

Working Paper No. 44

October 2016



International
Labour
Office



GLU

The integration of Vietnam in the global economy and its effects for Vietnamese economic development

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Layout: Harald Kröck

THE INTEGRATION OF VIETNAM IN THE GLOBAL ECONOMY AND ITS EFFECTS FOR VIETNAMESE ECONOMIC DEVELOPMENT

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The paper is also published in the digital library of the Friedrich Ebert
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First published 2016

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ILO Cataloguing in Publication Data

Herr, Hansjörg; Schweissshelm, Erwin; Vu, Truong-Minh.

The integration of Vietnam in the global economy and its effects for Vietnamese economic development / Hansjörg Herr, Erwin Schweissshelm, Truong-Minh Vu ; International Labour Office ; Global Labour University. - Geneva: ILO, 2016.

(Global Labour University working paper ; No. 44, ISSN: 1866-0541 ; 2194-7465 (web pdf))

International Labour Office; Global Labour University.

economic development / value chains / foreign investment / industrial policy / Viet Nam
03.02.3

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Printed in Switzerland



ABSTRACT

When Vietnam started the Đổi Mới (renovation) in the mid-1980s it was a backward agricultural country. Liberalising markets, allowing the establishment of private firms, integrating in the world economy and high FDI inflows stimulated growth and productivity development. However, this first face of development seems to be exploited and Vietnam is in danger to fall in a period of low growth, low productivity increases and no convergence with more developed countries. Vietnam is at the lowest end of global value chains in industrial productions and at the same time depends on the export of natural resources. Market mechanisms are reproducing this type of underdevelopment. The "liberalisation effect" of Đổi Mới is exhausted and does not create further sufficient development. Comprehensive industrial policy which is at the present stage poor in Vietnam is needed. Vietnam lacks especially institutions which are able to select, implement, evaluate and modify, when needed, industrial policy. This is the case for horizontal industrial policy and even more for needed more selective industrial policy. Foreign direct investment can support development, but it has to be integrated in industrial policy to increase productivity and create economic clusters with forward- and backward linkages. State-owned companies which must be managed in a good way can also play a key role in building economic clusters. Among other instruments development banks can play role to deliver cheap and sufficient credit for sectors and firms which support development. In addition a good macroeconomic management of the economy is needed. Current account deficits have to be avoided and exchange rate policy has to substitute general tariffs which are no longer allowed, guarantee the competitiveness of the industrial sector and to avoid Dutch Disease effects. Last not least an inclusive growth model is needed to avoid a lack of demand, negative supply side effects and incoherent social developments.



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1. INTRODUCTION

In mid-1980s at the start of *Đổi Mới* (renovation) Vietnam was a backward agricultural country under a socialist economic system based on the centrally directed allocation of resources through administrative means. At that time, most of the workforce was involved in agricultural production but the country faced food shortages and had to import rice. Industry was weak facing poor productivity. The overwhelming majority of the population was stuck deeply in poverty.

Vietnam's approach to economic reform has been characterized by two main features. Firstly, it followed a top-down and step-by-step approach. Pilot projects on an experimental basis in some localities were carried out before they are applied to the whole country. Secondly, there was the consensus among the Vietnamese leadership not to combine market-oriented reforms with political liberalization. Also, while introducing market-oriented reforms the important role of state-owned enterprise were maintained.

Since the beginning of the process of *Đổi Mới*, economic growth in Vietnam has been remarkable. Between 1991-2009 Vietnam's real GDP grew with the average growth rate of 7.4 %. In 1990 Vietnam's GDP per capita of 98 US dollars placed it among the poorest countries in the world. In 2009 a GDP per capita of 1109 US dollars led to Vietnam's attainment of the lower middle-income status by the World Bank classification methodology. In the year 2014 GDP per capita reached 2052 US dollars (Haughton et al. 2001; Quan 2014). Economic reforms included an increasing integration of Vietnam in the global economy. This integration process is still underway with trade commitments under ASEAN, accession to the World Trade Organisation (WTO) in 2007 and signing the Trans-Pacific Partnership Agreement (TPP) in 2015.

The open question, however, is whether this spectacular development will be able to continue. There are a number of experts who believe that Vietnam is in danger of falling in a middle-income trap or might be already affected by it (see Pincus 2015; Ohno 2015). A middle-income trap implies that the convergence between a developing country and the most developed countries in the world does not become smaller and the developing country is stuck at a certain income per capita level of developed countries. The only sustainable way to overcome a middle-income trap and to join the group of developed countries is to increase *productivity and the innovative power* of a country. Without a catching-up in the level of productivity in developing countries a conversion of the living standards between developing and developed countries will not be possible. However, productivity increases are not the only factor for economic development. Besides productivity development an *inclusive growth model* with not too high income inequality and a *functioning financial system* delivering sufficient credit with low interest rates are also preconditions for sustainable development.

The aim of this paper is to analyse the specific way on how Vietnam has been integrating in the world economy and what kind of production structure results from this in Vietnam. The key question is whether the type of integration in the world market is supporting economic development in Vietnam via increasing the productivity level or not. It will be asked what kind of integration different economic approaches expect. It will then be checked to which extent the different theoretical approaches are able to explain development in Vietnam and whether Vietnam is in danger of a middle-income trap.

The main conclusion of the paper is that theoretical considerations and empirical analyses support the hypothesis that an unregulated integration in the world market is not beneficial for Vietnam in the long-run and can lead to a middle-income trap. Integration in the world market is of key importance for a country like Vietnam, but it has to be guided by comprehensive industrial policy and government's interventions. To leave the integration of Vietnam completely the market leads to the reproduction of underdevelopment. A *combination* of markets *and* government activities is needed to reach a sustainable catch-up.

In the second section of this paper a review of the most important traditional economic models to explain international distribution of labour will be given. The analysis takes a look from the perspective of a developing country and asks what kind of industrial development these models for a country like Vietnam predict. The section also concentrates on a phenomenon which gained paramount importance the last three decades - global value chains and offshoring. It will be asked to which extent global value chains increase the chances of economic development for countries like Vietnam.

Section three analyses in detail how Vietnam integrated in the world economy. The theoretical approaches from section two will be used to understand Vietnam's role in the international distribution of labour. Import and export structures will be analysed as well as the role of global value chains in Vietnam. The theoretical prediction will be largely supported by the empirical analysis. Without government interventions a middle-income trap is a serious danger for Vietnam.

The fourth section draws policy conclusions for Vietnam. Here especially industrial policy will be discussed and its adaptation to the situation in Vietnam.

2. INTEGRATION OF DEVELOPING COUNTRIES IN THE WORLD MARKET AND ECONOMIC DEVELOPMENT

2.1 Traditional economic trade models and economic development

We will start with the model of absolute advantages and then analyse comparative advantages as well as different factor endowments. These trade models assume trade in complete goods. This implies that the production process of a good is not cut in different tasks which are produced in different countries as in global value chains. To understand the logic of trade usually in these models mobility of capital is assumed to be zero which automatically implies a balanced current account. Finally, these models assume constant returns to scale and competitive markets.

a) *Absolute advantages*

The most simple and obvious model of explaining international trade is the model of absolute advantages. Adam Smith (1776) argued that in the case of one country being good in producing one thing, and the other country good in producing another thing the welfare of both countries could be increased by trade. Absolute advantages are based on different technological levels and/or different natural conditions which influence productivity.

To make an example: If Vietnam has a higher productivity in producing textiles and the United States is more productive in producing cars to increase the welfare of both countries Vietnam should concentrate on the production of textiles and the US should focus on making cars. Table 1 shows the logic and consequence behind this type of trade. It is assumed that the US has an absolute advantage in producing cars – it needs 10 units of labour¹ to produce a car, whereas Vietnam needs 40 units of labour for a car. Vietnam has an absolute advantage in the production of textiles. For a given quantity of textiles Vietnam needs 20 units of labour and the US 35 units. Without international trade the production and consumption of the assumed quantities of textiles and cars need a total sum of 105 units of labour in both countries. If each of the countries concentrates on the goods with its absolute advantage and produces twice as much as before and exchanges cars against textiles, the level of consumption in both countries will stay the same and the needed hours for producing the goods can be reduced to together 60 hours. The conclusion by Adam Smith was that international trade (similar to national trade) increases the wealth of nations and markets leads to specialisation according to absolute advantages.

¹ We could also assume production inputs in general.

Implicitly some assumptions are taken to come to the welfare conclusion drawn by Smith. The most important one is that there is sufficient demand so that world output increases and that the production factors which have become unused as a result of efficiency gains will be able to be employed.² If the saved 45 units of labour in our example become unemployed, the wealth of nations does not necessarily increase. From a Keynesian perspective there is no guarantee that a switch to more free trade increases aggregate demand and output. If Say's law which assumes that supply creates its own demand does not hold free trade can lead to permanent higher unemployment. Sometimes, mainly by non-economists, it is argued that free trade increases the surplus in the trade balance (or reduces a deficit) and positive employment effects can be expected. However, a switch to free trade has nothing to do with surpluses or deficits in the trade and current account balances. Only in a world of lunatics can free trade lead to current account surpluses in all countries. Secondly, it has to be assumed that the factors of production move smoothly from one industry to another one. In a concrete economic constellation such structural changes can become difficult for countries. In our example, US textile workers may not be qualified to become workers in the car industry. Finally the model leaves open which of the two countries realise the biggest welfare gains. And trade, even if it increases the welfare of both nations, can produce some losers in both countries.

In the context of this paper the most important question is how productivities change when countries integrate in the global economy. Productivity is defined as output per unit of labour. In our exemplification in Table 1 the productivities of producing a car and a given quantity of textiles are calculated.³ To calculate the average productivity each of the productions is weighed according to the labour needed in the industry.⁴ The productivity gap for the whole economy in Vietnam before international trade is 0.006. Productivity in Vietnam under the condition of international trade increases because the country concentrates on the production of the good with its absolute advantage which has a productivity of 0.05. But productivity in the US increases even faster and the Vietnamese productivity gap increases to 0.05. The explanation for this is that the absolute advantage to produce cars is bigger than the absolute advantage of Vietnam to produce textiles. The figures in Table 1 are not based on empirical facts. However, the constellation shown in the table might not be unrealistic for many goods in a country like Vietnam.

² If the population prefers a reduction in working time, the welfare of nations can increase without increasing output. However, there is no plausible link between free trade and a preference to more leisure time.

³ The productivity of producing one car in Vietnam is for example 1 unit of output divided by 40 units of labour (1 car : 40 units of labour = 0.025 units of cars per one unit labour).

⁴ For example, in the case of Vietnam before trade the car industry counts for 66.66% of average productivity as two third of the workforce is employed in the car industry.

Table 1: International trade with absolute advantages

	Before trade		Total hours	After trade		Total hours
	Vietnam	US		Vietnam	US	
	Units of labour needed per given quantity of the good			Units of labour needed		
Cars	40	10			2x10=20	
Textiles	20	35		2x20=40		
Total hours	60	45	105	40	20	60
	Productivities without trade*		Productivity gap Vietnam**	Productivities with trade*		Productivity gap Vietnam**
Cars	1:40=0.025	1:10=0.100			2:20=0.100	
Textiles	1:20=0.050	1:35=0.029		2:40=0.050		
Average productivity***	(0.66-0.025) +(0.33-0.050)= 0.033	(0.22-0.100) +(0.78-0.029)= 0.039	0.006	0.050	0.100	0.050

*Quantities produced per labour input, **US productivity minus Vietnamese productivity,

*** Each industry is weighted according to its labour input in relation to total labour input

When we look at the areas where countries like Vietnam have absolute advantages we quickly detect the importance of unprocessed agricultural products and natural resources. Examples for the first group of goods are coffee beans, rice, sugar cane or fish. Examples for the second group are coal, manganese, bauxite, chromate, offshore oil or natural gas. The basis for such absolute advantages can be found in natural conditions like the climate or locations of rare earths. Possession of such natural advantages is not automatically a blessing for countries. It allows earning of hard currency in a relatively easy way. However, as an empirical fact, most countries with these advantages do not develop in a good way. And there are good theoretical explanations for this.

Hans Singer (1950) and Raúl Prebisch (1950) forcefully argued that the concentration of countries on the production and export of natural resources including basic agricultural products will in the long-term lead to a deterioration of the terms of trade in these countries. In the long-term this means that developing countries which concentrate on the production of natural resources have to exchange more and more of their primary products against industrially produced products of developed countries. Explanations for this effect are manifold. Productivity growth in industrial productions might be higher than in the production of agricultural products and natural resources extraction. Also the price elasticity of primary goods for single suppliers is higher than for industrial products. For example, exporters of coffee beans or oil produce a relatively homogenous good and are confronted with competition from exporters in many countries. Firms in developed countries exporting new high-tech or live-style products can exploit monopolistic positions and avoid price competition. Also the income elasticity of primary goods is supposed to be lower than for industrial products. The long-term terms of trade effect expected by Singer and Prebisch

reflects an overall slower productivity growth in developing countries producing natural resources as well as a relative stagnation of the demand of such products. Allowing the market mechanism to work developing countries will be pushed towards the production and export of primary products with relatively low value added. This reduces the possibility of catching-up. Empirically the Prebisch–Singer terms of trade hypothesis is supported for most of the primary products. However, there are some exceptions (see Harvey et al. 2010; Arezki et al. 2013).

For some of the natural resources the Prebisch–Singer hypothesis seems not to hold, for example for crude oil and rare earths. These resources seem to follow a trend of long-term increasing prices based on natural scarcity. Overall in the long-run the price of these natural resources may increase because the production costs to extract or mine these products increase with depletion. However, presently and for an uncertain time in future prices of natural resources are above production costs and prices are based on oligopolistic market structures. To which extent such oligopolies are able to increase prices and keep them high is an open question given the fierce competition of natural resource producer to export their natural resources.⁵ The development of the oil price after 2008 is a good example for this. But even when prices of natural resources are high and high rents can be earned possessing and exporting natural resources is for many countries a double-edged sword. The problem is that a country which exports natural resources as a high percentage of its total exports will import a high percentage of its consumption and capital goods. Thus, the concentration of a country to export natural resources will make the industrial sector in the natural resource exporting country suffer. This phenomenon became known as *Dutch Disease*. When in the 1960s the Netherlands found offshore oil, the domestic industrial sector came in a crisis. The global demand for Dutch oil led to an appreciation of the Dutch Guilder and reduced the competitiveness of the Dutch industry. As a result this reduced the dynamic of the Dutch economy. Natural resource rich countries are in danger suffering from serious overvaluation especially when the industrial sector is taken as a benchmark. The result of such an overvaluation is a lack of competitiveness of the industrial sector (Corden 1984; Corden / Neary 1982). The problem is that the industrial sector has a much higher potential for productivity increases and innovation than the natural resource sector. The outcome is that natural resource rich countries suffer from a lack of domestic economic dynamic and transform in rent economies.

