

Vietnam in the Global Economy

Development through Integration or Middle-income Trap?



Hansjörg Herr, Erwin Schweisshelm, Truong-Minh Vu

- 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 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 the TPP and other FTAs.
- Vietnam needs 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 including state-owned enterprises have to build up networks of domestic suppliers to increase their local content.
- A comprehensive industrial policy, which is poor at present in Vietnam, is needed. Vietnam especially lacks institutions that are able to select, implement, evaluate, and modify industrial policy when needed.

Contents

List of Abbreviations	i
Foreword	ii
Introduction	1
Integration of developing countries into the world market and economic development	3
Traditional economic trade models and economic development	3
GVCs and economic development	9
The danger of the MIT	15
Vietnam's integration into the global economy	17
Overview of Vietnam's integration into the global economy	17
Structure of exports and imports in Vietnam	18
GVCs in industrial productions	22
Effects of FTAs	25
The role of industrial policy for development	29
Principles of industrial policy	29
The role of the exchange rate	31
Overview of Vietnam's industrial policy	33
Recommendations for Vietnam	36
Notes	41
Bibliography	43

List of Abbreviations

ASEAN Free Trade Agreement	MIT	Middle-Income Trap
Association of Southeast Asian Nations	OECD	Organisation for Economic Co-operation
Economic Partnership Agreement		and Development
Central Institute for Economic	RMG	Ready-Made Garments
Management	R&D	Research and Development
Cut, Make, Trim	SOE	State-owned Enterprise
Communist Party of Vietnam	SEDS	Socio-economic Development Strategy
European Union	TPP	Trans-Pacific Partnership Agreement
Foreign Direct Investment	UNCTAD	United Nations Conference on Trade
Free On Board (finished product sourcing)		and Development
Free Trade Agreement	US	United States
Gross Domestic Product	VEIA	Electronic Industries Association
Global Value Chain		of Vietnam
International Labour Organization	VITAS	Vietnamese Textile and
International Monetary Fund		Apparel Association
Association of Vietnamese Footwear,	WTO	World Trade Organization
Leather and Bag Producers		
	ASEAN Free Trade Agreement Association of Southeast Asian Nations Economic Partnership Agreement Central Institute for Economic Management Cut, Make, Trim Communist Party of Vietnam European Union Foreign Direct Investment Free On Board (finished product sourcing) Free Trade Agreement Gross Domestic Product Global Value Chain International Labour Organization International Monetary Fund Association of Vietnamese Footwear, Leather and Bag Producers	ASEAN Free Trade AgreementMITAssociation of Southeast Asian NationsOECDEconomic Partnership AgreementCentral Institute for EconomicCentral Institute for EconomicRMGManagementR&DCut, Make, TrimSOECommunist Party of VietnamSEDSEuropean UnionTPPForeign Direct InvestmentUNCTADFree On Board (finished product sourcing)VEIAGross Domestic ProductVEIAGlobal Value ChainVITASInternational Labour OrganizationVITASInternational Monetary FundWTOLeather and Bag ProducersVEIA

Foreword

The multiple crises crippling our societies – from climate change to financial meltdown, from rising inequality to mass migration – are shaking the foundation of the world order. Taken together, these crises go well beyond the policy level, but call into question the very paradigms that the foundation of our economies are built around.

In 2011, economic thinkers and political decision-makers from China, Germany, India, Indonesia, Korea, Poland, Sweden, Thailand and Vietnam came together to discuss how our development models need to be adapted. Later joined by Bangladeshis, Filipinos, Malaysians, Pakistanis and Singaporeans, several regional dialogues discussed how to reconcile growth and equity, find a balance between boom and bust cycles, and how to promote green growth and green jobs. The findings, endorsed by 50 prominent thought leaders from Asia and Europe, have been published as "The Economy of Tomorrow. How to produce socially just, resilient and green dynamic growth for a Good Society" (versions available in English - 5th edition, Bahasa, Korean, Mandarin, Thai and Vietnamese, at designated page for Economy of Tomorrow, www.fes-asia.org.) The EoT Manifesto calls for an inclusive, balanced and sustainable development model which can provide the conditions for a Good Society with full capabilities for all.

True to our understanding that development models need to be tailor-made, in the second phase of the project national EoT caucuses have worked on adapting these sketches to the local context. At the regional level, the focus was on the political and social challenges which needed to be addressed to encourage qualitative economic growth. The national studies carried out on the political economy of development as well as the synthesis "Mind the Transformation Trap: Laying the Political Foundation for Sustainable Development" are available on the website.

In the third phase, the EoT project will focus on specific sectors of transformation. In India, for example, the focus is on energy transformation, urbanization and digital transformation. After graduating to the status of a low middle-income country, the focus of the EoT project in Bangladesh is on economic growths and decent work as well as institutional reforms for development.

In Thailand, resilient fiscal policy is the focus of the EoT network. After its founding in 2016, a Policy Community on Taxation Reform will continue to promote taxation policy as well as look into the spending to identify needs and perspectives in the context of upcoming challenges of an aging society.

Supporting the phase-out of a resource-driven and therefore extractive economic model, while strengthening the promotion of a sustainable manufacturing sector as well as the maritime and digital economy are the main efforts in Indonesia.

Vietnam is putting emphasis on an export-oriented, FDI-driven development strategy, focusing on wageled growth models, productivity gains and value chain improvement to find a way out of the middle income trap.

The EoT project in China focusses on the socioeconomic consequences of innovation-driven changes in the manufacturing and service sectors, and explores how China can achieve growth while implementing a sustainable climate and energy policy.

In Pakistan the current focus is on institutionalising the EoT discourse by bringing together governmental and nongovernmental think tanks as wells as leading individuals to develop a common advocacy agenda. A comprehensive compilation of previous research work will serve as a blueprint for political discussions during the upcoming election campaign.

Erwin Schweisshelm, Resident Representative, FES Vietnam Office

Marc Saxer, Regional Coordinator, "Economy of Tomorrow"

September 2016

Introduction

In the mid-1980s at the start of the Đổi Mói (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 and faced poor productivity. The overwhelming majority of the population was deeply stuck in poverty. Vietnam's approach to economic reform has been characterised by two main features. Firstly, it followed a top-down and step-bystep approach. Pilot projects in some localities were carried out on an experimental basis before they were applied to the whole country. Secondly, there was a consensus among the Vietnamese leadership not to combine marketoriented reforms with political liberalisation. In addition, the important role of state-owned enterprises (SOEs) was maintained during the introduction of market-oriented reforms.

Since the beginning of the process of Đổi Mới, economic growth in Vietnam has been remarkable. Between 1991 and 2009, Vietnam's real gross domestic product (GDP) grew with an average growth rate of 7.4 percent. In 1990, Vietnam's GDP per capita of US\$98 placed Vietnam among the poorest countries in the world. In 2009, its GDP per capita of US\$1,109 led to Vietnam's attainment of lower middle-income status, according to the World Bank classification methodology. In 2014, Vietnam's GDP per capita reached US\$2,052 (Haughton et al., 2001; Quan, 2014). Economic reforms resulted in Vietnam's increased integration into the global economy. This integration process is still underway with Vietnam's trade commitments under ASEAN, its accession to the World Trade Organization (WTO) in 2007, and Vietnam's signing of the Trans-Pacific Partnership Agreement (TPP) in 2015.

The guestion remains as to whether this spectacular development will be able to continue. There are a number of experts who believe that Vietnam is in danger of falling into the middle-income trap (MIT) or might already be affected by it (Pincus, 2015; Ohno, 2015). The MIT implies that the convergence between a developing country and the most developed countries in the world does not become smaller as the developing country is stuck at a certain level of per capita income. The only sustainable way to overcome the MIT and join the group of developed countries is to increase the productivity and innovative power of a country. If developing countries are unable to catch up to the level of productivity of developed 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 in which Vietnam has been integrating into the global economy and what kind of production structure has been created in Vietnam as a result. The key question is whether the type of integration (being carried out by Vietnam) into the world market is supporting economic development in Vietnam via an increased the productivity level or not. It will be asked what kind of integration different economic approaches expect. This paper will then determine to what extent the different theoretical approaches are able to explain development in Vietnam and whether Vietnam is in danger of getting stuck in the MIT.

1

The main conclusion of this 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 could lead to Vietnam becoming stuck in the MIT. Integration into the word market is of key importance for a country like Vietnam, but it needs to be guided by a comprehensive industrial policy and government intervention. To leave the integration of Vietnam completely to the market leads to the reproduction of underdevelopment. A combination of market and government activities is needed to reach a sustainable level in order for developing countries to catch up.

The second section of this paper will give a review of the most important traditional economic models to explain international distribution of labour. From the perspective of a developing country, the analysis looks at what kind of industrial development these models predict for a country like Vietnam. The section also concentrates on a phenomenon that gained paramount importance over the last three decades – global value chains (GVCs) and offshoring. It will be asked to what extent GVCs increase the chances of economic development for countries like Vietnam.

The third section analyses in detail how Vietnam has integrated into the global 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 GVCs in Vietnam. The theoretical prediction will be largely supported by the empirical analysis. Without government intervention, the MIT is a serious danger for Vietnam.

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

Integration of developing countries into the world market and economic development

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 that goods are traded as complete goods. This implies that the production process of a good is not divided into different tasks, which are produced in different countries through GVCs. 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.

Absolute advantages

The most simple and obvious model to explain international trade is the model of absolute advantages. Adam Smith (1776) argued that in the case of one country being good at producing one thing, and another country being good at 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.

For example, if Vietnam has higher productivity in textile production and the United States (US) is more productive in car production, 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 behind, and consequences of 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 to produce a car. Vietnam has an absolute advantage in producing textiles. For a given

quantity of textiles, Vietnam needs 20 units of labour, whereas the US needs 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, whereas the needed hours for producing the goods can be reduced to 60 hours altogether. The conclusion made by Adam Smith was that international trade (similar to national trade) increases the wealth of nations and markets, and leads to specialisation according to absolute advantages.

Some assumptions are made 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 the production factors that have become unused as a result of efficiency gains will be able to be employed.² If the 45 units of saved labour in our example become unemployed, the wealth of a nation will 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. It is sometimes argued (mainly by non-economists) 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 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. 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, American textile workers may not be qualified to become workers in the car industry. Finally, the model does not show which of the two countries would achieve the biggest welfare gains. Even if it increases the welfare of both nations, trade can produce some losers in both countries.

In the context of this paper, the most important question is how productivities change when countries integrate into 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 average productivity, each of the productions is weighed according to the labour needed in the industry.⁴ The productivity gap for the whole of Vietnam's economy 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. In addition, productivity in the US increases at an even faster rate, and the productivity gap in Vietnam increases to 0.05. The explanation for this is that the absolute advantage in producing cars is bigger than the absolute advantage of Vietnam in producing 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.

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 of the first group of goods are coffee beans, rice, sugar cane, or fish. Examples of the second group of goods are coal, manganese, bauxite, chromate, offshore oil, or natural gas. Such absolute advantages can result from natural conditions, such as the climate or locations of rare earths. The possession of such natural advantages is not necessarily a blessing for countries. While it can allow the earning of hard currency in a relatively easy way, empirically, most countries with these advantages have not developed in a sound way. There are good theoretical explanations for this.

