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# VIET NAM INDUSTRIAL COMPETITIVENESS REPORT 2011

(EXECUTIVE SUMMARY)

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## Foreword

The year 2011 marks a milestone in the process of Viet Nam's industrial development and modernization. The adoption of the strategy of socio-economic development 2011–2020 for Viet Nam by the Eleventh Party Congress offers many opportunities, but also poses several challenges for further development. Notably, Viet Nam has achieved relatively high industrial growth in recent years, with the value of industrial production accounting for a significant share in the country's economic structure. However, in comparison with other economies in the world in general, and in East Asia in particular, where competition is most intense, the quality of the underlying drivers for industrial development in Viet Nam still needs to be further strengthened.


In this context, the release of the Viet Nam Industrial Competitiveness Report 2011 (VICR 2011) – a result of the collaboration between the Ministry of Industry and Trade of Viet Nam (MoIT) and the United Nations Industrial Development Organization (UNIDO) – is timely as it raises important policy implications. Building on UNIDO's well established methodology, the report focuses on the manufacturing sector to assist policymakers in identifying key areas of intervention to boost industrial competitiveness. It compares Viet Nam's industrial performance to that of other countries in the region and sheds light on strategic paths to deepen the industrialization process.

The VICR 2011 highlights two major issues of concern: the evaluation of the role of trade liberalization in recent years for economic and productive restructuring, and the need to reformulate industrial policy and strategies to take account of national priorities as well as of global threats and opportunities. It also considers possibilities for building linkages among industrial sectors to increase the manufacturing value added of existing products and to enter new and more dynamic sectors. The report hence assesses the capabilities of Viet Nam's industrial sectors to participate and compete in the international context.

We sincerely hope that the VICR 2011 will be deemed a useful document which supports policymakers in the formulation of industrial and trade policies that meet the requirements of the realities of the new stage in Viet Nam's industrial development.



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Manuel Albaladejo, UNIDO staff and programme manager, was the main author and provided the conceptual framework and technical guidance to the drafting team. The Industrial Competitiveness Group (ICG), an inter-ministerial working group set up and trained by UNIDO, was responsible for the analysis and writing of several chapters of the report. The team was composed of Ms. Do Phuong Dung (official at ICD), Mr. Nguyen Viet San (principal official at ICD and national programme coordinator), Ms. Luu Thuy Duong (official at ICD), Ms. Dinh Thi Hoang Yen (official of the Planning Department at MoIT), Mr. Le Phan (official at the Central Institute for Economic Management of the Ministry of Planning and Investment) and Ms. Le Thanh Thao (National Programme Officer, UNIDO).

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SECTION A:

# SETTING THE SCENE

## Introduction

Viet Nam's efforts to shift from a centrally planned to a market-led economy are paying off. Not only has Viet Nam been one of the fastest growing economies over the last 20 years, this growth has also sharply reduced the incidence of poverty. Viet Nam is increasingly integrating into the global economy and is becoming a hub for potential national and international investors.

But how much has industrialization contributed to Viet Nam's economic growth and export success? And what is the role of manufacturing and structural change in the country's economic future? This report contends that industrialization lies at the core of Viet Nam's economic growth. It argues that Viet Nam needs an industrial policy aimed at structural change towards high value added manufacturing sectors to sustain current growth levels in the long run.

The report uses UNIDO's methodology to assess national industrial performance through a series of industry-related dimensions, indicators and indices. This methodology is the fruit of years of research and advisory work carried out under the guidance of the late Professor Sanjaya Lall of Oxford University.

## Theoretical underpinnings

The context in which industrial development occurs is changing. Rapid technological progress, improved transport and communication systems, and declining costs have made factors of production more mobile. Transnational companies now play an unprecedented role in world productive activity, and liberalization is removing historical barriers to global trade. This means that the determinants of competitive advantage are changing. Resources are being moved across the globe and efficient, reliable and technologically capable production sources are being sought. However, these mobile resources need to be complemented by immobile resources in host economies which do not entail basic natural resources or unskilled labour, but technological and organizational skills, good supplier networks, infrastructure, and support services for training, technology and R&D. Countries have to develop these competitive factors to reap the benefits of new technology and global value chains.