The reliance on natural resource exports leads to other serious potential negative effects. Natural resource prices and natural resource exports show a high volatility and expose natural resource exporting countries to large shocks. In many cases government revenues depend to a large extent on the development of the natural resource sector. In such cases the volatility of natural resource exports has even bigger negative effects as it distorts the functioning of public households.

⁵ Theoretically future demand of mankind for natural resources should lead to high prices of natural resources today. But there are no future markets which could signal scarcity of natural resources in fifty, hundred or five-hundred years. The market fails to lead to a rational intertemporal allocation of such products.

Last but not least, in many cases natural resource rich countries show a high level of corruption and a low level of democracy as the incentives for powerful groups in society to grab some of the natural resource rents are high (see as a survey Humphreys / Sachs / Stiglitz 2007). Very good institutions are needed to overcome negative effects of Dutch Disease. Norway serves as a good example for good institutions and the avoidance of Dutch disease. But Norway is an exception.

The question for Vietnam is: Does the export of goods with low terms of trade (for example coffee and rice) and of natural resources (for example crude oil) with the danger of Dutch Disease play an important role? These goods play a role in Vietnam's exports and some negative effects must be expected.

b) Comparative advantages and factor endowments

One of the most important arguments of free trade goes back to David Ricardo (1817) with his model of comparative advantages. Until today international institutions like the WTO or the International Monetary Fund (IMF) and many governments follow Ricardo's approach in different versions. Ricardo assumed different productivity levels in different countries. In contrast to Adam Smith he asked the questions whether international trade makes sense under the condition that one country is less productive in *all* industries. This assumption very much fits the constellation of countries like Vietnam, which are with regard to industrial production characterised by a general low level of technological development compared to developed countries. The not so obvious answer given by Ricardo is that even under such a condition international trade is welfare increasing for all countries. If countries concentrate on the production of products they are relatively good in the same output in the world can be produced with less input of labour (and other inputs). For a country like Vietnam this implies the export of goods where the productivity difference to developed countries is the lowest and imports of goods where the productivity difference is the highest. Indeed, the market mechanism leads to this structure of trade.

To reveal the consequences of this type of trade the numerical example in Table 1 is modified. In Table 2 we assume, as in Table 1, that Vietnam and the US both produce textiles and cars. But now the US-economy is better in producing all goods. To produce one car the US needs 20 labour inputs while to produce a given quantity of textiles it needs 40 labour inputs. The not so efficient economy in Vietnam needs 40 labour units to produce one car and 50 labour inputs to produce the textiles. If both countries produce both goods and there is no international trade both countries together need 150 hours to produce the given quantity of cars and textiles. In the US the productivity advantage in the car industry is bigger than in the textile industry. And for Vietnam the disadvantage in producing textiles is relatively small. Thus, with international trade Vietnam will produce textiles and the US cars – an example with high plausibility. With international trade the same quantity of goods can be produced with 140 labour inputs. Ten units can be saved. Of course, as in the example with absolute

advantages, a set of conditions must be satisfied to realise positive welfare effects.

Table 2: International trade with comparative advantages

	Before trade		Total hours	After trade		Total hours
	Vietnam	US		Vietnam	US	
	Hours needed per given quantity of the good			Units of labour needed		
Cars	40	20			2x20=40	
Textiles	50	40		2x50=100		
Total hours	90	60	150	100	40	140
	Productivities without trade*		Productivity gap Vietnam**	Productivities with trade*		Productivity gap Vietnam**
Cars	1:40=0.025	1:20=0.050			2:40=0.050	
Textiles	1:50=0.020	1:40=0.025		2:100=0.020		
Average productivity***	(0.44·0.025) +(0.56·0.020) = 0.022	(0.33·0.050) +(0.67·0.025) = 0.033	0.011	0.020	0.050	0.030

*Quantities produced per labour input, **US productivity minus Vietnamese productivity, *** Each industry is weighted according to its labour input in relation to total labour input

Before international trade, the average productivity level of Vietnam (0.022) is below the US-level (0.033) and the productivity gap between the US and Vietnam is 0.011. The important point is now, that in the logic of comparative advantages *international trade reduces the productivity level of Vietnam and increases the productivity gap* with the US. In Table 2 it is shown that trade reduces average productivity in Vietnam to 0.020 and the Vietnamese productivity gap widens to 0.030. This should not be a big surprise as Vietnam gives up the more demanding and advanced car industry and concentrates on the less productive textile industry. International trade leads to the breakdown of the car industry in Vietnam and Vietnam specialises on the overall low-tech and low productivity good textiles. In the US the textile industry disappears and the country concentrates on the production of the high-tech product cars.

The Prebisch–Singer hypothesis takes a new and more radical form. Under the condition of different productivity levels of countries unregulated international trade pushes developing countries to produce relatively low-tech and low-value adding products and concentrates high-tech and high-value adding productions in developed countries. Under a static approach Ricardo's argument is correct – international trade between counties with different levels of development increases the efficiency of worldwide production. The welfare of consumers will increase at least in the short term.

Under a dynamic perspective for a developing country the market determined distribution of international labour implies a huge disadvantage. As it is pushed to concentrate on low-tech and labour-incentive-low-skilled productions, it will

have a lower chance to develop. Friedrich List was very critical about free trade between countries with different development levels. He argued against England which developed under protectionism and then preached free trade: "Any nation which by means of protective duties and restrictive navigations has raised her manufacturing power and her navigation to such a degree of development that no other nation can sustain free competition with her, can do nothing wiser than to throw away these ladders of her greatness, to preach to other nations the benefits of free trade, and to declare in penitent tones that she has hitherto wandered in the path of error, and has now for the first time succeeded in discovering the truth." (List 1855: 295f.) Indeed, Ha-Joon Chang (2002) shows that virtually all now developed countries including the UK and USA used industrial policy to protect and support their industries in their development phase.⁶ It is worthwhile listening to Joan Robinson, who made the same argument (1979: 103): "The most misleading feature of the classical case for free trade ... is that it is purely static. It is set out in terms of a comparison of productivity of given resources (fully employed) with or without trade. Ricardo took the example of trade between England and Portugal. (...) It implies that Portugal will gain from specialising on wine and importing cloth. In reality, the imposition of free trade on Portugal killed off a promising textile industry and left her with a slow-growing export market for wine, while for England, exports of cotton cloth led to accumulation, mechanisation and the whole spiraling growth of the industrial revolution."

List's and Robinson's argument is valid until today. Countries concentrating on high-tech-high-skilled productions including services will gain from learning-by-doing, by developing a high-skilled workforce, benefitting from positive synergies, carrying out more firm based research and so on. Such countries can build-up monopolistic or oligopolistic constellations of their firms based on technological superiority and can earn high quasi-technological-rents. The high profits of these firms will further spur innovation and investment in research and development. Developed countries with a concentration of high-tech-high-skilled productions will benefit from positive external effects of markets, as Alfred Marshall (1890) has called it, and from the concentration of industrial high-tech productions and services (Krugman 1991). These processes unfold a strong path-dependency making innovative countries endogenously more innovative. All these advantages do not exist in developing countries or to a much smaller extent. And free trade will not help to overcome the disadvantages of developing countries – it will rather add to their problems. This is why Joseph Stiglitz (2006) demanded a one-sided protection of developing countries via tariffs and other instruments to make international trade fair. He also favoured the transfer of certain patents to developing countries for free or a low price.

⁶ Friedrich List was influenced by Alexander Hamilton, one of the founding fathers of the USA, who was advocating for protectionist tariffs and other measures to allow US industry to develop without too much foreign competition. Indeed the United States developed as many other countries under a regime of heavy protection (Chang 2002).

This does not mean that countries in their first development phase should not concentrate on low-tech and labour intensive production. They can do so when they enter mass production and exploit economies of scale. Such mass productions will trigger productivity increases through specialisation and learning effects. However, they should support domestic forward and backward linkages of mass productions. And, the positive effects of mass productions have to be supported by industrial policy in order for the country to enter in new and more value-adding industries. Industrial policy is needed at any stage of development because at any stage of development new industries have to be created and the private sector is not able to develop such industries alone.

According to mainstream thinking in the tradition of David Ricardo, international trade should lead to the specialisation of countries as an element of positive development. However, this recommendation does not fit the empirical development of successful developing countries. Jean Imbs and Romain Wacziarg (2003: 64) found in a broad empirical analysis that successful developing countries “diversify most of their development path”. Obviously only a broad spectrum of industries is able to create synergies between different industries and increases the likelihood and possibilities of entrepreneurship. Development has a lot to do with random self-discovery which cannot be explained by specialisation according to comparative advantages (Rodrik 2004).

The Smith-Ricardo model has a great explanatory power for the explanation of the international distribution of labour. If countries introduce free trade and the market is allowed to work freely the outcomes are as following: Developing countries will concentrate on low-tech-low-skill productions and developed countries on high-tech-high-skill productions. Below it will be shown that Vietnam fits in this scenario.

a) The factor-endowment argument for international trade

Eli Heckscher (1919) and Bertil Ohlin (1933) assumed the same technological knowledge in all countries in the world but different factor endowments.⁷ The typical developing country has a high stock of labour and not much capital and the typical developed country has a high stock of capital goods in relation to labour. The specialisation rule in international trade is that countries should concentrate on productions which especially need the relative abundant production factor. Developing countries should concentrate on labour intensive productions because this is the area of their comparative advantage. Developed countries should concentrate on capital intensive productions. International trade will, as in the Smith-Ricardo model, increase the efficiency of world production and will, sufficient aggregate demand assumed, etc., increase the welfare of countries.

The Heckscher-Ohlin model is for our question less important. There are not many industries in developing countries which possess the same technological knowledge and possibilities as industries in developed countries. Even if

⁷ The same macroeconomic production function in all countries is assumed.

knowledge is free it is often difficult to transfer it to developing countries. There is a lack of skills; and the experience to use advanced knowledge does not exist. The Heckscher-Ohlin model defines the development problem away by assuming that developing countries have the same skill- and technology-level as developed countries. Wassily Leontief (1954) found in his empirical investigation that US international trade does not follow the prediction of the Heckscher-Ohlin model. Later this so called Leontief paradox was found in many other countries. The main explanation for the paradox can be found in the fact that technological knowledge including differences in skill-levels between countries are of key importance for international trade and are not captured by the model.⁸

2.2 Global value chains and economic development

The vision of the old trade models with trade of goods produced in one industry and exchanged against goods of another industry does not fit to reality any longer.⁹ In 2013 trade in intermediate goods had the biggest share in world trade and reached US\$ 7 trillion, followed by primary goods with US\$ 4 trillion, consumer goods US\$ 3.8 trillion and capital goods US\$ 2.7 trillion. Almost 50% of intermediate goods are coming from developing countries (UNCTAD 2014). What we find is the dominance of international trade within one industry in intermediate goods to a large extent within multinational companies or controlled by multinational companies. Alan Blinder (2005) describes the increasing role of offshoring of productions in global value chains within one industry as a new industrial revolution. Indeed, a new dimension of globalization started to develop since the 1990s due to the revolution in information and communication technology, reduction in transportation costs and the implementation of Washington Consensus policies in developed and developing countries which deregulated international trade and capital flows. These developments allowed especially multinational companies to break down their production processes into different stages and outsource these stages to other companies in many cases in other countries. Below it will be shown that Vietnam is also intensively integrated in global value chains.

Trade effect of global value chains

In the case of global value chains the production process is cut in different tasks and these tasks are fulfilled by different companies all over the world. Analytically the different tasks become own products. The international allocation of the production of these different tasks depends again to a large extent on comparative advantages. Thus, the old trade models can be applied to global value chains (Feenstra 2010). However, the New Trade Theory added to the understanding of global value chains (see among others Paul Krugman 1979; 1991). Most industrial productions are characterised by economies of scale and scope which are based on, for example, indivisibilities (in research, marketing,

⁸ A theoretical weakness of the model is also that the macroeconomic production function which is essential for the model depends on the distribution of income between capital and labour. Any change of functional income distribution changes the value of capital in the production functions.

⁹ For this part also see Azarhoushang et al. (2015).

branding, etc. or using the same engine or other parts in different cars of a company), on production clusters which create synergies and positive external effects (concentration of high-tech companies in one region) or on positive network effects. As soon as economics of scale and scope are allowed in economic models the assumption of pure competition breaks down. Oligopolies and monopolies competition becomes the norm and with it rent-seeking in the form of technological rents, branding or asymmetric power relationships between firms. As soon as a country manages to host domestically owned firms which are in a global oligopolistic and monopolistic position these firms will increase domestic income via rent-seeking (more than normal profits) at the cost of other countries. Strategic trade policy to support domestic firms to achieve dominant positions becomes rational. The argument of economies of scale and scope also makes clear that first-mover advantages exist with high entry barriers for latecomers.

The complex production processes in global value chains are managed by lead firms, in the first place by headquarters of multinational companies. Of course, in the hierarchical structure of global value chains headquarters of fashion firms, global retailers or car and electronic manufactures do usually not directly interact with the lowest levels of value chains. Big contract manufacturers like Foxconn and Quanta in the field of electronics or Puo Chen in the field of shoe production are located on an intermediate level of supply chains. Lead firms and big contract manufacturers obviously are in a dominant position as they structure the production process and its location. They decide which tasks remain in the head quarter and which tasks are outsourced in which countries and in which companies. In global value chains there is not the cosy world of international trade between independent and equally strong firms as in traditional trade models. Global value chains are characterized by rent-seeking of leading firms and brutal competition between suppliers at the lower end of the value chain. Monopsony structures¹⁰ dominate the interaction between global value chains at least in the typical developing country.

