

# **The Present and Future of Teaching and Research in Business Education in Germany\***

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## **I. A Short Summary of the School and University System in Germany**

In order to understand the German university system it is necessary to first explain the preliminary school system as both differ considerably from the Korean and the American school system which is often referred to. Thereby I would like to limit myself to an overview and description of the basic structures. The German education system is very diverse. On one hand it offers a wide range of flexibility and on the other hand education and culture are governed by the individual states and can therefore be thoroughly different from state to state.

Generally, the education of children begins between the ages of three to five by voluntarily attending kindergarten. Between the ages of six and nine children are required to attend the elementary school. Upon completion of the elementary school at the age of ten the student decides if he or she wants to continue at an intermediate school (Hauptschule), which is generally completed at the age of 15 or to attend a high school (Gymnasium), which lasts until the student is about 19 years old. The completion of the inter-

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mediate school usually leads to a practical vocation, whereas upon completion of high school the student has fulfilled the requirements to attend a university. Thus, whoever wants to go to attend a university must complete 13 school years, one year more than in Korea.

The high school diploma (Abitur) is the requirement for admittance to a German university. In comparison to Korea and the USA there are no general or specific entrance examinations required.

Currently about 29% of every age group receives the high school diploma. Approximately 23% of the age group actually begins studying at the various universities.

There are no university fees imposed in Germany. However, there are more or less limitations set on the number of students admitted to certain subjects, business administration being one of them. Due to the excellent career opportunities studying business is chosen by many students. The number of students admitted is limited and is determined according to the grades (notes) received in the high school diploma.

Almost all subjects at the university require four or five years of studying. The average number of years spent at the university is usually longer, lasting about five or six years. Considering the fact that male students usually have to serve in the military the German students are on the average 27 years old before they begin their occupations. They are considered well trained but, if compared internationally, they are too old. Therefore, increased efforts are being made to shorten the time needed so that at least the age at which the students leave the university doesn't increase. So far these efforts have not yet been very successful.

## **II. The Structure and Content of Studying Business Administration in Germany**

The study of business administration is divided into basic and specialized

areas and differs in its structure as well as in its examinations from the Korean system.

The study of business administration normally requires 9 semesters, during which the student is expected to attend a total of at least 160 semester hours of classes. Thus a student takes on average course load of 18 semester hours; that is, he or she spends approximately 18 hours per week in the classroom.

There are 3 basic types of classes; these are lecture, exercise, and the seminar. Generally, lectures are large classes requiring only careful note-taking by students. In addition, students are expected to pursue a parallel, independent study of discipline, guided by a provided reading list. "exercises" offer students an opportunity to solve problems in the discipline, and to deepen their understanding of the material. They are generally smaller than lectures. Finally, seminars, which often require a written paper due before the class meets, involve yet deeper study of the respective subject. In order to obtain permission to write the thesis (discussed below), the student must earn credit in a seminar in that subject.

The German study of Business Administration is divided into two distinct parts, the Grundstudium and the Hauptstudium.

The basic studies (Grundstudium) and the specialization (Hauptstudium) are considered to be a unit. Only the completion of the specialized studies leads to the academic degree in business (Diplom-Kaufmann) which is comparable to the MBA. Although the basic studies can be compared to the bachelor degree in the USA, it does not lead to an independent and occupational degree.

**a) Basic Studies (Grundstudium)**

The Grundstudium (or "Basic Study") in business administration consists of approximately two and one-half years of required courses, corresponding roughly to the undergraduate courses required of a business major at an American university. German students attend Gymnasium (high-school) until age 19-20 - thus longer than Korean and American high-school students. Therefore, many liberal arts and science courses are provided before university-level

studies begin. The Grundstudium involves attending approximately 78 semester hours of classes. The students must obtain special credit for a subset of three basic courses. In addition, they must pass 5 written examinations in the general areas of business administration, economics, law, statistics, and one elective. The Vordiplom resulting from successful completion of the Grundstudium is roughly comparable to a Bachelor of Business Administration degree in the U.S. Required courses—in most cases both a lecture and an exercise are required—in the Grundstudium include:

