

## A Long Way of Volkswagen's Internationalization: Strategies and Dynamics of Capitalism

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**Abstract:** This paper presents an analysis of Volkswagen's economic development in respect of internationalization. A theoretical frame work has been made in order to understand the internationalization and economic development of Volkswagen by using internationalization theory and Porter's diamond model. A review of its historical development and strategic framework, in relation to management, organization and globalization, has been discussed with a view to the factors that led Volkswagen to enormous economic development. Lastly, a summery of remarks in respect of Volkswagen's contribution to the German economy and its destiny of internationalization have been presented.

**Key words:** Internationalization, dynamics of capitalism, analysis of volkswagen's

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### INTRODUCTION

As the economist Joseph Schumpeter once wrote, that the essence of capitalism is precisely a kind of disruption. Schumpeter saw capitalism itself as a process of industrial mutation-if I may use that biological term-that incessantly revolutionize the economic structure from within, incessantly destroying the old one. incessantly creating a new one<sup>[1]</sup>.

A capitalist system is organized around a market economy that emphasizes private property, entrepreneurial opportunity, technological innovation and the sanctity of contracts, payment of wages in money and the ready availability of credit. Modern capitalism, by contrast opened up labor markets and fostered cash wages systems. More broadly, capitalism promoted a dynamic, flexible and future oriented way of thinking<sup>[1]</sup>. Modern capitalism is not only derived by one aspect of the country, rather it is derived by so many macro environmental aspects such as societal structure, cultural phenomena, economic pattern, business association, labor organization and management practice etc.

A study on third industrial revolution in 1950 to the present, as reported by Thomas K. Mccraw<sup>[1]</sup>, led by United States, Japan and Europe has pointed out the following factors responsible for the dynamic capitalism such as rise of the information economy, immense increase in the volume of international trade, investment and finance. More specifically, if we integrate the driving forces of modern capitalism, revolution of information technology and the globalization are crucially driving the

modern industrial capitalism in this era of liberalization. On the other hand reversibly we can also say that dynamic capitalism is being derived by globalization.

In this study, we will discuss one of the crucial aspects of globalization, Internationalization, in respect of Volkswagen and the dynamic capitalism in German society. Obviously it is needless to say that dynamic capitalism of a giant transnational company Volkswagen is definitely one of the core industrial driving forces influencing German economic development since its inception, but the access to the internationalization made a dynamic change in its own structural development that contributed to the German socio-economic development.

The liberalization of trade, finance and investment across the world has opened vast new territories for the expansion of dynamic enterprises<sup>[2]</sup>.

German industrialization began in Saxony. Car manufacturing has a long-standing tradition, including brands such as Horch, Audi, DKW, Wanderer and Auto-Union. Volkswagen came first. In addition to the two assembly plants in Zwickau (Golf, Passat) and Chemnitz (engines), VW now has a third location in Saxony-the unique Transparent Factory (Phaeton) in Dresden. Today more than 60,000 people are employed in the automobile sector, in which there are 500 small and medium-sized suppliers<sup>[3]</sup>.

Present study focuses on the core competencies of Volkswagen such as strategies, labor, organization, management, corporate governance. It also discusses the external opportunities like attractive production locations, big markets, technologies, investment and financial

opportunities emerged from the globalization, which led Volkswagen to a modern dynamic firm. However, the main objectives of this study, as a holistic view, are

- Understanding the internationalization process of Volkswagen since its inception.
- Analyzing the factors affecting dynamic structure of Volkswagen in the process of internationalization.
- Understanding the strategic approach of Volkswagen's industrial capitalism.

However, a brief description of the evolution of internationalization of Volkswagen is given to understand the trend of dynamic capitalism of the company, which was stimulated by the internal motivation and competition, at the early stage and later on forced by the globalization. A complete profile of Volkswagen's internationalization, divided into pre-90 and post-90 has also been presented. Lastly concluding remarks have been made in view to dynamic industrial capitalism and its contribution to the German macro economy.

**Brief history of Volkswagen:** Volkswagen was founded by Ferdinand Porsche in 1937. After a long time working by Daimler, Ferdinand Porsche started his own automobile advisory company. Since he realized that his proposed model wasn't accepted by the client, he made link with the Nazi-government to produce the car to make his dream true. In the Second World War the factory of Volkswagen was used for the production of war materials. After the war the British army restarted the factory and the model, designed by Ferdinand Porsche, showed to be going to be the most sold car ever: The Beetle. In the fifties Volkswagen started to sell and, in some cases, produce in other countries, for example: Canada, USA, Brazil and South-Africa. In 1964 Volkswagen opened a plant in Mexico to be a bigger player on the USA-market. In the seventies and eighties Volkswagen bought other companies, for example AUDI in 1969 and Seat in 1986. In 1974, Volkswagen started the production of the Golf, one of the new generation cars of Volkswagen. Beginning 90's, Volkswagen was involved in some crisis, but after introducing the New Beetle in 1997 they proved to be a solid carmaker in the international market.

#### **THEORETICAL PROSPECTIVE OF VOLKSWAGEN'S INTERNATIONALIZATION**

##### **Volkswagen as a German centred international player:**

At the beginning of the 1990s Volkswagen was the only German carmaker with a considerable level of international production activities. Although BMW and Daimler-Benz,

the other two of the German Big Three car assemblers, sold more than half of their overall car production outside Germany in 1990, BMW realised only less than 4% of its production not in Germany (mainly CKD-assembly in South Africa) and Daimler-Benz had no passenger car production facilities abroad at all at that time. In the same year, 1990, the Volkswagen consortium (consisting of the brands Volkswagen, Audi and SEAT at that time) sold exactly two thirds and produced 40% of all units outside Germany. The structure of internationalisation of the German carmakers which prevailed until the end of the 1980s was characterised by Ulrich Jürgens as follows: Daimler-Benz is still exclusively a German company in the area of car production; it only has international production sites in the area of trucks and commercial vehicles. BMW and Porsche, finally, are the firms which are most closely limited to Germany in their production and work force<sup>[4]</sup>. He described the Volkswagen consortium as the only German automobile company that pursued an internationalisation strategy with regard to its production system and as a European oriented corporation. This definition of Volkswagen as a European oriented corporation could be quite adequate for the situation until the beginning of the 1990s-but holds it also for the last decade<sup>[4]</sup>.

In a more recent analysis, Jürgens distinguished three periods of the development of Volkswagen's industrial model which are separated from each other by periods of internal crisis, indecision, trial-and-error approaches and accompanying internal controversies and uncertainty, which were of extended length: from around 1968 until 1974 in the first case and from around 1988 until 1994 in the second. One important question is: What came after the period of internal crisis, indecision, trial-and-error approaches and accompanying internal controversies and uncertainty in the past decade<sup>[4]</sup>.