	Before trade			After trade		
	Vietnam	US	Total hours	Vietnam	US	Total hours
	Units of labour needed per given quantity of 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

Hans Singer (1950) and Raúl Prebisch (1950) argued that the producing and exporting natural resources, including basic agricultural products by countries, would lead to a deterioration of the terms of trade in these countries in the long-term. In the long-term, this means that developing countries that concentrate on the production of natural resources have to exchange more and more of their primary products against the 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. In addition, 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 lifestyle 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. By 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 developing countries catching up to more developed countries. Empirically the Prebisch-Singer terms of trade hypothesis is supported for most of the primary products. However, there are some exceptions (Harvey et al., 2010; Arezki et al., 2013).

The Prebisch–Singer hypothesis seems not to hold for some natural resources, for example, for crude oil and rare earths. These resources seem to follow a trend of long-term increasing

prices based on natural scarcity. In the long run, the price of these natural resources may increase because the production costs to extract or mine them increase with depletion. However, presently and for an uncertain time into the future, prices of natural resources are above production costs and prices are based on oligopolistic market structures. To what extent such oligopolies are able to increase prices and keep them high is an open question, given the fierce competition of natural resource producers to export their natural resources.⁵ The development of oil prices after 2008 is a good example of this. However, even when prices of natural resources are high and high rents can be earned possessing and exporting natural resources, they are still, for many countries, a double-edged sword. The problem is that a country that exports natural resources as a high percentage of its total exports will import a high percentage of its consumption and capital goods. Thus, a country focusing on the export of natural resources will make its industrial sector suffer. This phenomenon is known as Dutch disease. When in the 1960s the Netherlands found offshore oil, the domestic industrial sector found itself in 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 into rent economies.

The reliance on natural resource exports leads to other serious potential negative effects.

The possession of such natural advantages is not necessarily a blessing for countries.

By 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 developing countries catching up to more developed countries.

Natural resource prices and natural resource exports show a high volatility and expose natural resource-exporting countries to large shocks. 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. Lastly, 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 (Humphreys / Sachs / Stiglitz, 2007). Good institutions are needed to overcome negative effects of Dutch disease. Although an exception, Norway serves as a good example for good institutions and the avoidance of Dutch disease.

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.

Comparative advantages and factor endowments

One of the most important arguments of free trade goes back to David Ricardo (1817) and his model of comparative advantages. International institutions like the WTO or the International Monetary Fund (IMF) and many governments still follow different versions of Ricardo's approach today. Ricardo assumed different productivity levels in different countries. In contrast to Adam Smith, he asked whether international trade made 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 conditions, international trade is welfare-increasing for all countries. If countries concentrate on the production of products they are relatively good at producing in the same output in the world, these products 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 (compared to developed countries) is the lowest, and the import 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 at producing all goods. To produce one car the US needs 20 labour units, while to produce a given quantity of textiles it needs 40 labour units. The not-so-efficient Vietnamese economy needs 40 labour units to produce one car and 50 labour units to produce a given quantity of 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. For Vietnam, the disadvantage of producing textiles is relatively small. Thus, with international trade, Vietnam will produce textiles and the US will produce cars – an example with high plausibility. With international trade, the same quantity of goods can be produced with 140 labour units. 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.

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

	Before trade		After trade			
	Vietnam	US	Total hours	Vietnam	US	Total hours
	Hours needed per given quantity of 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

Table 2: International trade with comparative advantages

*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

important point is that now, in the logic of comparative advantages, international trade reduces the productivity level of Vietnam and increases the productivity gap with the US. Table 2 shows 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 in textiles an overall low-tech and low-productivity good. In the US, the textile industry disappears and the country concentrates on the production of cars – a high-tech product.

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, labour-intensive, low-skilled productions, it will have a lower chance of developing. Friedrich List was very critical about free trade between countries with different levels of development. 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 developed countries nowadays, including the United Kingdom and the US, used industrial policy to protect and support their industries in their developmental 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

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.

> Free trade will not help to overcome the disadvantages of developing countries; rather, it will add to their problems.

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 spiralling growth of the industrial revolution."

List's and Robinson's argument is valid still today. Countries concentrating on hightech, 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 (R&D). Developed countries with a concentration of high-tech, high-skilled productions will benefit from the positive external effects of markets, as Alfred Marshall (1890) 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. These advantages do not exist in developing countries, or exist to a much smaller extent. Free trade will not help to overcome the disadvantages of developing countries; rather, it will 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.

This does not mean that countries in their first development phase should not concentrate on low-tech, 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. The positive effects of mass productions need to be supported by industrial policy in order for the country to enter into new and more valueadding industries. Industrial policy is needed at any stage of development; at any stage of development new industries need 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 follows: developing countries will concentrate on low-tech, low-skilled productions and developed countries will concentrate on hightech, high-skilled productions. Below it will be shown that Vietnam fits into this first scenario.

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, while 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 labourintensive productions because this is the area of their comparative advantage. Developed countries should therefore 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 less important for our question. There are not many industries in developing countries that possess the same technological knowledge and possibilities as industries in developed countries. Even if knowledge is free, it is often difficult to transfer 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 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

GVCs and economic development

The vision of the old trade models, with trade of goods produced in one industry exchanged against goods of another industry, no longer reflects reality.9 In 2013, trade in intermediate goods had the biggest share in world trade, reaching US\$7 trillion, followed by primary goods with US\$4 trillion, consumer goods with US\$3.8 trillion, and capital goods with US\$2.7 trillion. Almost 50 percent of intermediate goods come 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 offshored productions in GVCs within an industry as a new industrial revolution. Indeed, a new dimension of globalisation started to develop during the 1990s due to the revolution in information and communication technology, the reduction of transportation costs, and the implementation of the Washington Consensus policies in developed and developing countries – which deregulated international trade and capital flows. These developments allowed multinational companies in particular to break down their production processes into different stages and outsource these stages to other companies, which in many cases were in other countries. Below it will be shown that Vietnam is also intensively integrated in GVCs.

Trade effect of GVCs

In the case of GVCs, the production process is cut into different tasks; different companies all over the world fulfil these tasks. Analytically the different tasks become their own products. The international allocation of the production of these different tasks depends to a large extent on comparative advantages. Thus, the old trade models can be applied to GVCs (Feenstra, 2010). However, the new trade theory added to the understanding of GVCs (Krugman, 1979; 1991). Most industrial productions are characterised by economies Only a broad spectrum of industries is able to create synergies between different industries and increases the likelihood and possibilities of entrepreneurship. The argument of economies of scale and scope also makes clear that first-mover advantages exist with high entry barriers for latecomers.

GVCs are characterised by the rent-seeking of leading firms and brutal competition between suppliers at the lower end of the value chain. of scale and scope, which are based on for example, indivisibilities (in research, marketing, 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 economies of scale and scope are allowed in economic models, the assumption of pure competition breaks down. Oligopoly and monopoly 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 domesticallyowned firms that 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 GVCs are managed by lead firms, in the first place by the headquarters of multinational companies. Of course in the hierarchical structure of GVCs, headquarters of fashion firms, global retailers, or car and electronics manufactures usually do not directly interact with the lowest levels of value chains. Big contract manufacturers like Foxconn and Quanta (in the electronics sector) or Puo Chen (in the shoe production sector) are located on an intermediate level of supply chains. Lead firms and big contract manufacturers are obviously in a dominant position as they structure the production process and its location. They decide which tasks remain in the headquarters and which tasks are outsourced, in which countries, and by which companies. In GVCs, there is not the cosy world of international trade between independent and equally strong

firms as in traditional trade models. GVCs are characterised by the rent-seeking of leading firms and brutal competition between suppliers at the lower end of the value chain. Monopsony structures dominate the interaction between GVCs, at least in a typical developing country.¹⁰

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 (Gereffi, 1999). Typical cases of these types of GVCs are labour intensive industries such as the apparel and footwear industry, but also the assembly of parts in the production process of mobile phones 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, computers, and heavy machinery. Lead firms in producerdriven value chains coordinate a complex transnational network of production with subsidiaries, subcontractors, and R&D units where the assembly lines of the final good typically remain under direct control of the lead firm (Figure 1).

Another similar model of GVCs has been designed by Baldwin and Venables (2013). They distinguish between "spiders" and "snakes". In snake value chains, production stages follow an engineering order, which means each location fulfils one task and then the (un-finished) product moves on to the next location for new tasks and values to be added. 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 GVCs

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

GVCs can also be classified into horizontal and vertical value chains. In horizontal value chains, lead firms buy from other firms or produce high quality inputs in subsidiary companies. 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 advantage of hightech specialisation. Vertical value chains' main motivation is to reduce production costs. Tasks are outsourced to low-cost producers. 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 valueadding 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 mainly of importance for countries like Vietnam.

Vertical value chains dominate the concentration of low value-adding and lowproductivity activities in developing countries and the intensive competition at the lower end of value chains, which allows only low profits of suppliers. This phenomenon can be expressed in what is known as the "smile curve", but should better be called the "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 at the fabrication stage, which is not the core competency of lead firms. This stage can be

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. Lead firms and big contract manufacturers are in an absolute dominant position and firms at lower levels of vertical value chains are dominated by, and dependent on the lead firm and big contract manufacturers. outsourced to less-developed countries to reduce costs and gain flexibility. The newest wave of offshoring increasingly covers services, indicating that low value-added activities may be outsourced at all stages of production.

The Apple iPhone production is a good example of the very unequal distribution of value-added in GVCs. 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 2010, from the sales price of an Apple iPhone of around US\$500, 58.5 percent were Apple profits. Profits of non-Apple US firms were 2.4 percent; firms in South Korea 4.7 percent; forms in Japan 0.5 percent; firms in Taiwan 0.5 percent; and firms in the European Union (EU) 1.1 percent. Unidentified profits were 5.3 percent. Costs of input material were 21.9 percent, cost of labour in China 1.8 percent, and cost of non-Chinese labour 3.5 percent. For an Apple iPad, Apple profits were "only" 30 percent of its price, with Chinese labour costs 2 percent of the price (Kraemer et al., 2012).

The conclusion is that GVCs can, compared with the Ricardo example, further reduce the productivity level in developing countries and further increase the productivity gap with developed countries. This is not good news for the economic dynamics in developing countries. The Prebisch–Singer hypothesis thus has a new dimension because under the trade perspective, GVCs make catching up even more difficult for developing countries.