In the case of buyer driven value chains, the leading firm focuses on designing and marketing functions while the manufacturing process is completely outsourced as a rule to legally independent subcontractors producing under strict specification of the buyer (see Gereffi 1999). Typical cases of these types of global value chains are labour intensive industries such as the apparel and footwear industry but also the assembly of parts in the production process of mobiles or simple electronic equipment. Producer driven supply chains are typically driven by lead firms where technology or high standards in production play a more important role. Examples are the production of automobiles, computer, and heavy machinery. Lead firms in producer driven value chains coordinate a complex transnational network of production with subsidiaries,

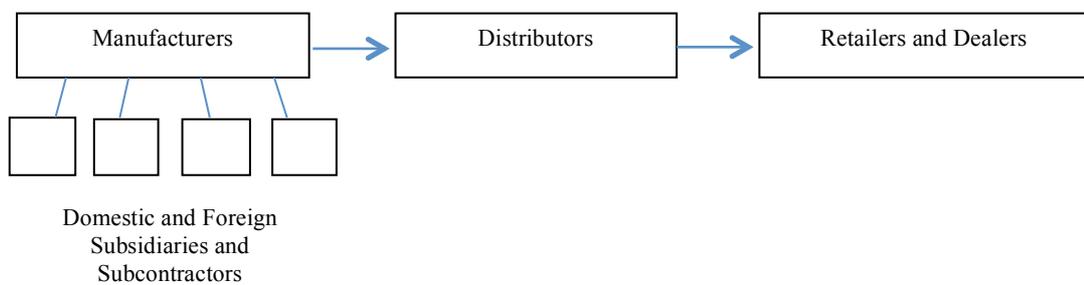
¹⁰ A monopsony describes the constellation of one demander of inputs and many suppliers. The demander can in this case increase its profits at the cost of the suppliers which compete with each other.

subcontractors and R&D units where the assembly lines of the final good typically remain under direct control of the lead firm (see Figure 1).

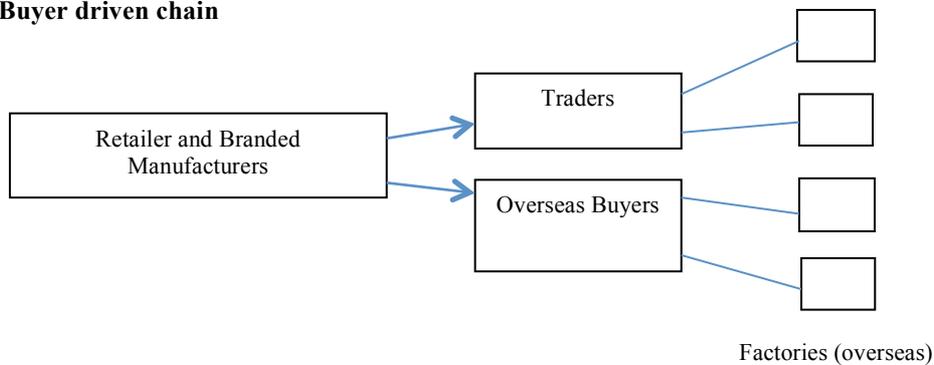
Another similar model of global value chains has been designed by Baldwin and Venables (2013). They distinguish between “spiders” and “snakes”. In snake value chains production stages follows an engineering orders, which means each location fulfils one task and then the un-(finished) product moves to the next location for adding new tasks and values. The chain continues until the product is completely produced. In spider chains the production of a good does not follow any particular order. Productions of tasks take place at different (international) locations and the final good is assembled in one location.

Figure 1: Producer-driven and Buyer-driven global value chains

Producer driven chain



Buyer driven chain



Source: adopted from Gereffi (1999), author's illustration

Global value chains can also be classified into horizontal and vertical ones. In *horizontal* value chains lead firms buy from other firms or produce in subsidiaries high quality inputs. These types of suppliers are typically highly specialised and have a high technological standard. For example Airbus outsources the production of engines to Rolls Royce. The motivation of this type of value chain is to increase the quality of the product and use the cost advantages of high-tech specialisation. *Vertical* value chains have the main motivation to reduce production costs. Tasks are outsourced to low-cost producers. Obviously, following the logic of traditional international trade theory developing countries

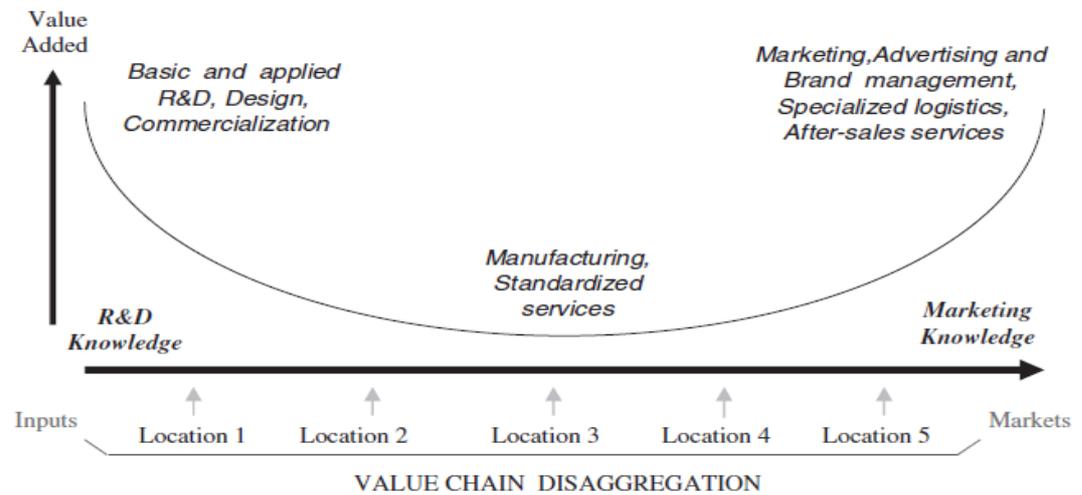
have a comparative advantage in low-productivity-low-skill-low-value adding tasks. Developed countries with their higher level of technological standard and higher skill-levels have a comparative advantage in taking over high-productivity-high-skill-high-value adding tasks. Developing countries are mainly integrated in vertical value chains and the main motivation to shift tasks to developing countries is to make the final product cheaper.

A second motivation of offshoring is to gain higher flexibility for lead firms. In case of volatility in demand for final products the needed adjustment of production can be shifted to lower levels of the value chain. Just-in-time production allows higher levels of the value chain to minimise inventories. In this paper we concentrate on the analysis of vertical value chains which are of main importance for countries like Vietnam.

In vertical value chains dominates the concentration of low value adding and low-productivity activities in developing countries *and* the intensive competition at the low end of value chains which allows only low profits of suppliers. This phenomenon can be expressed in what became known as the "smile curve", but better should be called "exploitation curve".¹¹ Figure 2 shows the exploitation curve and the typical distribution of value-added in different stages of production. According to the exploitation curve, the upstream and downstream part of value chains, which include research, design, marketing and after-sales service produce the highest value-added and are largely kept in developed countries. Most offshoring to developing countries can be found in the fabrication stage, which is not the core competency of lead firms. This stage can be outsourced to less-developed countries for cost reduction and also gaining of flexibility. The newest wave of offshoring increasingly covers services, indicating that low value-added activities may be outsourced at all stages of production.

¹¹ The "smile curve" was first designed by Stan Shih (CEO of Acer, a computer producing company from Taiwan) in order to illustrate the distribution of value-added through global value chains (Everatt et al. 1999).

Figure 2: The exploitation curve



Source: Mudambi (2008)

The Apple iPhone production can serve as an example of the very unequal distribution of value added in global value chains. Most of the components of the iPhone are manufactured in China, however, Apple continues to keep most of its product design, software development, product management, marketing and other high-value adding functions in the US. In the year 2010 from the sales price of an Apple iPhone of around 500 US dollars 58.5% were Apple profits. Profits of non-Apple US firms were 2.4%, of firms in South Korea 4.7%, in Japan 0.5%, in Taiwan 0.5%, and in the EU 1.1%, unidentified profits were 5.3%. Costs of input material were 21.9%, cost of labour in China 1.8% and cost of non-Chinese labour 3.5%. For an Apple iPad Apple profits were "only" 30% of its price with Chinese labour costs 2% of the price (Kraemer et al. 2012).

The conclusion is that global value chains can, compared with the Ricardo example, further reduce the productivity level in developing countries and further increase the productivity gap to developed countries. For the economic dynamic in developing countries this is not good news. The Prebisch-Singer hypothesis gets a new dimension because under the trade perspective global value chains make catching-up for developing countries even more difficult.

Dominance and technology effects

Global value chains create power asymmetries which are not known in traditional international trade relationships. Lead firms and big contract manufacturers are in an absolute dominant position and firms in lower-levels of vertical value chains are dominated by and dependent on the lead firm and big contract manufacturers. A monopsonist firm has the market power to reduce prices of suppliers to a minimum. It will push suppliers theoretically to profitless production and consequently increases its own profit. As the main motivation for this type of offshoring is to cut costs, multinational companies will do everything to do so as long as it does not destroy both their reputation and the quality of

products. Examples of such constellations are the lower levels of value chains in the garment or electronic industry where not only different suppliers in one country compete but even many supplier form different countries. It is obviously negative for developing countries when the lion's share of profits in global value chains is transferred to lead firms in foreign countries and wages are pushed to a minimum. This reduces domestic consumption via lower income of workers and company owners. It also reduces domestic investment via reduced possibility to use own funds for investment. Companies under competitive pressure will try to save costs by reducing wages, employ workers under precarious conditions or try to avoid safety and environmental standards. In case of subcontracting¹² the risk of underutilization of capacities in time of lower demand as well as the hiring and firing of workers is transferred to the subcontracting firms (Verra 1999).¹³

However, vertical value chains *potentially* can also create positive effects. In vertical global value chains a lead firm will directly intervene in the production of the task of the dependent firm. The lead firm has a high interest that the quality of the tasks is done in a good way and smoothly fits in the global production network. International subcontracting has two main differences compared to traditional arm's-length transactions. Firstly, it is of long-term nature as lead firms prefer a longer relationship with reliable suppliers; and secondly, the level of information that the parent companies provide for suppliers such as detailed instructions and specifications for the task is much higher than in the case of normal market interactions (Grossman / Helpman 2002). Lead firms, for example, can transfer new machinery to suppliers, give them technical support for working with them and give some consultancy to subcontractors for managing inventories, production planning and quality testing, etc. (UNCTAD 2001). But the lead firm has no incentive to transfer substantial knowledge to subcontractors as the lead firm has no control whatever to prevent the diffusion of such knowledge to other firms. Countries with very low levels of technological and managerial skills may benefit and be able to increase their productivity via subcontracting. However, these positive effects remain on a relatively low level.

Vertical foreign direct investment (FDI) takes place when a company wants to optimize its production cost by fragmenting each part of the value chain into countries with the least costs. This is similar to subcontracting. But a lead firm or a big contract manufacturer will chose FDI instead of subcontracting if the technology used in the production should not spread easily to other companies and / or if it wants to keep firm control over the supply process of own important inputs and / or if there is no suitable firm with the needed technology and management skills to be found in the developing country. In FDI, the likelihood of knowledge transfer is higher than in the case of subcontracting. Local firms can benefit from technologies and managerial skills of foreign firms through joint ventures, reverse engineering and hiring workers who are being trained for the

¹² In the case of international *subcontracting* the lead firm is signing contracts with legally independent companies in other countries.

¹³ For case studies about the apparel and garment industry which show these constellation see Anner (2015) and Khan and Wichterich (2015).

purpose of working in FDI firms. Foreign firms can also affect local companies through developing supply chains in host countries and by forcing local firms to increase their quality and standards as well as help them to increase their managerial skills. Companies with market seeking motivation may establish research centers in host countries in order to meet the special customers' demand via product localization. Especially because of the last motivation big countries have a higher chance to attract FDI than small countries. Technology and skill spill-overs highly depend on the development level of the host country. If local firms do not have a sufficiently high technological and educational level it might be difficult to absorb knowledge. The type of FDI (e.g. wholly owned, joint venture or mergers and acquisitions) is important for technological spillover. For instance, if foreign firms invest through mergers and acquisitions, the level of technological spillover may be very low as foreign companies can keep employees and production lines unchanged and only displace the management. Greenfield investment increases the likelihood that the foreign investor transfers technology and skills to the host country. Joint ventures, in comparison with wholly owned foreign companies, increase the likelihood of technology and skill transfers as a domestic company directly can absorb new technologies and skills. Of key importance is, whether economic policy forces FDI firms to increase the local content of their production and to help to build economic clusters.

There are also negative effects of FDI. Firstly, FDI firms can, as already mentioned, transfer all profits to the lead firm. Secondly, FDI can lead to a crowding out of promising domestic firms. This is especially the case when governments in host countries create preferable conditions for FDI which disadvantage domestic firms. Thirdly, if foreign companies invest in host countries only for producing and then exporting low value added goods or in labour intensive low-skill tasks in value chains the advantages for host countries will be low. For example the assembly of parts in the production of smart phones or computers does not bring a lot of new technologies to a country. Or if FDI firms import all parts and export the produced product without linkages to the domestic economy positive spillovers cannot unfold. In any case, it is not the rule that FDI firms will transfer newest technologies or strategic important tasks in a value chain to developing countries. Fourthly, FDI firms tend to exploit lax labour market regulations as well as safety and environmental standards when governments allow this; there might be even lobbying for lax standards. Fifthly, there are sectors where FDI does not contribute much to the development of host countries. If FDI goes to the natural resource sector, foreign firms will try to snap some of the rents earned in this sector. It depends on government policies to prevent exploitation policies of FDI firms in this sector. FDI in the retail sector in order to stimulate the selling of foreign products will also not be very helpful for development. The same argument holds valid for investment in the real estate sector. Foreign FDI in this sector will not lead higher competitiveness of the country. It can rather add to real estate bubbles in host countries. FDI in the financial sector can increase the efficiency, but it may also reduce credit availability of domestic small- and medium-sized firms as foreign owners prefer to give credit to big and especially

foreign companies and channel deposits to London or New York where they are at home and understand the markets.