The report defines industrial competitiveness as the capacity of countries to increase their industrial presence in domestic and international markets while developing industrial structures in sectors and activities with higher value added and technological content. Within each country, industrial development depends upon the business environment (the 'framework conditions'), the efficiency of factor markets (for labour, skills, technology, finance, inputs and infrastructure) and the quality of support available from intermediary institutions (for training,

technological services, R&D and so on). Government policies can improve or worsen these structural determinants of industrial development.

The identification of where and how the government should intervene is the essence of sound industrial policy. This process needs to consider the global technological context and the trends in the value chains in which national industries operate. Furthermore, the learning prospects, technology levels, spillover benefits and costs involved need to be understood. As technological conditions have changed, optimal industrial policies today differ from those which succeeded two or three decades ago. Therefore, it is important to interpret earlier experiences with great care.

## Industrial policy in Viet Nam: A historical perspective

In the decades since the initiation of the Doi Moi reforms in 1986, Viet Nam has undergone dramatic restructuring from a centrally planned to a market-based socialist economy, transforming the lives of its citizens. Industrial policy has played a central role in the country's economic transformation, though the focus has changed over time.

A review carried out for the purpose of this report identified 44 industrial sector master plans and seven specific strategies for sector development. According to a recent study, Viet Nam has, since 1995, elaborated around 80 development strategies, master plans and plans for individual industries. Viet Nam hence does not lack policies for industrial development, but rather lacks an effective implementation plan to incorporate a harmonized approach that takes account of various sectoral needs. Current policy outlines the planned goals of given sectors based on specified support measures, which are normally not fully implemented due to a lack of resources.





SECTION B:

# COMPETITIVE INDUSTRIAL PERFORMANCE

## Benchmarking Viet Nam's industrial performance

**B**enchmarking generates valuable information for policy. The fact that national industrial performance is now affected by a growing number of exogenous factors (international technological change, globalization, regional integration) makes international comparisons even more relevant when defining national industrial targets and strategies. The VICR 2011 analyses Viet Nam's industrial performance and compares it to that of ten countries: Cambodia, China, India, Indonesia, Malaysia, Taiwan (Province of China), Thailand, the Philippines, Singapore and Republic of Korea.

## Viet Nam in UNIDO's Competitive Industrial Performance (CIP) index

**U**NIDO's Competitive Industrial Performance (CIP) index combines several dimensions of industrial performance into a single intuitive measure. It captures the ability of countries to competitively produce and export manufactures, as well as the structural change towards high value added, technology intensive sectors.

Viet Nam ranked 58th in 2009 (out of 118 countries), jumping 14 spots within only four years, thus becoming one of the most rapidly improving countries in the world. Within four years, Viet Nam has overtaken strong competitors with a long industrialization tradition such as Egypt, Morocco and Russia. This is a clear indication that Viet Nam is turning into a rising star on the global manufacturing scene and a threat to competitors around the world.

## Manufacturing value added (MVA) performance

**V**iet Nam's MVA growth has been impressive. Between 2000 and 2009, MVA skyrocketed from US\$ 5.8 billion to US\$ 15.4 billion. What is even more remarkable is the consistency of its growth trajectory. Viet Nam achieved double-digit growth rates in the first and second half of the decade, a feat that has only been achieved by China and Cambodia in the region. MVA growth has gone hand in hand with economic growth. China, Cambodia and Viet Nam recorded the highest GDP growth rates for the period (10 percent, 8 percent, and 7.3 percent, respectively), implying that there is a strong link between industrialization and economic development.

The question is whether Viet Nam can keep up such impressive growth rates as the absolute value of MVA increases, especially if the country maintains its manufacturing focus on labour-intensive goods. As countries expand their industrial base, they are likely to experience less consistent growth rates. Industrial expansion calls for structural change towards more sophisticated industries and not just a shift from agriculture to manufacturing as has been the case in both Cambodia and Viet Nam over the last decades.

