HUMAN RESOURCE IN NEW CONDITION

by NGUYỄN HOÀNG THỤY

PROMOTION OF EDUCATION AND TRAINING

From the end of the World War II to the early years of the 20th century, a series of equipment, machinery and production automation process took shape and increased the output sharply due to rapid achievements in the scientific and technological revolution. Developed countries said that technology is the decisive factor of economic boom. The business philosophy regarded technology as core and the theory of external economic growth came into being. According to this theory, capital and labor in combination with technology as an external factor would generate economic growth in the long run. The theory paid less attention to human resource; workers were only an unfixed factor of production cost. Therefore, it focused all their efforts on equipment and product renovation and maintained the traditional labor structure. In reality, this theory was applied only in the first stage. Later, the growth rate per a worker declined sharply.

Since the 1990s of the 20th century, the well-developed industries have been those depending on the strength of brain – knowledge manpower including micro-electronics, biological technology, information technology and so on. This has changed the business philosophy from technology-centered to worker-centered concept, giving priority to knowledge, professional skill, and labor motivation. The theory of internal economic growth affirms that capital and labor are two important inputs for economic growth, in which labor is a decisive one.

Human capital is derived from education and training. Human resource development is really development of its quality or education and training. In the trend of globalization, developed countries see human resource development is an extremely important factor in the world competition. So the human resource development is the first target.

Table 1: The output growth rate per a worker in 5 rich countries in 1950-1987 (%)

Period/Nation	France	Germany	Japan	The U.K.	The U.S.	Average
1950 – 1973	4.0	4.9	8.0	2.5	2.2	4.3
1973 – 1987	1.8	2.1	3.1	1.8	1.6	2.1
Decline	–2.2	– 2.8	– 4.9	– 0.7	– 0.6	– 2.2

Source: *Dynamic Forces in Capitalist Development*, Oxford University Press, New York, 1991.

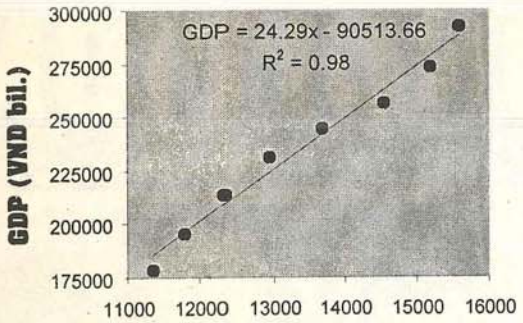
RELATIONS BETWEEN HUMAN RESOURCE AND ECONOMIC GROWTH

1. N. Birdsall, D. Ross and R. Sabot made studies on relations

Table 2: Relations between GDP and the number of Vietnamese students in 1990-2001

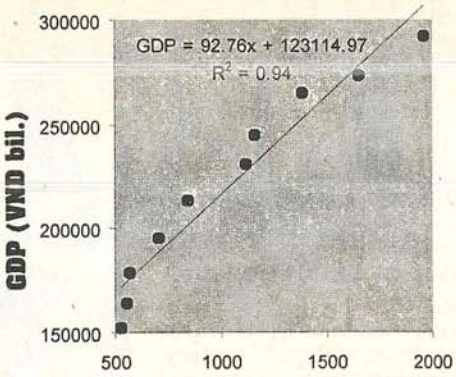
Relations Between	Relation coefficient (R)	Decisive coefficient (R^2)	Linear relation function
GDP and the number of students in primary and junior secondary education (x1)	0.99	0.98	GDP = - 90,513.66 + 24.29 x1
Between GDP and the number of students in senior secondary education (x2)	0.97	0.94	GDP = 123,114.97 + 92.76 x2
Between GDP and the number of students in primary and tertiary education (x3)	0.98	0.95	GDP = 144,041.58 + 170.10 x3

Figure 1: Relation between GDP and the number of students in primary and junior secondary education



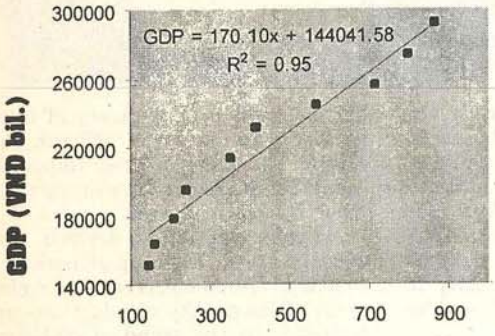
Students in primary and junior secondary education (1,000 students)

Figure 2: Relation between GDP and the number of students in senior secondary education



Students in senior secondary education (1,000 students)

Figure 3: Relation between GDP and the number of students in tertiary education



Students in colleges and universities (1,000 students)

between education and training, disparity in family and economic growth in 74 countries with low and medium income from 1960 to 1985. In 1997 they announced their research results: an increase of 1% in the number of primary school pupils will make GDP rise 0.65%; and the figures of high school students are 1% and 0.34%. (1)

2. The research on this relation in Vietnam in the 1990-2001 period shows the following results:

Notes: The delay between GDP and the number of students in primary and junior education (1) is 4 years, and the number of students in senior secondary education (2) and students in colleges and universities 2 years

The following notes are drawn from results indicated in Table 2 and Figures 1,2,3:

R(1) = 0.99; R(2) = 0.97; R(3) =0.98 shows the relation between GDP and education and training is very tight.

$R^2(1)$ = 0.98; $R^2(2)$ = 0.94; $R^2(3)$ = 0.95 shows the selected model can explain the 98%, 94% and 95% dispersion of GDP in the graph.

The equations in Table 2 and Figures 1,2,3 indicate the linear dependence of GDP on education and training.

