Externally Funded Research Projects

The external funding raised by our Faculty members totals about € 2.82 mio. in 2016, up from about € 2.81 mio. in 2015 and € 2.68 mio. in 2014. Our main sources of revenue are the Austrian Science Foundation (FWF), the Austrian National Bank (OeNB), and the European Union, see table 1. This funding enables us to investigate a broad range of issues. On the next page we list externally funded research projects that were ongoing in the calendar year 2016. This includes projects that have been started before 2016 as well as projects to be completed after 2016.
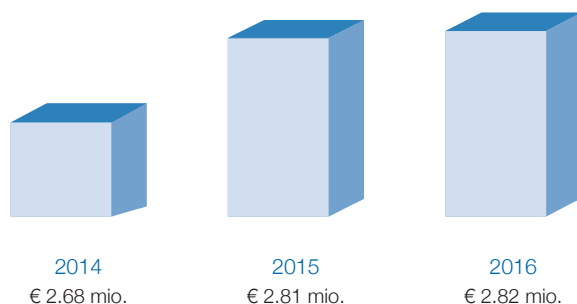
We sort the research projects below by the annual amount of funding attributed to our Faculty. In case of projects that are joint with other institutions or cooperation partners, we also state the amount of funding of the total project. Note that the list below reflects only a fraction of the entire research undertaken by our experts.

Sources of External Funding (in thousand €) — table 1

	Funds 2014	Funds 2015	Funds 2016
FWF	1,492,40	1,387,40	1,189,90
OeNB	224,80	278,90	267,00
EU	334,40	51,10	208,00
Organisations	-	75,30	204,30
FFG	137,40	152,90	157,70
Federal	9,30	146,40	128,50
WWTF	37,00	163,20	69,30
ÖAW	-	-	28,30
Other	446,70	558,20	564,40
Total	**2,682,00**	**2,813,40**	**2,817,40**

(Finance & Controlling 2016, University of Vienna)

External Funding, 2014 – 2016 — figure 5

2014	2015	2016
€ 2.68 mio.	€ 2.81 mio.	€ 2.82 mio.

(Finance & Controlling 2016, University of Vienna)

Externally Funded Individual Projects

Efficient Intermodal Transport Operations

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: Christian Doppler Forschungsgesellschaft
Funding: 1.155,208 €
2014 – 2019

The project is embedded in a Christian Doppler Laboratory and has two modules. Module I addresses intermodal transportation problems. The term intermodal transportation refers to the transportation of passengers or freight from an origin to a destination by at least two transportation modes, such that the transfer from one mode to the next takes place in intermodal terminals. The primary aim of this module, is to develop new optimisation solution methods based on operations research techniques to support efficient resource planning and management in intermodal transportation systems. Module II addresses efficient resource management in public transportation. This module mainly focuses on tactical and operational problems of urban public transport systems, including headway optimisation and disruption management. The CD-laboratory for efficient intermodal transport operations will develop and apply optimisation techniques to logistical decision problems with a particular focus on the development of metaheuristic and matheuristics for decision problems in transport which take real-world characteristics and realistic constraints into consideration.

Optimization and Analysis of Large-Scale Networks

Contact person: Leitner, Markus
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR)
Funding Source: WWTF (Wiener Wissenschafts-, Forschungs- und Technologiefonds)
Funding: 450,000 €
2015 – 2019

Networks are a ubiquitous tool to model the growing amount of data collected in science and business. In areas such as telecommunications, location theory, or social networks analysis (SNA), the size of the resulting networks and application data is ever increasing and analysis methods for large-scale data are crucial to deal with them in a meaningful way. Typically there are also inherent uncertainties associated with the input data and the implied optimisation problems often face multiple objectives. These three aspects (large-scale data, uncertainty and multiple objectives) limit the applicability of available optimisation algorithms that are capable to deal with at most one (if any) of these aspects. Following our recent "thinning out'" modelling approach, we aim to develop novel mathematical models and algorithmic solutions for solving highly relevant problems from operations management, telecommunications, and SNA at the large scale. We plan to exploit parallelization techniques, sparse mathematical models and general purpose heuristics, to reconsider decomposition approaches, and apply them in the context of high performance computing. The obtained results will enable the consideration of uncertain input data and / or multiple objectives at the large scale. To this end, various robust optimisation concepts and their applicability in multi-objective settings will be analysed. Results will be used to derive high-performance solution methods aiming to solve realistic, large-scale problem instances. These approaches will be based on mixed-integer (non-linear) optimisation, heuristics and parallelisation methods.