Dominance and technology effects

GVCs create power asymmetries that are not known in traditional international trade relationships. Lead firms and big contract manufacturers are in an absolute dominant position and firms at 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 theoretically push suppliers to profitless production and consequently increase its own profit. As the main motivation for this type of offshoring is to cut costs, multinational companies will do everything to achieve this goal, as long



Figure 2: The exploitation curve

Source: Mudambi (2008)

VALUE CHAIN DISAGGREGATION

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 electronics industries, where different suppliers in one country compete, as well as many suppliers from different countries compete. It is obviously negative for developing countries when the lion's share of profits in GVCs is transferred to lead firms in foreign countries and wages are pushed to a minimum. This reduces domestic consumption as a result of the lower income of workers and company owners. It also reduces domestic investment through the reduced possibility to use its 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 the case of subcontracting,¹² the risk of underutilisation of capacities in times 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 can also potentially create positive effects. In vertical GVCs, a lead firm will directly intervene in the production of the task of the dependent firm. The lead firm has an interest in the quality of the tasks being done to a satisfactory level and fitting smoothly into the global production network. International subcontracting has two main differences compared to traditional arm's length transactions. Firstly, it is of longterm nature, as lead firms prefer a longerterm relationship with reliable suppliers; and secondly, the level of information that the parent companies provide for its 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, provide them with technical support for working with them, and give some consultancies to subcontractors for managing inventories, production planning, and quality testing,

among other things. (UNCTAD, 2001). The lead firm has no incentive to transfer substantial knowledge to subcontractors, as the lead firm has no control over whether these subcontractors diffuse 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 optimise its production costs by fragmenting each part of the value chain in 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 they do not want the technology used in the production to spread easily to other companies and/or if it wants to control the supply process of its 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 the managerial skills of foreign firms through joint ventures, reverse engineering, and hiring workers who are being trained for the 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 centres in host countries in order to meet special customers' demands via product localisation. Especially because of the last motivation, big countries have a higher chance of attracting FDI than smaller countries. Technology and skill spillovers 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

Technology and skill spillovers highly depend on the development level of the host country. It is not the rule that FDI firms will transfer the newest technologies or strategic important tasks in a value chain to developing countries.

It appears that a case-by-case evaluation is necessary to come to a rational judgement as to whether FDI has positive or negative effects for host countries. Government regulations and interventions can substantially improve the quality of FDI and its effects.

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. A greenfield investment increases the likelihood that the foreign investor transfers technology and skills to the host country. Joint ventures, in comparison with wholly foreign-owned companies, increase the likelihood of technology and skill transfers as a domestic company can directly absorb new technologies and skills. Of key importance is whether the 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 favourable conditions for FDI that disadvantage domestic firms. Thirdly, if foreign companies invest in host countries only for producing and then exporting low value-added goods or for 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 technology to a country. Additionally, positive spillovers cannot occur if FDI firms import all parts and export the produced product without linkages to the domestic economy. In any case, it is not the rule that FDI firms will transfer the newest technologies or strategic important tasks in a value chain to developing countries. Fourthly, FDI firms tend to exploit existing lax labour market regulations, as well as safety and environmental standards, with some even lobbying for lax standards.

Fifthly, there are sectors where FDI does not contribute significantly to the development of host countries. If FDI is made in the natural resource sector, foreign firms will try to benefit from some of the rents earned in this sector. Government policies are necessary to prevent exploitative policies of FDI firms in this sector. Additionally, FDI in the retail sector, in order to stimulate the selling of foreign products, will not be very helpful for development. The same argument holds true for investment in the real estate sector. FDI in this sector will not lead to a higher competitiveness of the country. Rather, it can add to real estate bubbles in host countries. FDI in the financial sector can increase the efficiency, but may also reduce the credit availability of small and mediumsized domestic firms, as foreign owners prefer to give credit to big (and especially foreign companies) and channel deposits to London or New York in their home countries where they understand the markets.

There are two key conclusions in respect to the advantages and disadvantages of FDI for host countries. Firstly, it appears that a caseby-case evaluation is necessary to come to a rational judgement as to whether FDI has positive or negative effects for host countries. Secondly, government regulations and interventions can substantially improve the quality of FDI and its effects.¹⁴

What can we learn from this debate for Vietnam? Vietnam started its Đổi Mới policy at a very low level of development. We can draw 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 needs to develop its own policies to do so.

The danger of the MIT

The catching up of countries implies that the economic difference between developing countries 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 counties have 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 capita in relation to the level of top countries. The MIT implies that countries in their GDP per capita growth reach a kind of glass ceiling, as referred to by Kenichi Ohno (2009). A country in the MIT has exploited certain engines to increase its GDP per capita and is not able to find new growth engines. Countries such as Brazil or Malaysia, which have been stagnating during the last decades at a level of around 20 percent of real US GDP per capita, belong to the category of stagnating countries. While China has managed to catch up quickly, it has still not reached the GDP per capita level 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 into account all the market mechanisms in the area of international trade including GVCs, which work against a catching up, it should not be a big surprise that not many countries have managed to reach the per capita real income 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 (Rodrik, 2005; Herr /Priewe, 2005). However, neither did they 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, however, they integrated in the world market in a controlled and regulated way (Stiglitz, 1996; Stiglitz / Uy, 1996). It was a type of regulated capitalism that guaranteed the success of these countries. China also followed the East Asian tradition (Herr, 2010).

The MIT can theoretically occur at any income level. A country can trigger a growth process connected with productivity increases for many reasons. For example, the liberalisation 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 a boom of exports of labour-intensive, low-tech products when it was not previously 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 bubble 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 (because of low innovative power), and at the same time create sufficient aggregate demand to keep the economy growing, falling into the MIT becomes likely. It is relatively easy to trigger a growth process, but it is much harder to maintain high growth that will lead to a catch up with developed countries.

After the start of reforms, Vietnam achieved 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 is not hard to imagine 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 by the International Labour Organization (ILO) revealed that Vietnam's labour productivity Only a very small number of developing counties have managed to catch up to the group of industrial countries with the highest GDP per capita. was among the lowest in the Asia-Pacific region. It is 15 times lower than in Singapore, 11 times lower than in Japan, 10 times lower than in South Korea, five times lower than in Malavsia, and 2.5 times lower than in Thailand. It is worth noting that Vietnam's growth of labour productivity shows a downward trend. From 2002–2007, labour productivity increased by an average of 5.2 percent a year; between 2008 and 2013, the increase in labour productivity slowed down to an annual average of 3.3 percent (ILO, 2014). It is therefore not surprising that 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 expectations. Foreign firms are still the main drivers of industrial output and export. Policy ownership and the capability of the Vietnamese government to build 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 a culture of complacency and dependency."

Important for sustainable development is the need for a *dual* strategy. On the one hand, productivity has to be increased by innovation and 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 that 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 itself becomes 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 the 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 it clear that a developing country, which is left to market mechanisms, is in high danger of falling into the MIT. Particularly 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 on more developed countries and prevent developing countries from catching up with developed countries.

Vietnam's integration into the global economy

Overview of Vietnam's integration into the global economy

Vietnam integrated very quickly into the global economy. From very low levels of imports and exports as a percentage of GDP, trade increased sharply where imports were usually higher than exports. In 2015, the sum of exports and imports as a percentage of GDP reached around 200 percent (Figure 3). This is extremely high compared to Germany, for example, with a value in the same year of around 70 percent, the US with a value of around 23 percent, or China with 42 percent (World Bank, 2016a). Especially for a country with a population of over 90 million, this makes Vietnam more dependent on world market developments than other countries.

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

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.

Figure 5 shows the development of gross foreign debt of Vietnam in US dollars. Foreign debt after 2005 sharply increased but deceased somewhat after 2012. Vietnam's foreign debt is high, with an actual foreign debt level of 45.2 percent of GDP in early 2016 (IMF, 2016). In the case of a strong depreciation of the dong, Vietnam's foreign debt can become



Figure 3: Development of foreign trade in Vietnam as a percentage 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 as a percentage of GDP

VIETNAM CURRENT ACCOUNT TO GDP

a high burden. Most of the debt is public debt. Public debt to GDP in 2015 was 58.3 percent with an increasing trend; at the end of 2014, public debt in foreign currency was 39.9 percent of GDP (IMF, 2016; VietNamNet Bridge, 2015). While official loans to Vietnam are shrinking, Vietnam might gradually seek to obtain 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 could expose the country to currency crises and would make it economically and politically dependent on foreign creditors and donors.

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 finance 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. Since the coming into effect of the Foreign Investment Law in 1987, Vietnam has achieved substantial FDI inflows. Measured as a percentage of GDP, Vietnam reached its peak of attracting FDI in 1996. In 2008, as a result of joining the WTO, Vietnam again successfully attracted large volumes of FDI projects. Due to the negative impact of the global financial crisis and Vietnam's unstable macroeconomic development, FDI inflows remained relatively low after 2008, but still reached levels of 5 percent of GDP or more (Figure 6).

Structure of exports and imports in Vietnam

Figure 7 and 8 show Vietnam's export and import structure 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 percent of exports. Processed products like footwear, textiles, or gaiters accounted



Figure 5: Gross foreign debt in Vietnam as a percentage of GDP

VIETNAM TOTAL EXTERNAL DEBT

Source: Trading Economics (2016)



Figure 6: FDI net inflows in Vietnam as a percentage of GDP

Source: World Bank (2016b)

for about 30 percent of total exports. The industrial sector's share of Vietnamese trade has been continually increasing over the last 10 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 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 percent of total exports. The mining sector is also important for exports and characteristic for the export structure. According to a government report to the National Assembly Standing Committee (8/2012 session), the number of enterprises involved in mining has increased rapidly, from 427 enterprises in 2000 to nearly 2,000 enterprises in 2014.

Small and medium scale enterprises make up 60 percent of these enterprises. However, enterprises focusing only on post-processing account for a negligible proportion. Most post-processing enterprises employ simple out-dated 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 material exports and upgrade processing, this could not be achieved, partly because of illegal raw material 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 for three reasons: (1) the government's focus on natural resource exploitation as one of the main development strategies, (2) 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, (3) 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, the depletion and exhaustion of resources is 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 percent in 2005 to 7.6 percent in 2012 and 7.6 percent in 2014. More importantly, Vietnam's service trade balance has been constantly negative. As reported in the Online Newspaper of the Vietnamese Government from 13 January 2013, only tourism achieved surpluses, while other crucial services such as transportation, telecommunication, finance, insurance etc. all suffered from deficits.

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, as well as for most 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 GVCs are neglected, imports are mainly final consumption goods and investment goods. This is exactly what the Smith-Ricardo model predicts. Unfortunately, this also means 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 Vietnam from catching up to developed countries.

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. Looking at this Dutch disease effect, it becomes clear that the industrial sector in Vietnam has been suffering from an exchange rate that is destroying its competitiveness. Vietnam also suffers from the volatility of its 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, leading to bad terms of trade for Vietnam.

FDI inflows are of great importance for Vietnam's international trade. Figure 9 shows the structure of the stock of FDI in Vietnam in 2015. FDI projects mainly focused on the industrial sector and significantly contributed to the process of economic restructuring towards industrialisation. A study conducted by the Central Institute for Economic Management (CIEM) in 2006 showed that while FDI in the 1990s mainly focused on the mining industry and import substitution, since 2000, FDI in the processing industries and export-oriented fields has been increasing significantly contributing to a surge in Vietnam's total exports and imports in recent years (Tue-Anh et al., 2006). Around 30 percent of the stock of FDI – a relatively high figure – is in the real estate sector in Vietnam.

Budgetary pressures in certain provinces and cities led to the permission of natural resource exploitation and acceptance of illegal exports.



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)

FDI in this area has added to the real estate bubble in Vietnam, and has not been very helpful for industrial upgrading.

Due to legal regulations, FDI projects registered in Vietnam until the mid-1990s largely took the form a joint venture between SOEs and foreign investors. At the end of 1998, the number of joint ventures accounted for 59 percent of total projects and 69 percent of total registered capital. Since 1997, ownership restrictions have been removed. This had a strong impact on the ownership structure of FDI. In 2006, joint venture projects were reduced to just 42.5 percent of total registered foreign capital, while projects with 100 percent foreign capital accounted for 45.5 percent. Among 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 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 GVCs makes this point clearer.