The main argument is that Volkswagen changed its business model and production system as well as its internationalization strategy in this decade. After a small crisis until 1993/94, almost during the second half of the 1990s Volkswagen-as well as BMW and Daimler-Benz-played a very active and successful role in the international automobile industry.

It is argued that Volkswagen's crisis of 1993/94 reflects only a transition period towards a new and successful consortium profile where major changes in the three dimensions of (1) corporate governance and profit strategies, of (2) product structure and market strategies and of (3) production systems at plant and headquarters level coincided with important shifts in the internationalisation profile. In short, Volkswagen's internationalisation profile changed from a multinational

to a transnational company. Meanwhile in multinational companies all three dimensions are structured mainly by a multiplicity of local logics of the plants and headquarters, in trans-national companies they are modelled increasingly by a global or at least by a plurilocal logic<sup>[4]</sup>.

This differentiation of multinational and transnational companies combines aspects of the spatial structure of co-ordination and control<sup>[5]</sup>, of the configuration of values, capacities, knowledge and functions<sup>[6]</sup> and of the overall spatial division of all productive functions of the value chain<sup>[7]</sup>. At the beginning of the 1990s, BMW and Daimler-Benz were completely German-centred companies concerning their corporate governance and profit strategies, their product structure and their production systems. But as highly internationalised with respect to their market strategies both companies could be described as distribution oriented multinational company.

Volkswagen on the other hand could be characterised as a production oriented multinational company. During the past decade Daimler-Benz began to internationalise mainly its corporate governance structure (merger with Chrysler) and its production system (new production sites in a lot of countries), meanwhile BMW experienced a failure with its engagement in Rover and returned to be a highly German centred and distribution oriented multinational company.

The argument has been put forward that Volkswagen started the 1990s as a production oriented multinational company but took significant steps towards becoming a transnational company operating globally at the levels of market strategies and production systems, but remaining strongly a German centred company in relations to its corporate governance and profit strategies<sup>[4]</sup>.

**Internationalization theory fits with Volkswagen's pathway:** Internationalization is one of the steps of dynamic structural changes of the firm. Ultimately Volkswagen's sustainable growth in the domestic market as well as strong motive of being an international player led by competitive market forces and globalization reveals the degree of its dynamic structural change.

However, it is necessary to track the steps of internationalization of Volkswagen so as to understand its motive of dynamic capitalism as well as the degree of intensity of structural changes.

There are a number of different approaches to internationalization. These variously are based on increasing forms of involvement or commitment. They reflect the fact that, since World War II, the international trading environment has become more complex and the interdependencies between firms in different countries

become much greater. The first of these approaches classifies firms in terms of management approach to international involvement<sup>[8]</sup>.

Here, according to Fletcher and Brown<sup>[8]</sup> we use the following approach, which does extremely fit with Volkswagen's internationalization process.

**From domestic to transnational:** In this approach, firms are considered in terms of their orientation. On the one hand, the firm can operate as a domestic entity and in the past could be quite successful operation within the domestic market.

**Export marketing:** It is the first stage in the firm's exploration of opportunities outside the home market. By leveraging its experience in the domestic market, the firm exports its products overseas. This may involve a separate strategy to produce specifically for an overseas market or it may be the result of an attempt to dispose of surplus production or utilize excess production capacity. International marketing extends international involvement further and usually includes a greater commitment of resources to the overseas market.

In case of Volkswagen, it began to export cars in 1949 with an introduction in the Netherlands and gradually in other European countries and USA. Since its inception in 1937, after twelve years of operation, Volkswagen became a huge production oriented company because of Hitler's People's Car skim as well as active participation in military car production in Second World War, which led Volkswagen to expand its learning curve as well as to achieve economies of scale in production and management.

Similarly, post war high inflation, shrinkage of domestic market, huge amount of production and market seeking motives led Volkswagen to export abroad.

**Multinational:** This involves creating programs specifically for each overseas market that take into account the different and unique circumstances of each country. In this second stage of internationalization the firm's motive may be either market seeking or resource seeking, or both. Therefore, in 1952, with the establishment of Volkswagen Canada Ltd. it started exploiting the market of North America. However, further establishment of Volkswagen do Brazil Ltda. became the largest Brazilian car manufacturer led by resource seeking and market seeking motive of internationalization. In this stage two kinds of pathways of internationalization are seen e.g. distribution-oriented-such as Volkswagen of South Africa Ltd, Svenska Volkswagen AB in Sweden and

production-oriented such as Volkswagen Brazil and Volkswagen China.

**Global or transnational:** Finally global or transnational marketing, the last stage of internationalization, focuses on leveraging the global assets of the firm by taking what is truly unique and different in each country in which it operates combining the unique features to create the most globally competitive offering. The transnational firm does not have a centre from which decisions are dictated to operations else where-rather, the various operations operate relatively autonomously. They are connected to each other in the interests of dissemination of information and global rationalization. However, the effect of rapid globalization as such decentralization of the production, restructuring the organization took place in Volkswagen since 1990.

Multinational Volkswagen Ltd has become a global player by diversifying production around the world, restructuring organization such as Volkswagen Finanz GmbH, which is transformed into a stock company on 1 January 1994 as a bank Volkswagen Financial Services AG, to enable the access to the lowest-cost financing on a world basis.

Moreover, they also took the advantage of being first mover in China by setting up two production-base joint ventures with Chinese participation as well as acquiring a number of companies in different parts of the world.

In addition to this, product diversification and consumerism concept, e.g. Rent a car service through Europcar International S.A and Financing and leasing to the end users, have derived Volkswagen to dedicate itself to a real transnational company after 1999.

In the steps of internationalization process, Volkswagen's movement tends to be a path-oriented step forward advancement derived by the global industrial capitalism as well as organizational setting. As we pointed out that Volkswagen initiated its internationalization through small scale exporting to neighbor country The Netherlands and gradually stepped up to the next stage multinational. Since the wave of globalization hit the world industrial capitalism, interestingly, Volkswagen also changed its organizational structural to respond that wave and became trans-national company. According to the rapid dynamics of industrial capitalism of the world Volkswagen keeps continuing the changes in structure and strategy in response to the market competition. Its development of being international is therefore path-oriented in terms of the internationalization steps, which was derived time to time by the wave of globalization and market competition.

## APPLICATION OF PORTER'S DIAMOND THEORY IN VOLKSWAGEN'S INTERNATIONALIZATION

However, to understand the driving factors of dynamic industrial capitalism, in the context of globalization, Porter's 'DIAMOND' model has been used to analyze the nature of Volkswagen's internationalization (Fig. 1).

