailand Industry Overview. Executive Summary. 1997.

Kobayashi, Hideo. *Post war Japanese economy and South East Asia.* New Day Publishers 11 Land Street, VASRA, Philippines. 2002

Humphrey, John; Lecher, Yveline and Salerno, Mario Sergo. *Global strategies and local realities: The auto industry in emerging market*. Mac millan Press Ltd. 2000.

Hart, Jeffrey A..*Can Industrial policy be good policy?*. Indiana University. 2001.

Ito, Keiko. *Foreign ownership and Productivity in the Indonesian Automobile industry: Evidence from establishment data for 1990-1999.* International Centre for the study of East Asian development-ICSEAD. Development Research Group, World Bank. April 2003.

Ishizaki, Yukiko. *The automobile industries of ASEAN countries*. RIM Vol.I, 1994.

Ishizaki, Yukiko. *New phase in Asia strategies of Japanese-affiliated Automobile and Parts Manufacturers*. RIM Vo.I, 1996.

Pursell, Garry. *Australia's experience with local content programs in the auto industry: Lessons for India and other developing countries*. 1999.

Sturgen, Timothy J.. *The automotive industry in Vietnam: Prospects for development in a globalizing economy.* Report prepared for Development strategy Institute-Vietnamese Ministry of Planning and Investment and Medium-term Industrial Strategy Project- United Nations Industrial Development Organization. July 1998.

Takayasu, Ken-ichi. *Developing the Vietnamese automobile industry. RIM Pacific Business and Industries.* Vol.40. June 1998.

Khosla, Anil *transl*. *Economic analysis of industrial policy*. San Diego. Academic Press. 1991

Sharma Kisho *Edt.*. *Trade policy, growth and poverty in Asian developing countries*. London. NewYork: Routledge. 2003.

Hufbauer, Clyde Gary & Rsen, Howard F.. *Trade Policy for troubled industries.* Washington DC.: Institute for international Economics. 1986.

Audretch, David B. *edt.*. *Industrial policy and competitive advantage.* Northampton, Mass: Edward Elgar Publ. 1998.

Inoue, Ryuichiro; Kohama, Hirohisa & Urata, Shujiro *edt.*. *Industrial policy in East Asia.* Tokyo. JETRO.1993.

Athukorala, Prema Chandra. *Trade Policy in Asian development.* London. New York: Routledge. 1998.