There are two key conclusions in respect of advantages and disadvantages of FDI for host countries. Firstly, a case-by-case evaluation seems to be necessary to come to a rational judgement whether FDI has positive or negative effects for host countries. Secondly, government regulations and interventions can substantially improve the quality of FDI and their positive effects.¹⁴

What can we learn from this debate for Vietnam? Vietnam started its Đổi Mới policy at a very low development level. This allows the conclusion that subcontracting and FDI substantially supported the technological level as well as management and other skills. But permanent productivity increases during economic upgrading cannot be expected from foreign firms. Foreign firms only have an incentive for a certain level of technology and skill transfer. If Vietnam wants to go beyond this level it has to develop own policies to do so.

2.3 The danger of a middle-income trap

Catching-up of countries implies that the economic difference between them and the group of the most developed countries becomes smaller. An indicator to measure convergence is real GDP per capita.¹⁵ Looking at this indicator only a very small number of developing countries managed to catch up to the group of industrial countries with the highest GDP per capita. Japan in the 1950s and 1960s and later South Korea and Taiwan belong to this small group. Most countries stagnate at a certain level of GDP per capital in relation to the level of top countries. A middle-income trap implies that countries in their GDP per capital growth reach a kind of glass ceiling, as Kenichi Ohno (2009) called it. A country in a middle-income trap has exploited certain engines to increase GDP per capita and is not able to find new growth engines. To the group of stagnating countries belong such diverse countries as Brazil or Malaysia which have been stagnating during the last decades at a level of around 20% of real US GDP per capita. China managed to catch up quickly but still has not reached the GDP per capita of Brazil or Malaysia. Many developing countries stagnate even at much lower GDP per capita levels in relation to the US (Ohno 2013; Lee 2013).

Taking all the market mechanisms in the area of international trade including global value chains which work against a catching-up it should not be a big surprise that not many countries managed to reach the per capita real income

¹⁴ There is a rich literature about effects of FDI on industrial development in host countries (Balasubramanyam et al. 1996; Borensztein et al. 1998; Alfaro et al. 2010; Hansen / Rand 2006; Basu / Guariglia 2007; Kurtishi-Kastrati 2013). However, there is no consensus about positive effects of FDI on host countries' industrial development. Obviously there is no automatism that high FDI will lead to substantial technological and skill upgrading. It depends on the specific situation of the country and the policy it follows.

¹⁵ More precise would be GDP per hour worked. GDP per capita does not reflect different working times between countries. For example, in the US working time is much longer than in Europa as among other things holiday in the US are much shorter. Actual annual working time in the US in 2014 was 1789 hours, the OECD average was 1770 hours. Working time in Germany was 1371 hours (OECD 2015). Also, GDP does not reflect distribution of income, life expectancy, etc. and is only a very rough indicator for welfare.

level of developed western countries. South Korea and Taiwan which were successful in this respect did not develop under a regime of free markets in the logic of the Washington Consensus (for the Washington consensus policies and its critique see Rodrik 2005; Herr /Priewe 2005). However, they did also not develop under a planned economy with all-embracing government interventions. They developed in a constellation of guided markets with a combination of market mechanisms and comprehensive government interventions. At the same time they integrated in the world market, however, in a controlled and regulated way (see Stiglitz 1996; Stiglitz / Uy 1996). It was a type of regulated capitalism which guaranteed the success of these countries. Also China followed the East-Asian tradition (Herr 2010).

A middle-income trap can occur at theoretically any income level. A country can trigger a growth process connected with productivity increases by many reasons. For example the liberalization of a planned economy can lead to a first economic push as markets start to function in the sector of small and medium enterprises; an economy can experience of a boom of exports of labour-intensive-low-tech products when it was before not integrated in the world market; a natural resource boom can trigger a growth process; inflows of foreign capital and investment can trigger a growth period; aggressive public spending can create growth for some time; a real estate bubbles can trigger a period of growth; an aggressive depreciation can trigger domestic growth, etc. (Ohno 2015). Such growth engines sooner or later come to an end. If the country does not manage to increase productivity permanently and innovative power and at the same time create sufficient aggregate demand to keep the economy growing a middle-income trap becomes likely. It is relatively easy to trigger a growth process, but it is much harder to maintain high growth which leads to a catch up with developed countries.

After the start of reforms Vietnam realised very high GDP growth rates. However, growth rates became substantially lower in the first decade of the 21st century and even lower after 2008. It does not need much imagination that growth rates of real GDP per capita in Vietnam during the last decade were not sufficient for a quick catch up (World Bank 2015). Another challenge for Vietnam is the level of labour productivity. A recent report of the International Labour Organisation (ILO) revealed that the labour productivity of Vietnam is among the lowest in Asia-Pacific. It is 15 times lower than in Singapore, 11 times lower than in Japan, 10 times lower than in South Korean, 5 times lower than in Malaysia and 2.5 times lower than in Thailand. It's worth to note that Vietnam has a downward trend on the growth of labour productivity. In 2002-2007, labour productivity increased by an average of 5.2% a year; between 2008 and 2013 the increase in labour productivity slowed down to an annual average of 3.3% (ILO Newsletter 2014). Therefore it is not a surprise when Ohno (2015: 4) writes about Vietnam: "However, after more than two decades of receiving foreign investment and aid, competitiveness of Vietnamese industrial capability falls short of expectation. Foreign firms are still the main driver of industrial output and export. Policy ownership and capability of the Vietnamese government in building enterprise

competitiveness and industrial skills remain weak – and has not improved in the last two decades. Large inflows of public and private money from abroad may have generated the culture of complacency and dependency.”

Important for sustainable development is the need of a *dual* strategy. On the one hand productivity has to be increased by innovation, technological and social development. Government intervention in the form of industrial policy is needed to increase the innovative power of an economy. But high productivity increases do not automatically increase aggregate demand. This means on the other hand the country must be in a constellation of sufficient demand creation. The basis for sustainable high demand is a relatively equal income and wealth distribution and an inclusive growth model. High demand and high GDP growth becomes itself an engine of productivity increases via economies of scale and scope and a fast renewal of the capital stock. High GDP growth also leads to high profits in the enterprise sector and stimulates investment and research activities of firms. The role of high demand for productivity increases was already stressed by Nicolas Kaldor (1978: chapter 4) and became known as Verdoorn's Law (1949). A virtuous cycle is triggered when high GDP growth based on high demand triggers innovations and productivity developments and the latter stimulate demand and growth.

The above analysis makes clear that a developing country which is left to market mechanisms is in high danger to fall in a middle-income trap. Especially for a country like Vietnam with a low productivity level market mechanisms can lead to positive economic developments for some time and to a certain extent. However, at the same time market mechanisms lead to the reproduction of dependency from more developed countries and prevent a catching-up with the developed world.

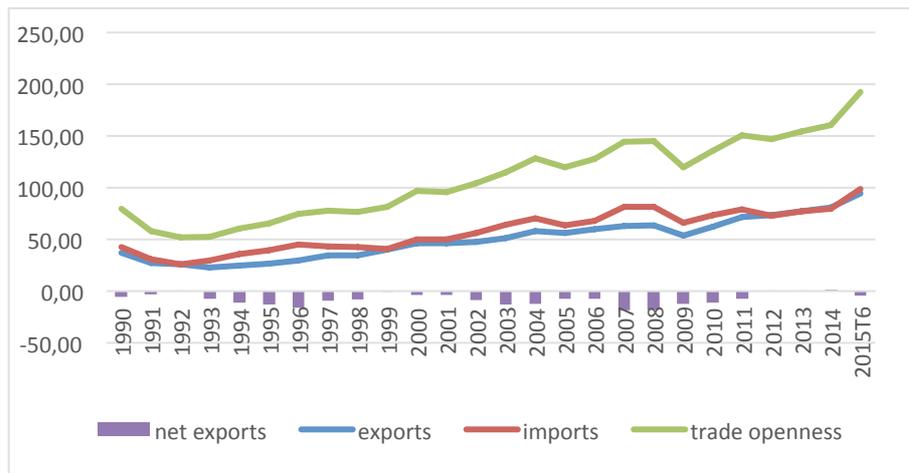
3. VIETNAM'S INTEGRATION IN THE WORLD ECONOMY

3.1 Overview about the integration of Vietnam in the world economy

Vietnam integrated very quickly in the world economy. From very low levels of imports and exports as per cent of GDP trade increased sharply whereas imports were usually higher than exports. In 2015 the sum of exports and imports in per cent of GDP reached around 200% (see Figure 3). This is extremely high compared for example with Germany with a value in the same year of around 70%, USA around 23% or China 42% (World Bank 2016a). This percentage is in international comparison especially for a country with a population of over 90 million inhabitants as Vietnam very high and makes Vietnam more dependent on world market developments than other countries.

In most of the years the current account balance in Vietnam showed negative values, however the last year was more or less balanced (see Figure 4). In some of the years the current account deficit was very high with values of more than 5% or even 10% of GDP. Of course, net capital inflows allow the import of capital goods which can increase productivity. However, such needed imports of machines etc. are also compatible with a balanced current account or even a surplus (see for example some to the successful Asian miracle countries in their development phase).

Figure 3: Development of foreign trade in Vietnam in per cent of GDP



Source: author's compilation based on General Statistics Office of Vietnam (2016); trade openness is defined as exports plus imports

Figure 4: Current account balance of Vietnam in per cent of GDP



Source: Trading Economics (2016)

Current account deficits have several negative repercussions. They can lead to a lack of domestic demand. They also lead to foreign debt which in the case of Vietnam is debt in foreign currency. Foreign debt implies a dangerous currency mismatch and the possibility of currency crises (for more detailed arguments see section 4.2).

Figure 5 shows the development of gross foreign debt of Vietnam in US-dollar. Foreign debt after 2005 sharply increased, however decreased after 2012 somewhat. With an actual foreign debt level of 45.2% of GDP in early 2016 (IMF 2016) Vietnamese foreign debt is high. In case of a strong depreciation of the dong the foreign debt can become a high burden. Most of the debt is public debt. Public debt to GDP in 2015 was 58.3% with an increasing trend; end of 2014 public debt in foreign currency was 39.9% of GDP (IMF 2016; VietNamNet Bridge 2015). While official loans to Vietnam are shrinking, Vietnam might gradually seek ways to get more risky commercial loans with floating interest rates. Therefore, the risk of changing interest rates and exchange rates might substantially increase. Vietnam should avoid such a dangerous development of foreign debt which exposes the country to the danger of currency crises and makes it economically and politically dependent on foreign creditors and donors.

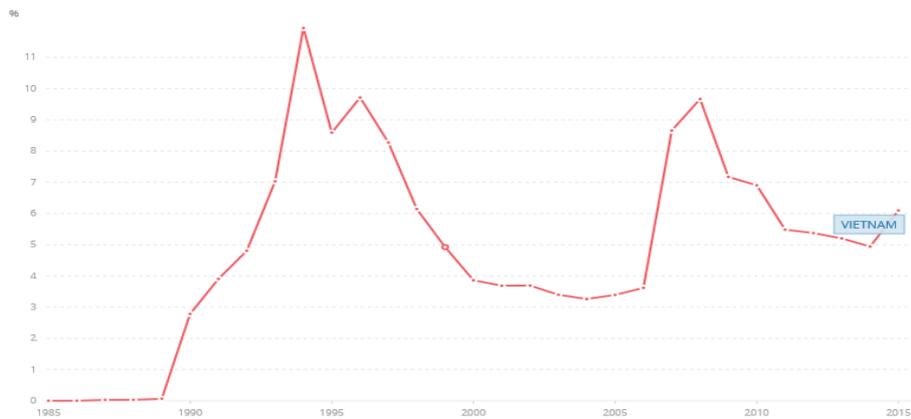
Figure 5: Gross foreign debt in Vietnam in per cent of GDP



Source: Trading Economics (2016)

Current account deficits are only possible if a country can realise net capital inflows or reduces official foreign reserves. For Vietnam FDI inflows play a big role and financed part of the current account deficit. However, FDI inflows which do not create foreign debt were not big enough to avoid the accumulation of foreign debt in Vietnam.

Figure 6: FDI net inflows in Vietnam in per cent of GDP



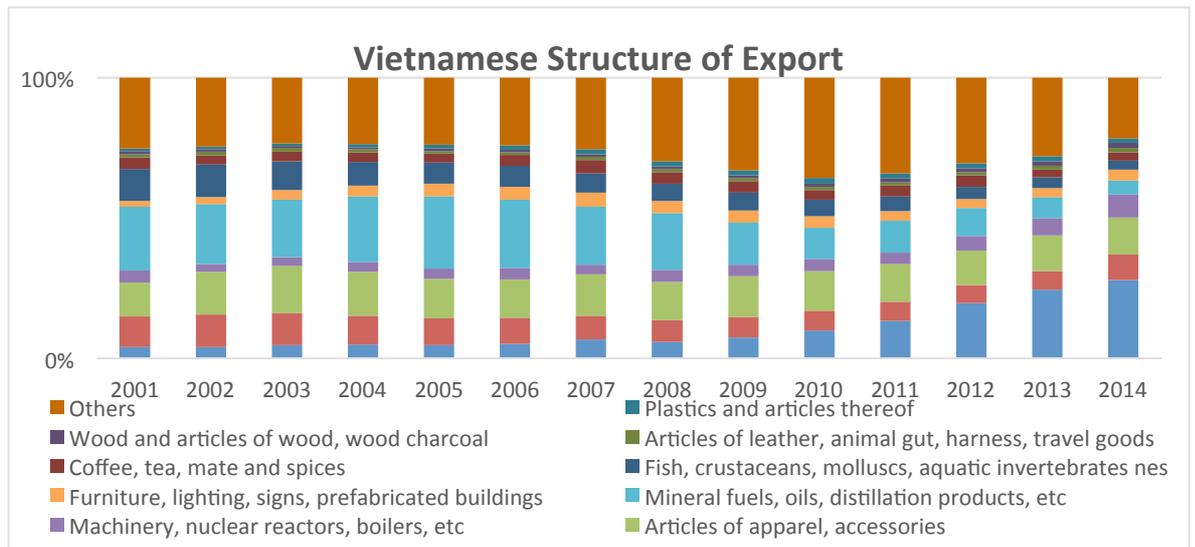
World Bank (2016b)

Since the Foreign Investment Law took effect in 1987, Vietnam has achieved substantial FDI inflows. Measured in per cent of GDP, Vietnam reached its peak of attracting FDI in 1996. In 2008, thanks to joining WTO, Vietnam has again successfully attracted large volumes of FDI projects. After 2008 due to the negative impact of the global financial crisis and Vietnam's unstable macroeconomic development FDI inflows remained relatively low, but still reached levels of 5% of GDP or more (see Figure 6).