- Introductory Accounting
- Introduction to EDP
- Mathematics
- Cost Accounting
- Marketing
- Production and Operations Management
- Financial Accounting
- Financial Management
- Corporate Policy
- Business and Descriptive Statistics
- Probability and Inductive Statistics
- Microeconomics 1 and 2
- Macroeconomics 1 and 2
- Civil and Trade Law 1 and 2

The elective courses in the Grundstudium include:

- Mathematics
- EDP
- Statistics
- Sociology
- Psychology for Business and Economics
- Politics
- Economic History
- Law

**b) The Hauptstudium**

The Hauptstudium (“Main Study”) corresponds to an MBA of the U.S.

The Hauptstudium consists of one year of core courses and one to one and a half years of more specialized study, thus totaling two to two and one half years. Basic components of the Hauptstudium are the core courses, the business specializations, an elective specialization, and the required diploma-thesis.

(1) Core Courses

The first year of the Hauptstudium consists of core courses corresponding roughly to those at a university in the U.S. and Korea. These core courses fall under the two broad categories of general economics and general business administration. Every student must pass both an oral exam and a 5-hour written exam in each of these two broad areas at the end of the first year of the Hauptstudium.

The core courses in general economics include:

- Advanced Microeconomics
- Economic Policy
- Economic Financial Theory and Policy
- Social Policy
- Economic Theory
- Econometrics
- Advanced Econometrics
- Prognostic Methods
- Competition Theory and Policy
- International Economics
- Monetary and Fiscal Policy

Courses in general business administration include:

- Corporate Management and Information Systems
- Production Management
- Expert Systems
- Planning of Industrial Research and Development
- Economic Analysis of a Corporation
- Valuation of Corporations
- The Balance Sheet and the Tax Laws
- Investments and Financing of Corporations
- Management Decision Models

Corporate Policy  
New Theories in Management  
Motivation and Job Satisfaction

## (2) The Business Specializations

After successful completion of the core, the student deepens his knowledge in selected areas through choosing two disciplines within the general category of business administration in which to specialize. As with the core courses, a student must pass both a 5-hour written exam and an oral exam in each of the chosen fields of study. According to the size of the departments, the business specializations are manifold and different throughout the Federal Republic of Germany. At large universities such as Cologne and Mannheim there are many diversified areas of specialization. For example, in Mannheim the following specializations are offered:

Auditing  
Banking  
Insurance  
Logistics  
Production and Operations Management  
Management Information Systems  
Management and Organizational Behavior  
Marketing  
Operations Research  
International Management  
Personnel Management  
Public Administration  
Taxation

## (3) The Elective Specialization

In addition to the courses and two areas of specialization within business administration, the Hauptstudium requires an elective specialization in an area of study outside of Business. Like the other areas, a 5-hour written exam and an oral exam must be passed. The possibilities in Mannheim include:

Civil and Trade Law  
Labor and Social Law  
State and Administrative Law  
Tax Law  
Statistics  
Economic & Social History  
Economic Geography  
Sociology  
Psychology for Business and Economics  
Political Science  
Mathematics  
Physical Technology  
Chemical Technology  
Languages

#### (4) The Diploma-thesis

Completion of the Hauptstudium and attainment of the Diplom-Kaufmann require a thesis. In most cases a student spends approximately four to six months doing the research and writing the thesis. The student can choose the thesis from all subjects and it is normally about 100 typed pages.

#### c) The Examination system

In comparison to the Korean or American methods of examinations, the German system does not use a system of credits. As already mentioned above, at the end of the basic studies (Grundstudium) and at the end of the specialization (Hauptstudium) 5-hour written exams and an oral exam must be passed. By not having examinations throughout the entire studies students are more inclined to learn the interdependences and relations of business. The examinations are structured in such a way that the connections between different areas of the subject can be tested.

