The following presentations were held and discussed in Bendorf (Rhine) on April 25 and 26, 2003:

1. Redesign of production theory

Prof. Dr. Harald Dyckhoff, RWTH Aachen

The traditional production and cost theory, as the original core of German business theory, has some serious narrowing that make it impossible to keep up with the developments in modern production management and more recent corporate theory. Therefore, the broader view of a general theory of production is redesigned, which encompasses the traditional theory as well as the newer scientific contributions as special theories, without immediately falling into the claim of a general theory of the enterprise. A decision-oriented generalization of traditional production and cost theory forms a special theory. The fertility of this approach can be seen in that it integrates more complex preference structures and functional efficiency concepts in a natural way and allows the theoretical foundation of a Generalized Data Envelopment Analysis (GDEA). (Essential parts of the lecture were published in the ZfB in July 2003.)

2. Economic analysis of insurance fraud: insurance and third markets

Prof. Dr. Martin Nell, University of Hamburg

The economic literature on insurance fraud has so far considered almost exclusively the case that insurance fraud is committed solely by the policyholder. In reality, however, third parties such as workshops, experts or doctors are often involved in insurance fraud. So far, such constellations have hardly been analyzed, because little is known in the insurance economy about the interdependencies between insurance and downstream repair markets. In order to close this gap and, among other things, to stimulate more intensive research on insurance fraud with the involvement of third parties, these interdependencies are examined using model theory. A model with differentiated products and an endogenous number of suppliers is used for the repair market based on Salop (1979), while complete competition is assumed for the insurance market. It can be seen that the existence of insured customers increases both the price level and the number of providers in repair markets. The reason for this lies in the falling price elasticity of the consumers, which results in a higher market power of the suppliers. With free market access, this increases the number of providers. Nevertheless, the price level increases because the higher number of providers does not fully compensate for the higher market power due to the lower price elasticity. Conversely, repair markets have an impact on the optimal contract structure in insurance markets. In contrast to the standard results of insurance demand theory, the optimal insurance contract also includes a deductible even when the information is distributed symmetrically and transaction costs are neglected. Furthermore, it is shown that

insurers offer contracts with insufficient deductibles in competitive markets compared to the optimal contract.

3. Measurement and evaluation problems in empirical research into success factors

Prof. Dr. Sönke Albers, Christian Albrechts University in Kiel

In the past 15 years, numerous empirical studies have appeared, particularly in sales and organizational research, in which statements about the success of various marketing strategies and organizational strategies are derived. These attempts to generate more knowledge about relationships in business management are to be assessed very positively. On the other hand, a large number of studies have used a methodological instrument that does not correspond to the latest knowledge. In the lecture 4 problem areas are identified and discussed, for which the latest methods should be used: 1. Since the explanatory strategies mostly only represent mental constructs, the problem of their operationalization arises. Here, mostly multi-item indicators are used, that are assumed to be reflective, but actually consist of formative indicators. This allows construct validations to be carried out that were not required at all and often led to the deletion of indicators that represent important aspects of a strategy. Reflective constructs are usually assumed because LISREL can be used to calculate structural equation models that supposedly can differentiate between the measurement and model levels. In the case of formative indicators, path regressions of the PLS type are more suitable. 2. Regression is almost exclusively calculated for the entire sample, even if cross-section examinations show a high degree of unobserved heterogeneity. Cluster analyzes don't help here either, since these only form similar groups according to the observed criteria, but only mixture models with which simultaneous group formation and regression is possible. 3. In the success factor research almost only linear models are calculated, which would mean that as a result you only get relationships of the type the more the better. In business management, however, we primarily know the optimal use of resources. Optimality therefore always means that a certain level is best. 4. Model relationships are often tested that contain "unspecific" hypotheses, the confirmation of which any manager would consider trivial anyway. Instead of just reporting significance here, the amount of which is strongly driven by the sample size anyway, the relative contribution to the explanatory or even better the forecast quality should always be reported. After all, one should rather concentrate on "exciting" hypotheses.