GVCs in industrial productions

Vietnam is integrated in GVCs. It exports and imports large volumes of intermediate goods. From the volume of trade especially the textile/garment industry, shoemaking/ leather industry, and the electronics industry are important to understand Vietnam's integration into GVCs. In this section these three industries are analysed in more detail. Other sectors where Vietnam is integrated in

The overall productivity development in Vietnam is slow and the productivity effects of FDI have been disappointing. GVCs are coffee, tea, and the shrimp farming industry (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 that starting growing. This trend has continued until today and got an additional boost following Vietnam's accession to the WTO in 2007. The textile and clothing industry plays a major role in Vietnam's growth. Ready-made garments (RMG), i.e. clothing products and leather products, contribute substantially to the proceeds of the exportbased Vietnamese economy (Sarah, 2011). Currently, Vietnam ranks fourth among the largest clothing exporters, surpassed only by China, Bangladesh, and India (Kak, 2015).

The Vietnamese Textile and Apparel Association (VITAS) estimated that in 2015, the sector comprised a total of more than 5,000 companies, including 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 accounted for 13.6 percent of Vietnam's total export value. Accordingly, the sector ranks second in manufacturing after electronic products in terms of net proceeds (Schweisshelm, 2016).

In 2013, the share of Vietnam in the global apparel export market was 3.7 percent (Kak, 2015). The VITAS forecasts a total export volume that grows much faster than in China or India. In 2015, approximately US\$24 billion was achieved in export value. However, approximately US\$12 billion must be detracted due to the import of intermediate products, such that the valueadded in the industry would be approximately US\$12 billion in 2015. Further growth is not unrealistic given the drop in oil prices and the drop in costs for fibre materials. According to the VITAS, in 2015, 52.8 percent of apparel exports went to the US (Bangladesh 24.1 percent), while 17 percent was exported to EU countries (Bangladesh 59.7 percent), followed by Japan, and South Korea (VISTA, 2015).

Typically, production in global textile and apparel value chains is divided into five 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 used by garment companies; (4) export by commercial intermediaries; (5) marketing and distribution (Tot, 2014). The highest value-added is earned in design, marketing, and distribution. The lowest value-added is in the Cut, Make, Trim (CMT) process. However, in the GVC, Vietnam is now mainly engaged in CMT, which has low value-added and is characterised by a labour-intensive production process. Eightyfive percent of Vietnamese enterprises in the sector are engaged in CMT. The remainder mainly occupy finished product sourcing (FOB), but it is still FOB at level 1, which means that Vietnamese enterprises are engaged in subcontracting without much freedom of their own (Tot, 2014).

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

Shoemaking and leather industries

The shoemaking industry also plays an important role in the Vietnam's 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, and Germany. With free trade agreements (FTAs) in the pipeline, the Association of Vietnamese Footwear, In the textile and garment industry, Vietnam is in the exploitation curve, located at the lowest level with the lowest value-added. Remaining at this level does not open a development perspective. Vietnam in th

Leather and Bag Producers (LEFASO) expects a substantial increase in exports of their products over the coming years (Dezan, 2015). According to government sources, the shoemaking industry employs around 1 million workers in 600 companies. The Vietnam News from 28 February 2015 reported that 77 percent of the export value in the shoe making industry for 2015 was generated in FDI companies. One contributing factor to the growth of the sector is the increasing number of companies relocating production from China and Bangladesh to Vietnam. This can be explained by relatively low wages in Vietnam, its strategic geographic location, and the perspective of upcoming FTAs with major economic powers. With its lower wages and production costs, India is the main competitor for the industry.

In this sector, Vietnam's dependence on imported pre-fabrics, mainly from China, South Korea, and Taiwan, is high. Raw material for the production of leather shoes accounts for 80 percent of the value of shoes. Vietnam's enterprises only produce limited items for shoe production, such as labels, laces, etc., but completely ignore other accessories such as eyelets, hooks, beads, ornaments, etc. Most Vietnamese businesses in the footwear sector are small and mediumsized and lack capital, advanced technology, high-quality human resources, initiatives by other industries for improvement, and good management. Both Vietnam News in its issue from 11 December 2014 and Vietnam Business Forum from 26 December 2014 reported low labour productivity in the sector.. The production of Vietnam's footwear industry is mainly export-processing; design capability is weak. Seventy percent 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, labour-intensive tasks in the GVC.

Electronics industry

The electronics industry is Vietnam's biggest export-earner. 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 is one of the largest manufacturing hubs of mobile phones, photocopy machines, printers, etc. in the world. The export of electronics and components in 2013 grew to over 34 percent of Vietnam's export basket (VEIA, 2014). However, the value-added is still low and raw materials have mainly been imported. In 2014, Vietnam's electronics industry exported over US\$32 billion worth of products, but imported goods of US\$28 billion (VEIA, 2014). It is noteworthy that the local content in the electronics industry is limited to assembling on the basis of low wages. Most intermediate parts are either imported from China, partly because of China's location in relation to Vietnam and the easily accessible ports down its 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 electronic companies move production offshore to Vietnam.¹⁶ A recent survey conducted by the Central Institute for Economic Management (CIEM) showed that enterprises with 100 percent foreign investment in the electronics industry in the provinces of Hung Yen, Hai Duong, Ba Ria-Vung Tau, Binh Duong, and Dong Nai performed only the simplest phases of the production chain, while the design and other sophisticated phases of production were 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

The logic of the exploitation curve also applies to the shoemaking industry where Vietnam concentrates on low value-adding, low-tech, labour-intensive tasks in the GVC. 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 GVCs. However, tasks taken over in Vietnam are mainly low value-adding, low-tech, labourintensive 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 industry, subcontracting and small and medium-sized companies play an important role. The technological and managerial level of most of the enterprises in this sector is low in comparison to other countries. Economies of scale are not sufficiently exploited. 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 spillover effects to Vietnamese firms and other industries are disappointing. There are not many linkages between FDI firms and domestic firms. It is obvious that the unregulated market mechanism will not lead to sufficient upgrading in Vietnam and will not allow living standards in Vietnam to catch up to that of more developed countries.

Effects of FTAs

The economic integration process of Vietnam started in 1995 with four significant milestones. (1) Vietnam negotiated and signed a bilateral trade agreement with the US in 2000. This was an important rehearsal for Vietnam's broader participation in FTAs and WTO membership. The US agreement allowed Vietnam to reach the largest export market in the world without discrimination. (2) Vietnam joined the Association of Southeast Asian Nations (ASEAN) and the ASEAN Free Trade Agreement (AFTA) in 1995, followed by an FTA with other additional partners (ASEAN+) in 1997. (3) Vietnam joined the WTO in January 2007. Along with these agreements,

in 2009, Vietnam signed a comprehensive Economic Partnership Agreement (EPA) with Japan, which is essentially a bilateral trade agreement. (4) Vietnam concluded a number of important trade agreements, including the Trans-Pacific Partnership Agreement (TPP) and the Vietnam-EU FTA. Both could be considered as a high-standard FTA, affecting many fields in the economy and society. In these agreements, tariff cuts are negotiated over different periods of time. An overview of recent agreements is shown in Table 3.

The TPP will be especially important for Vietnam over the next decade. The debate about the TPP revolves around the question of what economic benefits Vietnam would enjoy if it participated 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. The World Bank (2016) also expects more gains than losses from the TPP. According to a World Bank report, Vietnam's export in apparel and footwear will increase by about 50 percent. The effects of the TPP can be exemplified by the textile sector. In this sector, the TPP will incorporate Vietnam into the GVC to an even greater extent than has previously been the case. TPP member countries represent 40 percent of global GDP and 30 percent of world trade volume. Vietnam could overtake Bangladesh in exports in a few years in terms of its 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 percent by 2020 (World Bank, 2016).

These very optimistic expectations are in contrast to persistent problems occurring in the Vietnamese apparel, footwear, textile, and clothing industries. The industries complain about rising labour costs and their The unregulated market mechanism will not lead to sufficient upgrading in Vietnam and will not allow living standards in Vietnam to catch up to that of more developed countries.

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	Signed 5/5/2015	89.9%	15 years
Vietnam – Eurasian Economic Union	Signed 29/5/2015	87.8%	10 years
Vietnam – EU	Signed 02/12/2015 – Implementing 2018	99%	10 years
Trans-Pacific Strategic Economic Partnership (TPP)	Signed 02/2016 – Implementing 2018	~100%	16 years

Table 3: Overview of Vietnam's trade agreements

Source: Vietnamese Ministry of Foreign Affairs (2016)

dependence on imported raw materials and intermediate goods. One of the conditions attached to the TPP is that intermediate goods for exported goods going to TPP areas on preferential terms must come from a TPP member country. Yet, China and South Korea for example (neither being TPP member countries) together account for 54 percent of all imports in the textile and clothing industry and are Vietnam's main source of intermediate products (World Bank, 2016). Imports from other countries might be substantially more expensive than imports from China or South Korea. Foreign investors from Asian countries in the textile, garment, apparel, and footwear sectors in Vietnam are 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 in downward linkages of the value chain. A number of Vietnamese companies are already starting or expanding their own fibre manufacturing operations in order to not be left behind when the TPP is finally implemented. But foreign investors are also flocking to see the establishment of spinning, knitting, and dyeing factories in Vietnam. It is important that the government supports local producers in the transition period to the full enforcement of the TPP rules in order to climb up the value chain, establish local brands, and also encourage upward linkages in terms of exporting 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 more or less prevails in the electronics sector. Here also, as shown above, the local content is limited to assembling on the basis of low wages. Large foreign companies are dominating, which makes it even more difficult to trigger an upgrading of Vietnamese enterprises.

Overall, Vietnam is deeply integrated in 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 the TPP on a more fundamental level. It appears that the TPP will integrate Vietnam deeper into existing GVCs 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 - there is no good argument that the market mechanism will lead to such an upgrading. A further specialisation in 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 phase did not specialise but developed a diversified and broad export and production structure - just the opposite expected for Vietnam. The specialisation Vietnam may experience under the TPP fits

the logic of the Smith-Ricardo trade model with all the negative consequences of such a specialisation.

In case of the TPP, as well as in any other FTA, there are hopes that further trade deregulation will lead to a stimulation of GDP growth. Caution 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. While Vietnam is pleased about the substantial advantages the TPP will have in some industries, for example, increasing export in apparel and footwear by about 50 percent, there are substantial disadvantages in other industries, which have somehow been forgotten in the debate. It is implicitly assumed that there is a clear relationship between the deregulation of trade and surpluses (reductions of deficits) in the trade balance of a country. But such an idea is simply wrong. If net capital flows between a country and the rest of the world do not change, no FTA can change the current account balance of the country in guestion. This is what we can learn from David Ricardo (1817). Ricardo made the assumption of capita 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, while others suffer. Can we expect higher net capital outflows from Vietnam to the rest of the world after the TPP is implemented? This is hard to predict, probably the opposite might be the case or net capital flows will not change to a large extent. In any case, if there are extremely positive developments in some industries caused by the TPP, there must be extremely negative effects in other industries, for example, in agricultural production. The involved structural changes are probably a challenge for Vietnam's economy.

