

# Opportunities and Challenges in Developing the Knowledge-based Economy in Vietnam

by MEcon. PHẠM HỮU HỒNG THÁI

In recent years, Vietnam has made very good progress in developing the market economy. This achievement is a basis for the development of a knowledge-based economy. In transition from the socialism-oriented market economy to the knowledge-based economy, Vietnam meets a lot of chances to realize the modernization and industrialization. However, it also faces many difficulties and challenges in this phase.

## 1. Opportunities

The knowledge-based economy could help with perfection of the legal infrastructure, enhancement of resources for economic reforms, reduction in government interventions in

the economy and restructuring of sectors with poor competitiveness and performance. It also helps create new dynamics, human resource and infrastructure for the enhancement of international competitiveness, thereby obtaining sustainable development and more benefits for the whole society.

Vietnam is accessing the knowledge-based economy by exchanging trade agreements with developed countries besides ones with many European countries. In 2005, Vietnam is expecting to gain permission to the WTO, thereby developing the trade with developed world and getting easier access to new technologies and managerial skills.

Vietnam, as an agriculture-based economy, could introduce more knowledge to the agricultural production in order to reform the economy that has been kept too long under the centrally-planned mechanism.

## 2. Challenges

When engaging in the globalized economy, Vietnam will meet with keener and keener competition from the most developed economies, which requires high ability to adapt to the new environment. This challenges forces Vietnam to reform its rigid and ineffective mechanisms that have existed for a very long time and adopt new mechanisms. Foreign experience, especially from South Korea, Ireland and

Finland, is useful for Vietnam in this process. For example, South Korea has faced rigid mechanisms in industrial and educational areas and the role of the government in the economy. The Asian financial crisis forced South Korea to reform quickly these areas in order to improve its competitiveness in the knowledge-based economy. As for Finland and Ireland, they have found ways to develop from poor and backward economies to highly competitive ones.

## 3. Strategies to develop the knowledge-based economy

a. Encouraging all sectors:

To make the best use of available knowledge requires an appropriate mechanism for management, various policies to encourage new knowledge and put it in use. In reforming the social management mechanism, the role of the government is the most crucial issue. The legal infrastructure must be perfected and a level playing field must be available for all sectors. The role of the private sector must be enhanced while the public sector must be reorganized. The PM has issued one directive and 115 decisions on reorganization of state-owned companies which allow the State to hold at least a 51% stake of privatized companies that are capitalized at VND5 billion or more and making profits.

The Government should adopt open policies to smooth international trade in the globalized economy. One decree, 17 decisions and nine circulars have been issued to reform customs formalities

Figure 1: Top ten exports in 2003 (US\$ million)

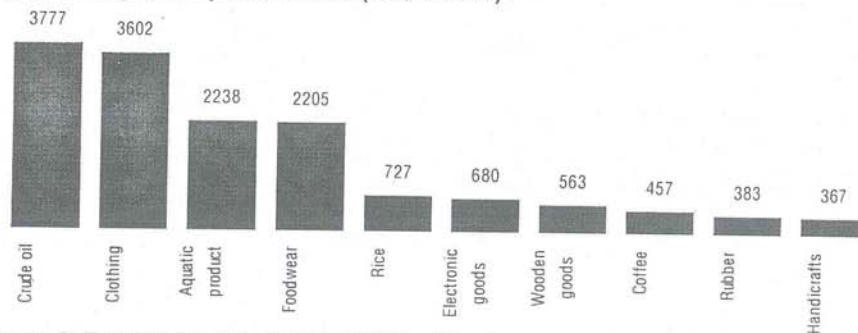
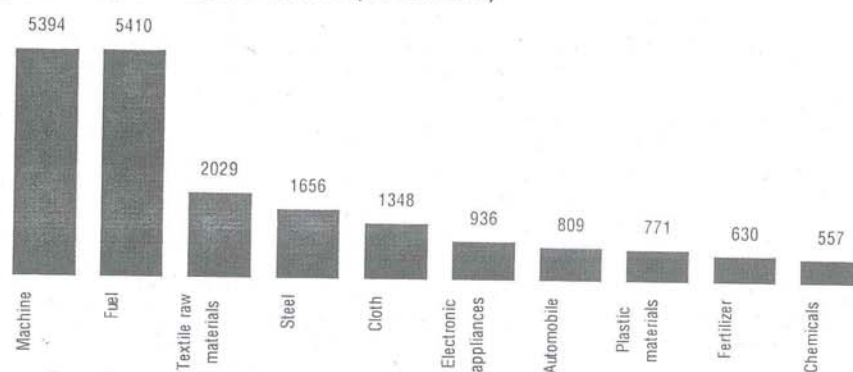


Figure 2: Top-ten imports in 2003 (US\$ million)