4. Innovation and intellectual property - approaches to analyzing the patent system

Prof. Dr. Dietmar Harhoff, Ludwig Maximilians University Munich

Dietmar Harhoff's lecture gave an overview of the current state of economic analysis of patent rights. The focus of the lecture was on the empirical analysis of legal disputes in which the validity of patents is challenged. The role of patents and other intellectual property rights and their place in developed economies changed fundamentally and

probably permanently in the 1990s. The change challenges traditional economic knowledge about the importance of patents for the innovative behavior of companies and for the organization of markets. The change manifests itself in a phenomenon that has entered the economic literature as a "patent paradox": A massive increase in the number of patent applications has been observed at the macroeconomic level since the beginning of the 1990s. This increase is not accompanied by a corresponding increase in research and development expenses (R&D), which are to be regarded as the most important input for the invention process. In some cases, R&D expenditure is even declining. At the same time, surveys show that many companies attest that patents are becoming less and less effective as a means of appropriating innovation income compared to other protective instruments. This also applies to companies that increasingly register patents. By contrast, patents have acquired a strategic importance that goes beyond the actual function of appropriating direct income from innovations. This strategic meaning is often no longer borne by individual patent rights, but by interconnected individual patents, which are referred to as patent thickets. Against this background, a number of theoretically and economically relevant questions are currently being raised in the economic science discussion. For example, should all technical fields be provided with the same patent protection ("one size fits all") or should options be created for applicants? Should a new EU community patent be established in addition to the existing institutions in Europe? Should European Courts be set up for patent litigation (centralized litigation)? Patents give their holder the right exclude other actors from using an invention. Only in rare cases does this include a monopoly. The equation of monopoly and patent found in some textbooks is an abstraction for the purpose of simplifying the model, but this rarely corresponds to reality. The theoretical reason for granting temporary exclusion rights is based on the incentive effect of patents. The non-rivalry and non-exclusion of technical knowledge (as described in the works of Arrow, Nordhaus and Romer) lead to market failure and suboptimal incentives for inventive step. In the 1990s, the classic model approaches were supplemented by works that highlight the breadth of patents, the level of invention, and other aspects. Special attention has also been paid to the phenomenon of sequential or cumulative innovation, which raises the question of the optimal strength of patent protection for early and late (based on other inventions) patents. Patent systems offer a number of advantages over other policy instruments, such as the fact that costs are borne by users, that no private information is required for the implementation, and that the disclosure of the patents (meanwhile also in the USA) enables the diffusion of knowledge. This is offset by the disadvantage that temporary market power is created, that there are incentives for the duplication of R&D activities and that distortions arise with regard to the orientation of R&D activities. because patent protection is not available to the same extent in all technical areas. An important research question concerns the distribution of the value of patents. In the lecture, various study results were presented that demonstrate the strong heterogeneity of the value of patent rights. The value of patents can be approximated with a log normal distribution. Approximately 10 percent of patent rights represent approximately 90 percent of the total in a patent portfolio. In the recent literature, legal disputes about patent rights have been examined particularly intensively. Since particularly valuable patents are often the focus of these disputes, their analysis is of great importance. The legal institutions in Europe and the USA differ considerably. The EPO (European Patent Office) can appeal against the granting of a patent within 9 months of the announcement of the grant; an appeal against the decision of the Board of Appeal is possible. This option has been used in around 8 percent of all patent

grants since 1978, around a third of the contested patents have been revoked, and another third has been restricted in scope. Approximately a third of the decisions are reviewed in the second instance (complaint). Econometric analyzes of these disputes have already produced a number of interesting results. The likelihood of an opposition increases with the value of patent law and the degree of uncertainty in a technical area. Just new, Science-based patents are created in an environment in which the scope of protection cannot be clearly defined. This encourages the creation of divergent expectations and asymmetrical information, which in turn make disputes more likely. Disputes in court, which can arise after opposition and appeal in any of the nation states for which the European Patent Office can grant patent rights, are far less well investigated. In Germany the frequency of disputes is around one dispute per 100 patents. Interestingly, the frequency of litigation in court is significantly lower than in the United States. This difference is probably due to the intensive pre-selection by the opposition procedure. In the lecture, results from econometric studies were presented, who support this assessment. Finally, research questions were presented that have so far remained largely unanswered. In particular, this includes the need to replace the unrealistic equation of patent and product in theoretical modeling with model variants in which the protective effect is based on a bundle of interlocking patent rights. In addition, it appears necessary to examine the increasing strategic importance of patents in the sense of patent thickets. Here, however, there is still a lack of theoretical approaches that can be used in empirical work. To replace the unrealistic equation of patent and product in theoretical modeling with model variants in which the protective effect is based on a bundle of interlocking patent rights. In addition, it appears necessary to examine the increasing strategic importance of patents in the sense of patent thickets. Here, however, there is still a lack of theoretical approaches that can be used in empirical work. To replace the unrealistic equation of patent and product in theoretical modeling with model variants in which the protective effect is based on a bundle of interlocking patent rights. In addition, it appears necessary to examine the increasing strategic importance of patents in the sense of patent thickets. Here, however, there is still a lack of theoretical approaches that can be used in empirical work.