

# **CROSS CULTURAL DIMENSIONS IN THE GLOBAL ECONOMY**

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## Keywords:

Changing structures, demographical change, education participation, employment, possibilities and limits of Human resources

## Introduction:

Even in the German well-developed economy, because of the globalisation and changing structures, human resources are more important than physical assets.

The demographic trends make it necessary to well qualify the growing next generation, because the relationship between working people and not employed people will be dramatically change.

Even if Human Resources give possibilities, – most of all for the regions which want to catch-up with better developed ones – Human resources and with that, education, will have to be improved.

## Education participation.....:

Education is of central importance for economic and social participation.

Globalization and technical change require increasingly better qualifications. Education and knowledge are Germany's most important resources. Education of the employees is an input factor getting more importance in the process of innovation and technology genesis.

A trend towards the service and knowledge society has worldwide to be watched in all advanced national economies.

- o additional employment opportunities arise almost exclusively in the service sector and only still in exceptions in industry.

- o knowledge and research intensive sectors expand much more considerably (in service sector)

It must be made sure that qualifications are available in a sufficient scale.

The foreseeable unfavourable population trend and the comparatively weak interest of young people in appropriate training programmes increase the danger, that education and qualification of employed persons will be a problem for innovation, structural change, growth and occupation in Germany.

#### ...and employment

The demographic trends in Germany make it necessary, to qualify workers for the labour market. It is an immutable framework for the composition of the population and therefore of the different levels of education of a specific region.

The relationship between working people and not employed persons will dramatically change. In the year 2006 came to 100 employed persons 55 not working children, adolescents (under 19 years) and Seniors (over 66 years).

Prognostic increases this ratio to 100 to 69. The total number of people between 19 and 66 years by (2006) 53,1 million will decline to (2030) 45,7 million.

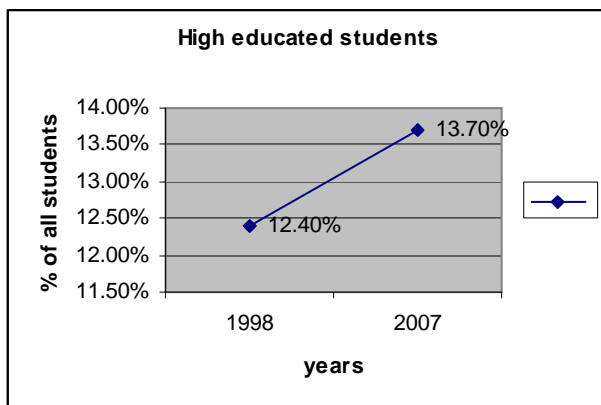
In the same period, the proportion of the over 66 years old seniors (2006) of 17 % (14 million) will rise up to 25 % (19,5 million).

Educations scales are comparable in the rarest cases. The ISCED (international standard Classification of Education) tries to bring the national education conclusions on an international denominator.

In the demarcation used in Eurostat-data „low “means the graduations below secondary school II , „highly “contain all tertiary graduations and „middle educated “ all remaining education graduations.

- Students at ISCED-Levels 5-6 of all pupils and students as % of total students (high educated):

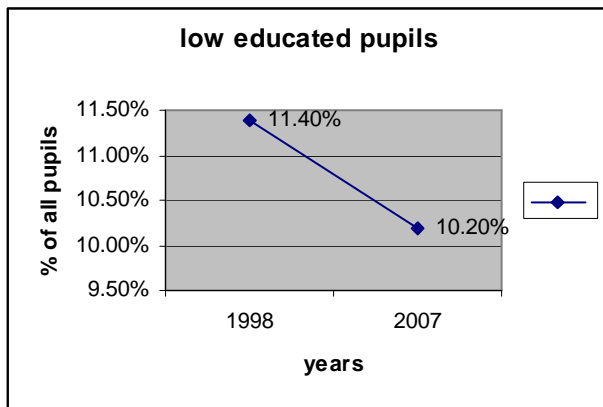
1998 (12,4%) to 2007 (13,7%)



source: Eurostat databank, Table 1 : own

- Pupils in primary and lower secondary education ISCED-Levels 1-2 as % of total pupils

1998 (11,4%) to 2007 (10,2%)



source: Eurostat databank, Table 2 : own

If the education graduations-change permits a thematic connection to the development of future socio-economic conditions and associated social regrouping, cannot be proven only on the basis these shifts.

By the rapid development of the society learning, education and their institutions became uncertain. A social and economic change began, which opens new possibilities for perspectives and education in Germany must adept to that change.

### Possibilities of human capital:

Definition of human capital:

In the human capital theory humanly resources is regarded under the criterion of education investments.

Human capital summarize all abilities, knowledge, experiences, innovative potential and talents as well as the knowledge of the employees and manager, the „brains “of an enterprise.

By these factors, information, ideas, and innovations are combined in order to optimize the achievement for the customer and the entrepreneurial success.

Human capital are also the company values, - culture and – philosophy.

#### Changing structures:

The international structural change is adjusted to knowledge-intensive growth.

Competitive ability, lastingness of the economic development as well as protection of jobs are based to convert knowledge in innovations.

Research-intensive industries and knowledge-intensive services play are of outstanding importance.

Because technical progress develops particularly fast in ational economies and regions with efficient research-intensive industries are represented, i.e. such industries, which operate to a considerable degree FuE.

According to Gehrke and Legler, education, science and research as well as technology are the substantial forces for growth and employment of a region.

Therefore, it is essential that a region is equipped with innovation relevant competences to be endued in comparison with competitive areas well.

