



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



MINISTRY OF INDUSTRY AND TRADE



IN PARTNERSHIP WITH  
THE REPUBLIC OF KOREA



# VIET NAM INDUSTRY WHITE PAPER 2019

## Manufacturing and Subsector Competitiveness

INCLUSIVE AND SUSTAINABLE INDUSTRIAL DEVELOPMENT

Copyright © 2020 United Nations Industrial Development Organization

The designations employed, descriptions and classifications of countries, and the presentation of this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development.

The responsibility for opinions expressed rests solely with the authors, and publication does not constitute an endorsement by UNIDO of the opinions expressed. Although great care has been taken to maintain the accuracy of information herein, neither UNIDO nor its Member States assume any responsibility for consequences which may arise from the use of the material.

Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgement about the state reached by a particular country or area in the development process.

The mention of firm names or commercial products does not imply endorsement by UNIDO.

Material in this publication may be freely quoted or reprinted, but acknowledgement is requested, together with a copy of the publication containing the quotation or reprint.

# **VIET NAM INDUSTRY WHITE PAPER 2019**

Manufacturing and Subsector Competitiveness



## Contents

<b>I. INTRODUCTION</b>	<b>1</b>
<b>Chapter 1. Background</b>	<b>3</b>
1.1. Purpose of this paper	3
1.2. Conceptual framework	4
1.3. Preparing the White Paper	7
1.4. Workshop series	8
<b>II. POLICY ENVIRONMENT</b>	<b>11</b>
<b>Chapter 2. Challenges in the global context: The 4th Industrial Revolution</b>	<b>13</b>
2.1. General definitions	13
2.2. 4IR in different countries	15
2.3. Challenges	19
<b>Chapter 3. Overall performance of industry in Viet Nam</b>	<b>25</b>
3.1. Viet Nam's position in global competitiveness rankings	25
3.2. Benchmarking Viet Nam's manufacturing performance	31
3.3. Cross-sectoral competitiveness analysis	40
3.4. Performance of manufacturing versus government objectives	45
3.5. Selection of subsectors to be analysed	47
<b>III. SUBSECTOR ANALYSIS &amp; RECOMMENDATIONS</b>	<b>51</b>
<b>Chapter 4. Food processing</b>	<b>53</b>
4.1. Definition and classification	53
4.2. Development of agro-processing industry	53
4.3. Production and employment	56
4.4. Trade	59
4.5. Value chain analysis	63
4.6. Market structure, dynamics and diversification	65
4.7. SWOT analysis	71
4.8. The food processing industry's strategic objectives	77
4.9. Policy recommendations	78
<b>Chapter 5. Textile apparel and leather – footwear (TALF)</b>	<b>83</b>
5.1. Definition and classification	83
5.2. Development of the TALF industry	83
5.3. Production and employment	84

5.4. Trade	89
5.5. Value chain analysis	92
5.6. Market structure, dynamics and diversification	96
5.7. SWOT analysis	100
5.8. The TALF industry's strategic objectives	100
5.9. Policy recommendations	101
<b>Chapter 6. Electronics</b>	<b>107</b>
6.1. Definition and classification	107
6.2. Development of the electronics industry	107
6.3. Production and employment	108
6.4. Trade	112
6.5. Value chain analysis	114
6.6. Market structure, dynamics and diversification	116
6.7. SWOT analysis	117
6.8. The electronics industry's strategic objectives	119
6.9. Policy recommendations	120
<b>Chapter 7. Automotive</b>	<b>129</b>
7.1. Definition and classification	129
7.2. Development of the automotive industry	129
7.3. Production and employment	130
7.4. Trade	133
7.5. Value chain analysis	136
7.6. Market structure, dynamics and diversification	138
7.7. SWOT analysis	142
7.8. The automotive industry's strategic objectives	143
7.9. Policy recommendations	143
<b>Chapter 8. Conclusion</b>	<b>157</b>
8.1. Overview of horizontal issues	157
8.2. Monitoring and evaluation (M&E) framework for industrial policy in Viet Nam	159
8.3. Limitations	169
<b>Annexes</b>	<b>171</b>
Annex 1. A series of training workshops for Vietnamese policymakers	171
Annex 2. Launching the White Paper	180
<b>References</b>	<b>182</b>