In the usual calculations of the positive effects of free trade, the efficiency gains in the logic of

Foreign investors from Asian countries in the textile, garment, apparel, and footwear sectors in Vietnam are so far only interested in Vietnam as a lowwage assembling site in the global supply chain. There is a need for the domestic industry to invest heavily in downward linkages of the value chain.

The specialisation Vietnam may experience under the TPP fits the logic of the Smith-Ricardo trade model with all the negative consequences of such a specialisation. 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. 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 mention the 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 the TPP and other FTAs.

The role of industrial policy for development

Principles of industrial policy

Industrial policy is needed in all countries in the world. This is even more so the case in developing countries, which suffer from a number of market mechanisms that reproduce underdevelopment. The reason for this is that there are two fundamental coordination failures the private sector has difficulties solving (Rodrik, 2004; 2008; Stiglitz, 1996). Firstly, there are information externalities. An innovation, the production of a new product previously produced in other countries, and the application of a new technology to produce goods, etc. involve a process of discovery or entrepreneurship. By virtue of 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. To make matters worse, if a firm is successful in producing a new product, follower firms can, in many cases, easily imitate the successful firm's product and can also enter the new production. To put it differently: the social rate of return of a discovery process is much higher than the private return. This gives governments an incentive (and a need) 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, innovative firms from starting on a small scale. Even more importantly, in many cases, a number of activities are needed, which go far beyond a single firm. A new production of a firm may need new infrastructure from transportation possibilities to communication, which cannot be handled by a single firm. A firm may need its employees to have specific skills, it may need other firms that produce complementary goods, or inputs, or to buy the new product, etc. In all these cases, an innovative firm, even a big one, cannot coordinate all these activities. Therefore, a new production or innovation will most likely never take place without government intervention. In a developing country, FDI can take over such functions. In such a case, FDI must flow into the right areas and must build up backward and/or forward linkages. But such types of FDI are an exception. An FDI firm's main objective is not the development of a country; their objective is to make money for a foreign owner living in a foreign country.

Governments have to create a vision, together with society as whole, about the direction in which technological development should go.

Ha-Joon Chang (1994) makes a similar argument. He stresses that governments have to create a vision, together with society as whole, about the direction in which technological development should go. Only such a vision allows the concerted action of societal forces to implement new developments. All changes in society, including positive changes, 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 block structural change.

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

Problems related to the vested interests of stakeholders and corruption can make industrial policy very difficult.

Another example is the abandoning of nuclear power in Germany, which would never have been triggered by the private sector. After the 2011 Fukushima nuclear catastrophe in Japan, the German government decided to shut down its last remaining nuclear power station in 2022. Even before this, the German government had already been subsidising solar and wind energy for a number of years. Thousands of small electric current producers, who had the right to sell their surplus electric current to big electric power producers, were created. The infrastructure is built to bring electric power from big offshore wind farms in the north of Germany to the industrial centres in southern Germany. A compromise with coalmines was found to fade out coalbased power plants based over a period of time.

There is no doubt that a country without a comprehensive industrial policy cannot develop. Thus, the question is not why, but how to carry out industrial policy (Rodrik, 2008; Ohno, 2015). The question is whether the government is better than the private sector at deciding in which direction to invest. 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 should not? In addition, problems related to the vested interests of stakeholders 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. Given these arguments, governments should be restricted to horizontal industrial policies in line with the Washington Consensus. This means that governments should invest in general education, general R&D, 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 need to decide a lot

of things. For instance, 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 built and where? In addition, especially for developing countries, horizontal industrial policy is not sufficient. For industrial policy, it is important to intervene more directly and in a selective way in technological and industrial development to overcome information and coordination externalities. If in developing countries, industrial policy is sometimes not possible due to government failure; a catch up of the country is simply not possible. This explains why so many developing countries do not develop, even when they follow Washington Consensus policies.

How can government failure be minimised? Of key importance is the flow of information between the government and the enterprise sector and the creation of a process that 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 und 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 associations at the centre, but also by including trade unions and civil society.

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

(1) Incentives should be given only for new activities. This means activities that increase the productive power of the country. There should be no discrimination. Private companies, SOEs, small and big companies should qualify if they can deliver something new.

- (2) There should be clear benchmarks or criteria for success or failure. These criteria need 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 the tourism or electronics industry is not sufficient. Specific activities that support innovation and productivity need to be selected.
- (5) Supported activities should have spillover and demonstration effects. They should crowd in additional investment and productivity gains.
- (6) The authority implementing industrial policy should demonstrate that they are qualified and not corrupt.
- (7) Implementing authorities should be closely monitored by political authorities 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 happened. The private sector also makes mistakes in its investment decisions. What is important is to detect mistakes early and minimise their cost.
- (10) Industrial policy is a process. Implementation agencies should be on a path of permanent learning form mistakes and successes.

These guidelines could be adapted to the Vietnamese context. We will come back to this point in the recommendations for Vietnam.

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 the industrial development of a country difficult, whereas an undervaluation supports the industrial sector and makes it competitive. Despite 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 to be learned from him. The first one, as already mentioned above, is 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.

Firstly, 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 An overvalued exchange rate makes the industrial development of a country difficult, whereas an undervaluation supports the industrial sector and makes it competitive. Countries that allow high foreign debt in foreign currency and international institutions that do not warn countries against this, are acting in an irresponsible way. in GVCs 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. A real depreciation will have a significant negative impact on the trade balance in the short-term. However, the trade balance will improve over the long-term (Trinh, 2014).

Secondly, 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 problem. High debt in foreign currency leads to a fear of floating as sufficient depreciations are prevented due to the danger of financial crises (Calvo / Reinhart, 2002). If a big depreciation cannot be avoided, the outcome is a twin crisis: a crisis of the exchange rate and a crisis of the domestic financial system (Kaminsky / Reinhart, 1999). Countries that allow high foreign debt in foreign currency and international institutions that do not warn countries against this, are acting in an irresponsible way. High foreign debt takes away from countries the very important macroeconomic instrument of exchange rate adjustment. Vietnam should therefore reduce foreign debt as quickly as possible.

Thirdly, a nominal depreciation may not lead to a real depreciation of a currency. Countries that 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 pathtrough is likely when the negative effects 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 a nominal wage increase, a depreciation-inflation-wage-price spiral is triggered, leaving the real exchange rate unchanged. The higher the import quota and the bigger the real depreciation, the bigger 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 political destabilisation. For example, when a large 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 therefore possible.

Despite these problems, real depreciations have a number of positive effects for medium and long-term development: (a) real depreciations 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 (and which provides the best benchmark for efficient companies); (d) the subsidies for export activities are market-friendly and do not require 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. In many cases, investment, consumption, and government demand do not compensate for a negative trade balance. Or to 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 global economy, current account imbalances should even be limited. For countries that 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 global economy can lead to a sudden stop in capital inflows and sudden capital outflows. The country is then trapped in a twin crisis, which can lead to 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 that prevents such deficits.¹⁷

An exchange rate policy that 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 needs to control capital inflows. China serves as a good example in this policy area. From the beginning of its transition at the end of the 1970s until now, China has had limited capital inflows. Foreign portfolio investment and foreign bank credits were strictly controlled. Only FDI was welcomed. China's 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 exchange rate development (which is beneficial for a country); it also allows the prevention of high foreign debt in a foreign currency. Lastly, capital controls can give a country the space to follow domestic oriented monetary policy. Without such controls, a central bank in a country that does not issue an important international currency has to follow the worldwide 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 still have current account deficits and foreign debt as high 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 to overvalue the exchange rate of the dong. During the last decade, the current account balance of Vietnam, as well as the trade balance, was in many years negative. If one takes into account that a substantial part of Vietnam's exports are natural resources, it becomes obvious that the exchange rate of the dong makes it difficult for Vietnam's industrial sector to become competitive. A cautious medium-term real depreciation of the dong seems to be optimal to support industrial development in Vietnam.

Overview of Vietnam's industrial policy

The national Socio-economic Development Strategy (SEDS) is a master plan that governs Vietnam's industrial policy framework for each 10 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 For Vietnam, a balanced current account or even a moderate surplus is the best constellation for its development.

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. Local governments at different levels have been powerful players in economic decision-making and increased their respective bargaining power vis-à-vis the central government. and supervise industrial strategies and plans, while the Ministry of Planning and Investment has the role of implementing the five-year plans within the SEDS, including coordination with the private sector through its Foreign Investment Agency, Enterprise Development Agency, and Department of Economic Zones (Tue-Anh *et al.*, 2014: 14f.).

Since 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 words "industrialisation and modernisation" have always been together (CPV, 1996). In 2001, the "Strategy for Acceleration of Socialist-oriented Industrialisation" 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). Thirteen 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), beverages, dairy, and pulp and paper. At the same time, the strategy seeks to mobilise "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).

This official strategy remains very abstract, however, it sounds like a mingle-mangle of different targets. Ohno (2015) compared and evaluated Vietnam's industrial policy with that of a number of other countries, and came to the conclusion that Vietnam's industrial policy was poor. In a ranking system from 5 (highest) to 1 (lowest), Vietnam was given the following scores: industrial human resources 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, and South Korea score much higher than Vietnam (with overall values over 4), whereas India and Rwanda are behind Vietnam.

There are several reasons why Vietnam's industrial policy has only been partly central-local successful. Firstly, its relationship is uncoordinated. Since 1986, the decentralisation of state power has characterised Vietnam's economic transition. Local governments at different levels have been powerful players in economic decisionmaking and increased their respective bargaining power vis-à-vis 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 industrialisation include nationwide enhancement of infrastructure. In this regard, infrastructure investment should adopt a national approach, the opposite to the existing mechanism of arbitrarily granting infrastructure investments to particular provinces. Or, for example, current policies set targets to construct deepwater ports and airports whose usage is not cautiously scrutinised. 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 large state conglomerates in many cases did not lead to globally competitive corporations, despite their massive support. 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 needs to be substantially improved. It needs to be discussed and decided in which areas SOEs are important for development and in which areas private firms can play a bigger role. In addition, in the past, SOEs were not actively used to create clusters with private firms. Lastly, SOEs should not be systematically supported (in contrast to private firms) if they do not provide public goods or other advantages for society.

Thirdly, industrial policy in Vietnam suffers from corruption. Despite formal government attempts to fight corruption, in Transparency International's Corruption Perceptions Index 2015, Vietnam ranked 112th out of 168 countries. Corruption undermines the rational selection of sectors and firms that should be supported. Firms concentrate on good relations with officials and not on 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 three missing links: (1) a lack of cooperation among different stakeholders in the entire drafting and implementation process including ministries, the business community, SOEs, and trade unions; (2) a lack of inter-ministerial coordination within the government in deciding concrete action plans; (3) a lack of evaluation and correction (in instances where mistakes have been made) of industrial policy (Ohno, 2006; 2013). Corruption undermines the rational selection of sectors and firms that should be supported. Firms concentrate on good relations with officials and not on innovations to maximise profits. A comprehensive industrial policy is indispensable for economic development.

Countries at any development level can be trapped by low growth, low innovative power, and the inability to catch up to more developed countries. In this section, ideas are presented on how economic policy can help Vietnam avoid the MIT, and allow permanent upgrading. We are convinced that a successful strategy has to be built on three pillars. Firstly, economic policy needs to be built on market mechanisms, which in many areas are the best institution to determine good allocation and economic dynamics. Secondly, it needs 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 needs to integrate into the global economy. However, its integration also has to be embedded in institutional and government interventions to reap the positive effects of globalisation and minimise the negative ones.

