

[April 26 und 27. 2002 in Bendorf \(Rhine\)](#)

The following presentations were held and discussed in Bendorf (Rhine) on April 26 and 27, 2002:

1. The emergence of a 'new economy' - an O-ring approach

Prof. Dr. Oliver Fabel, University of Konstanz

In the most recent literature, approaches are increasingly found that refer to the characteristic properties of production technology and the incentive system of companies in the "new economy". In contrast to the "old economy", the human capital of company members is the critical resource. In addition, the members of the production teams are directly involved in the company's success. This article attempts to work out an organizational-economic theory of business start-up that processes these two stylized facts of companies in the new economy. Given an "O-ring" - analogous to the failure of a sealing ring as the alleged cause of the Challenger accident - Production, the team output is determined by the contribution of the weakest team member. On the one hand, a longer task chain increases the team's product per capita, on the other hand, the inclusion of an additional team member increases the likelihood that the planned income cannot be realized. Teams whose members have a higher ability in terms of a lower probability of error are therefore willing and able to offer a new member a better offer than teams with a poorer skill profile. There is an advantage of matching skills in teams. However, this can only be realized in companies that are organized as equal partnerships between team members. In the typical profit-maximizing company of the "old economy", which hires managers to organize the production, the individual skills during the hiring process cannot be verified. At the same time, however, assuming the risk aversion of the team members means that partnerships also fail to offer the first best solution, as there is an individual financing risk. The capital resources and the capital intensity of production in the risk-averse partnerships are inefficiently low. They also realize an inefficiently small size. The existence of at least one separating equilibrium can then be shown. Groups of individuals with an identical, relatively high level of ability form partnerships, while individuals with relatively poorer skills than workers in profit-maximizing companies seek employment who randomly recruit their workforces from the remaining workforce "pool" of the economy. If skills are evenly distributed across the population, even small improvements in the attractiveness of employment in the "old economy" mean that a relatively large number of partnerships in the "new economy" cease production. In addition, there will generally be multiple equilibria with different numbers of partnerships, only one of which is efficient. Finally, knowledge of the existence of a balance means that the profit-maximizing companies of the "old economy" can profitably integrate partnerships.

2. Optimism and pessimism in financial investment decisions

Prof. Dr. Jürgen Eichberger, Heidelberg University

Optimism and pessimism are important features of the decision-making process in the face of uncertainty. However, the economic theory of decision in the event of uncertainty is still based on the paradigm of subjective maximization of expectation benefits, as developed by RAMSEY (1926), DE FINETTI (1937) and SAVAGE (1954). Based on this approach, economic theory finds it difficult to see such weighty decisions as financial investment decisions influenced by "irrational" attitudes. Over the past two decades, experimental studies have shown that decision-makers are influenced by whether events are considered impossible or safe. Based on robust experimental observations, WAKKER (2001) presents a definition of optimism and pessimism that can be used to analyze economic decision-making behavior. Optimistic behavior is characterized by the fact that the best possible result of an unsafe action is overweighted, while pessimism emphasizes the worst possible result. It is possible to show that this conception of optimism and pessimism can be integrated into the Choquet expectation benefit approach. By restricting the independence postulate to actions in which the extreme results occur on the same events, the preferences can be represented by a balanced mean of expected benefits and the extreme utility values. If one examines the financial investment decisions of investors with this representation, it shows that high risk premiums for stocks, as stated by the "Equity Premium Puzzle", are perfectly compatible with risk-taking behavior when investing with high but risky returns. The contradiction between a risk-averse search for insurance options and a risk-taking willingness to take part in games of chance can be resolved by empirically observing a mixture of optimistic and pessimistic weighting of the results of campaigns. but tolerable risky returns. The contradiction between a risk-averse search for insurance options and a risk-taking willingness to take part in games of chance can be resolved by empirically observing a mixture of optimistic and pessimistic weighting of the results of campaigns. but tolerable risky returns. The contradiction between a risk-averse search for insurance options and a risk-taking willingness to take part in games of chance can be resolved by empirically observing a mixture of optimistic and pessimistic weighting of the results of campaigns.

3. The coordination of demand and capacity through adaptive decisions - An application of the case based decision theory

Prof. Dr. Hermann Jahnke, Bielefeld University

The decision of a monopolistic company about the price and the production capacity in the case of incompletely known demand is considered. For this purpose, a delivery service-sensitive market is represented by a kinked demand function. With the help of a queue model, it is shown for the one-product company that in this scenario the sum of proportional, fixed capacity costs and variable costs is a sensible basis for pricing. If the distribution of demand is unknown, the optimal capacity cannot be determined. In the context of an adaptive decision process modeled with the help of the Case Based Decision Theory (CBDT), the additional information resulting from the demand process is used to gradually change the installed capacity.

4. Price influence, profit and liquidity risk in Xetra stock trading

Prof. Dr. Siegfried Trautmann, Johannes-Gutenberg University Mainz

The lecture presented the empirical results of a completed DFG research project on the profitability of trade-based price manipulation on financial markets (results and recommendations for action are summarized in three as yet unpublished working papers). Financial market manipulations can be classified according to ALLEN / GALE (1992) as follows. Action-based manipulation: manipulation is based on activities that influence the actual or perceived share value based on fundamental data. Information-based manipulation: Influencing prices that arise due to inside information or the spreading of false rumors. Trade-based manipulation: manipulation means the price influence that results from larger buy or sell orders in a financial security. Model-theoretical analyzes of the profitability of trade-based manipulation now provide the following answers: in models in which a non-price taker has a higher level of information, the latter is better off than an (uninformed) price taker (e.g. KYLE (1985), ALLEN / GALE (1992), HOLDEN / SUBRAHMANYAM (1992), KUMAR / SEPPI (1992)). In models in which a non-price taker does not have a higher level of information, the results are not uniform: in the models of GRINBLATT / ROSS (1985) and KAMPOVSKY / TRAUTMANN (1999) a non-price taker has no advantages due to his market power, while in the BASAK model (1996, 1997) a non-price taker is at least as well off as a price taker. There are hardly any empirical studies or no clear answers. Classic example: The trade-based manipulation of the silver market by the Hunt brothers in 1979/1980. The presented empirical study on "Price Impact and Profit of Xetra-Traders: Does Profitability increase with Trade Size?" now supports the model-theoretical results of GRINBLATT / ROSS (1985) and KAMPOVSKY / TRAUTMANN (1999). On the basis of a unique data sample (transaction data from the electronic trading platform Xetra with coded trader identification in 11 DAX shares and in 6 MDAX shares over the period from August 1998 to August 1999), it is shown, among other things, that proprietary profitability does not increase with the average order size, Trading-based price manipulation is therefore not profitable, at least in the Xetra world, and therefore, in our opinion, is not an issue for financial market supervision. Further results of the empirical study can be summarized as follows:

- The relationship between price influence and trade size is almost linear.
- Even with liquid DAX shares, the liquidity risk increases on turbulent trading days: The price influence of large orders increases substantially.
- Day trading is profitable but contributes little to the profit of the dealer.
- Proprietary traders who also trade on the customer's account do not benefit from this business (especially with DAX shares and when brokerage fees from commission transactions are neglected).
- Proprietary profits fall with the proportion of initiated transactions, especially for DAX shares.
- Retailer profits increase with the number of transactions in a share, especially for DAX shares.