3.2 Structure of exports and imports in Vietnam

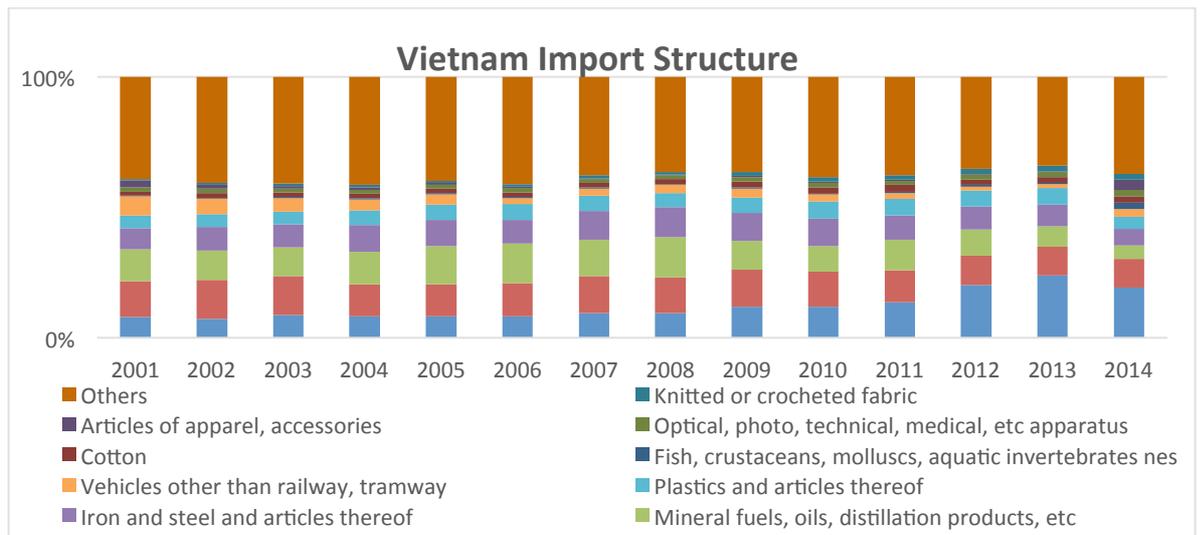
Figure 7 and 8 show the export and import structure of Vietnam and its development. Vietnam's main export items at present come from raw products, including mineral resources and agriculture, forestry and fishery products. In 2014 this group of products accounted for approximately 50% of exports. Processed products like footwear, textiles or gaiters accounted for about 30% of total exports. The industrial sector's share of Vietnamese trade has been continually increasing during the last ten years whereas the period has seen a significant decline in the relative importance of agriculture exports. In general, the main export merchandise of Vietnam comprises of raw materials or pre-processed outsourced manufacturing based on labour-intensive and low value-added productions. Vietnam mostly imports machinery, intermediate products for manufacturing consumer goods and other products that are not yet made domestically like cars, motorbikes and refrigerators.

Figure 7: Vietnam's export structure



Source: author's compilation based on General Statistics Office of Vietnam (2016)

Figure 8: Vietnam's import structure



Source: author's compilation based on General Statistics Office of Vietnam (2015)

Crude oil accounts for approximately 20% of total exports. But also the mining sector is important for exports and characteristic for the export structure. According to a report by the Government to the National Assembly Standing Committee (8/2012 session) the number of enterprises in mining has increased rapidly, from 427 enterprises in 2000 to nearly 2000 enterprises in 2014. Among these small and medium scale enterprises make up 60%. However, enterprises focusing on post-processing only account for a negligible proportion. If any, most post-processing enterprises employ simple outdated technology with low economic efficiency. There are only a few rare materials such as tin, zinc, copper,

iron, and antimony that have complementary post-processing industries. Despite the government's guidelines and the Prime Minister's directives to thwart unprocessed raw materials exports and upgrade processing this could not be achieved, partly because of illegal raw materials exports. In many cases budgetary pressures in certain provinces and cities led to the permission of natural resource exploitation and acceptance of illegal exports.

Vietnam's growth model is heavily reliant on trade in natural resources on the basis of three reasons: (i) The government focus on natural resource exploitation as one of the main development strategies, (ii) as a result of this strategy huge capital investment and investment in advanced technology takes place in the exploitation and post-processing of natural resources, with only limited success, (iii) at the same time, as mentioned, there are many private companies exporting natural resources on a low technological level. As a result of this development depletion and exhaustion of resources are accelerated, environmental degradation is expedited and environmental costs became higher.

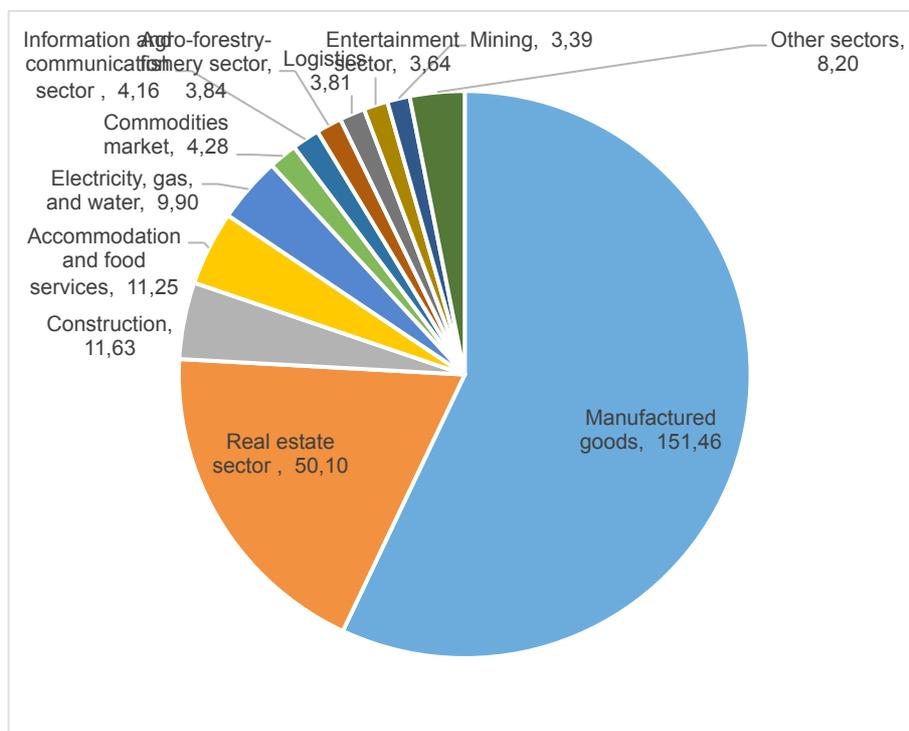
The proportion of exported services in relation to total exports went down from 11.6% in 2005 to 7.6% in 2012 and to 7.6% in 2014. More importantly, Vietnam's service trade balance has been constantly negative. Only tourism achieved surpluses, while other crucial services such as transportation, telecommunication, finance, insurances etc. all suffered from deficits (Online Newspaper of the Vietnamese Government, 13.01.2013).

Looking at the structure of international trade and services in Vietnam the Smith-Ricardo model is largely confirmed. A large proportion of Vietnam's exports originate from absolute advantages. This is the case for natural resource exports like crude oil and minerals; and it also the case for most of the agricultural exports whose competitiveness largely depends on the climate in Vietnam. In the industrial sector Vietnam exports low-tech-labour-intensive products. If imports of intermediate goods for inputs in global value chains are neglected imports are mainly final consumptions goods and investment goods. This is exactly what the Smith-Ricardo model predicts. Unfortunately this means also that all the fears in the tradition of Friedrich List are of key importance for Vietnam. Vietnam finds itself in a structure of international trade which without comprehensive government interventions reproduces underdevelopment and prevents catching-up.

The high percentage of natural resource exports leads to an overvaluation of the exchange rate – at least if the industrial sector is taken as a reference. Taking this Dutch-Disease effect it becomes clear that the industrial sector in Vietnam has been suffering from an exchange rate which is destroying its competitiveness. Vietnam also suffers from the volatility of natural resource prices. At the same time the high percentage of exports of unprocessed agricultural products involves the risk stressed by the Prebisch-Singer hypothesis that these products have to be sold for a very low price and lead to bad term of trade for Vietnam.

For international trade FDI inflows are of most importance for Vietnam. Figure 9 shows the structure of the stock of FDI in Vietnam in 2015. FDI projects mainly focused on the industrial sector contributing significantly to the process of economic restructuring towards industrialization. A study conducted by Central Institute for Economic Management (CIEM) in 2006 showed while FDI in the 1990s mainly focused on the mining industries and import substitution, since 2000 FDI in the processing industries and export-oriented fields has been increasing significantly contributing to a surge in total export but also imports of Vietnam in recent years (Tue-Anh et al. 2006). With around 30% the stock of FDI in the real estate sector is relatively high in Vietnam. FDI in this area added to the real estate bubble in Vietnam was not very helpful in industrial upgrading.

Figure 9: Structure of FDI inflows to Vietnam, stock of FDI in 2015



Source: author's compilation based on General Statistics Office of Vietnam (2016)

Due to legal regulations FDI projects registered in Vietnam until the mid-1990s took largely the form a joint venture between state-owned enterprises (SOEs) and foreign investors. End 1998 the number of joint venture accounted for 59% of total projects and 69% of total registered capital. Since 1997 ownership restriction has been removed. This had a strong impact on the ownership structure of FDI. In 2006, joint venture projects reduced to just 42.5% of total registered foreign capital, while projects with 100% foreign capital accounted for 45.5%. Amongst joint venture projects those between foreign investors and private Vietnamese enterprises increased significantly (Tue-Anh et al. 2006).

Relatively high labour productivity expected from the FDI sector is generally thought to spread out to other sectors. However, the case of Vietnam needs to be considered carefully. The overall productivity development in Vietnam is, as shown above, slow and the productivity effects of FDI have been disappointing. The analysis of how Vietnam is integrated in global value chains makes this point clearer.

3.3 Global value chains in industrial productions

Vietnam is integrated in global value chains and exports and imports large volumes of intermediate goods. From the volume of trade especially the textile/garment industry, shoemaking/leather industries and the electronic industry are important to understand the integration of Vietnam in global value chains. In this section these three industries are analysed in more detail. Other sector where Vietnam is integrated in global value chains are coffee, tea or the shrimp farming industry (see more Tran et al. 2013).

Textile and garment industry

Following the launch of the transition process from a planned to a market economy in 1986, the textile and clothing industry was one of the first industrial sectors starting growing. This trend has continued until today and got an additional boost following Vietnam's accession to the WTO in 2007. For growth of Vietnam the textile and clothing industry plays a major role. Ready-made garments (RMG), i.e. clothing products and leather products, contribute substantially to the proceeds of the export-based Vietnamese economy (Sarah 2011). Currently, Vietnam ranks fourth in the league table of the biggest clothing exporters, and is only surpassed by China, Bangladesh and India (Kak 2015).

The Vietnamese Textile and Apparel Association (VITAS) estimated that the sector comprises in 2015 a total of more than 5,000 companies, of which approximately 4,500 sewing rooms, 500 weaving mills and 100 spinning mills. The annual production is 5,000 tons of wool, 200,000 tons of yarn and fibres, 1.4 billion tons of cloth and 3 billion ready-made clothing products. In 2015 textile and apparel account for 13.6% of Vietnam's total export values; accordingly the sector ranks second in manufacturing after electronic products in terms of net proceeds (Schweisshelm 2016).

The share of Vietnam in the global apparel export market was 3.7% in 2013 (Kak 2015). The textile association VITAS forecasts a total export volume which growth much faster than in China and India. In 2015 in export value of approximately 24 billion US dollars was achieved. However, approximately 12 billion US dollars must be detracted for the import of intermediate products, such that the value added in the industry would be approximately USD 12 billion in 2015. A further growth is not unrealistic given the drop in oil prices and the drop in costs for fibre materials. According to VITAS, in 2015 52.8% of apparel exports go to the US (Bangladesh 24.1%), while 17 % is exported to EU countries (Bangladesh 59.7%) followed by Japan and Korea (VISTA 2015).

Typically, production in global textile and apparel value chains is divided into 5 basic stages: 1) supply of raw materials, including natural cotton, thread, etc.; 2) production of intermediate goods; products of this stage are fibres, fabrics provided by weaving, knitting and dyeing companies; 3) design and manufacture finished products implemented by garment companies; 4) export by commercial intermediaries; 5) marketing and distribution (Tot 2014). The highest added value is earned in design, marketing and distribution. The value added is the lowest in the CMT (Cut-Make-Trim) process. However, in the global value chain, Vietnam is now mainly engaged in CMT which has a low value-added and is characterized by labour-intensive production. 85% of Vietnamese enterprises in the sector are engaged in CMT. The rest occupies mainly finished product sourcing (FOB), but it is still FOB at level 1, which means that Vietnamese enterprises are engaged in subcontracting without much own freedom (Tot 2014).

In sum, Vietnam in the textile and garment industry is in the exploitation curve located at the lowest level with the lowest value added. Remaining on this level does not open a development perspective.

Shoemaking and leather industries

The shoemaking industry also plays an important role in the Vietnamese export economy. Vietnam is the world's third largest exporter of shoes and handbags after China and Italy. In 2013, the most important markets were the US (Vietnam is the second most important supplier for the US behind China), followed by Belgium, just ahead of Germany. With free trade agreements in the pipeline, the Association of Vietnamese Footwear, Leather and Bag Producers (LEFASO) expects a substantial increase in exports of their products during the next years (Dezan 2015). The shoemaking industry according to government sources employs around 1 million workers in 600 companies. In 2015, 77% of the export value in the shoemaking industry is generated in FDI companies (Vietnam News 28.02.2015). One contributing factor to the growth of the sector is the increasing number of companies relocating production from China and Bangladesh to Vietnam. The explanation can be found in the relative low Vietnamese wages, a geographically good strategic location of Vietnam and the perspective of upcoming free trade agreements with major economic regions. India, with its lower wages and production costs, is the main competitor for the industry.