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

 where all levels of the administration and all social groups have to work together.
Catch up: A comprehensive industrial policy is indispensable for economic development.
Another important point is that economic upgrading needs to be combined with social upgrading and the participation of all groups

Development has

a national project

to be considered as

Recommendations for Vietnam

of society. Too high inequality leads to a lack of aggregate demand, as well as negative supply side effects such as insufficient expenditure on education. A lack of an inclusive growth model destroys societal cohesion and makes economic development unsustainable.

A vision of Vietnam's general economic development needs to be developed and broadly discussed to create a consensus among the majority of the population about the direction in which it should 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 levels 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 towards a desired direction and to avoid the disruptive effects of structural change. One of the major tasks will be to organise structural change without producing losers who could block necessary structural changes. The following discusses different dimensions of industrial policy.

Good institutions

Following Dani Rodrik (2004), the most important point for industrial policy or for government intervention in the economy in general is creating a *process* that allows a rational industrial policy and allows mistakes, which will necessarily occur, to be corrected. For such an industrial policy, an intensive information flow between the government institution carrying out industrial policy, and the enterprise sector is needed. Other important and informed institutions in society could also be included in the debate about industrial policy, for example, trade unions and different types of non-governmental organisations. Incentives by the government should only be given for new activities: risktaking and experiments should be possible; there should be clear benchmarks or criteria for success or failure; there should be built-in sunset clauses; mistakes need 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.

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

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

Thirdly, fighting corruption in Vietnam is important to allow rational policy decisions. Building high quality institutions is essential to prevent 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. In Vietnam, the practice of "buying jobs", which developed after the start of reforms, needs to stop. The institution implementing industrial policy (the agent) and the government institutions (the principal) controlling the agent should not tolerate corruption and/ or unqualified personnel; otherwise a good industrial policy will not be possible. The functioning of these institutions is of key importance as a second-best solution, which

would recommend a model without any industrial policy leaving development primarily to the market, is not acceptable.

Instruments of industrial policy

The instruments of industrial policy are multifaceted. Two points are especially important. Firstly, under FTAs and the 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 (Ohno, 2013).

Among them, development 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 that are promising, not whole industries. They should not concentrate on small and medium-sized companies, which in many cases work with backward technologies. To support small and medium-sized companies, for example in the agricultural sector, special programmes are needed.

In an open economy, the SOE 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 important strategic sectors. However, it is important that SOEs are managed in a non-corrupt and professional way. Institution building is also important in this field. Privatising SOEs quickly is not a solution. In a corrupt environment with bad institutions, privatisation makes things worse. Examples of this are the oligarchs in the countries of the former Soviet Union. A World Bank commission also warned against quick liberalisation and fast privatisation (Commission on Growth and Development, 2008).

The fragmentation of industrial policy in Vietnam and the egoisms of provinces need to be overcome.

it is important that SOEs are managed in a non-corrupt and professional way. Vietnam should avoid policies that accept low labour and low ecological standards to attract FDI.

Horizontal industrial policy

Governments should invest in public goods that are not being delivered in a sufficient quantity by the private sector. Investment in education is a good example of this. Of particular importance is 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. Investment in research and in public infrastructure fit to this type of industrial policy is also important. Heavy public involvement in each of the aforementioned areas is unavoidable. For instance, it is important that Vietnam's government invests heavily in upgrading broadband telecommunication, which plays a crucial in achieving a general increase in productivity.

A country like Vietnam needs to set priorities in each of the aforementioned areas and between these areas. Horizontal industrial policy also needs nationwide coordination and supervision, for example, where motorways, ports, and airports should be built; which transportation infrastructure is preferred, etc. The idea of horizontal industrial policy not intervening in certain industries and not supporting certain firms is an illusion. As discussed above, institutions are needed to select which horizontal industrial policy to choose.

Economic cluster and forward/backward linkages

Vietnam needs 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. Big companies have to support domestic suppliers to allow them reach the skill level and technological standards to become suppliers.

SOEs can play an important strategic role in this field. 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. In other areas, SOEs could be actively used for cluster building. SOEs should be well managed and forbidden from investing in speculative activities like the real estate sector. SOEs should not 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 to SOEs if they are forced to build clusters with forward and backward linkages. FDI should flow into areas that contribute to economic development. FDI in such areas is of course highly welcomed, but will most likely also be limited. Certain activities and areas should be closed to foreign companies, for example, certain real estate investments or investment in public utilities. The financial sector should remain, with some exceptions, under 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. Vietnam should avoid policies that accept low labour and low ecological standards to attract FDI. FDI relying on such factors will not bring many new types of technology to Vietnam in any case. Rules for FDI need to be enforced nationwide to avoid competition between regions to attract FDI through the use of tax holidays or other unfair advantages.

The integration of a country into GVCs needs an adaptation of its traditional industrial policy. Traditional industrial policy supports the production of products that are internationally competitive and can be exported, or, it supports the production of goods that can substitute imports. As soon as GVCs start to play an important role for a country, such policies become more difficult. However, a country can systematically try to search for an upgrade of tasks in GVCs. "The central goal of industrial policy in the GVC context shifts from creating fully blown, vertically integrated national industries to moving into highervalue 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-adding tasks can also be tried whenever possible.

For example, to upgrade in GVC design, marketing or branding are important. Vietnam should also try to develop its own brands. Foreign lead firms, as well as the big and powerful suppliers of lead firms that are located in the middle range of value chains should be approached to transfer skills and technology to Vietnam. Otherwise FDI has very limited positive effects. Attempts to build clusters in value chains within the country or the region can also attract higher valueadding tasks in GVCs. Countries like Vietnam should also shame and negotiate with countries that do not allow them to climb 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 for the agriculture sector to protect their own processing industries. These are unfair practices that are harmful to Vietnam. Vietnam should try to make such unfair practices public and put a stop to them.

Special sectors

Vietnam needs to support productivity development in the industrial sector as it is deeply integrated in the world market; i.e. the electronics sector, the textile and garment sector, and the shoemaking and leather sector. In these sectors especially, three strategies are needed. Firstly, economies of scale should be exploited. Secondly, backward and forward linkages need to be built up. Thirdly, any chance to attract higher value-adding tasks needs to be exploited.

The agricultural sector in Vietnam plays an important role for employment, but also for

exports. This also makes it an importance sector for development. Vietnam has to climb up the value chain and build up its own brand names in the production and export of rice, coffee, fish, etc. Farms should reach a certain size that allows for increases of productivity. Institutional changes are also needed, including land law reforms to mitigate the problem of land grabbing. The 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, but rather become selfsufficient with its natural resources. This also implies more processing of resources for domestic use. Focusing on areas other than natural resource exports avoids the danger of Dutch disease. In any case, Vietnam should negotiate with China in order for higher processed natural resources to be exported to China, without China increasing tariffs.

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

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

Developing countries are in danger of specialising too much in the international distribution of labour; 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 and the 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. Specialising too much in the textile and garment industry as a result of the TPP is not an advantage, it can become an obstacle to Vietnam's development.

Vietnam has to climb up the value chain and build up its own brand names in the production and export of rice, coffee, fish, etc.

Specialising too much in the textile and garment industry as a result of the TPP is not an advantage, it can become an obstacle to Vietnam's development. Central bank interventions to prevent appreciation combined with sterilisation policies as practiced in many Asian countries can prevent appreciations and keep the exchange rate competitive.

Exchange rate policy, export orientation and demand management

In the past, Vietnam had partly high current account deficits despite substantial natural resource exports. The target for exchange rate policy should be to realise a balanced trade and service balance without taking natural resources into account. Especially when institutions are judged to be weak, the exchange rate has to take over the function of a general protection comparable to a general high tariff to protect the industry of a country. To reach this aim, capital imports (except FDI) need to be strictly controlled. Central bank interventions to prevent appreciation combined with sterilisation policies as practiced 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 economies have concentrated on export promotion. Latin American economies have concentrated more on import substitution-based industrialisation. Industrial policy can do both, but it should not support weak companies from foreign competition long-term, rather, it should support strong companies with good prospects. In many cases this will lead to them becoming successful exporters (Stiglitz, 1996).

Besides controlling the exchange rate, central banks should influence credit allocation. Instruments could be special capital requirements, special reserve requirements for certain types of bank credits, and a general ceiling or the prohibition of certain types of credits. For example, credits form 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 subsidise 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 a high rate of innovation are "one package". To realise such a combination, industrial policy and demand management is needed. Demand management implies sufficient domestic consumption demand, which crucially depends on a relatively equal income distribution (Stiglitz, 1996) and stable investment. The latter can be stabilised by a large SOE sector and investment in big infrastructure projects. Deficits in the current account have to be avoided as such deficits reduce domestic demand.¹⁹

Notes

- 1. We could also assume production inputs in general.
- 2. If the population prefers a reduction in working time, the welfare of a nation 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 percent of average productivity, as two thirds of the workforce is employed by the car industry.
- 5. Theoretically, future demand of mankind for natural resources should lead to high prices of natural resources today. But there are no future markets that could signal scarcity of natural resources in 50, 100, or 500 years. The market fails to lead to a rational intertemporal allocation of such products.
- 6. Friedrich List was influenced by Alexander Hamilton, one of the founding fathers of the United States, who advocated for protectionist tariffs and other measures to allow American industry to develop without too much foreign competition. Indeed, the United States developed, along with many other countries, under a regime of heavy protection (Chang 2002).
- 7. The same macroeconomic production function in all countries is assumed.
- 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. See also Azarhoushang et al. (2015).
- 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, who compete with each other.
- 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).
- 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 that show these constellations, see Anner (2015) and Khan and Wichterich (2015).
- 14. There is a rich literature about the 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 the 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 followed.
- 15. More precise would be GDP per hour worked. GDP per capita does not reflect different working times between countries. For example, in the United States, working time is much longer than in Europe as among other things holidays in the United States are much shorter. Actual annual working time in the United States in 2014 was 1,789 hours; the OECD average was 1,770 hours. Working time in Germany was 1,371 hours (OECD, 2015). In addition, GDP does not reflect distribution of income, life expectancy, etc. and is only a very rough indicator for welfare.

- 16. For instance, after 20 years of investment in Vietnam the localisation rate of parts produced by Samsung currently (2015) only reaches 36 percent. 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).
- 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's say, the rich are allowed to keep a large part of their wealth abroad and the country falls into a currency crisis.
- 18. Sterilisation policy of the People's Bank of China mainly to issue its own bonds and increase minimum reserve requirements of banks allowed the control of the liquidity effects created by the interventions.
- 19. For such a development regime see Herr / Kazandziska (2011), Dullien et al. (2011) and Gallas et al. (2016).