Porters 'Diamond model' shows the interaction of four conditions that usually need to be favorable if an industry in a country is to gain a global competitive advantage<sup>[9]</sup>.

In case of Volkswagen, Porter's diamond shows that four conditions are important for competitive superiority; a complete explanation is given below, which gives a clear indication of its overall dynamic capitalism through the internationalization, based on following competitive components.

**Demand:** Demand, at the initial stage of capitalism of Volkswagen, was derived by People's Car concept and production of vehicles for the military during World War II. Rapid increase of sells and expansion of distribution network in Europe, North America, Australia, South Africa and last of all Asia led by market seeking motive, is the second phase of responding to the dynamic capitalism of the car industry.

**Factor Condition:** Diversification of production makes the product cheap in the nearest market of its production, product line extension and product diversification meets the perfect consumerism concept. Volkswagen consortium concept creates several distributions, production and market-based networks around the world. Volkswagen

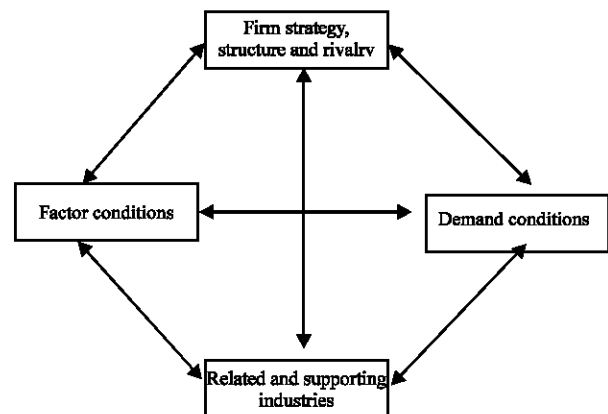


Fig. 1: Determinants of Global Competitive Advantage in the development of capitalism<sup>[5,9]</sup>.

also exploited the absolute advantages of its capital and organization as well as locations abroad as it moved to cheap labour and raw material based countries such as Brazil, China, Mexico. It also considered the comparative advantage from the specialization of the country in terms of knowledge, existing backward linkage facilities and expertise in specific field.

**Related and Supporting Industries:** Volkswagen took the first moving advantage in China and Brazil. It has created the strong backward and forward linkages around the world through the concept of consortium. Volkswagen estimated the limitations of the product life cycle as well as the trend of dynamic capitalism of the car industry around the world in terms of rapid changes of consumer's taste and technology. Therefore, it has expanded the product lines and set up a plant in China for producing the trucks, as China is going to be the factory of the world. Organizational structure has also been broadened up to financial institution, which is a kind of expansion of forward linkage keeping a view to rapid dynamic capitalism in globalization.

**Firm's Strategy, Structure and Rivalry:** Volkswagen has changed its global strategic view from production oriented to consumer oriented (Detail is explained in the Global marketing concept of Volkswagen) through transnationalization. Industrial rivalry from the Japanese and USA's point of view has been emerged, which is also another force of new trend of dynamic capitalism in the vehicle industry. Globalization itself is a competitive force that derived Volkswagen to be more strategic and competitive. To face the rivalry, Volkswagen consortium consists of different nature of companies from different countries around the world has been developed. Production of the cars is also being decentralized according to engineering of the production in order to enjoy the economies of scale and scope.

However, the above mentioned points in the analysis of Porter's diamond model in respect of Volkswagen show an apparent indication that it has been moving forward to gain global competitive advantage, therefore, keep changes its structure and strategies to cope with the dynamics of industrial capitalism through the process of internationalization.

#### **HOW DOES INTERNATIONALIZATION INFLUENCE VOLKSWAGEN'S STRUCTURAL AND STRATEGIC CHANGES**

**Volkswagen as a genuine international company:** After World War II and the corresponding debacle of the

Volkswagen factory after war production for the Nazi-regime (from 1939 until 1945 Volkswagen produced only about 600 civil cars!) the plant in Wolfsburg was administrated by the Allies until 1947. Since the very beginnings of the after-war-production a considerable share of the total production of Beetles and Bullis was exported. Even in 1947, 1656 or 20% of the total of 8382 cars were sent abroad. In 1949 the Allies handed over the company to German state ownership (as Volkswagenwerk GmbH). In the same year, the first two Beetles were exported to the USA, beginning thereby the success of the Beetle in the biggest auto market of the world. Since the 1950s Volkswagen opened overseas plants in a considerable number of countries, mainly in the so called Third World. Therefore, Volkswagen has to be considered an internationally active company from its beginnings. To understand the characteristics of the new internationalisation period of the 1990s it is worth to summarise briefly the preceding trajectory. Focusing on economic development, industrial relations and the regulation mode some authors differentiate a phase up to the crisis in 1966, a phase of recuperation up to the end of the 1970s, a third phase of decrease from 1980 to 1983, a fourth phase of renewed expansion from 1984 to 1991, a fifth phase of crisis and adjustments in 1993/94 and a sixth phase of dynamic growth<sup>[10,11]</sup>. Analysing the industrial-model Jürgens distinguished the aforementioned three periods, first up to the crisis and adjustment of 1967/73, second up to the crisis and structural change of 1988/93 and third beginning from the mid 1990s (Jürgens 1998).

As far as this chapter concentrates on the internationalisation profile of Volkswagen in the context of the overall consortium profile, the main concerns are on the specific structures and strategies of the geographic-spatial distribution of resources, functions, competencies and power between the headquarters and plants. This spatial configuration of resources, functions, competencies and power between headquarters and plants refers to the already mentioned three dimensions of (1) corporate governance and profit strategies, of (2) product structure and market strategies and of (3) production systems. Based on these concepts three phases of Volkswagen's internationalisation profile could be distinguished as indicated in Table 1.

During the first phase (1940s to 1967/69) Volkswagen operated as a distribution oriented multinational company. World-wide distribution was organised with independent general import partners or by direct Volkswagen dependencies like in Canada, the USA and France. Assembly and production facilities were opened in countries like Brazil, Mexico, South Africa and Australia where national regulations hindered free market access. In this context, new and highly integrated production

Table 1: Three phases of Volkswagen's internationalisation profile

Phase resources, functions competencies and power to define	Distribution oriented Multinational Company (1940s to 1967/ 69)	Production oriented multinational company (1967/69 to 1990/92)	Globally operating transnational company (Since 1990/92)
Corporate governance and profit strategies	Centre-periphery configuration	Centre-periphery configuration with centralisation	Globlised centralism and intra-organisa- competition
Product structure and market structure	Centre-periphery configuration	Centre-periphery configuration	Globlised platforms with regionally speci- fied hats
Production system	Centre-periphery configuration	World wide produc- tion network	Global learning and transfer of general Production principle

Pries. L.<sup>[4]</sup>

facilities with press shop and stamping, body shop, painting, subassembly and final assembly were constructed in the 1950s in Anchieta/Brazil and in the 1960s in Puebla/Mexico.