Explicit and Implicit Country Stereotypes of Consumers

Contact Person: Diamantopoulos, Adamantios
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 355,688 €
2014 – 2017

Extant country-of-origin (COO) research lacks strong theory, assumes only reflecting thinking on the part of consumers, and relies invariably on explicit (direct) measurement of country stereotypes. The proposed project integrates Fiske et al.'s (2002) stereotype content model (SCM) with Strack and Deutsch's (2004) reflective-impulsive model (RIM) into a unifying conceptual framework which is subsequently used to study the impact of both explicitly- and implicitly-assessed country stereotypes on consumer emotions and behaviour. Based on a series of complementary studies – both survey- and experimentally-based – it seeks to offer detailed insights into (a) the degree of and reasons for the convergence/divergence of explicitly- and implicitly-measured country stereotypes, (b) the relative influence of such stereotypes on deliberate vs. spontaneous purchase decisions, (c) the role of implicit country stereotypes in steering consumers' attention and (automatic) approach impulses, (d) the mediating effects of (positive and negative) emotions on the stereotype-behaviour relationship, and (e) the relative predictive validity of explicitly- and implicitly-measured country stereotypes with respect to a wide range of behavioural outcomes. The project findings are expected to substantially advance both COO theory and stereotyping theory as well as generate several implications relevant for practice.

Portfolio Risk and Asset Allocation: Utilizing High-Frequency Information in High Dimensions

Contact person: Hautsch, Nikolaus & Pflug Georg (joint project with Faculty of Mathematics)
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: WWTF (Wiener Wissenschafts-, Forschungs- und Technologiefonds)
Funding: 350,000 € (attributed to our Faculty; total funding of project 585,000 €)
2015 – 2018

Measuring and predicting risk of financial positions and using risk forecasts for decision making is of high social relevance. The recent financial and economic crisis taught us that misperception and underestimation of risk can have dramatic consequences for both the financial sector and the entire society. New challenges arise due to an increasing emphasis on the analysis of extreme events, the requirement of managing large-scale portfolios and the possibility of exploiting high-frequency market information. To address these issues, the objective of this project is twofold. On the one hand, we aim for a deeper understanding of high-dimensional dependencies of asset returns, reflected by more advanced estimates of covariance structures, tail dependencies and measures reflecting extreme (correlation) risks. On the other hand, we will develop mathematical and statistical tools for optimising large-dimensional portfolio positions and for monitoring and managing their risks under realistic conditions. The innovations of this project are (i) the development of a theoretical and empirical framework to control for transaction costs in high-frequency based portfolio optimisation, (ii) the further development of high-dimensional copula models and measures of tail dependence, and (iii) the construction of forecasts of large-scale asset return covariances exploiting high-frequency data.

Network Optimization in Bioinformatics and System Biology

Contact person: Bomze, Immanuel & Ljubic, Ivana
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR), Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 347,760 €
2014 – 2019

Mathematical models and algorithmic approaches for solving combinatorial optimisation problems from the field of network optimisation are known to be essential in telecommunications and the design of transportation and supply chain networks. More recently, it has been discovered that network optimisation algorithms are also crucial in the context of bio-informatics and system biology. Numerous publications in system biology point out that studying functions, structures and interactions of proteins in combination with networks can provide new insights regarding robust biomarkers and can allow new discoveries regarding protein functions, or testing of new hypothesis regarding their interactions. Network optimisations algorithms have also been applied in the analysis of functional modules in protein-protein interaction networks, the discovery of regulatory subnetworks, in revealing hidden components in biological processes, or in detecting transcription factor modules. Motivated by these recent developments, we aim to study several network optimisation problems that are among the most challenging ones in the fields and that were not sufficiently studied or understood so far. In this project we also aim at developing the first supernetwork-driven approach in combinatorial optimisation that will seamlessly integrate various methodologies from operations research (exact and metaheuristic approaches for network optimisation) and computer science (machine learning) into a single mathematical framework.