## Manufactured export performance

**M**anufactured export growth in Viet Nam in the last decades has been impressive, even outshining China's growth for the period 2000–2009. Viet Nam's successful trade performance in the last ten years has been highly praised nationally and internationally. A consensus has emerged that trade liberalization is the main factor in stimulating the growth of exports. However, some argue that export growth should be interpreted with caution as Viet Nam's trade pattern is heavily reliant on imports and the domestic technological content is limited.

First, the competitiveness Viet Nam has achieved in export markets does not correspond to the performance of its national industry. For every unit of MVA produced in Viet Nam, 2.5 times this value is exported, which not only reflects Viet Nam's export propensity, but also the mismatch between production capacity and export performance.

Second, import figures tell a less optimistic story about the effects of trade liberalization. Between 2000 and 2009, Viet Nam's manufactured imports grew by 19 per cent per annum, almost matching manufactured export growth for the same period.

Third, trade liberalization seems to have failed to trigger change in Viet Nam's manufactured export pattern. Viet Nam has a positive trade balance in low-technology manufactures (around US\$ 10 billion in 2009), while recording a trade deficit at the more sophisticated end of the manufacturing spectrum. The VICR 2011 argues that boosting the domestic industrial sector and the technological content of exported goods may well be the best option to bridge the trade gap. Specifically, attention needs to be paid to the opportunities the Chinese market offers to Vietnamese exporters.

## Product and market diversification

**V**iet Nam ranks 8th out of ten countries in the product diversification index, having gained one position over the Philippines. This suggests high product concentration in a limited range of export products, which should be a

serious concern for Viet Nam's export sector, as it is consequently highly exposed and vulnerable to changing demand and third country competition.

However, Viet Nam's manufactured trade is far from concentrated. Viet Nam ranks third in the region in terms of market diversification, with only China and India ranking higher. This favourable performance in the market diversification index is a result of Viet Nam's strong presence in the world's largest markets, namely North America (US and Canada), the European Union and East Asia. Whether this was an intentional strategy based on export promotion and trade policy or driven by other factors is not clear. Whatever the case may be, the fact is that Viet Nam's market diversification helps the country protect itself from weak demand in specific markets and the emergence of strong competitors in the world's largest markets.

Evidence seems to suggest that Viet Nam has experienced a much more diversified pattern of export destinations since the signing of the Bilateral Trade Agreement (BTA) with the US. Yet the BTA has not generated diversification into new and more productive activities. This implies that trade liberalization does not trigger structural change. Industrial diversification calls for specific industrial policies that nurture private entrepreneurship and the development of new manufacturing activities.

## Viet Nam's performance in the world's most dynamic manufactured exports

**T**he ability to shift production and export structures quickly to respond to changes in global demand is another important component of industrial competitiveness. Countries that heed and adapt to meet new market demand demonstrate readiness to compete.

Viet Nam's performance in terms of dynamic structure and capacity indicators has been quite stable over the period 2000 to 2009. Although Viet Nam has increased its dynamic exports per capita ninefold, it only translates into an improvement of one position, from seventh to sixth. Similarly, in terms of dynamic exports over total manufactured exports, Viet Nam improved from sixth position in 2000 to fifth in 2009. The rising share of Viet Nam's dynamic exports from 8 percent in 2000 to 15 percent in 2009 indicates that the country is increasingly responding to the dynamics of world demand.

Yet despite improvements in the exports of dynamic products, Viet Nam, as of 2009, was still a net importer of this product group. While exports of all dynamic products stood at US\$ 5.5 billion in 2009, imports amounted to over US\$ 13 billion in the same year. As a matter of fact, Viet Nam experienced trade deficits in 14 out of the 20 most dynamic products in the world.



SECTION C:

**BENCHMARKING  
SECTORAL  
COMPETITIVENESS**

## Resource-based manufactures

**E**xpansion of resource-based products increases exposure to commodity booms and subsequent collapses; therefore, while there are some areas with strong growth potential in Viet Nam, reliance on this sector is precarious. The good news for Viet Nam is that renewable resources-based exports dominate this sector, thus offering a greater level of sustainability. Attention needs to also be paid to the observation that the domestic market is under-exploited with net imports recorded for most of its champion products. Finally, Viet Nam has the opportunity to build linkages between resource-based manufactures and low-tech manufactures, allowing the country to capture a greater share of value added.