These plants represented the dominant internationalisation strategy of the consortium during this period: With old and used tools and machines (for example discarded stamps from Germany) the factories produced older models (the old Beetle and Combi) mainly for the protected national markets and local plant management had relative high autonomy from the headquarters<sup>[11-13]</sup>. The main strategic aims of the distribution oriented multinational company were to secure access to potentially big markets and to use cheap labour in work-intensive fordistic production lines. There was a very clear technological hierarchy of products and production systems and a definitive division of labour between the core plants in the centre and the peripheral overseas plants. For managers, it was a certain kind of punishment and a career disadvantage to be sent to such an overseas plant for some years.

During the second phase (1967/69 to 1990/92) of its internationalisation trajectory Volkswagen can be labelled as a production oriented multinational company. The centre-periphery-figure maintained stable regarding the corporate governance and profit strategies and the product structure and market strategies (with some tendencies towards a centralisation of profit strategies) and considerable efforts were made in the field of world wide production networking (the so called 'Verbundproduktion'). Similar cars were assembled in a wide range of world wide distributed plants. In spite of the clear polarisation of old products in the peripheral plants and new ones in the central plants, now all of the company parts were redefined in a transnational division of labour<sup>[4]</sup>.

Nevertheless, a strong hierarchy of products and production technologies between core and peripheral plants remained. Whereas the latter had functioned

exclusively for local market access during the first period, they were now increasingly integrated into a global division of production.

According to main production capacities and economy of scale-criteria a growing share of auto parts were produced in other than their locales of assembly. For instance, the Volkswagen plant in Puebla/Mexico produced millions of body parts and rear axles for export to Germany and other Volkswagen plants from 1974 up to 1991; it exported CKDs to the Nigerian assembly plant of Volkswagen in 1984/85; and it produced millions of doors, chassis parts and engines to the Westmoreland/USA plant from 1984 until the closure of that assembly facility in 1988/89<sup>[4]</sup>.

The world wide production networking ('Verbundproduktion') went along with a vertically highly integrated production in the Volkswagen consortium of more than 50% of added value. Meanwhile during the first phase the peripheral plants were just passive, less productive 'dependencies' serving protected markets and to a great extent were not connected to the production flows in the centre, during the second period the main peripheral plants gained an important role in the overall transnational division of labour inside the company. Concerning the product structure and market strategies the basic centre-periphery figure maintained: the peripheral plants produced and sold out-fashioned models (like the old beetle or the first generation of Golf) or even produced their own locally developed products as e.g. in Brazil with the BX-series models<sup>[14,15]</sup>.

In general, the 'modernity gap' of models produced in the periphery compared with those produced in the centre closed slowly during this phase, but it still remained tangible. For instance, the Shanghai plant produced an older Santana-model, when in Germany and Belgium a newer one was already assembled; the Volkswagen de México plant manufactured the Golf A2 model when in Germany the next generation of Golf A3 already was assembled. Peripheral plants like those in

Brazil, Mexico and South America became more important; besides the criteria of access to a protected market and to cheap labour, these factories entered more and more into transnational productive networks and macro-regional market strategies (like using Mexico as an export base for the USA and Canada, when the Westmoreland factory of Volkswagen USA was closed in 1988). In terms of the internationalisation profile of the overall consortium, these tendencies were precursors of the third period<sup>[4]</sup>.

**The internationalisation trajectory of Volkswagen in the 1990s:** During the time from the 1980s to the 1990s Volkswagen began to shift more and more from a simple multinational company to a globally operating transnational company. The traditional centre-periphery configuration began to become less significant, although Volkswagen is as will be shown far away from turning into a rootless global company. The internationalisation profile changed qualitatively by integrating new foreign companies and brands and by reorganising the overall corporate governance structures. Concerning the product structure and market strategies as well as the production systems there was no longer a fixed and defined hierarchy between a centre and a 'periphery'. On the contrary, the company began to globalise the search for best places and best practices. An important mechanism was diffusing the notion and idea-not necessarily concrete and hard mechanisms-of intra-organisational competition between plants-independently of their former central or peripheral location-for products and production quotas.

Core strategic competencies like design, Research and Development or construction remain in the central plants, but diffuse spatially to a greater extent than before. Recently opened new plants or strongly restructured old ones are considered as technical, organisational and social laboratories in the development of new production systems and best practice principles. The strategic function of each plant is to maximise the exploitation of all local idiosyncrasies and to optimise inter-organisational competition and learning processes within the consortium.

In this overall setting, the 1990s are characterised by fundamental changes in all three dimensions of corporate governance and profit strategies, of product structure and market strategies and of production systems at plant and headquarters level leading to a general shift in the internationalization profile. The argument is that innovations in all these different dimensions and levels were not only additive but cumulative and reinforcing one another. Therefore, it is adequate to speak of an acceleration spiral. Important elements of these transformations will be described in more detail below. To

get a general idea of their scope and quality a comparison with the situation of Japanese automobile companies during the 1980s is useful. The wave of Japanese car transplants that were opened mainly in the USA and the United Kingdom during the 1980s happened mainly due to the highly competitive Japanese production system of lean production. High export rates and a corresponding high favourable balance of trade led to political pressure towards the Japanese car makers to bring production facilities and jobs to the regions of sale, namely the two other triad regions USA and EU.

In contrast to this, the transnationalization push of the German carmakers and especially of Volkswagen in the 1990s started from a situation of fragility and disadvantages. Compared with Japanese and US-companies, the German Big Three Volkswagen, Daimler-Benz and BMW had serious productivity problems detected not only by the MIT-study<sup>[16]</sup>, but also by international benchmarking realised by the firms themselves<sup>[17]</sup>. Although well aware of this situation at the end of the 1980s, German carmakers enjoyed a short and quite artificial recovery period due to the German unification until 1992. Meanwhile and taking advantage of this 'breathtaking period', all three companies initiated a twofold offensive of company restructuring and internationalisation. In sum, the Japanese internationalisation push of the 1980s was based on a position of high international competitiveness, whereas the German internationalisation push of the 1990s started from a disfavoured situation of multifaceted crisis.