## Figures

Figure 1.1	Component indicators of UNIDO's Competitive Industrial Performance Index (CIP)	5
Figure 1.2	Analytical and conceptual framework of industrial competitiveness	6
Figure 2.1	Typical example of a general process leading to 4IR	14
Figure 2.2	Global megatrend and 4IR triggered by digital transformation	14
Figure 3.1	Criteria to assess readiness for production in the future	27
Figure 3.2	Readiness of ASEAN countries for 4IR	27
Figure 3.3	Viet Nam compared to ASEAN average	28
Figure 3.4	Factors affecting production competitiveness	29
Figure 3.5	Product Space's visualization of Viet Nam's exports in 2015	30
Figure 3.6	Product Space visualization of the Republic of Korea's exports in 2015	31
Figure 3.7	Manufacturing value added (% of GDP)	33
Figure 3.8	Share of manufactured exports over total exports (excluding services)	34
Figure 3.9	Export structure by technology level – Viet Nam and comparators (2006-2016)	35
Figure 3.10	Export structure by origin of value added from total economy	36
Figure 3.11	Export structure by origin of value added from chemicals – Viet Nam (2015)	37
Figure 3.12	Export structure by origin of value added from chemicals – Thailand (2015)	37
Figure 3.13	Employment by economic sector	38
Figure 3.14	Manufacturing productivity (VA/employee) for Viet Nam and comparators	39
Figure 3.15	Viet Nam's incremental capital-output ratio (ICOR), 2005-2016 (constant 2010 prices)	40
Figure 3.16	Value added of Viet Nam's manufacturing sector by industry (2006-2016) – million USD	41
Figure 3.17	Viet Nam's manufactured exports values by industry, 2006-2016 (million USD)	41
Figure 3.18	Origin of value added of Viet Nam's exports by industry (2006-2015)	42
Figure 3.19	FDI export and trade balance (billion USD, 2018)	43
Figure 3.20	Manufacturing employment by industry, Viet Nam (2011-2015)	44
Figure 3.21	Productivity (industry VA/industry no. of employees) by industry, 2006-2016 (USD)	44
Figure 4.1	Exports of agro-forestry-fishery products (unit: USD billion)	54
Figure 4.2	No. of employees per subsector in food processing, 2006-2016 (units)	57
Figure 4.3	Food processing equipment production and trade, 2006-2016 (million USD)	58
Figure 4.4	Food processing export values, 2007-2017 (million USD)	59
Figure 4.5	Processing ratio of Viet Nam's agricultural exports (2000-2015)	64
Figure 4.6	Origin of value added of Viet Nam's exports of FBT (from primary)	64
Figure 4.7	Origin of value added of Viet Nam's exports of FBT (from chemical)	65
Figure 4.8	Sectoral market competitiveness matrix for Viet Nam (2000-2015) - food processing	66
Figure 4.9	Top 10 Vietnamese import partners for fish (2006-2016)	66
Figure 4.10	Top 10 exported fish products to U.S. (2006-2016)	67
Figure 4.11	Top exporters of fish products to the U.S. (2006-2016)	67

Figure 5.1 Value added from different textile/leather subsectors, 2006-2016 (billion USD)	85
Figure 5.2 Value added from different textile/leather subsectors, 2006-2016 (billion USD)	86
Figure 5.3 Value added per establishment, TALF (USD)	87
Figure 5.4 Number of formal employees by TALF subsector (2006-2016)	87
Figure 5.5 Average salary per TALF subsector, 2006-2011-2016 (USD)	89
Figure 5.6 Total TALF export values, 2015, for Viet Nam and top global exporters (million USD)	90
Figure 5.7 Export values for textile/apparel, leather/footwear, 2006-2016 (million USD)	90
Figure 5.8 Import values for textile/apparel, leather/footwear, 2006-2016 (million USD)	91
Figure 5.9 Trade balances for textile/apparel, leather/footwear, 2006-2016 (million USD)	91
Figure 5.10 Origin of value added of Viet Nam's exports of textile/garment and leather/footwear (from primary)	92
Figure 5.11 Origin of value added of India's exports of textile/garment and leather/footwear (from primary)	92
Figure 5.12 Origin of value added of Viet Nam's exports of TALF (from chemical)	93
Figure 5.13 Viet Nam's export of textile by broad processing level, 2000-2016 (%)	94
Figure 5.14 Viet Nam's export share of high value apparel over total exports, 2000-2016 (%)	95
Figure 5.15 Viet Nam and comparators' unit values for selected items, 2016 (USD)	95
Figure 5.16 Sectoral market competitiveness matrix for Viet Nam, 2006-2016	98
Figure 6.1 Value added from Viet Nam's electronics subsectors, 2006-2016 (million USD)	109
Figure 6.2 Value added of Viet Nam's and comparators' electronics industry, 2015 (million USD)	110
Figure 6.3 No. of employees in Viet Nam's electronics subsectors, 2006-2016	111
Figure 6.4 Viet Nam and comparators' labour productivity in electronics, 2015 (USD)	111
Figure 6.5 Export value of electronics products, Viet Nam and comparators, 2015 (million USD)	113
Figure 6.6 Export values of Viet Nam's electronics subsectors, 2006-2016 (thousand USD)	113
Figure 6.7 Trade balances of Viet Nam's electronics subsectors, 2006-2016 (thousand USD)	114
Figure 6.8 Origin of value added of Viet Nam's electronics exports (from manufacturing)	114
Figure 6.9 Origin of value added of Viet Nam's final electronics products (from total economy)	115
Figure 6.10 Trends in gross exports and imports of Viet Nam's electronics, 2006-2016 (billion USD)	115

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_23115](https://www.yunbaogao.cn/report/index/report?reportId=5_23115)