At the product group level, Viet Nam has achieved some encouraging success in agricultural exports – three of Viet Nam’s champion resource-based industries are anchored in agriculture. As productivity levels in agriculture were shown to be low, the mechanization of the cultivation process combined with export growth there is strong potential for Viet Nam to further foster development in agricul-

## Low-tech manufactures

**L**ow-tech manufactures dominated Viet Nam’s manufacturing exports with a value of US\$ 22.5 billion in 2009. Although Viet Nam has endeavoured to move into more sophisticated exports, low-tech manufactures are likely to continue to be the largest export category for some time to come and will provide the bulk of Viet Nam’s employment in manufacturing. The experience of supplying international markets, including the improvement of quality standards, timeliness and process technologies has provided Vietnamese firms with valuable experience that could form the basis of diversification efforts into new products and markets.

The report suggests that vulnerability to competition – especially from China – and the low value-added nature of low-tech manufactures make over-reliance on this sector undesirable. However, some valuable learning opportunities are highlighted, in particular the development of export networks and systems and the gaining of experience in dealing with foreign buyers.

## Medium-tech manufactures

Viet Nam accounts for only a very small share of global trade in medium-tech manufactures, but witnessed impressive annual growth rates of 24 percent between 2000 and 2009. The most worrying trend for Viet Nam is the fact that despite such impressive growth, it continues to be a net importer of most medium-tech products. The challenges ahead for Viet Nam will revolve around the development of a strategic knowledge base and technology upgrading in strategic sectors, including shipbuilding and automobiles.

## High-tech manufactures

Viet Nam's world market share for high-tech exports has increased from only 0.06 percent in 2000 to 0.22 percent in 2009. Although both the absolute value of the market share and the magnitude of the increase are quite small, the figures are encouraging. A positive aspect of recent developments is the increase in FDI in Viet Nam to produce high-tech exports.

As with medium-tech manufactures, the greatest challenge in this sector is the development of a suitable resource base for future development. The process of developing skills, upgrading technological sophistication and gaining the necessary experience in these sectors requires a lot of time before actual benefits can actually be reaped. In the meantime, the attraction of foreign-owned companies remains the cornerstone in the development of a Vietnamese high-tech sector. This will also provide the possibility to develop linkages into these value chains and to capture some technology spillover.

SECTION D:

# POLICY RECOMMENDATIONS



The VICR 2011 highlights that manufacturing growth is at the core of Viet Nam's impressive economic performance over the last 20 years, and that manufacturing must continue to play a major role in the future if Viet Nam is to sustain high growth rates.

The findings of the report suggest that trade liberalization in Viet Nam has been one of the driving forces of economic growth, but not a sufficient factor in triggering structural change. Industrial diversification calls for specific industrial policies that nurture private entrepreneurship and the development of new manufacturing activities. The Vietnamese experience is no exception, as many other countries have faced a similar pattern.

A new strategy is needed to promote structural change. The report calls for a new industrial policy that focuses on industrial transformation of strategic sectors that can support sustained growth and reap the benefits of technological change, innovation and learning. While all manufacturing sectors are important, the VICR 2011 argues that a shift towards technology intensive sectors is needed to promote industrial deepening and value addition.

To achieve this, the report presents five key policy areas for government action:

- Reformulation of industrial policies and strategies;
- Industrial diversification into high value added products;
- Human resource development for manufacturing;
- Technology development;
- Targeting quality FDI for manufacturing.

## Reformulation of industrial strategies and policies

The Government of Viet Nam has undertaken considerable efforts to internationalize the country's economy by entering into trade agreements with various global partners. This report confirms that these efforts are paying off. Viet Nam's manufactured trade performance has been impressive over the last decade. However, many now question whether trade liberalization has triggered industrial dynamism and value addition at the firm level. Evidence shows that the Vietnamese industrial sector continues to struggle to compete in international markets.

Given the challenges the industrial sector in Viet Nam faces, the VICR 2011 advocates that trade liberalization in Viet Nam should be achieved through a strategic and controlled approach to both strengthen existing capabilities and develop new ones. It argues for strategic targeting of FDI and global value chains to extract the maximum benefits for production, exports and employment. The

government should play an active part in this process and learn from role models in the region.