So, this internationalisation push actually took place during the past decade-and it was not only an increase in car exportation, but a general shift in the internationalisation profile. Important indicators for the changing spatial distribution of productive resources and functions are the shares of units produced and sold, of employment and of turnover in Germany and abroad (Fig. 2). Taking into account the portion of turnover (in DM) and of sales (in car units) realised outside Germany as share of the total turnover and sales of the Volkswagen consortium (that is: including the different brands existing in each corresponding year Audi, Seat, Skoda, Volkswagen cars and Volkswagen trucks) the Fig. 2 reveals the long tradition and high level of international activities. Since the 1950s more than the half, roughly two thirds of sales and turnover of Volkswagen were realised outside Germany. The two corresponding lines only have one significant peak in 1967/68 (foreign sales compensated the relatively and even absolutely decreasing sales in Germany due to the first severe post-war economic crisis) and one significant break down in 1991/92 (indicating the enormous demand push due to

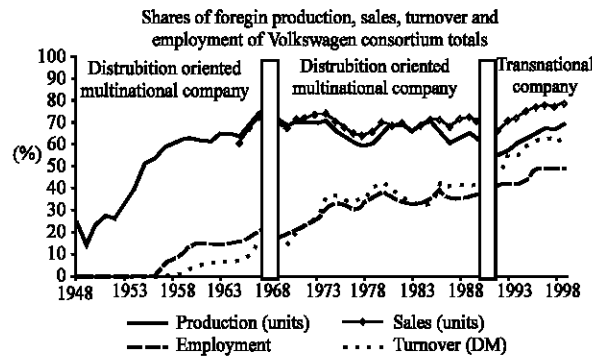


Fig. 2: Three internationalisation phases of Volkswagen consortium (Source: Annual Reports Volkswagen AG)

German unification). Each of these two extremes indicates just the turning point from one period to another<sup>[4]</sup>

Therefore, these shifts from one internationalisation dynamic to another become clearer comparing sales and turnover with production (in car units) and employment (in people employed directly by one of the Volkswagen consortium's companies). Whereas during the first period of Volkswagen as a distribution oriented multinational company foreign production and employment were very low compared to sales and turnover, this relation began to change constantly during the second phase of Volkswagen as a production oriented multinational company: foreign shares of employment and production raised up to 30-40% of total. During the third phase-Volkswagen as a transnational company-this share of cars produced abroad and employment outside Germany went up significantly to 60 and 50%. The growing distance between the two lines indicates the increasing labour productivity of the formerly peripheral plants. At the same time foreign sales and turn over showed a new upward dynamic. The opening gap between sales in units and turnover in DM is considerable but needs careful interpretation. Turnover per sold unit abroad decreases relatively which reflects currency shifts (devaluation of DM in relation to the US \$ and the corresponding US \$ bound currencies, like in Mexico and Brazil) as well as market opening in former peripheral countries<sup>[18]</sup>.

The three periods of Volkswagen's internationalisation trajectory coincide with the findings of Jürgens (1998) concerning the industrial model. However, two additional remarks are necessary.

First, the internationalisation push of the 1990s is not primarily a Europeanisation as indicated by Jürgens<sup>[19]</sup> for the beginnings of the past decade. During the 1990s the share of Volkswagen cars produced in Europe fall from 85% to 70,5%, when the production portion of America

and Africa raised from 14% to 19% and Asia expanded from 1% to 10,5%. Taking into account that the European part also includes the dynamic expansion in Eastern Europe, the significant relative decrease of production in Western Europe remains even clearer. Although Volkswagen developed a lot of new activities in Eastern Europe (Poland, Slovenian Republic, Czech Republic and Hungary) during the 1990s, the increasing production shares mainly of Latin America and of China indicate a qualitative shift towards a globally operating and transnational company<sup>[4]</sup>.

The second point to mention concerning Jürgens' analysis deals with the general judgement of the success and stability of Volkswagen's consortium profile in the past decade. Of course, it is easier to assess this question in 2000 than in 1997. But compared with the relatively pessimistic view of Jürgens<sup>[19]</sup> the Volkswagen consortium-and its industrial model-did quite well throughout the past decade. When Jürgens<sup>[19]</sup> suggested that the strike of 1995 could turn out to be an early sign of a weakening of the very foundations of this model, viewed from now this insinuation was not verified. Obviously, there are some structural problems in the overall profile of the Volkswagen group-which will be described below-but in general the internationalisation trajectory of the 1990s was successfully combined with qualitative shifts in all three dimensions of corporate governance and profit strategies, of product structure and diversification as well as market strategies and of production systems<sup>[4]</sup>.

**Corporate governance and profit strategies:** Structural and strategic changes have also been taken place due to Volkswagen's special corporate governance and profit strategies. Volkswagen kept up to be a strongly Germany rooted consortium which is controlled by shareholders as well as by strong groups of stakeholders. Although the federal state began to sell its 4.8 mL. shares (only to private buyers and in small packages!) since 1988, the state of Lower Saxonia kept its shares of about one fifth of the corporate capital. The specific 'Volkswagen law' of 1960 which prohibits concentration of shares in the hands of private institutional shareholders maintained in force despite of rising, often neo-liberally inspired criticism. This leads to a very original embeddedness of the Volkswagen consortium in national and micro-regional networks of interest and power groups. The corporate governance structure of Volkswagen is traditionally and stayed during the 1990s truly corporatistic in the sense that capital, labour and the state played an important role and have if not equal than at least similar weight<sup>[20]</sup>.



Volkswagen's trajectory during the past decade reveals the importance of this 'corporatistic corporate governance' even for its internationalisation profile. When in 1992 the succession of CEO Karl Hahn was discussed, Daniel Goeudevert as the friendly and communicative best-seller with an ecological marketing approach was at first the favourite candidate in Wolfsburg. But in the face of growing sales and at the same time decreasing profits-as a signal of productivity and efficiency lacks-the supervisory board elected Ferdinand Piëch in April 1992 and designated him as Hahn's successor from January 1993 on. Piëch stood for a relative successful reorganisation of the Audi brand focusing on product innovation and process optimisation. This was an important aspect for the president of the union IG Metall, Franz Steinkühler and the president of the Workers Council, Klaus Volkert, both powerful members of the supervisory board of Volkswagen.

The workers and employees with their representatives were mainly interested in a long term competitive company with a typically German product approach to technology and quality-and therefore supported Piëch against Goeudevert.