Fair and Efficient Allocation of Transportation (FEAT)

Contact person: Dörner, Karl & Vetschera, Rudolf
Research Theme: Management of Resources (MR)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 322,868 €
2016 – 2018

Transportation carriers fulfill transport requests for other parties and provide the physical connection between shippers, who own the freight, and their customers. To improve the situation and stay competitive, carriers must focus on transport requests offering a relatively high profit margin. A particular problem is caused by empty (return) trips, which by definition do not generate revenue, but cause costs and thereby reduce profits. The main goal of the present project is to study collaborative mechanisms to reallocate trips between carriers and thus improve the system-wide efficiency. We consider periodic shipments of goods in a three-stage setting. In local trips, goods are collected from costumers to hubs. A carrier is assumed to have at least two hubs, which are connected by a long haul transportation leg. Goods arriving at the destination of this main leg are again distributed to customers using local trips.

Heuristic Optimization in Production and Logistics (HOPL)

Contact person: Dörner, Karl (project collaboration with external partners)
Research Themes: Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)

Funding: 307,999 € (attributed to our Faculty; total funding of project 984,000 €)
2014 – 2018

This project aims to develop novel algorithms in order to gain additional optimisation potential by modeling and optimising interrelated logistics and production processes in an integrative way. The main goals for the application of optimisation networks in this project are:
- integrated storage, transport and schedule optimisation
- strategic planning and design of production and logistics systems
- integration of data-based modeling in the optimisation of production processes

Evaluation of Soft Measures to Promote Student Success

Contact person: Tyran, Jean-Robert
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: Federal Ministry of Science, Research and Economy
Funding: 300,000 €
2016 – 2019

The aim of this research project is to systematically evaluate various "soft" measures implemented by the University of Vienna to promote student success. Measures are called "soft" if they do not entail regulations for students or are based on economic incentives like sanctions or rewards. Therefore, students are not coerced or constrained by soft measures and remain entirely free to choose the pace and sequence of their studies as if the measures were not present. Soft measures are also cheap to implement. Typical examples of such measures are reminders of important deadlines or providing online tools for planning coursework. To evaluate the effectiveness of such measures, the University plans to implement a series of soft measures at different times in different faculties. Not all students will therefore experience the same measures at the same time. The purpose of the evaluation is to determine which measures are particularly effective such that they can be used to the benefit of all students.

Securing Health Care in Emergency Situations (S-HELP)

Contact person: Rauner, Marion (project collaboration with external partners)
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR), Statistics and Risk Analysis (SRA)
Funding Source: EU fp7-project
Funding: 278,647 € (attributed to our Faculty; total funding of project 3,500,000 €)
2014 – 2017

Large scale disasters – be they natural, deliberate or accidental – are inevitable. They do not respect borders, a large number of people will die and the long term consequences from economic to mental health can for years devastate the affected population. People, not tools, are the most important asset. Healthcare practitioners and services respond to emergency situations but they are sometimes overwhelmed often requiring rapid decision-making. Decisions in the allocation of strained resources, prioritizing casualties, while simultaneously trying to contain the level of impact are challenging.

Between 70 % and 80 % of disaster losses are secondary to indirect deaths that would not have occurred without the breakdown of social and health services and the information systems. Therefore, preparedness and response capabilities of Health Services will directly impact society's ability to 'bounce back' to become more resilient to such devastating shocks.

The central aim of S-HELP "Securing Health.Emergency. Learning.Planning – Development of Decision Support Tools for Improving Preparedness and Response of Health Services Involved in Emergency Situations" project is to develop and deliver a holistic framed approach to healthcare preparedness, response and recovery. S-HELP is a people, process and technological solution to emergency situations.

Model selection and inference with sparse models when the true model need not be sparse

Contact person: Leeb, Hannes
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 266,742 €
2015 – 2018

Recent results of Leeb (2013) and Steinberger and Leeb (2014) entail that most low-dimensional submodels of a high-dimensional linear model are approximately correct, in an appropriate sense. The proposed research project aims to explore the statistical implications of this finding to sparse modelling and to inference after model selection from a class of sparse models, in various scenarii, and to extend the existing theory. The goal is to develop statistical methods for model selection and inference with sparse working models without relying on sparsity assumptions.