The consequence is, that determinants of a regional innovative capability moves to the focus of regional politics.

The authors assume, that technology- and growth competition will more and more end into a competition of regions in the European room.

According to Global- region- concept, not business lines but regions worldwide have to fight in global competition.

Lehrke and Legler discussed in detail industrial research and development in their study of different German regions.

They concluded that:

- Federal states with less research - intensive producing hold few industries of high research – intensive producing sectors, so Schleswig-Holstein confine on mechanical engineering and Mecklenburg-Vorpommern to MSR technology and mechanical engineering, and Thuringia on mechanical engineering,
- the south of Germany is more research intensive (Baden-Wurttemberg: automobile-, air-, space-travel- vehicle engineering, office machines, EDP -computer and electrical engineering).

The authors notice, that there is a centre- periphery- descent in the regional innovation sample. The most important drivers of innovations are found mainly in the agglomeration areas.

International environments are changing rapidly.

Foreign competition and the need to trade more effectively overseas have forced most corporations and government to become increasingly culturally sensitive and globally minded. But this development can bring benefits in terms of increased employment opportunities, earnings and economic development but this may be at the expense of comparatively low pay, poor working conditions, and denial of employment rights. However, along with a trend

towards reduction of trading barriers and encouragement of international trade, there is an increasing call for worldwide regulation of labour issues.

To become cultural competent, it is necessary to have a solid understanding of the values and how they shape cultural identity.

Cross-cultural management researchers and theorists (i.e., Edward Hall, Geert Hofstede and Fons Trompenaars) have developed cultural value dimensions.

E. Hall (1960) mentioned as cultural value dimensions the concept of time, G. Hofstede (1980) talked about e.g. of power distances, Individualism and long-term orientation and F. Trompenaars about individualism versus collectivism, passage of time and specific versus diffuse.

Human capital theory (Becker 1962; Becker 1993; Mincer 1958; Schultz 1961) assumes that productivity is influenced by human capital existence by persons in the working process .

Knowledge is measured in enterprises or national economies on the basis certain input and in particular output factors (e.g. by scientific publications or patents). The application of the available knowledge and the generation of new knowledge depend however on the abilities and talents of the persons employed.

Germany, with 16.763 patents of the countries the most inovations, is on the third place, behind the USA (45,790 registrations) and Japan (29,827).

In Germany the number of the patent applications decreased/went back by 11,2 per cent, in the USA by 11,4 per cent, while Japan increased by 3,6 per cent.

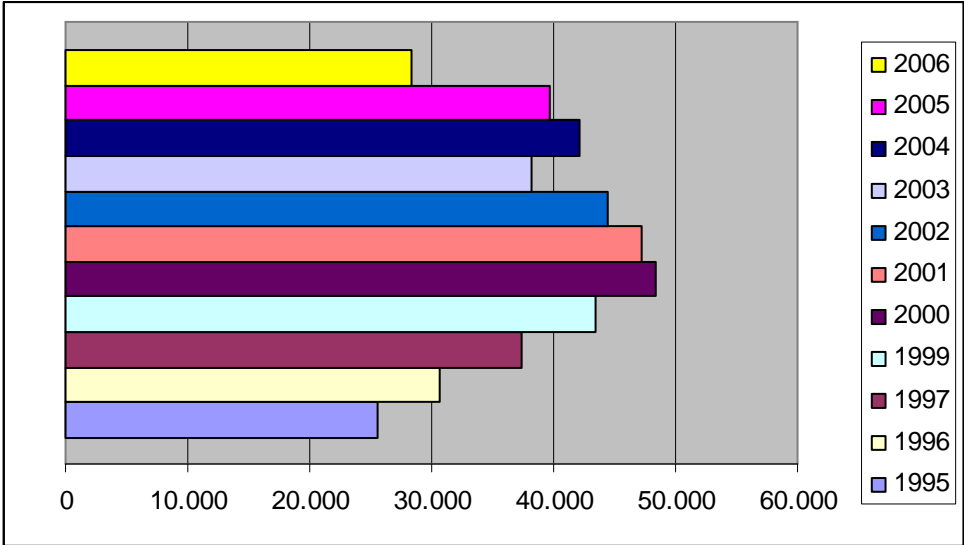
Mostly in traditionally strongly market segments like the computer technology, pharmaceutical industry and medical technology, decline the numbers of the registrations.

The German patent office counted (according to own data) in the year 2009 approximately 58,000 patent applications, thus a minus of approximately seven per cent compared with 2008.

Only under 10 per cent of the free inventors requested a patent application, likewise a declining trend.

Nevertheless, the German patent office understands crisis also as chance and offers straight for freelance inventors an extensive support program. (Nürnberger Nachrichten, Wirtschaftsteil, 9.2.2010)

High-tech applications to the EPO by priority



source: Eurostat database, Table 3 : own

Conclusion:

The production of a knowledge balance requires the data integrations beyond regions. The use of evaluation methods for human, structural economic potential is just as important. Characteristic numbers are to be determined, which originate from different ranges, like educational facilities, demography, participation of young people and senior participation at education and work.



In addition different scenarios are to be regarded and prognoses to be provided, that anticipate the changes and the risks.

The values for human capital rise from qualification, thus an integrated approach are pursued, which evaluate education, knowledge, and possibilities of advancement comprehensibly.

Human capital is a multi-dimensional size, the development needs time and possibilities.

Beside education conditions, human capital is also meant as professional experience, readiness for flexibility and occupation of trainees.

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