With Piëch as the new strong chairman, raised to power by the triadic support of capital, labour and the state, the Volkswagen consortium maintained the characteristics of its 'corporatistic corporate governance' during the 1990s. In an international perspective, this is probably one of the most interesting aspects of the Volkswagen case. In a decade of strongly growing international competition and a neoliberal 'shareholder value'-bias in general, Volkswagen not only survived, but was quite successful with a completely different corporate governance model. Nevertheless, there were important processes of overall consortium restructuring during the past decade. Product innovation and brand differentiation and development were probably the most important<sup>[4]</sup>.

**Product structure and market strategies:** The incorporation of SEAT/Spain in 1986 represents the beginning of brand differentiation and a new type of internationalisation of production for the Volkswagen consortium. The acquisition of Skoda/Czech Republic in 1991 was the second step and then in 1998 the brands Bentley, Bugatti and Lamborghini (additionally Rolls-Royce until 2003) were bought. In 1995 the Volkswagen Nutzfahrzeuge (trucks) already was separated from the Volkswagen Pkw (cars) brand. Especially Audi and Volkswagen Cars were developed as premium brands in their segments. At the end of the 1990s Volkswagen presents itself as a complex consortium focused on the 'core competencies' of car and truck production with a

defined brand strategy and a global presence in the most important world automobile regions. There is a certain regional focus of the SEAT brand towards South European countries and of Skoda towards Eastern Europe, but at the same time Skoda for instance aims at price and quality oriented buyers in Germany.

In the international automobile industry as a whole the Volkswagen consortium probably was the most successful in differentiating brands with specific car models and images, on the one hand and homogenising platforms as the invisible part of the car, on the other hand. Platform strategies are nothing completely new to Volkswagen. The very first and successful models of the old beetle and the Combi were built on the same platform. During the 1970s the new Golf and the Audi 50 were based on the same A1-platform and this was happened because of the engineer Piëch who suggested that platform homogenisation will simplify the production system and will gain the economic scale due to the emergence of synergy and development of competency. The aim is to reduce the overall scope of car models to only four platforms. At the end of the past decade the body chassis, axles, engines, gear box and power train, gearshift, tank and air condition system were quite the same in the A4-platform models VW-Golf, VW-Bora, VW-New Beetle, Audi-A 3, Audi-TT, Seat-Toledo and Skoda-Octavia.

Even if platform unification furthermore remains a complex task-in 1999 there existed 17 basic platforms in the Volkswagen consortium and only about 10 to 20% of the overall car parts are homogenous at platform level-it seems that it is the most promising strategy for combining the economies of scale with the economies of scope. At the same time this strategy pressures towards stronger ties and real global co-operation of all organisational units on regard of product structures and market strategies. Volkswagen of Brazil will no longer develop and produce its own car models but produce a regionally adapted part of the consortium's model range and perhaps adapt new 'hats' to the standardised platforms. Realising platform strategies in the very different plants all over the world requires a certain homogenisation of production technologies, of organisation and of skill requirements. Therefore, on the one hand platform strategies are a precondition for a real transnationalization of consortium structures and strategies, on the other hand, platform strategies reinforce transnationalization in all important dimensions of corporate governance and profit strategies, of product structure and market strategies and of production systems.

Concerning its internationalisation trajectory the Volkswagen consortium followed a 'double strategy' of

buying existing foreign brands and internationalising its VW and Audi brands. In regard to the latter Volkswagen Cars has traditionally been an internationally oriented and known brand. After its foundation as an independent brand in 1995 Volkswagen trucks began internationalisation mainly with the Resende plant in Brazil. In this country 52.911 light and heavy trucks were sold in 1999 representing with more than a quarter of total sales of VW Trucks brand the most important foreign market. During the past decade the Audi brand experienced an internationalisation push as well and the North American region was the most important foreign market for Audi (with 12% or 72.757 sold units of a total of 635.343 units in 1999). The internationalisation of Volkswagen Cars and Audi cannot only be seen in growing shares of foreign sales, but also in qualitative new production activities<sup>[4]</sup>.

**Diversification in the Global era:** Despite its success the Beetle had hardly changed from its original design and by 1974, with increasing competition from other compact cars, Volkswagen came close to bankruptcy. This spurred the company to develop newer, more modern models, among them the Golf a car whose platform finally helped to give VW domination of the European markets. Although the company had been founded by the German government; in 1960 the state denationalized it by selling 60 percent of its stock to the public. So finally Volkswagen did become the people's car.

Volkswagen later acquired the Audi Company in 1965 and later NSU. Volkswagen has since been on the acquisition trail SEAT in Spain, Skoda of the Czech Republic and more esoterically Bentley and Bugatti. Whilst Audi who are still part of the VA Group bought Lamborghini, nowadays, the brand is divided in the following parts:

**Global marketing concept in Volkswagen:** Volkswagen has not only diversified its product lines but also diversified its investment from the automotive division to financial division around the world. Through the above structure the group is able to offer abroad range of services in addition to the sale of automobiles, all along the value adding chain to the customer. This new concept of diversification and product differentiation were led by the market competition and globalisation. Differentiation by colour, design and brand while using the same engineering and engine, ultimately due technological revolution<sup>[3]</sup>. This is how Volkswagen has become consumer-oriented trans-national automobile Company. However, the following paragraphs will explain what kind of diversification was taken place in Volkswagen.

- The Audi brand group-comprising the Audi, SEAT and Lamborghini brands represents shared core competencies from which all three brands benefit: spottiness, technology and design. The brand group offers a product range from the compact class, through the luxury saloon, to the sports super-car, which embodies the high technical expertise of the brands, extraordinary design ideas and a shared passion for sporty motoring. The commercial focus of the brand group is on efficiency, profitability, orientation to customer needs and utilization of synergies.
- In the new Volkswagen Group structure the Commercial Vehicles sector is integrated as an autonomous business unit alongside the Volkswagen and Audi brand groups. The product range extends from leisure and utility vehicles to heavy trucks. Following several years of internationalization, restructuring and consolidation the Commercial Vehicles brand group is outstandingly positioned among its global competitors as a technology-leading manufacturer of light trucks and utility vehicles. The year 2003 saw the launch of the new T5 generation-the Multivan and the Transporter.
- The Financial Services Division successfully supports the sale of Group products by the services it provides. The range includes financing, leasing and insurance, a modern direct banking operation as well as professional fleet management services for private and business customers. This comprehensive range of services is a major factor in assuring customer loyalty to the Volkswagen Group. An important part of this division is Europcar International, one of the largest car rental companies in Europe. This how Volkswagen Group concentrates on the customer-focus by providing additional services and Utilities rather than only focusing on production and engineering aspects.