Bibliography

- Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek. "Does Foreign Direct Investment Promote Growth? Exploring the Role of Financial Markets on Linkages." Journal of Development Economics 91, no. 2 (2010): 242-56.
- Anh-Tuan, Do Thien. "Các mô thức quản lý nợ công và vấn đề của Việt Nam" [The patterns of public debt's management and issues in Vietnam]. Fulbright Economics Teaching Program, 2015.
- Anh-Tuan, Do Thien. "Recognizing the Role of FDI and the Requirement of Institutional Reform in Vietnam". Fulbright Economics Teaching Program, 2015.
- Anner, Mark. "Social Downgrading and Worker Resistance in Apparel Global Value Chains." *In Putting Labour in its Place. Labour Process Analysis and Global Value Chains*, edited by Kirsty Newsome, Phil Taylor, Jennifer Bair. New York, NY: Palgrave, 2015.
- Arezki, Rabah, Kaddour Hadri, Prakash Loungani, and Yao Rao. *Testing the Prebisch-Singer Hypothesis since 1650: Evidence from Panel Techniques That Allow for Multiple Breaks*. International Monetary Fund Working Paper. International Monetary Fund, 2013.
- Azarhoushang, Behzad, Alessandro Bramucci, Hansjoerg Herr, and Bea Ruoff. "Value Chains, Under-Development and Unions Strategy." International Journal of Labour Research 7 (2015): 153-175.
- Balasubramanyam, Venkataraman N., Mohammed Salisu, and David Sapsford. "Foreign direct investment and growth in EP and IS countries." *The Economic Journal* 106 (1996): 92-105.
- Baldwin, Richard. "Global supply chains: why they emerged; why they matter, and where they are going." *In Global value chains in a changing world* edited by Deborah K. Elms and Patrick Low. Geneva: WTO Publications, 2013.
- Baldwin, Richard and A. J. Venables. "Spiders and snakes: Offshoring and agglomeration in the global economy." *Journal of International Economics 90* (2013): 245-254.
- Báo Nhân Dân. "Nợ Công Năm 2015 Vẫn Dưới Ngưỡng 65% GDP." http://www.nhandan.com.vn/kinhte/thoi_su/ item/27842002-no-cong-nam-2015-van-duoi-nguong-65-gdp.html.
- Basu, Parantap and Guariglia Allessandra. "Foreign Direct Investment, inequality, and growth." *Journal of Macroeconomics* 29 (2007): 824-839.
- Blinder, Alan S. "Fear of Offshoring." CEPS Working Paper. No. 119. 2005
- Borensztein, Eduardo, Jose De Gregorio, and Jong-Wha Lee. "How does foreign direct investment affect economic growth?" *Journal of International Economics* 45, no. 1 (1998): 115-135.
- Guillermo, A., Reinhart Carmen, and Calvo Guillermo. "Fear of Floating." *Quarterly Journal of Economics* 117 (2002): 379-408.
- Center for Socio Economic Information and Forecast. http://www.ncseif.gov.vn/sites/en/Pages/danhgiakhanangthucdaynd-1342.html.
- Chang, Ha-Joon. "Kicking the Away the Ladder. Development Strategy under Historical Perspective." London: Anthem Press, 2002.
- Chang, Ha-Joon, "State, Institutions and Structural Change." Structural Change and Economic Dynamic 5, (1994): 293-313.
- Commission on Growth and Development. "The Growth Report: Strategies for Sustained Growth and Inclusive Development." Washington DC: World Bank, 2008.

- Corden, Max W. "Boom Sector and Dutch Disease Economics: Survey and Consolidation." Oxford Economic Papers 36 (1984): 359-380.
- Corden, W. Max, and J. Peter Neary. "Booming Sector and De-Industrialisation in a Small Open Economy." *The Economic Journal 92* (1982): 829-831.
- Communist Party of Vietnam. *Materials of 8th Party Congress*. [in Vietnamese] Hanoi: National Political Publishing House, 1996.

-----. Materials of 9th Party Congress. [in Vietnamese] Hanoi: National Political Publishing House, 2001.

- Dullien, Sebastian, Hansjoerg Herr, and Christian Kellermann. Decent Capitalism. A Blueprint for Reforming our Economies. London: Pluto Press, 2011.
- Everatt, Donna, Terence Tsai, and Bor-Shiuan Cheng. "The Acer Group's China manufacturing decision." Version A. Ivey Case Series. University of Western Ontario, 2001.
- Feenstra, Robert C. Offshoring in the global economy: microeconomic structure and macroeconomic implications. Cambridge, MA: MIT Press, 2010.
- Gallas, Alexander, Hansjoerg Herr, Frank Hoffer and Christoph Scherrer. Combating Inequality. *The Global North and South*. London: Routledge, 2016.
- General Statistics Office of Vietnam. http://www.gso.gov.vn/default_en.aspx?tabid=491.
- Gereffi, Gary. "International Trade and Industrial Upgrading in the Apparel Commodity Chain." *Journal of International Economics* 48 (1999): 37-70.
- Gereffi, Gary and Timothy Sturgeon. "Global value chain-oriented industrial policy: the role of emerging economies." In Global value chains in a changing world, edited by D. K. Elms and P. Low. Geneva: World Trade Organization, 2013.
- Grossman, G. M., and Elhanan Helpman. *Outsourcing in a Global Economy.* National Bureau of Economic Research, 2002.
- Hansen, Henrik, and John Rand. "On the causal links between FDI and growth in developing countries." *World Economy* 29 (2006): 21-41.
- Harvey, David I., Neil M. Kellard, Jakob B. Madsen, and Mark E. Wohar. "The Prebisch–Singer hypothesis: four centuries of evidence." *The Review of Economics and Statistics* 92 (2010): 367-377.
- Haughton, D., J. Haughton and P. Nguyen. *Living Standards During an Economic Boom; the Case of Vietnam*. Hanoi: United Nations Development Program and General Statistical Office, Statistical Publishing House, 2001.
- Heckscher, Eli. "The effect of foreign trade on the distribution of national income [1919]." In Readings in the Theory of International Trade, edited by Howard Sylvester Ellis and Lloyd A. Metzler, American Economic Association, 272–300.
 Philadelphia: Blakiston Company, 1949.
- Herr, Hansjoerg. "Credit Expansion and Development: A Schumpeterian and Keynesian View of the Chinese Miracle." Intervention. European Journal of Economics and Economic Policy 7 (2010): 71-90.
 - -----. "Capital Controls and Economic Development in China." In *Financial Liberalisation and Economic Performance in Emerging Markets*, edited by Philip Arestis and Luiz Fernando De Paule. Cheltenham: Edward Elgar, 2008.
- Herr, Hansjoerg, and Milka Kazandziska. *Macroeconomic Policy Regimes in Western Industrial Countries*. London: Routledge, 2011.
- Herr, Hansjoerg, and Jan Priewe. "Development Strategies beyond the Washington Consensus." Internationale Politik und Gesellschaft 2 (2005): 72-98.

- Humphreys, Macartan, Jeffrey D. Sachs, and Joseph E. Stiglitz. *Escaping the Resource Curse*. New York: Columbia University Press, 2007.
- Hung L. "Nguyên phụ liệu Nút thắt của ngành công nghiệp da giày Việt Nam [Raw Materials Ravel of Vietnam's leather industry]." ARID, 2015. http://www.arid.gov.vn/default.aspx?page=news&do=detail&category_ id=233&news_id=3951.
- International Labor Organization. "Education-business mismatch worsens already low workforce quality and productivity." ILO Vietnam Office Newsletter, 2014.
- Imbs, Jean, and Romain Wacziarg. "Stages of Diversification." American Economic Review 93 (2003): 63-86.
- Industry and Trade Magazine. "Dịch vụ góp phần vào tăng trưởng và những vấn đề đặt ra" [Contribution of Service Industry to Economic Growth and its challenges]. January 1, 2013. http://baocongthuong.com.vn/dich-vu-gopphan-vao-tang-truong-va-nhung-van-de-dat-ra.html.
- International Monetary Fund. "IMF Executive Board Concludes 2016 Article IV Consultation with Vietnam." Washington DC, 2016. https://research.standardchartered.com/configuration/ROW%20Documents/Trans-Pacific_Partnership_(TPP)__Winners_and_losers_05_01_15_05_22.pdf
- Kaldor, Nicholas. Further Essays on Economic Theory. New York: Holmes and Meier, 1978.
- Kaminsky, Graciela L., and Carmen M. Reinhart. "The twin crises: the causes of banking and balance-of-payments problems." *American economic review* (1999): 473-500.
- Khan, Mohd Raisul Islam, and Christa Wichterich. Safety and labour conditions: the accord and the national tripartite plan of action for the garment industry of Bangladesh. ILO, 2015.
- To, Linh Huong, Huong Lan Chu, and Viet Khoi Nguyen. "Vietnam Tea Industry: An Analysis From Value Chain Approach." International Journal of Managing Value and Supply Chains 6, no. 3 (2015). doi: 10.5121/ijmvsc.2015.6301
- Khuong, Vu Minh. "Can Vietnam Achieve More Robust Economic Growth?" *Journal of Southeast Asian Economics 32*, no. 1 (2015): 52-83.
- Kraemer, Kenneth L, Greg Linden, and Jason Dedrick. "Capturing Value in Global Networks: Apple's iPad and iPhone." University of California: Investments Office, 2012.
- Kurtishi-Kastrati, Selma. "The Effects of Foreign Direct Investments for Host Country's Economy." European Journal of Interdisciplinary Studies 5, no. 1 (2013): 26-38.
- Krugman, Paul R. Geography of Trade. Cambridge: MIT Press, 1993.
 - -----. "Increasing returns, monopolistic competition, and international trade." Journal of international Economics 9, no. 4 (1979): 469-479.
- Lạc, P. "Công nghiệp điện tử Việt Nam: Miếng ngon thuộc về doanh nghiệp ngoại" [Electronic Industry: Titbits flow into foreign enterprises], SGGP Online, 2015. http://www.sggp.org.vn/kinhte/2015/9/397789/.
- Lee, Keun. Schumpeterian Analysis of Economic Catch-up. Knowledge, Path-Creation, and the Middle-Income Trap. Cambridge: Cambridge University Press, 2013.
- LEFASO. http://lefaso.org.vn/default.aspx?ID1=2.
- Leontief, W. "Domestic Production and Foreign Trade: The American Capital Position Reexamined." *Economia Internatiozionale* 7 (1954): 3-32.
- Libby, Nelson. "How the TPP could change where your clothes come from." VOV Policies and Politics, 11.11.2015. http:// www.vox.com/policy-and-politics/2015/11/11/9715652/tpp-textiles-clothes-garments.

List, Frederick. The National System of Political Economy [1841]. London: Longmans, Green, and Company, 1885.

Marshall, Alfred. Principles of Economics. London: MacMillan, 1890.