We have the following conclusion:

- The selected model studying the relations between GDP and the number of students is very logical.
- The model's exactness is very high, 97%, 98% or 99%, so the linear equations can be used to forecast the following years.
- Education and training provide workers with knowledge, professional skill and humanity or develop human resource. Developed human resource will enhance productivity and economic growth. In its turn, the national income will improve the people's material life, culture, health, and education. In the present time, education and training are the origin of economic development.

SOME SUGGESTIONS

1. New concepts

- The Adam Smith's theory that "invisible hand" regulates economic growth was terminated by the Great Depression in 1929-1933. The Keynes's theory "the state intervention in the economy" came into being later and dominated in the 1970s. From the early 1990s until now, a new theory appeared: "an invisible head" regulates economic development. That implies the State manages the economy by its intelligence through socioeconomic policies. Education and training are a sector in the economy; therefore the State regulates the education also by "an invisible head". Its policies must create conditions for promoting invention and capability of educators and relevant objectives. The government should not make detailed intervention in education.
- We are living and growing in the world market. In that market, labor is goods. As a result, services enhancing labor quality are also goods. That is, education and training services supplying morality, knowledge and professional skill must be goods. At present, many countries come to Vietnam to build schools and joint-training establishments, and domestic investors also open schools. They are doing business in the Vietnamese education market. Therefore, the Vietnamese Government should affirm that the

education market is a real and special market where the State role is specially important.

- To learn is for gaining knowledge, working, living together and self-affirming. Education and training equip workers with morality, knowledge and professional skill so that they supply quality labor by doing jobs in enterprises or being self-employed. At the same time, well-educated persons know how to effectively exploit the system of social welfare for their family's development, and live in peace and affection. Therefore, the Government is required to build a new mechanism so that everybody has opportunities to learn all their life.

- The technology-centered philosophy has been changed into the worker - centered philosophy. This leads to a concept revolution in education and training. Formerly, many countries paid attention to professional skill and focused on training skilled workers, or blue-collar ones. However, today they concentrate on training students in colleges and universities. In this trend, Vietnam should develop high quality human resource to receive foreign state-of-the-art technologies. Only by doing so, can the Vietnam's participation in WTO become the people's happiness, not their unfortunate event. Just because of this, Vietnam should have policies and solutions for promoting the terriary education strongly in terms of size and quality.

2. To accelerate human resource development

In addition to promotion of tertiary education, the country has to boost primary and secondary education. According to the World Bank's standard in 1995, Vietnam is rated in the list of poor countries (those having per capita GDP below US$365). Six years later, in 2001, our per capita GDP did not surpass US$400. That implies our road to development is extremely difficult. Taiwan and South Korea encountered only one challenge: poverty but Vietnam currently faces one more that is globalization. We have to make great efforts to shorten the time in changing globalization into development opportunities. If not, we are always employed by foreigners even in our fatherland.

As a result, we must reduce the time of universalization of junior and senior secondary education by half of that of Taiwan and South Korea. South Korea universalized primary education in late 1950s; junior secondary education in early 1980s with 96% of primary school students enrolled in high schools; and senior secondary education in early 1990 with 95.7% of junior high school students enrolled in senior high schools; 5 years later (1998-1999), 83.7% of high school graduates were enrolled in universities and colleges.

Regarding general education: Vietnam should universalize junior secondary education by 2010 with 95% of graduates of junior high schools enrolled in senior high schools and universalize senior secondary education by 2015 with 70% of high school graduates enrolled in colleges and universities.

Regarding tertiary education: We analyze Table 3 as follows:

Suppose the world and Vietnam's conditions for socio-economic development is similar to that of 1990s from now to 2020, we will figure out the enrolment in universities and colleges as indicated in row (d), Table 3. But the reality is not so. Today, science and technology develop very swiftly and the pressure of global competition is increasingly heavy. As a result, the Vietnam's tertiary must obtain higher growth rate than that in the past period with a view to reaching a knowledge economy by 2030.

When comparing the Vietnam's current conditions for development of tertiary education with the South Korean conditions 40 years ago, we see Vietnam is able to reduce the road of education development, including tertiary education by half. That is by 2015 the Vietnam's education will be equal to the South Korean's in 1996. Therefore the number of university and college students per 10,000 Vietnamese persons will be 533 by 2015. Thereby, we can calculate the number of university and college students per 10,000 Vietnamese persons from now to 2010 as suggested in row (e), Table 3.■

REFERENCE

[1] *Tia Sáng Magazine*, Issue No.2, 2001

[2] The General Department of Statistics, *2000 Statistical Yearbook*, Thống Kê Publisher, Hà Nội, 2001

[3] The General Department of Statistics, *Project VIE/97/P14: Report on Forecast of Vietnamese Population, 1999-2024*, Thống Kê Publisher, Hà Nội, 2000.

Table 3: Some planed targets for socioeconomic development of Vietnam by 2020

Indicator	2001	2002	2003	2004	2005	2010	2015	2020
GDP (VND bil.) (a) based on 1994 price	292,295	312,756	334,649	358,074	383,139	537,372	753,692	1,057,092
Population (1,000 persons) (b)	71,815	78,734	79,749	80,843	81,860	86,353	91,278	95,762
Students in colleges and universities (1,000 persons) (c)	872	992	1,121	1,258	1,406	2,312	3,584	5,368
Student/10,000 persons (d) d = c/b	112	126	140	156	172	268	393	560
Suggested number of students/10,000 persons (e)			190	212	233	364	533	760

Notes:
(A) GDP based on the origin of 1999 with an annual growth rate of 7% - The 2000 Statistical Yearbook [2]
(b) Population calculated on average [3]
(c) College and university students are calculated by the linear equations displayed above.