### III. Recent Developments in Business Education

If one attempts to combine the recent developments in business education

into large groups, then the following classification should be appropriate:

- a) stronger generalization instead of specialization
- b) strengthening of the interdisciplinary structure of subject areas
- c) strengthening the internationalization of the studies

to a): academic studies means the transfer of knowledge for the purpose of obtaining professional or vocational abilities but not the technical expertise. The student should be in the situation to recognize the interdependence of economic facts and to make decisions accordingly.

In the last decade too much specialization has slipped into the business education, which is one reason for the long duration of time needed to study. Therefore all universities maintain the study of general business as the main focus of their curriculum. Whereas the material for specialized areas is reserved for students who have chosen this subject as a part of their studies, the material for general business administration is for all students regardless of specialization. The general business education should give the students the ability to think analytically, to base problem solving on broad theoretical fundamentals and to make independent decisions. He should understand to grasp the realities of business life critically. This requires the penetration of the content of business education to a demanding theoretical level. The object of the studies should be not just to serve the industries, rather the students should also be introduced to the similarities and differences of other areas such as trade, banking, insurance etc. Most of all, the student should be confronted with different methods and conceptions in order to be able to develop his own opinion.

to b): Within the strengthening of the interdisciplinary structure of subject areas different directions can be recognized:

- The enforced bonding between the business and technical sides of an enterprise
- The stronger attachment of standard (authoritative) elements in the studies



—The enforced implementation of language and cultural aspects into the business education.

The rapid development in computer sciences have led to increased information from business and technical areas of an enterprise which can be combined and simultaneously used in the decision making process. Only then can the costs of information be reduced and advancements in productivity be made. The concept of Computer-Manufacturing (CIM) in its different variations is taking form. This development has led to the introduction of management information systems as a part of the curriculum on various universities including Mannheim. This area of study has been very successful and in the future will be complemented with the study of engineering (Diplom-Ingenieur) which based on the knowledge of electronics and automation will contain a large element of business education.

A further alignment with the interdisciplinary structure is being executed from the viewpoint of social behavior and business administration. Here elements of psychology, social sciences and political science are being combined. Standard criteria, especially the question of ethical aspects of management decisions, are becoming increasingly more important.

to c) : The increasing internationalization of markets has led to the situation that graduates are being confronted more and more with other languages and cultures while mastering their professions. Academic training is not enough if the student only learns foreign languages. It is far more important that he also learns to know and understand other cultural elements of the respective region. Based on this experience the University of Mannheim has developed an option for students which includes language and cultural components in the studies. These students of business administration can choose a specialization in languages and cultural studies in one of the following regions: England, North America, France, Spain, South America, East Europe (especially USSR), to prepare for a career in international management. An expansion of this area of studies to include regions of Southeast Asia is being planned. These

students receive language training of up to 20 courses and seminars, depending on their language abilities at the beginning of this program. They also have to attend courses in history, political systems, and social structures of the elected region. They are not required to take courses in statistics in the Grundstudium and the elective specialization in the Hauptstudium.

The inclusion of language and cultural components is the beginning of the internationalization of the courses of study. Especially the growing together of Europe with its different languages and cultures gives the opportunity to develop integrated European studies. A Model of such integrated studies is being undertaken at this moment by different French, English and German universities, among them the University of Mannheim. Under the title of a European Masters of Business Administration (EMBA) this integrated study would lead to a European degree equivalent to a Diplom-Kaufmann. The most important rules governing such a course of study can be described briefly:

Each student completes a two-year basic study at his/her home university.

The following main study (Hauptstudium) includes the following areas:

- Resource Management
- Marketing
- Finance
- Accountancy
- Business Policy
- Production
- Information Science
- Econometrics
- Economics

Each student must choose six modules, whereby the sixth module is the diploma-thesis. In addition, another subject must be completed in which the student must familiarize himself with European affairs.

The EMBA includes the following European and integrating elements:

—Two of the above subjects have to be studied abroad and an election can be made to also study a third subject abroad.