Fairness, Personal Responsibility, and the Welfare State

Contact person: Tyran, Jean-Robert (project collaboration with external partners)
Research Themes: Human Behaviour and the Economy

(HBE), Changing Markets and Institutions (CMI)
Funding Source: Norface (EU)
Funding: 250,000 € (attributed to our Faculty; total funding of project 1,500,000 €)
2015 – 2018

The aim of the research project "Fairness, personal responsibility and the welfare state" is to analyse how fairness considerations, in particular with respect to personal responsibility, affect the support and effectiveness of welfare policies. The European welfare states are faced with important challenges, in particular related to financial strains on the welfare system, changing migration flows and increasing inequality. Partly as a response to these challenges, there is an increasing focus on personal responsibility. The proposed research project provides new knowledge about how the welfare states can meet these challenges and how concerns for personal responsibility can be integrated in the design of welfare schemes in a way that is perceived as fair.

Four research teams from Norway, the Netherlands and Austria take a cross-disciplinary perspective on fairness and use an innovative combination of methods, including administrative register data, surveys, as well as field and laboratory experiments.

Representative Democracy: Theory and Experiments

Contact person: Tyran, Jean-Robert & Wagner, Alexander K.
Research Themes: Human Behaviour and the Economy (HBE), Changing Markets and Institutions (CMI)
Funding Source: DFG (Deutsche Forschungsgemeinschaft)
Funding: 250,000 €
2014 – 2017

This proposal incorporates insights from psychology into economic reasoning to better understand political processes and outcomes in representative democracy. In terms of academic disciplines, the proposal is located at the crossroads of economics, psychology and political science, and in terms of method it is grounded in both theory and experiment. Economic reasoning will be used to investigate how rational and self-interested politicians change their behaviour when voters are forgetful, inattentive and have limited foresight. This approach starts from the well-defined benchmark of rational choice theory and adds psychological realism to how voters are modelled. The theoretical investigation is expected to yield clear and testable predictions. These predictions are tested in a controlled laboratory setting. The general aim is to provide an empirically grounded model of the political process and to inform us when we need to be careful in advancing conclusions from rationalistic models.

Out-of-sample Prediction Using Shrinkage Estimators

Contact person: Leeb, Hannes
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 192,182 €
2014 – 2018

In regression, performance analyses of shrinkage estimators are mainly focused on parameter estimation and on in-sample prediction. Little is known about the performance of shrinkage estimators for out-of-sample prediction, where the goal consists of estimating the regression function at new and un-observed points. Recently, Huber and Leeb (2013) showed that the James-Stein estimator can fail to dominate the maximum-likelihood estimator for out-of-sample prediction. The goal of the proposed research project is to analyse this and related phenomena, to design new shrinkage estimators with good predictive performance out-of-sample, and to develop inference methods like prediction intervals based on these new estimators.

Sansero Safe and Secure Routing

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 180,548 €
2015 – 2019

In this project, a new multi-criterial vehicle routing problem is studied in which different locations demand for periodic service. The objective is to determine cost efficient yet heterogeneous tours. The latter is defined such that repeating particular sequences of nodes or edges has to be avoided and that service at specific nodes or edges are serviced at the same time of day they have already been serviced before.

The ERP-System of the future (ERP3)

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: Ramsauer & Stürmer Software GmbH
Funding: 175,090 €
2016 – 2016

This project aims at the extension of an existing planning model and of existing planning procedures for task scheduling in production developed in the previous year of the project. In several iterations and extension phases considered planning data and complexity of procedures (e.g. sequence dependent setup-costs, integration of sub-contracted manufacturing, etc.) is to be increased.

Models for Ecological, Economical, Efficient, Electric Car Sharing (e4-share)

Contact person: Leitner, Markus (project collaboration with external partners)
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)
Funding: 162,865 € (attributed to our Faculty; total funding of project 804,731 €)
2014 – 2017

Due to growing awareness and concerns regarding pollution, sustainability and living quality, cities are confronted with severe challenges and need to manage a transformation process that ultimately shall lead to fewer emissions and less energy consumption while increasing the quality of public space available to citizens. At the same time, however, citizens ask for flexible solutions that allow to efficiently use different modes of transport without increasing their planning overhead. Among others, car-sharing systems and the usage of electric cars are currently increasingly gaining popularity to meet some of these challenges. In the project e4-share, we will lay the foundations for efficient and economically viable electric car-sharing systems by studying and solving the optimisation problems arising in their design and operations. A main goal is to derive generic methods and strategies for optimised planning and operating. In particular concerning flexible variants which best meet preferences of customers but impose nontrivial challenges to operators. We will develop novel, exact and heuristic, numerical methods for finding suitable solutions to the optimisation problems arising at the various planning levels as well as new, innovative approaches considering these levels simultaneously.