- Mudambi, Ram. "Location, control and innovation in knowledge intensive industries." *Journal of Economic Geography* 8, no. 5 (2008): 699-725.
- Nadvi, Khalid, John T. Thoburn, Bui Tat Thang, Nguyen Thi Thanh Ha, Nguyen Thi Hoa, Dao Hong Le, and Enrique Blanco De Armas. "Vietnam in the global garment and textile value chain: impacts on firms and workers." *Journal of international development* 16, no. 1 (2004): 111-123.
- Online Newspaper of the Vietnamese Government. "Nhận diện tăng trưởng của xuất khẩu dịch vụ" [Identifying growth potential of services exports], 2015. http://baochinhphu.vn/Kinh-te/Nhan-dien-tang-truong-cua-xuat-khau-dich-vu/189571.vgp.
- Ohlin, Bertil. Interregional and International Trade. Cambridge: Harvard University Press, 1933.
- Ohno, Kenichi. "An Approaching Middle Income Trap and Industrial Policy Quality in Vietnam." Tokyo: National Graduate Institute for Policy Studies (GRIPS), 2015.
 - —. Learning to Industrialise. From Given Growth to Policy-Aided Value Creation. London: Routledge, 2013.
 - -----. The Middle Income Trap Implication for Industrialization Strategies in East Asia and Africa. Tokyo: GRIPS Development Forum, 2009.
 - ------. Vietnam's Industrial Policy Formulation: To Become a Reliable Partner in Integral Manufacturing. Tokyo: Vietnam Development Forum and National Graduate Institute for Policy Studies, 2006.
- Perkins, Dwight H., and Vu Thanh Tu-Anh. "Vietnam's Industrial Policy: Designing Policies for Sustainable Development." UNDP Harvard Policy Dialogue Papers 1, (2010).
- Petri, Peter A., Michael G. Plummer, and Fan Zhai. *The Trans-pacific partnership and Asia-pacific integration: A quantitative Assessment*. Peterson Institute. 2011.
- Pham, Thi Thu Tra. "Does Exporting Spur Firm Productivity?: Evidence from Vietnam." Journal of Southeast Asian Economies (JSEAE) 32, no. 1 (2015): 84-105.
- Phong, Đặng. "Phá rào" trong kinh tế vào đêm trước đổi mới" [Economic breakthrough at the eve of Doi Moi], Ha Noi: Tri Thuc Publish House, 2011.
- Phu, Nguyễn Vạn. "Hai điều chưa nói về nợ công" [Two unrevealed things about public debt]. Saigon Times, December 11, 2014. http://www.thesaigontimes.vn/122568/Hai-dieu-chua-noi-ve-no-cong.html.
- Pincus, Jonathan. "Why Doesn't Vietnam Grow Faster?: State Fragmentation and the Limits of Vent for Surplus Growth." *Journal of Southeast Asian Economies (JSEAE)* 32, no. 1 (2015): 26-51.
- Prebisch, R. *The Economic Development of Latin America and Its Principal Problems*. New York: UN Department of Economic Affairs, 1950.
- Polanyi, Karl. The Great Transformation. New York: Farrar & Rinehart, 1944.
- Vietnam-Briefing. "Vietnams Schuhindustrie erwartet ein starkes Wachstum aufgrund der TPP." January 1, 2015. http:// www.vietnam-briefing.com/news/schicke-sneaker-vietnams-schuhindustrie.html/.
- Vuong, Quan Hoang. "Vietnam's Political Economy in Transition (1986-2016)." The Hub: International Perspectives, 2014.

Ricardo, David. On the Principles of Political Economy and Taxation. London, Everyman 1992, 1817.

Robinson, Joan. Aspects of Development and Underdevelopment. Cambridge: Cambridge University Press, 1979.

Rodrik, Dani. "Industrial Policy: Don't Ask Why, Ask How." Middle East Development Journal 1, no. 1 (2008): 1-29.

-----. "Industrial Policy for the Twenty-First Century." Cambridge: Harvard University, 2004.

Thomasson, Sarah C. "Vietnam: A Textile Powerhouse." *Textile World Asia*, July/August/September 2011. http:// textileworldasia.com/Articles/2011/August/Country_Profile_Vietnam.html.

Schweisshelm, Erwin. "The textile, clothing and shoe industries in Vietnam – Information about the sector, wage formation, working conditions and occupational safety." Briefing Paper. Friedrich-Ebert-Stiftung, 2015.

Singer, Hans W. "The distribution of gains between investing and borrowing countries." *The American Economic Review* 40, no. 2 (1950): 473-485.

Smith, Adam. An Inquiry into the Nature and Causes of the Wealth of Nation. London: Straham and Cadell, 1776.

Stiglitz, Joseph E. Making Globalisation Work. New York, NY: W. W. Norton, 2006.

-----. "Some Lessons from the East Asian Miracle." World Bank Research Observer11 (1996): 151-177.

- Stiglitz, Jospeh .E., and Uy, M. "Financial Markets, Public Policy, and the East Asian Miracle." The World Bank Observer 11 (1996): 249-276.
- Suiwah L. "The Vietnamese economy seven years after the global financial crisis." *Journal of Southeast Asian Economies* 32.1, (2015).

Tho, T. "Việt Nam 40 năm qua và những năm tới: Cần một nền kinh tế thị trường định hướng phát triển" [40 years Vietnam's reform and beyond: Toward a market economy with development orientation]. Thoi Dai Moi 33 (2015).

Tran, N., C. Bailey, N. Wilson, and M. Phillips. "Governance of Global Value Chains in Response to Food Safety and Certification Standards: The Case of Shrimp from Vietnam." *World Development* 45 (2013): 325–336.

- Anh, Nguyen Thi Tue, Luu Minh Duc, and Trinh Duc Chieu. "The evolution of Vietnamese industry." UNU-WIDER Working Paper 76 (2014).
- Tot, Bui Van. "Opportunities for Breakthrough, Textile & Apparel Industry Report." FPT Securities, 2014.
- Trading Economics. "Current account balance (% of GDP) in VietNam." http://www.tradingeconomics.com/vietnam/ current-account-balance-percent-of-gdp-wb-data.html.
- Trinh, Pham Thi Tuyet. "The impact of exchange rate fluctuation on trade balance in the short and long run: the case of Vietnam." Journal of Southeast Asian Economies (JSEAE) 31, no. 3 (2014): 432-452.
- Tu, H. "Tỷ lệ nội địa hóa của Samsung là 36%" [Samsung's domesticalization rate is 36%]. Saigon Times Online, July 15, 2015. http://www.thesaigontimes.vn/133046/Ty-le-noi-dia-hoa-cua-Samsung-la-36.html.
- Vu-Thanh, Tu-Anh. The political economy of industrial development in Vietnam: Impact of state-business relationship on industrial performance, 1986-2012. No. UNU-WIDER Research Paper WP2014/158. 2014.
- Tue-Anh, N., V. Hong, T. Thang, and N. Hai. "Tác động của Đầu tư trực tiếp nước ngoài tới Tăng trưởng Kinh tế ở Việt Nam" [Impacts of FDI on Vietnam's Economic Growth]. SIDA Project, CIEM, 2006.



UNCTAD. "Key Statistics and Trends in International Trade 2014", Report from United Nations, Geneva, 2014.

- -----. "Integrating Developing Countries' SMEs into Global Value Chains." Report from United Nations, Geneva and New York, 2010.
- -----. "World Investment Report." New York, 2001.
- VEIA. "Thông tin thống kê từ Hiệp Hội Doanh Nghiệp Điện Tử Việt Nam" [Statistic of Vietnam Electronic Industries Association], 2014. http://www.veia.org.vn/.
- VEPR. "Bài thảo luận chính sách CS-10, Những đặc điểm của nợ công Việt Nam" [Discussion on Policy CS-10, Characteristics of Vietnam's public debt], 2015.
- Verdoorn, Petrus Johannes. "On the Factors Determining the Growth of Labor Productivity." *Italian Economic Papers 2* (1993).
- Verra, G. J. Global Sourcing: An international survey among 7 multinationals. No. 1999-01. Nyenrode Business Universiteit, 1998.
- Vietnam Chamber of Commerce and Industry. "Promoting Value Chain-based Business." VCCI News, December 26, 2014. http://vccinews.com/news_detail.asp?news_id=31564.
- Vietnamese Ministry of Foreign Affairs. "Tài liệu dùng cho tập huấn hội nhập địa phương tại tỉnh Quảng Ngãi" [Materials for training course "International integration" in Quang Ngai], 2016.
- VietNamNet Bridge. "Dong depreciation increases Vietnam's foreign debt." http://english.vietnamnet.vn/fms/ business/120976/dong-depreciation-increases-vietnam-s-foreign-debt.html.
- Vietnam News. "Big year likely for VN textile, garment, exports." http://vietnamnews.vn/economy/266932/big-yearlikely-for-vn-textile-garment-exports.html.
- Vietnam News. "Footwear export to the US soars," March 2, 2015, Economy. http://vietnamnews.vn/economy/266897/ footwear-export-to-the-us-soars.html.
- Vietnam News. "VN not ready to join global value chains," December 11, 2014, Economy. http://vietnamnews.vn/ economy/263874/vn-not-ready-to-join-global-value-chains.html.
- Voice of Vietnam. "Vietnam's FDI three years after joining WTO," July 3, 2010. http://english.vov.vn/economy/vietnams-fdi-three-years-after-joining-wto-117163.vov.
- Wei, S., C.-.C. Shih, N.-.H. Chen, and S.-.J Tung. "Value Chain Dynamics in the Taiwan Orchid Industry." *International Orchid Symposium* 878 (2010): 437-442.
- World Bank. "Potential Macroeconomic Implications of the Trans-Pacific Partnership." In Global Economic Prospects, 219-255. Washington D.C, 2016.
 - ——. "Taking Stock: An Update on Vietnam's Recent Economic Development." Washington DC: World Bank Group, 2015.
 - ——. "Making Global Value Chain Work for Development. Economic Premise." Washington D.C:Poverty Reduction and Economic Management Network, 2014.
- WTO Centre. "Ngành dịch vụ Việt Nam sau 7 năm gia nhập WTO" [Vietnam's service industry after 7 years of participating in WTO], June 23, 2015. http://www.trungtamwto.vn/tin-tuc/nganh-dich-vu-viet-nam-sau-7-nam-gia-nhap-wto.

About the authors

Hansjörg Herr is Professor for "Supranational Integration" at the Berlin School of Economics and Law in Berlin, Germany. He is an expert for the development of the international monetary system, the European monetary integration, labour markets and development economics. Most of his research and publications are focused here.

Dr. Truong Minh Vu is Director of the Center for International Studies at the University of Social Sciences and Humanities in Ho Chi Minh City, Vietnam. He is an expert on international studies, security and foreign policies as well as regional development.

Erwin Schweisshelm is Head of the office of the Friedrich-Ebert-Stiftung in Vietnam. He has over 20 years of experience in working in different countries in South East Asia.

The views expressed in this publication are not necessarily those of the Friedrich-Ebert-Stiftung.

Imprint

@ 2016 Friedrich-Ebert-Stiftung Vietnam Office7 Ba Huyen Thanh Quan I Ba Dinh IHanoi - VietnamIIPO Box 44

Responsible: Erwin Schweisshelm | Resident Representative

Phone: +84 4 3845 5108 Website: www.fesvietnam.org Facebook: Friedrich-Ebert-Stiftung, Vietnam

To order publication: info@fesvietnam.org

Commercial use of all media published by the Friedrich-Ebert-Stiftung (FES) is not permitted without the written consent of the FES.

Friedrich-Ebert-Stiftung (FES) is the oldest political foundation in Germany. The foundation is named after Friedrich Ebert, the first democratically elected president of Germany.

The **Regional Programme in Asia** complements FES programmes and projects on the global and national level. Its approach and focus is going beyond the national level by responding to the trends of globalisation, labour mobility, regional integration and connectivity in all areas of life. The projects conducted under its framework target to build transnational networks and coalitions between individuals and organisations and promote change for more social justice, sustainable peace, economic development in the region.

