



AN OUTLINE OF THE KNOWLEDGE ECONOMY

by VƯƠNG LIÊM

The world has seen the birth of three economic systems: (1) the market economy in capitalist countries; (2) the planned economy in socialist ones; and (3) the mixed economy in some developed or developing countries. The third one is an effort to combine the two first ones.

In the past decade, after the USSR and Eastern European countries changed their economic system and the Cold War came to an end, new trends (international integration and trade globalization) made their appearance, many market economic systems with different features started to develop. We can name some of them: short-term market economy in the U.S., the planned market economy in France, the property market economy in England, the welfare market economy in Sweden, the social market economy in Germany, the socialist market economy in China, and now, the socialism-oriented market economy in Vietnam.

Thus, the market economy is a common name used for indicating an economy operating according to the price mechanism without government intervention. This economic

system originated from the concept of the "invisible hand" coined by Adam Smith and it was accepted until J.M. Keynes used the term "visible hand" to refer to the need for government intervention. After that, various economic theories appeared one after another: classical economics, neoclassical economics, Marxist-Leninist political economics, modern economics, neo-liberalism, etc.

After the World War II, a lot of people thought the market economy with many defects tended to cause crises or depression, and some countries decided to change to the mixed economy.

1. Development of the knowledge economy

In the 1960s and 1970s when the state monopolistic capitalism was predominant, state monopolists intervened too much in socio-political life in order to regulate economic activities by setting forth socioeconomic development strategies aiming at favoring the capitalist class. Meanwhile, productive forces in the world were modernized and sciences and technologies progressed at lightning speed. Therefore, skills and abilities of laborers were improved

and their struggle became fiercer. The capitalist class had to change their way of exploitation: allowing laborers to buy shares and take part in business management, offering higher pay and improving living and working conditions for workers. Governments in capitalist countries adopted new viewpoints and started to adjust the market economy with a view to ensuring interests for all parties: laborer, monopolists and government.

In the new trend of the modern time, intellectual labor and service sector become more and more important while the role of manual labor reduces. Relations between farmers and workers also change because the farmer population is on the decrease (3 million in the U.S., 0.5 million in England, 1.5 million in France, 1.2 million in Germany and some 0.5 million in Japan).

Obviously, the role of intellectual becomes particularly important to the economy. The technological revolution progresses in parallel with transfer of technology and modern management methods between developed countries. That is the management method linked with new technologies. In the modern society,

the role of intellectuals is embodied in the discrimination between white-collar and blue collar workers.

Experts in management and economics generalize about three stages of development producing modern knowledge. They are as follows:

- Industrial revolution in England (17th and 18th centuries) made the production shift from engineering to technology: 100 years.

- Efficiency revolution started by Frederick W. Taylor (1856-1915) lasted for some 70 years until 1945: knowledge was used for optimizing production methods and rationalizing systems to increase efficiency and output.

- Management revolution lasted for 50 years, from the Taylorism to

of key industries in the first decades of the 21st century. It's planned that some 10 industries will be present in this center. These industries, based on new knowledge, will generate some 40% of the GDP and create from 20,000 to 25,000 new jobs every year. The leading ones are oil and petrochemical industries with their own international centers whose total output is worth some Sing\$75 billion (about US\$44.2 billion) and some three million tonnes of ethylene a year.

Singaporean leaders concluded that the greatest and most long lasting opportunity for their country lies in knowledge-based technologies (information, biology and medicine) and professional services (financial and

Singapore is also a convenient place for multinationals to build their head or regional offices. Its government wants to form at least 50 local companies that can supply competitive goods and services to the world market. One of them is the Singapore Port. This is the world biggest container port that handles some 1.5 containers a year. Singapore is one of the first Asian countries using computers in 1980 and its companies now have two decade of experience. They also go first in applying human knowledge to R&D activities and microwave telecommunications.

Obviously, one of their important tasks is to develop and attract skilled human resources. In the 1980s, some



Japanese TQM (Total Quality Management) in the 1980s and ISO system now.

Now we can see that knowledge, considered as both human resource and economic resource, has taken an overall position. All traditional factor inputs, such as land, labor and capital, don't disappear but take a secondary role. A new economy came into being and it is directed by the knowledge and knowledge becomes a means of production in the process of making things. It's the knowledge economy.

2. Singaporean model of knowledge economy

At the beginning of 1999, the Singaporean government started to develop the knowledge economy by forming the Economic Development Board (EDB) with the task of building a global economic center which controls and directs the development

logistical services).

The new center of knowledge economy concentrates on R&D activities, development of new products and marketing and pays full attention to new industries and businesses.

In education service, the EDB has made plans to build an education center of international standards famous for its creativity. To achieve this aim, the center is required to cooperate with some 10 foreign leading universities and import modern facilities for study. At present, Singapore has attracted six foreign universities, such as J. Hopkins, Wharton, Chicago, and Technology Institute of Georgia from the U.S.

The communications and mass media businesses are also organized into companies that supply their services to the world market through e-commerce, Internet service, television and other activities.

one third of jobs created by investment in Singapore required skilled labor and two third for unskilled labor. At present, two third of employment requires skilled labor.

This trend also shows itself now in the service sector where 50% of jobs created require skilled labor. The development of knowledge economy puts pressure on both the public and private sectors to ensure better training for laborers in order to help them meet requirements posed by knowledge-based jobs. ■

Reference materials:

- *Nền kinh tế tri thức: Nhận thức và hành động* (The knowledge economy: concepts and practice) Thống Kê publishers, 2000.

- "New Hub of the Knowledge Economy" in *International Herald Tribune*, July 9, 1999.