But also in this sector, the dependence on imported pre-fabrics, mainly from China (mainland), South Korea and Taiwan, is high. Raw materials of leather shoe's production accounted for 80% of the value of shoes. Vietnam's enterprises only produce limited items for the shoe production such as labels, laces, lace etc. but completely ignore other accessories such as eyelets, hooks, beads, ornaments for shoes, etc. Most Vietnamese businesses in the footwear sector are small and medium sized and lack capital, advanced technology, high-quality human resources, initiative by other industries for improvement and good management. Overall labor productivity in the sector is low (Vietnam News, 11.12.2014; Vietnam Business Forum 26.12.2014). The production of Vietnam's footwear industry is mainly export processing; design capability are weak. 70% of businesses depend

entirely on foreign resources, technical equipment, technology, design and marketing (Hung 2015). In substance, the logic of the exploitation curve also applies to the shoemaking industry where Vietnam concentrates on low value adding, low tech and labour intensive tasks in the global value chain.

Electronics industry

The electronic industry is the biggest export-earner for Vietnam. The largest single-investor, Samsung, now produces more than half of its smartphones globally in Vietnam; Intel, Foxconn and others are following suit. According to the evaluation of the Electronic Industries Association of Vietnam (VEIA), Vietnam appeared to be one of the largest manufacturing hubs of mobile phones, photocopy machines, printer etc. in the world. The export of electronics and components in 2013 has grown to over 34% of Vietnam's export basket (VEIA 2014). However, the added value still is low and raw materials have been mainly imported. In 2014, Vietnam's electronic industry exported over 32 billion US-dollars, but imported goods of 28 billion dollars (VEIA 2014). It is noteworthy that the local content in the electronic industry is limited to assembling on the basis of low wages. Most intermediate parts are either imported from China (partly because of the location that Vietnam has towards China and the easily accessible ports down the coast which gives Vietnam an advantage over Thailand or Cambodia) (Lac 2015; Hung 2015), or from South Korea with which Vietnam has recently concluded a trade agreement that helps Korean electronics companies to offshore production to Vietnam.¹⁶ A recent survey of the Central Institute for Economic Management (CIEM) showed that enterprises with 100% foreign investment in the electronic industry in the provinces of Hung Yen, Hai Duong, Ba Ria-Vung Tau, Binh Duong and Dong Nai perform only the simplest stages in the production chain, while the design and other sophisticated phases of the production are determined by the parent company abroad. A study conducted by the Fulbright School in Ho-Chi-Minh City draws the same conclusion. The process of industrial upgrading, moving up the value chain and gaining a strong foothold in global supply chains is slow. Value-added from the manufacturing sector as a percentage of output declined steadily from 31 percent in 2000 to 21 percent in 2005 and to only 13 percent in 2013 (Tue-Anh et al. 2014).

To sum up: The three key industries looked at in Vietnam are highly integrated in global value chains, however tasks taken over in Vietnam are mainly low value adding, low tech and labour intensive productions. The local content is relatively small and intermediate products are mainly imported. In the framework of the exploitation curve Vietnam is located at the lowest level. In the textiles and garment industry and shoemaking and leather industries subcontracting and small and medium-sized companies pay an important role. The technological and managerial level of most of the enterprises in this sector is in international

¹⁶ For instance, after 20 years of investment in Vietnam the localization rate of parts produced by Samsung currently (2015) only reaches 36%. In earlier times under different regulations Samsung and Honda invested more in local content, Samsung in Thai Nguyen and Bac Ninh and Honda in Vinh Phuc (Saigon Times Online, 15.07.2015).

comparison low. Economies of scale are not exploited in a sufficient way. In the electronics industry FDI firms dominate the production of low value tasks. Here, economies of scale are exploited. However, the local content, the transfer of technology and spill-over effects to Vietnamese firms and other industries are disappointing. There are not many linkages between FDI firms and domestic firms. It seems to be obvious that the unregulated market mechanism will not lead to sufficient upgrading in Vietnam and to a catch-up of living standards.

3.4 Effects of free trade agreements

The economic integration process of Vietnam started from 1995 with four most significant milestones. First, Vietnam negotiated and signed a bilateral trade agreement with the US in 2000. This was an important rehearsal for Vietnam's broader participation in free trade agreements and WTO membership. The US-agreement allowed Vietnam to reach the largest export market in the world without discrimination. Second, Vietnam joined the Association of Southeast Asian Nations (ASEAN) and the ASEAN Free Trade Agreement (AFTA) in 1995 followed by a free trade agreement with other additional partners (ASEAN+) since 1997. Third, Vietnam joined the WTO in January of 2007. Along with these agreements in 2009 Vietnam signed a comprehensive Economic Partnership Agreement (EPA) with Japan which is essentially a bilateral trade agreement. Fourth, Vietnam concluded a number of trade agreements (that have either been signed or will be concluded in 2015). Among these are the Trans-Pacific Partnership Agreement (TPP) and the EU-Vietnam Free Trade Agreement. Both could be considered as a high-standard free trade agreement affecting many fields in the economy and society. In these agreements among other things tariff cuts are negotiated over different periods of time. An overview about recent agreements is given in Table 3.

Table 3: Overview about trade agreements in Vietnam

Agreements	Adjustment time	Agreed tariff cuts	Timing
WTO (World Trade Organisation)	01/01/2007 – 31/12/2018	35.5%	12 years
AFTA (ASEAN Free Trade Area)	1996 - 01/01/2018	~100%	22 years
ASEAN(Association of Southeast Asian Nations)– China	01/7/2007 - 01/01/2018	90%	10 years
ASEAN – South Korea	01/06/2007 - 01/01/2018	87%	11 years
ASEAN – Australia and New Zealand	01/01/2010 - 01/01/2020	90%	10 years
ASEAN – India	01/01/2010 - 31/12/2020	78%	11 years
ASEAN – Japan	01/12/2008 - 31/3/2025	88.6%	16 years
Vietnam – Japan	01/10/2009 - 31/03/2026	92%	16 years
Vietnam – Chile	01/01/2014 - 01/01/2029	87.8%	15 years
Vietnam – South Korea	Signing 5/5/2015	89.9%	15 years
Vietnam – Eurasian Economic Union	Signing 29/5/2015	87.8%	10 years
Vietnam – European Union	Signing 02/12/2015 – Implementing 2018	99%	10 years
Trans-Pacific Strategic Economic Partnership (TPP)	Signing 02/2016 – Implementing 2018	~ 100%	16 years

Sources: Vietnamese Ministry of Foreign Affairs (2016)

For the next decade the TPP will be especially important for Vietnam. The debate about the TPP revolves around the question of what economic benefits Vietnam would enjoy if it participates in the completion of the TPP. The study by Petri et al. (2011) is being widely discussed in Vietnam. This study argues that Vietnam would be the largest beneficiary of the TPP. It is cited as the key economic reason Vietnam joined the negotiations, and has bolstered a growing number of pro-TPP voices among the public. Also the World Bank (2016) expects more gains than

losses from TPP. According to the World Bank report, Vietnam's export in apparel and footwear will increase by about 50%. The effects of TPP can be exemplified by the textile sector. In this sector the TPP will incorporate Vietnam into the global value chain to an even greater extent than has hitherto been the case. TPP member countries represent 40% of global GDP and 30% of world trade volume. Vietnamese exports could overtake Bangladesh's in a few years in terms of market share in global exports. According to a recent report of the World Bank, if the TPP takes effect Vietnam's garment and textile sector could grow by 41% by 2020 (World Bank 2016).

These very optimistic expectations contradict with persistent problems in the Vietnamese apparel and footwear and textile and clothing industry. The industries complain about rising labour costs. And there is the persistent dependency on imported raw materials and intermediate goods. One of the conditions attached to TPP is that intermediate goods for exported goods going to TPP areas on preferential terms must come from a TPP member country. Yet, for example, China and South Korea alone (both no TPP countries) accounts for 54% of all imports for the textile and clothing industry and are Vietnam's main source for intermediate products (World Bank 2016). Imports from other countries might be substantially more expensive than from China or South Korea.

Foreign investors from Asian countries in the textile and garment apparel and footwear sector in Vietnam were so far only interested in Vietnam as a low-wage assembling site in the global supply chain. There is a need for the domestic industry to invest heavily especially in downward linkages of the value chain. A number of Vietnamese companies are already starting or expanding their own fiber manufacturing operations in order to not be left behind when the TPP is finally implemented. But also foreign investors are flocking into the establishment of spinning, knitting and dyeing factories in Vietnam. It is important that the government supports local producers in the transition period to full enforcement of the TPP rules in order to climb up the value chain, establish local brands and also encourages upward linkages in terms of export marketing strategies. In that sense the TPP agreement could serve as a "driver" for more upstream investment and downward linkages in the textile sector.

The same situation prevails more or less in the electronics sector. Also here, as shown above, the local content is limited to assembling on the basis of low wages. Large foreign companies are dominating here which makes it even more difficult to trigger an upgrading of Vietnamese enterprises.

Overall, Vietnam is deeply integrated into global supply chains. However Vietnam's export industry is located at the low-end side of production with few upward and downward linkages and little local content. In some of the sectors foreign companies play a paramount role for exports. They can easily leave Vietnam to switch productions to other countries worldwide.

There are open questions about the long-term effects of TPP on a more fundamental level. It looks like that TPP will integrate Vietnam deeper in *existing*

global value chains and lead to a further specialisation of its export and production structure. There is a high likelihood that this specialisation will *not* lead to economic upgrading – at least there is no good argument that the market mechanism will lead to such an upgrading. A further specialisation on low-tech labour intensive productions may even reduce the chances of longer-term upgrading. In a comprehensive study Jean Imbs and Romain Wacziarg (2003) found out that successful developing countries in their development face did not specialise but developed a very diversified and broad export and production structure – just the opposite expected for Vietnam. The specialisation Vietnam may experience under TPP fits to the logic of the Smith-Ricardo trade model with all the negative consequences of such a specialisation.

In case of TPP as well in any other free trade agreements there are hopes that further trade deregulation leads to a stimulation of GDP growth. Cautious is also needed here. How GDP develops after trade deregulation largely depends on the development of the current account balance and especially the *trade balance* and not on the development of single export industries. When Vietnam is pleased about substantial advantages of TPP in some industries, for example of increasing export in apparel and footwear of about 50%, there must be substantial disadvantages in other industries, which are somehow forgotten in the debate. Obviously, implicitly it is assumed that between deregulation of trade and surpluses (reductions of deficits) in the trade balance of a country is a clear relationship. But such an idea is simply wrong. If net capital flows between a country and the rest of the world do not change no free trade agreement can change the current account balance of the country under discussion. This is what we can learn already from David Ricardo (1817). He made the assumption of capital immobility which implies that the current account is always balanced by definition. A switch to more free trade in the logic of Ricardo correctly benefits some industries, others will suffer. Can we expect higher net capital outflows from Vietnam to the rest of the world after TPP is implemented? This is hard to predict, probably the opposite might be the case or net capital flows will not change much. In any case, if there are extremely positive developments in some industries caused by TPP there must be extremely negative effects in other industries, for example in agricultural production. The involved structural changes are probably a challenge for the Vietnamese economy.

In the usual calculations of the positive effects of free trade the efficiency gains in the logic of Ricardo are calculated. But these are *potential* gains. If sufficient demand stimulation is missing or structural adjustments are difficult free trade will not lead to positive welfare gains even in the short-term – not to speak about negative long-term effects of free trade for developing countries. As an empirical fact, the era of free trade after the 1980s did not bring higher worldwide growth than the first decades after World War II with more regulated trade and capital controls. Overall Vietnam is well-advised to be cautious in its growth and employment expectations of TPP and other free trade agreements.

4. THE ROLE OF INDUSTRIAL POLICY FOR DEVELOPMENT

4.1 Principles of industrial policy

Industrial policy is needed in all countries in the world. This is the case even more in developing countries which suffer from a number of market mechanisms which reproduce underdevelopment. The reason for this is that there are two fundamental coordination failures the private sector has difficulties to solve (see Rodrik 2004; 2008; Stiglitz 1996).

Firstly, there are *information externalities*. An innovation, the production of a new product which was produced before in other countries, applying a new technology to produce goods, etc. involve a process of discovery or entrepreneurship. From its very character new things are risky and can fail, the more fundamental the change is, the higher the not calculable uncertainty. The high level of uncertainty makes it difficult for private investors to invest alone in new activities. And to make matters worse, is a firm successful to produce a new product etc. follower firms can in many cases easily imitated the successful firm and can, for example, also enter the new production. Or to put it differently: The social rate of return of a discovery process is much higher than the private return. This gives an incentive and a need of governments to support new activities.

Secondly, there are *coordination externalities*. Most new productions need a high level of investment. Economies of scale and scope prevent in many cases that innovative firms can start on a small scale. Even more important, in many cases a whole bundle of activities is needed which goes far beyond a single firm. A new production of a firm may need a new infrastructure from transportation possibilities to communication which cannot be handled by a single firm. A firm may need specific skills of employees, it may need other firms which produce complementary goods or inputs or buy the new product, etc. In all these cases an innovative firm, even a big one, is not able to coordinate all these activities. Without government intervention a new production or innovation most likely never takes place. In a developing country FDI can take over such functions. In such a case FDI must flow in the right areas and must build-up backward and / or forward linkages. But this must be considered an exception. FDI firms do not have the development of country as their aim; their aim is to make money for a foreign owner living in a foreign country.

Ha-Joon Chang (1994) makes a similar argument. He stresses that governments have to create a vision together with society as whole in which direction technological development has to go. Only such a vision allows the concerted action of societal forces to implement new developments. All changes in society, also the positive ones, produce losers. Part of industrial policy is to compensate the losers and allow a relatively smooth structural change. If losers are not compensated they may be able to block structural change.

A good example for industrial policy is the creation of the Orchid industry in Taiwan which became world class (Rodrik 2004: 8; Wei et al. 2010). Taiwan used to be a traditional exporter of sugar. In the late 1990s / early 2000s due to intensive international competition this industry came under pressure and could no longer survive in Taiwan. As a reaction it was decided to grow orchids. The government paid for a genetic laboratory for orchids, a needed quarantine site, shipping and packing areas, new roads, water and electrical hook-ups and an exposition hall. The private farmers build their greenhouses. In 2001 the Taiwan Orchid Growers Association, a non-profit organization, was founded with the aim to promote the development of the Taiwan orchid industry.