—The course "European Affairs" must be studied abroad

—The diploma-thesis must either cover a European topic or be written in affiliation with a company abroad.

With the integrated European studies two important aspects can be achieved: A European graduate is obtained who can function without any difficulties in the Pan-European labor market of the future. Through integration and recognition of examinations taken abroad the length of time needed can be kept in reasonable limits. If this model approach is successful, the integrated international studies will be extended to other universities and areas.

The graduates of traditional and new courses of studies in business administration have at the moment and for the future excellent career prospects. In Germany it is predictable that especially graduates of engineering, natural sciences and business administration have excellent opportunities and with Germany's growth potential there will be a higher demand for these fields of study. This also has an impact in connection with university recruitments. In Germany there are not enough young professors to occupy the positions available. We have identified a serious deficit in new recruits in the scientific areas.

#### **IV. Developments in Research**

The development of business research in Germany does not differ in any way from the international standards of development. Whereas the origins of business research can be traced back to German researchers, the leadership in business research has shifted heavily to the USA. The mirror-image of the developments made there can be found in Europe and in Germany, where they are adapted to the special aspects within the special areas of business education in each country.

The development of research in business administration has made rapid progress in Germany. Whereas 30 years ago the question was asked if business

was a science at all that deserved a place at the university, or if it was essentially an art that involved the technology of accounting and thus should be sent back to the commercial colleges and business academies. Doubts on the scientific character of business studies have long since been rejected as groundless. This is due to the fact that the study of business understood that it could not just be oriented towards practical aspects but had to first of all develop business theories that served knowledge and understanding. This development of business theory has unjustifiably led to the often heard criticism that the study of business has diverted from the practical application and has become too formal (abstract).

If one observes the general development of the last 20 to 30 years then, apart from the development in special areas, the decision-oriented concept has become widespread in Germany. This is a methodical concept which is characterized by asking which decisions will achieve the optimum realization of the managerial goals. The decision-oriented concept is based on a formal decision making theory. The goal of this theory is the logical analysis of human behavior which realizes certain goals under the assumption of different existing alternatives. It attempts to typify decision situations and to derive formal methods of problem solving. With the decision making theory the use of mathematics in business studies increased considerably. This is because highly developed solutions to solving decision making problems had already been developed in mathematics: linear equations, linear and nonlinear programming, matrix and vectors, graphology and combinations, heuristic methods and forecasting in statistics as well as game theories. With the use of computers simulations and the development of expert systems as a form of artificial intelligence have been playing an increasingly important role.

The decision-oriented business studies can be found not only in its formal style but also has other varieties. Whereas the type discussed up until now assumes rational decision behavior in accordance with decision making principle, the behavioral science oriented business research takes another approach. They

try to explain the actual decision making process of individual persons and organizations by using the findings of the behavioral sciences. Thus, the social sciences such as psychology, sociology, and socio-psychology which attempt to explain human behavior play a major part in constructing the models. Recently other components from philosophy, in particular ethics, have been brought into business studies. Another variation of the decision-oriented concept is the systems oriented concept. The systems oriented concept is based on cybernetic findings.

According to the systems theory a system is an ordered set of elements between which a network of relations exist connecting the elements with each other and with systems of a lower order (subsystems). The connections between the systems themselves is explained with a connected network of circuits.

The different connections between the systems are given in social as well as in technical areas. The concept of Computer-Integrated-Manufacturing (CIM) which in different forms combines the technical and business elements of an enterprise was developed from the technical emphasis of the systems theory.

The methodical fundamentals described above can be found in all areas or special subjects of business studies. It doesn't matter if they are intended to be functional (for example the areas of purchasing, production, financing and marketing) or institutional (for example banking, insurance, industry).

While many areas of business education—as mentioned above—were influenced by developments in the USA over the past years, it is possible that a new direction in business administration could begin in Europe: that is environmental-oriented business administration. This new impulse could gain strength in view of the congestion and overcrowdedness in Europe. Of course, it must be said that only the first concepts have been noticed. Certainly a new and wide field in this area could be opened.