Mounting an industrial strategy is a very demanding task for any government. It calls for a coherent vision of national development and for consistent inter-agency coordination. It also calls for substantial analytical skills. Many initiatives require building consensus among the major stakeholders (enterprises, employees, ministries and institutions). The Vietnamese government has to pay close attention to all these factors if it aims to devise and effectively implement industrial strategies. It must overcome traditional ministerial divisions that can prevent coherent action. It must develop new in-house analytical capabilities and coordinate policies with the private sector. It must continually monitor policies and modify and adapt them to new circumstances. In other words, the government must build a 'learning and adaptive' policy structure to replace the traditional rigid, rule-bound and top-down apparatus of government.

To support the process, this report proposes the following policy recommendations:

- Set up dialogue forums for all stakeholders to discuss key areas of industrial policy in Viet Nam, strategic objectives, the role of the government and private sector, and the institutional architecture required for successful implementation;
- Formulate an industrial law to embody the legal foundation for subsequent laws that relate to industrial development in Viet Nam;
- Set up a consultative mechanism with enterprises (private and public) and government agencies to discuss drafts of industrial master plans. The purpose is to not only address the technical content of the plan, but also to determine and approve the responsibility of ministries and departments at the national and local levels;
- Establish a dedicated inter-ministerial industrial competitiveness unit or council to assess and monitor industrial performance at the macro and sector levels nationally and internationally;
- Conduct a study to identify skill gaps at the government level for the reformulation and implementation of industrial policy;
- Elaborate an action plan on the institutional and coordination mechanisms for industrial strategy implementation. Based on lessons learned from industrialized countries, some agencies will play a fundamental role:
  - The Vietnamese Investment Agency should assume a greater level of autonomy to negotiate with potential investors and devise individually tailored benefit packages for investment and negotiate links with domestic industry;
  - An independent body to design and supervise technical training can significantly contribute to building human capital;
  - Viet Nam's research centres, coordinated by the Ministry of Science and Technology, can play a key role in accelerating Viet Nam's process of technological development;

- o The Ministry of Industry and Trade should play a leading role in coordinating these efforts and develop a strategic plan to guide the stakeholders' actions.
- Devise specific policy packages for SMEs and state-owned enterprises. For SMEs, the focus should be on the provision of facilities for the acquisition of industrial land (through subsidies and low tax rates); start-ups (through, for instance, business incubators and subsidized training); and capital by setting up a special fund similar to that of Japan, Republic of Korea, Taiwan (Province of China) and Thailand. For SoEs, the focus should be on accelerating the process of equitization to promote the development of the private enterprise sector while reducing the bureaucratic administrative management of state agencies.

## Industrial diversification into high value-added products

The findings of the report reveal that Viet Nam is vulnerable to third country competition due to its concentration on a few labour-intensive manufacturing sectors. Sustaining growth rates in manufactured trade and MVA requires Viet Nam to enter into new high value added manufacturing activities.

Industrial policy in Viet Nam should build on sub-sectoral priorities. This involves three sets of strategic priorities:

- Upgrade existing activities that can become competitive fairly quickly at a reasonable cost and ensure that they are able to sustain their competitiveness over time;
- Gradually move out of activities that are no longer competitive and have few prospects of competing in the foreseeable future;
- Promote new activities with strong potential for growth, employment and technology upgrading.

Other recommendations on sectoral priorities for industrial diversification include:

- Definition of policies to execute Decision Number 842/QĐ-TTg dated 1/6/2011 by the Prime Minister on the “Development plan on several high-tech industries”;
- Definition of policies for the development of key industries based on clear criteria rather than trade, combining growth potential with sustainability;
- Definition of policies to develop supporting industries, in particular, strategic sectors including automotive, motorcycle, industrial electronics, consumer electronics, shipbuilding, textiles and footwear.

## Human resource development for manufacturing

Viet Nam's current educational and vocational training system does not produce an adequate level of skills for its workforce. Many firms are forced to retrain workers at high costs so they are able to work in those firms. This reduces Viet Nam's competitiveness and makes Viet Nam less attractive to medium- and high-technology manufacturers looking for lower cost producing countries or alternatives to their Chinese production bases.