Another example is the abandoning of nuclear power in Germany which never would have been triggered by the private sector. After the nuclear catastrophe in Fukushima in 2011 the German government decided to shut down the last nuclear power station in 2022. Even before the German government subsidised solar and wind energy for years. Thousands of small electric current producers were created who have the right to sell their surplus electric current to the big electric power producers. The infrastructure is built to bring electric power from big off-shore wind parks in the north of Germany to the industrial centres in southern Germany. A compromise with coal mines was found to fade out power plants based on coal over a longer process.

There is no doubt that a country without comprehensive industrial policy cannot develop. Thus, the question is not why, but how to carry out industrial policy (Rodrik 2008; Ohno 2015). But the challenge is whether the government is better in deciding in which direction to invest than the private sector? Is a bureaucrat, probably far away from enterprises, able to decide in a rational way which industries and which companies should be supported and which ones not. In addition, all the problems with vested interest and corruption can make industrial policy very difficult. One could come to the conclusion that the danger of government failure is bigger than market failures. Following these arguments governments should be restricted to horizontal industrial policies in line with the Washington Consensus. This means governments should invest in general education, general research and development, general infrastructure, etc. Of course, these types of horizontal industrial policies are important. But it is an illusion that these policies would avoid far reaching discretionary government decisions with widespread repercussions. Looking more closely at horizontal industrial policy governments have to decide a lot of things: Should primary education, vocational education or university education have priority? Are engineers or managers more important? In which direction should research be supported, which streets, ports, airports, and electric grids should be build and where? In addition, especially for developing countries horizontal industrial policy is not sufficient. For industrial policy it is important to intervene in a selective way more directly in technological and industrial development to overcome information and coordination externalities. If in developing countries industrial policy due to government failure is not possible, a catch-up of the country simply

is not possible. This explains why so many developing countries do not develop even when they follow Washington Consensus policies.

How can government failure be minimized? Of key importance is the flow of information between government and the enterprise sector and the creation of a *process* which selects policies in a rational way and checks mistakes. Dani Rodrik (2004: 3) gives a good summary of this idea: "The right model for industrial policy is not that of an autonomous government applying Pigovian taxes or subsidies, but of strategic collaboration between the private sector and the government with the aim of uncovering where the most significant obstacles for restructuring lie and what type of interventions are most likely to remove them. Correspondingly the analysis of industrial policy needs to focus not on the policy *outcomes* – which are inherently unknowable *ex ante* – but on getting the policy *process* right." Institutions have to be created with government and employer's associations in the centre, but also including trade unions and civil society.

Rodrik (2004) gives ten principles for industrial policy which also can serve as a guideline for industrial policy in Vietnam.

- (1) Incentives should be given only for new activities. This means activities which increase the productive power of the country. There should be no discrimination. Private companies, state-owned companies or small and big companies should qualify if they deliver something new.
- (2) There should be clear benchmarks or criteria for success or failure. These criteria have to be checked.
- (3) There should be built-in sunset clauses. After an appropriate period of time support has to be reduced and faded out.
- (4) Governments should support activities not whole sectors. To support tourism or electronic industry is not sufficient. Specific activities which support innovation and productivity have to be selected.
- (5) Activities supported should have spill-overs and demonstration effects. They should crowd in additional investment and productivity gains.
- (6) The authority implementing industrial policy should have demonstrated that they are qualified and not corrupt.
- (7) Implementing authorities should be closely monitored by political authority of the highest level. A cabinet minister or even president or prime minister should be directly in charge of supervising and controlling industrial policy and its implementation.
- (8) The implementation agency for industrial policy should have direct and close information channels with the enterprise sector.
- (9) Mistakes of industrial policy will occur. It would be a bad sign if no mistakes happen. Also the private sector makes mistakes in its investment decisions. What is important is to detect mistakes early and minimize their costs.

(10) Industrial policy is a process. Implementation agencies should be on a path of permanent learning from mistakes and successes.

These guidelines could be adjusted to the situation in Vietnam. We come back to this point in the section about the recommendation for Vietnam.

4.2 The role of the exchange rate

Some may be surprised to find a subsection about the exchange rate under the section of industrial policy. But this is no accident. Exchange rate policy is probably the most successful horizontal type of industrial policy. An overvalued exchange rate makes industrial development of a country difficult whereas an undervaluation supports the industrial sector and makes it competitive. In spite of the fact that David Ricardo (1817) neglected the negative dynamic effects of free trade on productivity development in less developed countries there are two important lessons learned from him. The first one is, as mentioned already above, that in case there are no international capital flows (or net flows are zero) the current account balance must be zero. The second one is that a real exchange rate will be established which keeps the current account between the two countries balanced.

The Ricardo model assumes a functioning exchange rate mechanism which depends on a number of conditions and does not always work smoothly.

First, a real depreciation does not always improve the current account imbalance. The so called Marshall-Lerner condition has to be fulfilled. This condition states that the absolute value of the import elasticity plus the export elasticity of a real exchange rate movement must be bigger than one to lead to a "normal" reaction. If, to make an example, a real depreciation does not reduce the quantity of imported goods *and* at the same time the export quantities do not increase the Marshall-Lerner condition is not fulfilled. The likelihood of high import and export elasticities is reduced if a country is integrated in global value chains with high imports of intermediate goods. In developed countries the Marshall-Lerner condition holds. In developing countries like Vietnam the Marshall-Lerner condition may not hold or very large exchange rate movements may be needed to balance the current account. For Vietnam empirical investigations have shown a typical result for developing countries. In the short-run a real depreciations has a significant negative impact on the trade balance. However, the trade balance will improve in the long-run (see for example [Trinh 2014](#)).

Second, a high level of foreign debt denominated in foreign currency makes depreciations difficult. The problem is that depreciations increase the real debt burden of debtors in foreign currency. The consequences are liquidity and solvency problems of debtors in foreign currency. In addition, for foreign debt the domestic central bank cannot take over the function as a lender of last resort. Dollarisation (or euroisation), which means domestic debt in foreign currency, aggravates the problems. High debt in foreign currency leads to a fear of floating as sufficient depreciations are prevented because of the danger of financial crises

(Calvo / Reinhart 2002). If a big depreciation then cannot be avoided the outcome is a twin-crises, a crisis of the exchange rate *and* the domestic financial system (Kaminsky / Reinhart 1999). Countries which allow high foreign debt in foreign currency and international institutions, which do not warn countries doing this, act in an irresponsible way. Because high foreign debt steals countries the very important macroeconomic instrument of exchange rate adjustment. Vietnam should reduce foreign debt as quickly as possible.

Third, a nominal depreciation may not lead to a real depreciation of a currency. Countries which suffer from a high inflation path-trough of nominal depreciations can be caught in a constellation in which nominal depreciations lead to such an enormous domestic inflationary push that the real exchange rate does not change. A high inflationary path-trough is likely when the negative effect of falling real incomes which accompany a real depreciation are not accepted by the population and demands for nominal income increases are fulfilled. If for example, a cut in real wages immediately leads to nominal wage increase a depreciation-inflation-wage-price spiral is triggered which leaves the real exchange rate unchanged. The higher the import quota and the bigger the real depreciation the bigger is the negative real income effect of the depreciation, and the bigger the challenge to keep nominal domestic incomes unchanged.

Finally, connected to the last point, a real depreciation can lead to a political destabilisation, for example when a big part of the consumption basket of the population is imported. If income inequality is high a real depreciation can push part of society into (deeper) poverty. Political destabilisation is possible.

In spite of these problems real depreciations have for the medium- and long-term development a number of positive effects: a) They increase the profitability of companies in the exporting sector across the board; b) real depreciations can be substantial and quick; c) export activities are stimulated which have to compete on the world market which provides the best benchmark for efficient companies; d) the subsidy of export activities is completely market friendly and does not need a bureaucrat to decide which company should be subsidised. Dani Rodrik, using these arguments, summarises: "For all these reasons, a credible, sustained real exchange rate depreciation may constitute the most efficient industrial policy there is." (Rodrik 2005: 2002) A level of the real exchange rate which makes the domestic industry internationally competitive is a permanent positive industrial policy.

Aggregate demand is investment plus consumption plus government demand plus exports minus imports. Countries with a deficit in the current account tend to suffer from a lack of demand. Because in many cases investment, consumption and government demand do not compensate for a negative trade balance. Or put it differently: As long as capacities in a country are not fully utilised an improvement of the current account stimulates domestic demand, output and employment. Countries with a lack of domestic demand can follow an export-led growth strategy. Many of the most successful developing countries followed such a strategy (Herr 2010). From a global perspective not all countries in the world can

have current account surpluses. For a stable development of the world economy current account imbalances should even be limited. For countries which can only get foreign debt in foreign currency current account deficits financed by foreign debt is very risky. Unpredictable developments at home or in the world economy can lead to a sudden stop of capital inflows and sudden capital outflows. The country is then trapped in twin-crisis which can lead a period of long-term low growth. For Vietnam *a balanced current account or even a moderate surplus is the best constellation for its development*. In any case Vietnam should avoid current account deficits and should follow an exchange rate policy which prevents such deficits.¹⁷

An exchange rate policy which protects the domestic economy cannot leave capital flows and exchange rate movements to market forces. For example, a country with net capital inflows (and no central bank interventions) will be pushed in current account deficits. To avoid such a scenario a country has to control capital inflows. In this policy area China can serve as a showcase. From the beginning of transition in the end 1970s until today China limited capital inflows. Foreign portfolio investment and foreign bank credits were strictly controlled. Only FDI was welcomed. The Chinese central bank intervened massively in the foreign exchange market and bought hard currency to keep the renminbi undervalued (Herr 2008).¹⁸ Capital controls and central bank interventions do not only allow an exchange rate development which is beneficial for a country it also allows to prevent high foreign debt in foreign currency. Last not least capital controls can give a country the space to follow domestic oriented monetary policy. Without such controls a central bank in a country which does not issue an important international currency has to follow the world wide interest rate development.

Under a regime of uncontrolled international capital flows flexible exchange rates do not prevent negative economic developments. Countries with flexible exchange rates can realise as high current account deficits and as high foreign debt as countries with fixed exchange rates. An exchange rate regime with an adjustable peg or a regime with managed floating both combined with capital controls seems to best suited for developing countries like Vietnam.

Vietnam has a tendency of an overvalued exchange rate of the Dong. During the last decade the current account balance of Vietnam was in many years negative as well as the trade balance. If one takes into account that a substantial part of Vietnamese exports are natural resources it becomes obvious that the exchange rate of the Dong makes it difficult for the Vietnamese industrial sector to become

¹⁷ A balanced current account or even a current account surplus does not automatically lead to low foreign debt. If, for example, a current account surplus and /or gross capital inflows are combined with gross capital outflows gross debt in foreign currency of a country can be high even if there is no net debt. The net position does not help a country when, let us say, the rich are allowed to keep their wealth to a large part abroad and the country falls in a currency crisis.

¹⁸ Sterilisation policy of the People's Bank of China mainly in the way to issue own bonds and increase minimum reserve requirements of banks allowed the control of the liquidity effects created by the interventions.

competitive. A cautious medium term real depreciation of the Dong seems to be optimal to support industrial development in Vietnam.

4.3 Overview about industrial policy in Vietnam

The national Socio-economic Development Strategy (SEDS) is a master plan that governs Vietnam's industrial policy framework for each ten years. In this strategy, two five-year socio-economic development plans as well as numerous sectorial and industrial roadmaps are introduced. It is the responsibility of the Ministry of Industry and Trade to implement and supervise industrial strategies and plans, while the Ministry of Planning and Investment takes the role of implementing the five-year plans within the SEDS, including coordination with the private sector through its Foreign Investment Agency (FIA), Enterprise Development Agency and Department of Economic Zones (see Tue-Anh et al. 2014: 14f.).

From 1996, the Communist Party of Vietnam (CPV) has set a target of turning Vietnam into a modern and industrial country by 2020. Since then the phrase "industrialization and modernization" has always been together (CPV 1996, online version). In 2001, the "Strategy for Acceleration of Socialist-oriented Industrialization" to modernise the country by 2020 was launched. The aim was building "some selected important heavy industrial establishments with high technology, which produce the necessary means of production to equip and re-equip advanced techniques and technologies for the whole economy and to meet national defence requirements" (CPV 2001, online version). The following leading 13 industries to reach the 2020 target were selected, among them electronics, steel, leather and footwear, construction materials (including ceramic sanitary wares), mineral processing (coal, bauxite, titan, apatite, lead, and zinc), beverage, dairy, pulp and paper. At the same time in the paper demands to mobilize "all possible resources to achieve a rapid and effective development of products, sectors and industries that have comparative advantages in order to basically meet domestic demand and promote exports" (CPV 2001, online version).

This official strategy remains necessarily very abstract, however, it sound like a mangle-mangle of different targets. Ohno (2015) compared and evaluated industrial policy in Vietnam with a number of other countries. He came to the conclusion that industrial policy in Vietnam is poor. In a ranking system from 5 (highest) to (1) lowest Vietnam got in the categories: industrial human resource 1.5, domestic enterprise development 1.8, business climate 2.0, power and logistics 2.8, export promotion 1.6, strategic FDI marketing 1.7, industrial parks 2.2, supporting industries and FDI-local firm linkage 1.5, productivity, technology and innovation 1.4, and standards and testing 1.5. In his ranking countries like Singapore, Japan or South Korea are much better than Vietnam (with overall values over 4), India or Rwanda are for example behind Vietnam.

There are several reasons why Vietnamese industrial policy has been only partly successful. Firstly, *central-local relationship is uncoordinated*. Since 1986, decentralization of state power has characterized the Vietnamese economic

transition. Local governments at different levels have been powerful players in economic decision-making and increased its bargaining power toward the central government. The interaction between central and local governments is still not settled. This also influences industrial policy. Measures to tackle regional disparity in industrialization include for example nation-wide enhancement of infrastructure. In this regard, infrastructure investment should adopt a national approach, the opposite to the existing arbitrary granting mechanism to particular provinces. Or, for example, current policies set targets at constructing deep water ports and airports whose usage is not cautiously scrutinized. Regional positioning of large-scale heavy industry complexes in areas far from both their input and output market is another typical example of the current industrial policy.