Source: Department of Statistics



Figure 3: Ten provinces with the highest FDI in Vietnam (US\$ million)

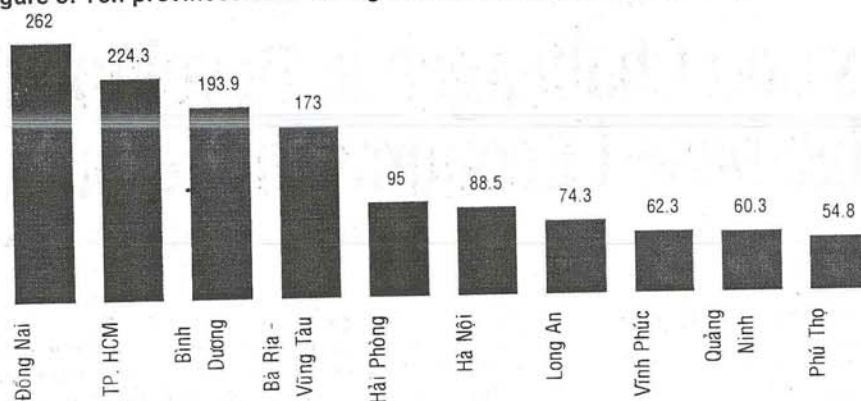


Figure 4: Top-ten Investors in Vietnam (US\$ million)

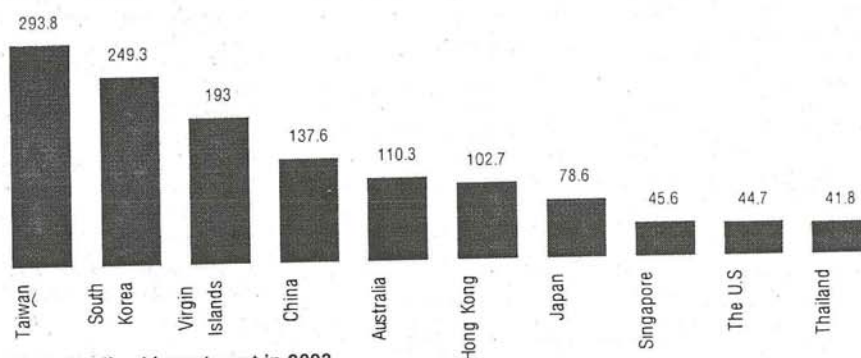


Table 1: Realized investment in 2003

	Realized investment (VND1,000 billion)		As % compared with 2003	
	2002	approximately realized in 2003	In 2003 plan	realized in 2002
Total	183.8	217.6	100.9	118.3
Public investment	1,042.2	120.0	101.9	119.0
- From public fund	3.2	27.2	119.6	112.4
From non-state sectors	46.5	58.1	100.2	124.9
From foreign sector	34.0	36.5	101.3	107.4

Source: Department of Statistics

in order to make them suitable to international practices. In 2003, Vietnam gained many achievements in its foreign trade as shown in the following figures.

Besides promoting the foreign trade, Vietnam must adopt a new policy to attract foreign investment. The year 2004 witnessed new achievements in the foreign sector. A delegate of 14 American businesspersons from many major companies visited Vietnam. They showed interests in telecommunication, power supply and insurance industries in Vietnam. According to the MPI, the foreign direct investment in Vietnam in 2004 rose to some US\$3.3

billion increasing by 8% compared with 2003. In addition, political stability, stable growth rate and expanded domestic market are active factors of the future knowledge-based economy. In 2003, four laws, one ordinance, five decrees, four circulars and one directive relating to both foreign and domestic investment were issued in order to create more favorable conditions for investors. The following figures reflect increases in foreign investment in Vietnam in 2003.

b. Developing the human resource:

In 2003, the primary education developed well, especially when the Decision 161/2002/QĐ-TTg

came into effect. Up to the end of 2003, 17 cities and provinces finished the standardization of the junior secondary education; and 2,181 community study centers were built in 55 cities and provinces. However, the quality of education service is still a worry, not to mention differences between provinces and regions; and irrationality of the structure of the education service.

The strategy to develop the human resource should aim at enhancing the service quality in all educational levels, expanding the network of schools in remote and depressed areas, and linking the education programs with the market demand. In addition,

international cooperation in the education field must be promoted in order to ensure the supply of skilled workers for the foreign sector.

From 2004 on, foreign-invested companies are allowed to recruit their workers directly. In 2004, according to the MPI, some 45,000 new jobs were created in this sector, which made its labor force rise to over 700,000. This means that part of the working class has enjoyed opportunities to improve their skills and take in modern knowledge.

The first task in reforming the education service is to enhance the status of teachers and researchers in society and take measures to encourage scientific research instead of letting teachers secure reasonable standard of living for themselves by adopting subsidiary occupations.