**Production systems:** Understanding production systems as specific configuration of technologies, organization and work in a given factory, platform strategies do not determine but actually motivate homogenisation of production systems in certain aspects. The traditional centre-periphery-duality (new versus old products and production technologies; high versus low production quality and productivity) could not be sustained. Therefore, the outcomes of production systems in terms of productivity, flexibility and quality have to be similar in all plants all over the world that are included in the networks of global production. Concerning the differentiation homogenisation and the adaptation-

Volkswagen group					
Division/ Segment	Automotive division				Financial services division
Business line	Volkswagen brand group	Audi brand group	Commercial vehicles	Remaining companies	Financial services
Product line/ Business field	VW passenger cars  Skoda  Bentley  Bugatti	Audi  Seat  Lamborghini		Financial services	Dealer and customer financing  Leasing Insurance Fleet business
					Rental business

Fig. 3: [www.volkswagen-ir.de](http://www.volkswagen-ir.de)

application problems of production systems Pries suggests a certain hierarchy of local embeddedness of technologies, organization and work. Like in the figure of concentric circles of an onion production technologies tend to become similar in all plants of Volkswagen all over the world. At the other extreme work (qualification structures, recruitment and employment systems, individual and collective rules and mechanisms for vertical and horizontal mobility, industrial and labor relations) was and remains most influenced and structured by local factors (labor law, labor markets, socio-cultural norms etc.) and organization as the specific way of dividing and integrating the working process holds an inter-medium position.

Findings of Pries's study<sup>[4]</sup> are focusing to conclude that during the 1990s production systems became more similar in the overall consortium concerning their benchmarks and their production technologies, but they remain quite different with respect to their work systems<sup>[15]</sup>. Some quantitative data indicate the qualitative shift in the international profile of Volkswagen's productive resources. In only the last four years (from 1995 to 1999) the Volkswagen consortium expanded from a total of 35 to 47 production and assembly sites all over the world.

The majority of plants are 'one brand plants' (like 2 Skoda, 3 Audi and 12 Volkswagen plants in 1999), but there are also a lot of mixed plants where cars of more than one brand are produced (like Cheshire/Great Britain, Martorel/Spain, Bruxelles/Belgium, Poznan/Poland, Curitiba/Brazil, Pacheco/Argentina, Uitenhage/South Africa, Kvasiny/Czechia and Changchun/China in 1999 and the Wolfsburg/Germany plant in 1995 as well). Comparing only the changes of models produced by plants between 1995 and 1999 reveals the high international productive flexibility of the Volkswagen consortium. Concerning production, sales and

employment the weight of the Volkswagen Cars brand in relation to the other car brands (Audi, SEAT, Skoda) went down during the past decade, but it still represented two thirds of production, sales and employment<sup>[11]</sup>.

Meanwhile international division of labour between plants during the 1980s concentrated on the North American region (between the Mexican Puebla plant and the U.S. Westmoreland plant) and on the West European region (between plants in Germany, Belgium and Spain). During the 1990s transnationalisation strengthened world wide production networking and platform strategy is an important element in this. The 25 most important and defining parts of the body chassis of A4-platform are produced exclusively for world wide assembly in the headquarters Wolfsburg plant. This means that about one thousand or more equal pieces a day with completely the same measures and quality are produced. This global platform strategy also means that actually equal quality standards in production, for instance concerning distance measurements in body shop or colours in painting are necessary in all integrated plants. Through this interchangeability of components and assembly of plurilocally produced parts in one plant is possible. The qualitative shift from a centre-periphery configuration of international division of labour towards a transnational production networking becomes clearer taking the example of the New Beetle product and its production in Puebla/Mexico<sup>[4]</sup>.

**The qualitative shift from the old Buggy to the New Beetle: Volkswagen's Puebla plant:** During the decade of the 1980s the Mexican plant in Puebla produced a wide range of Volkswagen cars and different product generations. The old 'buggy' and the different variants of the old Combi-at consortium level and viewed in current international standards completely out-fashioned models-were sold mainly in Mexico and only a small part

of the Golf/Jetta (model A1 and A2) were exported, mainly to the USA. Even in 1991 the old buggy and the Combi-model represented quite half of the overall production of 209000 units. Contrary to the declared market strategy the export of Golf and Jetta models towards the USA and Canada remained insignificant during the 1980s and the share of the overall Volkswagen consortium in the U.S. car market was below one percent<sup>[21]</sup>. Until the end of the 1980s the Puebla plant was very important as components and engines supplier for the assembly plant in Westmoreland/USA (which was closed in 1988/89). In sum, the Mexican Volkswagen factory was part of an international division of labour at consortium level, but this division of labour assigned a clearly subordinated position to the Puebla plant. Volkswagen worked as a production oriented multinational company, but the division of labour in the sense of the geographic-spatial distribution of resources, functions, competencies and power between headquarters and plants followed a centre-periphery scheme.

This situation began to change dramatically during the past decade. In 1991 the headquarters assigned the Mexican plant as the strategic export base of the Golf/Vento A3 for the US market and made efforts to change the failed strategy of the foregoing decade. Facing the liberalisation of car markets in the Mexico-USA-Canada-region by the NAFTA-agreement-which began to work 1st of January 1994-and the internationalisation strategies of BMW (initiating construction of its Spartanburg/South Carolina plant in 1993) and Daimler-Benz (starting construction of its plant in Tuscaloosa/Alabama in 1994) the Volkswagen consortium felt the need of qualitative shifts. During the model change of the Golf and Jetta (from A2 to 3), a one month labour dispute stopped nearly all activities in August 1992 and led to a 'model change' of the work organisation and industrial relations system. In the year 1993 the future of the Puebla plant was between going down to a third level assembly plant and rising up to a top level production facility. Nearly half of the top managers were fired or replaced, working groups were established by force and upside-down<sup>[15]</sup>.

Productivity and quality of the new A3-models increased. But the qualitative divide came with the decision to produce the New Beetle in Puebla. After strong intra-company competition and campaigns in 1995 more than one million signatures in favour of New Beetle production in Puebla were collected!, in September 1995 the Mexican plant was defined as the world-wide first and tentatively exclusive producer of the New Beetle. This car was defined as key stone in Volkswagen's market strategy to recuperate presence in the USA reviving the image and

nostalgia of the old buggy and combining it with a high tech fun car for a market niche. Based on the A4-platform a completely new 'hat' was designed mainly in Volkswagen's Californian studios and developed in German headquarters in Wolfsburg. In 1996 the New Beetle group grew up to more than 30 managers and technicians, a third of them came from Mexico to Wolfsburg to develop the project and prepare production in Puebla. In the Mexican plant more than 200 technicians were prepared in the Vocational Training Centre in 1997.