Secondly, a *full-scale reform of SOEs has not been fully implemented*. The establishment of big state conglomerates did in spite of their massive support in many cases not lead to globally competitive corporations. Many of the conglomerates do not focus on their core business and take part, for example, in real estate speculation. Without fundamental reforms these conglomerates will continue to cement the already close relationship between politicians and state enterprises. Management of SOEs has to be substantially improved. It has to be discussed and decided in which areas SOEs are important for development and in which areas private firms can play a bigger role. Also SOEs in the past were not actively used to create clusters with private firms. And last not least SOEs should not be systematically supported in comparison to private firms if they not provide public goods or other advantages for society.

Thirdly, industrial policy in Vietnam suffers from *corruption*. In spite of formal government attempts to fight corruption in 2015 in the Corruption Perception Index of Transparency International (2015) Vietnam ranks 119 from 175 countries. Corruption undermines the rational selection of sectors and firms which should be supported. Firms concentrate on good relations to officials and not innovations to maximise profits.

Fourthly and most importantly, *there is no sufficient process to define, implement and evaluate industrial policy*. The weaknesses of Vietnam's industrial policy mostly stem from the following two missing links: (i) lack of cooperation among different stakeholders in the entire drafting and implementation process including ministries, the business community, SOEs or trade unions; (ii) lack of inter-ministerial coordination within the government in deciding concrete action plans; (iii) lack to evaluate industrial policy and correct it in case of mistakes (Ohno 2006; 2013).

5. RECOMMENDATIONS FOR VIETNAM

Countries at any development level can be trapped by low growth, low innovative power and a lack of catching-up. In this section ideas are presented how economic policy can avoid a middle income trap in Vietnam and allow permanent upgrading. We are convinced that a successful strategy has to build

on three pillars: Firstly, it has to be built on market mechanisms which in many areas are the best institution for good allocation and economic dynamic. Secondly, it has to be built on government interventions as markets in many areas fail. Karl Polanyi (1944) has correctly shown that markets especially fail in the areas of labour, finance and nature. Far reaching government interventions are in any case needed in these areas. In addition, in developing countries markets reproduce underdevelopment. Markets have to be embedded in institutions and government policies to allow sustainable development and upgrading. Thirdly, a country like Vietnam has to integrate in the world economy. However, the integration also has to be embedded in institutions and government interventions to reap the positive effects of globalisation and minimize the negative ones.

The backbone of any policy to catch-up is the increase in productivity. This implies increasing the power to innovate, support entrepreneurship of private and public firms and search for new combination of production factors, to foster research, to increase skills and to learn, etc. Policies in the tradition of the Washington Consensus recommended by market radical economists are not sufficient for a county to catch-up. Industrial policy in a comprehensive way is indispensable for economic development.

Another important point is: economic upgrading has to be combined with social upgrading and the participation of all groups in society. Too high inequality leads to a lack of aggregate demand and also negative supply side effects like insufficient expenditures for education. A lack of an inclusive growth model destroys the coherence of the society and makes economic development unsustainable.

A vision of the general economic development of Vietnam has to be developed and broadly discussed to create a consensus among the majority of the population in which direction to go. For example, Vietnam could decide to make ecological sustainability one of the principles of its policy as well as social inclusion and the control of increasing income inequality. Development has to be considered as a national project where all level of the administration and all social groups have to work together. One challenge for the Vietnamese government is to develop appropriate policy instruments to foster change in the desired direction and avoid disruptive effects of structural change. One of the major tasks will be to organise structural change without producing losers who can block necessary structural changes. In what follows different dimensions of industrial policy are discussed.

Good institutions

Following Dani Rodrik (2004) the most important point for industrial policy or for government interventions in the economy in general is creating a *process* which allows a rational industrial policy and allows corrections of mistakes which will necessarily occur. For such an industrial policy an intensive information flow between the government institution which carries out industrial policy and the

enterprise sector is needed. Also other important and informed institutions in society could be included in the debate about industrial policy, for example trade unions and non-government organisations of different type. Incentives by government should be given only for new activities, risk taking and experiments should be possible, there should be clear benchmarks or criteria for success or failure, there should be built-in sunset clauses, mistakes have to be corrected, implementing authorities should be closely monitored by a political authority of the highest level, and industrial policy institutions should be able to learn permanently.

For Vietnam two additional challenges exist. Firstly, a big part of industrial policy has to be decided on a national level. The fragmentation of industrial policy in Vietnam and the egoisms of provinces have to be overcome. A recentralisation of economic policy is necessary. A coherent national policy also includes inter-ministerial coordination mechanisms both at local and federal level to prevent institutional fragmentation that impedes rational policy making.

Secondly, to organise sufficient information flows for industrial policy the government needs partners. Employer's associations play an important role here. These associations are weak in Vietnam and have to be strengthened to give especially the private enterprise sector a voice.

Thirdly, to fight corruption is important in Vietnam to allow rational policy decisions. Building high quality institutions are essential for preventing rent-seeking and allow for efficient state regulations of complex financial and commercial activities. An efficient bureaucratic body that includes qualified and non-corrupt staff depends on merit-based recruitment. The bad habit in Vietnam which developed after the start of reforms to "buy jobs" has to be stopped. The institution implementing industrial policy (the agent) *and* the government institutions (the principle) controlling the agent should not be allowed to be corrupt and / or unqualified; otherwise a good industrial policy is not possible. The functioning of these institutions is of key importance because we do not trust a second best solution which recommends a model of no industrial policy and leaving development primarily to the market.

Instruments of industrial policy

The instruments of industrial policy are multifaceted. Two points seem to be especially important. Firstly, under free trade agreements and WTO many of the traditional instruments of industrial policy like tariffs and quotas can only be used in a limited way. Under such free trade regimes industrial policies become more difficult. Secondly, there are sufficient instruments for comprehensive and selective industrial policy left (see Ohno 2013 for a long list).

Among them, developing banks can play an important role in Vietnam. They can mobilise more support for enterprises than government subsidies. Of key importance is the good management of development banks. Development banks should not discriminate between SOEs and private firms; they should finance projects which are promising, and not whole industries. They also should not

concentrate on small- and medium-sized companies which in many cases work with backward technologies. To support small- and medium companies, for example in the agricultural sector, special programmes are needed.

Under an open economy the state-owned enterprise sector can play an important role in industrial policy. SOEs can be used for strategic industrial development including attracting selected FDI via joint ventures in strategic important sectors. However, it is important that SOEs are managed in a non-corrupt and professional way. Also in this field institution building is important. To privatise SOEs quickly is no solution. In a corrupt environment with bad institutions privatisations makes things worse. Good examples of this are the oligarchs in the countries of the former Soviet Unions. Along these lines recently also a high World Bank commission was warning of quick liberalisation and fast privatisation (Commission on Growth and Development 2008).

Horizontal industrial policy

Governments should invest in public goods which the private sector does not deliver in a sufficient amount. Investment in education is a show case for this. Important are the enhancement of skills through formal education and the establishment of occupational training programs to ensure that low-skilled manual workers can switch to high-skilled labour sectors. But also investment in research and in public infrastructure fit to this type of industrial policy. Heavy public involvement in each of the mentioned areas is unavoidable. For instance, it is important that Vietnam's government invests heavily on upgrading broadband telecommunication that plays a crucial role for the general increase in productivity.

A country like Vietnam has to set priorities in each of the areas and between these areas. Also horizontal industrial policy needs a nationwide coordination and supervision, for example where motorways, ports and airports should be built, which transportation infrastructure has to be preferred, etc. The idea of horizontal industrial policy not to intervene in certain industries and not support certain firms is an illusion. For selecting which horizontal industrial policy to choose institutions as discussed above are needed.

Economic cluster and forward and / backward linkages

Vietnam has to build economic clusters with forward and backward linkages to exploit economies of scale and scope as well as synergies and positive external effects. Big companies have to build up networks of domestic suppliers to increase their local content. And big companies have to support domestic suppliers to allow them reach the skill-level and technological standards to become suppliers.

SOEs can play in this field an important strategic role. In the areas of so called natural monopolies (electricity and water supply, garbage collection, rail traffic, postal service, toll based motorways, etc.) companies should be owned by public households anyway. But also in other areas SOEs could be actively used for cluster building. SOEs should be managed in a good way and forbidden to invest in

speculative activities like investment in the real estate sector. SOEs should have no own banks and credit allocation should not systematically privilege SOEs, for example in case they provide no public goods.

Foreign companies can play a similar role as SOEs if they are forced to build clusters with forward and backward linkages. FDI should flow in areas where it contributes to economic development. FDI in such areas is, of course, highly welcomed, but most likely also will be limited. Certain activities and areas should be closed for foreign companies, for example certain real estate investments or investment in public utilities. The financial sector should remain with some exceptions in domestic ownership.

Foreign companies should not be privileged vis-à-vis domestic companies. There should be an equal playing field between all companies in the country. And Vietnam should avoid policies to accept low labour and ecological standards to attract FDI. FDI relying on such factors will anyway not bring much new technologies to Vietnam. Rules for FDI have to be enforced nationwide to avoid the competition between regions to attract FDI with tax holidays or other unfair advantages.

The integration of a country in *global value chains* needs an adaptation of traditional industrial policy. Traditional industrial policy supported the production of products which are internationally competitive and can be exported or it supported the production of goods which can substitute imports. As soon as global value chains play an important role for a country such policies become more difficult. However, a country can systematically try to search for upgrading tasks taking over in global value chains (GVC). "The central goal of industrial policy in the GVC context shifts from creating fully blown, vertically integrated national industries to moving into higher-value niches in GVCs." (Gereffi / Sturgeon 2013: 337f.) A systematic search and support for niches with higher value-added will lead to upgrading and productivity increases. High-value creating tasks can be tried to support, whenever possible.

For example, for upgrading in GVC design, marketing or branding are important. Vietnam also should try to develop own brands. Foreign lead firms and also the big and powerful suppliers of lead firm which are located in the middle range of value chains should be approached for transferring skills and technology to Vietnam. Otherwise FDI has very limited positive effects. Also attempts to build clusters in value chains within the country or the region can attract higher value-adding tasks in global value chains. Countries like Vietnam also should shame and negotiate with countries which do not allow the climbing-up in value chains. China, for example, has increasing tariffs for natural resource imports with higher processing status. The US and the EU do the same in the field of agriculture to protect their own processing industries. These are unfair practices which are harmful for Vietnam. Vietnam should do everything to make such unfair practices public and stop them.

Special sectors

Vietnam has to support productivity development in the industrial sectors it is deeply integrated in the world market, the electronic sector, the textile and garment sector and the shoemaking and leather sector. In this sector especially three strategies are needed. Firstly, economies of scale should be exploited. Secondly, backward- and forward linkages have to be build-up. Thirdly, any change to attract higher value creating tasks has to be exploited.

The agricultural sector plays a big role for employment, but also for export in Vietnam. This makes it to an importance sector also for development. Vietnam has to climb up the value chain and build-up own brand names in the production and export of rice, coffee, fish, etc. Farms should reach a size which allows increases of productivity. Also institutional changes are needed. These must include land law reforms for mitigating "land grabbing." Lack of enforcement of private ownership of land leads to low agricultural production due to inefficient investment and use of land (World Bank 2015)

Vietnam should not concentrate on natural resource exports and rather become self-sufficient in natural resources. This also implies a higher processing of resources for domestic use. Not to focus on natural resource exports avoids the danger of Dutch Disease. In any case Vietnam should negotiate with China that higher processed natural resources can be exported to China and that China does not sanctions this with higher tariffs.

Export of tourist services is also an area where Vietnam could improve. Vietnam should concentrate here on all levels on tourism and try to build up own high quality tourism services.

Do not put all your eggs in one basket - do not specialise too much

Developing countries are in danger to specialise too much in the international distribution of labour – compare for example Bangladesh in garment production or some of the natural resource exporting countries. Such specialisation is dangerous as it makes a country dependent on the world market development of a small number of goods. It also reduces the innovative power of countries and the development of new market niches. Vietnam should keep a broad spectrum of industrial production and exports. To specialise too much on textile and garment within the TPP is not advantage, it can become an obstacles for development.

Exchange rate policy, export orientation and demand management

Vietnam had in past periods partly high current account deficits in spite of substantial natural resource exports. The target for exchange rate policy should be to realise a balanced trade and service balance *without* taking into account natural resources. Especially when institutions are judged to be weak the exchange rate has to take over the function of a general protection comparable to general high tariff to protect the industry of a country. To reach this aim capital imports except FDI have to be strictly controlled. Central bank interventions to

prevent appreciation combines with sterilisation policies as practices in many Asian countries can prevent appreciations and keep the exchange rate competitive.

Development should be export oriented. Successful exporters should be supported to further improve. Export performance can become one of the criteria to support firms via industrial policy. In the past successful East Asian countries have concentrated on export promotion. Latin American economies much more concentrated on import substitution based industrialization. Industrial policy can do both, but it should not support weak companies from foreign competition for a long time, it should support strong companies with good prospects. In many cases this will be successful exporters (see Stiglitz 1996).

Besides controlling the exchange rate, central banks should influence credit allocation. Instruments could be special capital requirements, special reserves requirements for certain types of bank credits, and a general ceiling or the prohibition of certain types of credits. For example credits from the commercial banking system to non-bank financial institutions or the real estate sector could be strictly limited. However, monetary policy should not only sanction some types of credits. It should also subsidize and support certain types of credits. For example, development banks can get privileged access to central bank refinancing.

Innovation and productivity increases are not likely to occur in stagnating economies. At least in developing countries high GDP growth and high innovations is "one package". To realise such a combinations industrial policy *and* demand management is needed. Demand management implies sufficient domestic consumption demand which crucially depends on a relatively equal income distribution (see the successful Asian countries, Stiglitz (1996) and the problems of China now) and stable investment. The latter can be stabilised by a big SOE-sector and investment in big infrastructure projects. Deficits in the current account have to be avoided as such deficits reduce domestic demand.¹⁹

¹⁹ For such a development regime see Herr / Kazandziska (2011), Dullien et al. (2011) and Gallas et al. (2016).

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ISSN 1866-0541