

supplies, and intangibles like consultations and collaboration. The third advantage is the intensity of knowledge exchange that can lead to knowledge spillovers between nearby firms and institutions in the cluster. While the first two advantages of clustering have an indirect effect on the innovation output of a cluster, the third one has a direct effect on the innovation process of people and firms located in a cluster. Clustering can bring a wide range of other benefits to both businesses involved and the wider economy of the region. These benefits include:

- Increased levels of expertise.
- Ability of firms to draw together complementary skills.
- Potential for economies of scale.
- Strengthening social and other informal links.
- Improved information flow within a cluster.
- Development of the infrastructure.

The phenomenon of technological clusters is widespread around the world. For instance, in Europe, watchmakers clustered in Switzerland and fashion designers in Paris. In the United States, well known clusters include Detroit for the automotive industry, Hollywood for motion pictures, New York City for financial services and advertising, and Silicon Valley for electronics. Silicon Valley is a commonly used nickname for the southern part of the San Francisco Bay Area in northern California, originally referring to the concentration of silicon chip innovators and manufacturers, but eventually becoming a metaphor for the entire concentration of high-tech businesses. Thousands of high technology companies are headquartered in Silicon Valley. Among the recently constituted clusters is Bangalore, called the Silicon Valley of India due to the large concentration of technology companies.

In conclusion, we'd like to admit that technological clusters have a positive effect on the development of technologies and on the economic situation in the world, which leads to a higher level and quality of life for everyone.

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## RATES OF RETURN TO INVESTMENT IN HUMAN CAPITAL

One of the most important ideas in labor economics is to think of the set of marketable skills of workers as a form of capital in which workers make a variety of investments.

A well-trained human capital is identified as a key component to the success of the organization and therefore requires investment. The success depends in large part on

the people with higher level of competence. In response, the people are becoming valuable assets. In the economic perspective, the capital refers to factors of production used to create goods or services. Thus, it can be recognized that human capital means one of production elements which can generate added-values through inputting it.

Schultz classified investment in human capital into investment in schooling and higher education, post-school training and learning, pre-school learning activities, migration, health, information, and investment in children. Investments in human capital has a number the features that distinguish them from other types of investments.

1. Return from the investment in human capital depends on life terms of its owner. The earlier a person is invested in, the quicker the investments start giving return.

2. The human capital is not only a subject of physical and moral wear out, but also it is can be collected and multiplied.

3. In process of accumulation of the human capital its profitability increases to the certain rate limited to the upper bound of active work (active working-age), and then sharply decreases.

4. Not all of the investments in a person can be called the investments inhuman capital. For example, the expenses connected with crime, aren't investments into the human capital, as they are socially inexpedient and harmful for society.

5. Character and types of investments in a person are caused by historical, national, cultural features and traditions.

6. In comparison with investments in other forms of the capital investments into the human capital are the most favorable from the point of view of the certain person, and from the point of view of the whole society.

It is not easy to measure adequately all of the many forms of investment in human capital. Public and private spending on formal education is relatively well-documented. Spending by enterprises on job-related training programmes is also possible to quantify, although some less formal work-based learning can be hard to distinguish. The ways in which families devote resources to children are important in determining lifetime learning patterns, but it is impossible to calculate how much overall spending on children should be attributed to human capital investment. In all cases an annual rate of return is calculated on the basis of the cost of investment and the value of subsequent benefits, discounted to take account of their postponement. The *private* return to education takes account only of privately borne costs (including foregone earnings) and private gains in terms of higher post-tax earnings. The '*social*' return to education includes both private and public costs. By looking at gross earnings, it includes one element of public benefit – the higher income tax revenues paid by people who earn more as a result of their education. However, macroeconomic and wider social gains have not yet been built into calculations of these returns. The *fiscal* return to education looks at the direct implications for the public purse. It compares public costs to extra tax

revenues and gains from lower payments of public transfers to those who require them less as a result of being more educated. This last benefit is difficult to measure accurately, and has not been used in calculating social returns; estimates of fiscal returns are as a result less reliable. Inevitably, because of data constraints, the most robust measures of benefit and of returns focus on market outcomes only, and are based on formal educational attainment rather than on wider definitions of human capital investment. Notwithstanding the variety of complex inter-linking factors that underpin economic growth, the evidence does point to a positive relationship between expenditure for education and macroeconomic performance. But the mechanisms that create this impact, and hence the most effective types of investments in human capital, remain poorly understood.

The most substantial finding is that tertiary education constitutes a relatively high cost to the taxpayer (per student), but appears to yield relatively high benefit to tertiary graduates.

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## ALTERNATIVE INVESTMENTS

In the past ten years, alternative investments have moved from the tactical fringes of public pension investment portfolios to the strategic mainstream. According to Preqin, total industry assets now stand at 6.91 tn dollars. Nevertheless, there exists no universal definition of the term “alternative investments”. Basically, this term suggests investments that are not typical or non-traditional of investors to be included in their portfolios of stock, bonds and cash.

Alternative investments often share a few principal characteristics. They are as follows:

- historically low to moderate correlation with traditional asset classes (stocks and bonds);
- not listed on an exchange, that is why it may be difficult to determine the current market value of the asset;
- characterized by reduced liquidity;
- there may be limited historical risk and return data.

However, the concepts of ‘traditional’ and ‘alternative’ may significantly vary over time. For example, the international stocks and derivatives have been considered as alternative assets during the 1970’s, while real estate have been thought as part of the ‘alternative’ group during the 1980’s. Today, the term of alternative investments is