Pre-and Zero-Series-Production began in autumn 1997, in December of the same year normal production began. Average daily output raised up to more than 600 units in 1998, so that more than 107000 New Beetles were produced that year. Destination of 70% of total production was the US-and Canadian market, 20% for the European market and only 10% to satisfy the Mexican demand. In 1999 more than 160.000 New Beetles produced in Puebla represented a share of about 40% of Volkswagen's Mexican production, making the Golf-and Jetta-A3 and A4-models for another half and the old buggy only for less than a tenth of total production in Puebla.

This marks a qualitative shift in product structure and market strategies during less than ten years.

During the same period the production system changed dramatically as well. After the labour conflict of 1992 from one day to another, a working system of working groups was imposed unilaterally in quite all production areas. The payment system changed to a productivity-oriented evaluation each nine months. Management offered higher payment and regular wage rising in change for a strong quality and productivity commitment of the workers. The union politics and structure changed as well from a culture of confrontation and distrust towards a model of productivity consent and commitment. During the last five years, systems of quality management, of visual management and of workers participation in product and process improvement were developed and refined. Hierarchy levels were reduced, information flows were accelerated and new forms of interdisciplinary and inter-hierarchical team working and management were developed.

These changes in the production system led to increased productivity and production quality. In 1999, the Puebla plant produced 410061 cars with less than 16000 employees. Compared to 1990, this indicates a gross productivity growth from an average of 6.75 cars per employee and year to an average of about 25,6 cars per employee and year. The export share is now higher than two thirds of total production and only about 36500 old Beetles (8,9% of total production) were produced in 1999.

Of course, these numbers reflect not only productivity gains, but also, for instance, changing structures of procurement, namely a massive outsourcing and subcontracting of productive and service activities<sup>[22,23]</sup>. But they actually also indicate the qualitative and really dramatic changes that occurred in Volkswagen's Puebla plant during the 1990s-in terms of product structure and market strategy as well as concerning the production system. At the same time, the changing plant profile of the Puebla factory indicates the general shifts in Volkswagen's overall consortium profile and internationalisation strategy.

### CONCLUSION

Volkswagen's dynamic capitalism was never derived by a single component; rather it was motivated by two major components such as organisational structure and market competition. These two major factors are emerged from two opposite sources i.e. internal and external, but behave symbiotically. Volkswagen's organisational structure was very much influenced by German typical labour and management structure, as explained in corporate governance section.

In addition to this, nature of corporate governance, workers participation in management, political decisions (In Second World War) and multi-governmental interference into Volkswagen's management motivated Volkswagen, as an organisation, to be more strategic and international.

On the other hand, from the historical development of Volkswagen's internationalisation, it is evident that it was also strongly influenced by the change of market mechanism and competition. Thus, its capitalism was directed to the internationalisation for resource seeking and market seeking opportunities.

However, globalisation, as a dynamic market mechanism, has also made a rapid structural and strategic changes not only in the organisation but also in product diversification, consumer oriented marketing and portfolio investment.

Apart from its own dynamic capitalism, it is also necessary to focus on the impact of Volkswagen's capitalism to German economy. From the theoretical perspective, it is crystal clear that Volkswagen's dynamic capitalism has made a dramatic contribution to the German economy as a whole. Although it is hardly possible to quantify how much was the impact on the macro economic development, it is possible to explain what happened.

Volkswagen's business expansion made a big impact to the German economy, as it created a lot of job

opportunities for the German people around the world. On the other hand, its decentralization of production and distribution systems and rapid trans-nationalisation have been bringing huge amount of foreign currency, which ultimately increasing the foreign currency reserve of the country. This is also indirectly impacting on the control of inflation as well as balance of trade.

However, it is significant to note that in the era of globalisation it is as important for a country to have dynamic trans-national company as it was important to have colony during the colonial era.

Although Volkswagen has been a highly multinational company during the entire second half of the past century, the decade of the 1990s is crucial for a general shift towards a transnational internationalisation profile. Foreign and especially overseas production gains relative importance. Old brown field factories (like Puebla/Mexico or Anchieta/Brazil) are restructured fundamentally and new assembly facilities were opened (from the Czech Republic, Poland, Hungary and Portugal to Malaysia, Indonesia, Taiwan, the Philippines and China). But not only had the quantity of foreign production activities changed dramatically, also the quality of the geographic distribution of resources, functions and competencies altered. The consortium began to shift from the traditional division of labour between centre and periphery towards a more homogenised and centralised product structure and more regionalised market strategies.

Concerning the production system a certain convergence at the level of production technologies and some elements of organisation could be observed, but there remain strong differences in relation to work and labour relations. Compared with the internationalisation of Japanese automobile companies during the 1980s, the trans-nationalisation push of the Volkswagen Company in the 1990s is a dialectic process of company restructuring and company internationalisation led by dynamic capitalism of the firm. The search for new production systems and higher productivity, on the one hand and the expansion to new markets and production sites, on the other hand, are two mutually accelerating processes in the change from a multinational company towards a trans-national company. This trans-nationalisation process is even going on and can be termed as highly motivated industrial capitalism.

Theoretically it could end in a completely globalised company as an economically, culturally and politically 'uprooted' and 'unbound', cosmopolitan business network acting at least in all of most important world regions. But this option is not very likely due to the particular corporate structure and capital strategy of the company.

From the study of Pries<sup>[4]</sup> some interesting clues have been found, which raises some questions regarding the future trend of dynamic capitalism of Volkswagen, as said that:

Volkswagen is deeply embedded in the economic, political and social structure of the Lower Saxonian State. In the even very particular German system of corporate governance with workers participation at company level (Workers Council) and strong union participation in the supervisory board the Volkswagen case is unique. It is very interesting that despite-or perhaps because of these particularities Volkswagen has been quite successful during the past decade.

Nevertheless, there remain some structural problems for the future. In the name of equal opportunities the European Union could probably put in question the specific Volkswagen Law. This could challenge the corporate governance fundamentally-if there is no new and now European special arrangement in the case of Volkswagen<sup>[4]</sup>. A second structural problem deals with the contradiction and combination of platform strategy and brand differentiation. At short term there prevailed the advantages of combining economies of scale with the economies of scope. But in a long term it could be difficult to maintain brand differences and images if people increasingly get aware that all brands use the same platforms and parts<sup>[4]</sup>.

A third problem relates to the centralisation of strategic decisions and control on the one hand and the need for decentralised, more autonomous and ethnocentric structures. According to Pries, Piëch as a very strong and authoritarian CEO who was able to maintain and control the consortium centrally, but who and what comes after Piëch? The development of Volkswagen during the first decade of the new century will be at least as interesting as during the last one of the past century<sup>[4]</sup>.

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