This report identifies the following key policy actions to boost Viet Nam's human resources for manufacturing:

- Elaborate a study to benchmark Viet Nam's education and training system against major competitors in terms of quantity, quality, relevance and cost effectiveness, and identify areas of improvement;
- Conduct regular skills audits, particularly in vocational training, once the new measures have been introduced;
- Encourage enterprise training using several measures, including subsidized training expenditures and tax exemptions or charge a levy to refund training later;
- Develop a programme to link vocational training institutions with industry, setting up training centres in industrial parks, high-tech parks and export processing zones. A successful university-industry link requires the following:
  - A longer term vision and a more strategic approach to replace the current short-term objectives of simply earning fees in order to benefit the academic system;
  - To overcome the separation of research from teaching in the university system, more autonomy and incentive systems to encourage innovative research are necessary;
  - Investment should be more focused to avoid wasting resources and fragmentation;
  - Modern university and R&D management practices such as peer review, advisory committees and performance-based evaluations should be systematically applied.

## Technology development

Viet Nam lags well behind its regional role model in technology development. This has resulted in Viet Nam being a net importer of technology products, which, given the unsophisticated nature of its exports, has contributed to a negative trade balance. Moving up the technology ladder calls for the Government of Viet Nam and the private sector to design and implement an agenda to boost the country's technological and innovation capacity. Some of the recommendations presented in the report are as follows:

- The government must first thoroughly examine the structure, capabilities and relevance of technology institutes, including standards and metrology, R&D support, regional technology centres and technology financing;
- It should launch a technology foresight exercise to raise awareness of the technological weaknesses of industry and create consensus between industry, research institutes and the bureaucracy on actions to be taken to remedy those weaknesses;
- It should introduce measures to stimulate technological efforts in industry: R&D, process/product engineering, quality improvement and cost reduction among larger firms, productivity and quality improvement among smaller ones;
- It should conduct a comprehensive survey of technological activity and capabilities in industry; this survey should be updated periodically;
- It should launch a programme of stimulating linkages between industry and S&T infrastructure (R&D laboratories and universities);
- Strengthen SME extension and support services by:
  - Setting up industrial productivity centres in the main SME clusters, along the lines of the Hong Kong Productivity Council or Taiwan's (Province of China) China Productivity Centre;
  - Developing industrial subcontracting and partnership exchange programmes;
  - Participating in donor assistance programmes for SMEs to provide low cost but experienced technical manpower from developed economies to raise engineering and design capabilities.
- The government should establish a technology import information service or database to collect data on foreign sources of technology;
- The government should initiate a technology finance system, either by setting up a venture capital company or by initiating technology 'windows' in existing financial institutions.

## Attracting quality FDI for manufacturing

It is increasingly apparent that Viet Nam needs to pay more attention to the quality of the FDI it is attracting. While FDI in real estate and investments may be welcome when there is a capital shortage, it can also help fuel dangerous asset bubbles. The current structure of FDI also has little positive effect on Viet Nam's trade balance, with many FDI firms relying heavily on imports for production.

Based on international best practice, policy recommendations to boost the quality of FDI include:

- Identifying target sectors and processes;
- A strong, autonomous, well-funded and strategically planned IPA is vital for capitalizing on potential FDI interest;
- Developing a human capital base in strategic sectors is essential to make Viet Nam an inviting destination for foreign investment;
- Restructuring of bureaucracy and financial incentives for foreign-owned companies improves the business environment and increases the ease of doing business;
- Targeting research institutes and creating a research base can have important implications;
- Potential investor opportunities should be ranked according to quality and prospects;
- The majority of R&D investment occurs within already existing MNC subsidiaries. Viet Nam should analyse the current composition of existing foreign subsidiaries and target key companies in major sectors. Alternatively, a longer term approach to attract new industries to Viet Nam can be taken, planning R&D support in the future (for example, 10 years) once the companies have been established;
- Aftercare of investing companies should be emphasized;
- Creating a new Technology Development Agency (TDA) established under the Office of the Government and reporting directly to the Prime Minister, under the day-to-day supervision of the Head of the Office of the Government.