According to the Department of Statistics, the personal income per year in 2003 was VND1.91 million. Data show that there is a great difference between the income from the education and scientific research and that from other fields, which discourages creativity and enthusiasm of labor force of these fields. The Department of Statistics also provides information about contribution from these fields to the GDP.

We could estimate that their shares in the GDP in the years 2003-04 are still low and much lower in comparison with figures gathered from regional countries.

c. Infrastructure for telecommunications

The Internet service was introduced at nationwide level in 1997 but its development is still very slow in comparison with regional countries because of high fees, slow transmission and lack of Vietnamese versions. In addition, the e-commerce didn't develop because



**Table 2: Average salary of education and scientific research fields in 2003 (VND1 million)**

Field	Monthly salary
Science – technology	1.21
Education and training	1.02
Sport and cultural activity	0.99
Power production and supply	> 2.02
Gas and water supply	> 2.02
Financial and banking services	>1.98

Source: *Đầu tư* newspaper, Jan. 16, 2004

**Table 3: Contribution to the GDP**

Fields	Share in the GDP (%)				
	1995	1999	2000	2001	2002
Science- technology	0.61	0.48	0.53	0.55	0.56
Education- training	3.62	3.50	3.36	3.38	3.38
Sport – cultural activity	0.55	0.59	0.58	0.58	0.56

Source: *Đầu tư* newspaper, Jan. 16, 2004

there is no relevant law or regulation.

Up to now, the national telecommunication network in Vietnam is rather modern with the digitalized telephone service. However, the fee is so very high that it discourages all foreign investors

Investment in the infrastructure for this industry is inadequate. It is a government monopoly and the range of services it offers is poor. The supply of information is limited even in the public sector. The fee is set so high that it discourages all users. There is no policy to allow or encourage non-public sector to engage in this industry.

The telecommunication network must be modernized in order to

help organizations and individuals improve their knowledge and quality of life. Based on this network, the government could develop software parks, computerize the financial and banking services, develop the e-commerce and introduce more technical advances to the business world. Telecommunications must be extended to remote and depressed areas, the coverage for mobile phone must be expanded nationwide and the fee must be cut to the bone. Competition to a certain extent must be allowed in this industry in a process to open it to international companies.

d. Improving performance of research centers:

Public investment in R&D activities is limited

while most local companies haven't got enough funds for these activities. There is almost no cooperation between research centers because they want to keep their researches secret. Policies on scientific researches are not consistent. Number of researchers working in companies is very small (only 30% of them work for companies in comparison with 48% in South Korea, 58.2% in Thailand and 64.4% in Japan.) Moreover, many researches prove to be infeasible or unrealistic.

Legal infrastructure for cooperation between research centers, universities and companies must be perfected. The privatization program must be accelerated in order to force state-owned companies to be more competitive. Financial support must be given first to researches that serve the good for communities and technology transfer. Laws on intelligent and industrial property must be made in order to encourage the import of new technology.

In short, Vietnam, as a developing economy, should work out strategies to develop the knowledge-based economy by dealing with problems relating to resource allocation, human resource, legal system and encouragement to scientific communities. In this effort the heaviest burden is certainly on the government. ■

Reference:

- *Knowledge Economy Forum II – Final Report*, June 2003

- *Building Knowledge Economies: Opportunities and Challenges for EU Accession Countries*, Paris, 2002

- Lưu Ngọc Trinh, *Bước chuyển sang nền kinh tế tri thức ở một số nước trên thế giới hiện nay* ("Transition to the knowledge-based economy in certain countries"), Hà Nội, 2002.

- *Đầu Tư* newspaper, Jan. 16, 2004.



**Table 4: Telecommunication fee in Vietnam and the region**

Service	Unit	Thailand	China	Regional average	Vietnam
Mobile phone (270 min. per month)	US\$/month	33.04	32.06	35.67	47.69
International call	US\$/min.	0.857	0.844	0.8875	1.870
64K Internet link	US\$/month	879	1,248	1,042	1,446

Source: *Tuổi trẻ*, Aug. 21, 2002

**Table 5: Information and telecommunication technologies in Vietnam and some neighbors**

Nation	PPP-based per capita GDP (US\$)	Wired phone/ 1,000 persons	Cell phone/ 1,000 persons	Radio set/ 1,000 persons	Wired phone/1,000 persons in big cities	Computer/ 1,000 persons	Competitiveness in mobile service
China	3,940	112	65.8	333	294	15.9	Less comp.
Malaysia	8,394	199.2	213.2	420	282	103.1	Less comp.
Philippines	4,220	40	84.4	159	142	19.3	Competitive
Thailand	6,330	92.3	50.4	238	384	24.3	Competitive
Vietnam	2,010	31.9	9.9	107	133	8.8	Less comp.

Source: *Tuổi trẻ*, Aug. 21, 2002