Low Emission Electric Freight Fleets (LEEFF)

Contact person: Dörner, Karl (project collaboration with external partners)
Research Theme: Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)
Funding: 122,500 € (attributed to our Faculty; total funding of project 2,679,000 €)
2016 – 2019

As the LEEFF (Low Emissions Electric Freight Fleets) project follows an integrative multiperspective approach to the Call objectives, the key elements of the examined system have to be identified. These key elements contribute to reach the target of a commercially viable overall solution for an electric fleet operation addressed by the Call. To reach the set targets, an advanced eVan together with an adapted battery and a smart charging station for commercial use at logistical hubs will be developed and an innovative business model for fleet operators together with adapted planning and communication tools realised as a prototype. The target users will be provided practical guidelines, a show case presentation based on a comprehensive demonstration mode and a strategic implementation.

Consistent Stochastic Inventory Routing Management (COSIMA)

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 118,104 €
2016 – 2019

This project integrates two fundamental logistical aspects that are typically investigated independently or sequentially: inventory management and transportation routing optimisation. We extend the existing knowledge with regard to essential real-world characteristics of such problems and develop new approaches for the integration of these two aspects. Stochastic demands at the retailers are typically non-stationary and correlated, emergency shipments are allowed and service level requirements have to be met. Moreover, we incorporate consistency, i.e. delivery at a certain retailer should always take place within the same time interval. This leads to a two-stage multi-echelon inventory problem with routing, stochastic lead times and non-equidistant review periods.

Consumer Regret in Global versus Local Brand Purchase Decisions

Contact Person: Diamantopoulos, Adamantios
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 98,000 €
2015 – 2017

Consumer Regret in Global versus Local Brand Purchase Decisions. The proposed research project investigates the relationship between perceived brand globalness (i.e. consumers' perception of a brand's global availability and reach) and consumer regret (i.e. the feeling rising after the realisation or the anticipation of suboptimal decisions due to the presence of better, non-chosen alternatives) as well as their joint impact on consumer behaviour. Two conceptual frameworks (one for anticipated and one for experienced regret) are proposed for subsequent testing in a series of complementary studies. The project findings are expected to enrich both the global branding and

consumer decision making literatures and provide novel theoretical and managerial insights on the competition between local and global brands, the psychological processes underlying global/local brand preferences, and the optimality of consumer decision making.

The Effects of Liquidity Regulation in Basel III on Financial Stability

Contact person: Loranth, Gyongyi
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 96,000 €
2016 – 2018

Liquidity requirements were introduced after the recent financial crisis to combat illiquidity due to market freezes. The aim of this project is to study the effects of liquidity requirements on financial stability.We argue that liquidity give banks an incentive to use staggered debt structures, because this maximises the amount of profitable, illiquid assets the bank can hold at any given point in time. We plan to analyse whether staggered debt structures are more prone to bank runs and propose to develop a model that allows to compare the probability of bank runs between staggered and concentrated debt structures.

Risk Capital for Flood Catastrophes in Europe

Contact person: Pflug, Georg
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 94,500 €
2014 – 2017

In recent years, we have observed lots of natural catastrophes in Austria, Europe and the whole world. These catastrophes have direct impact on the financial strength of affected countries, often leading to increasing taxes, additional public debts and budget diversion. Of course these impacts have further consequences on the available budget of private households and/or governments, thus reducing investments and opportunities for the future. The aims of this project are twofold: (i) to set the theoretical background for statistical risk modeling of regional and temporal distributed catastrophic events; (ii) to analyse and design insurance schemes for interregional and international protection against losses from these events.

Autocorrelation Robust Testing in Regression Models

Contact person: Pötscher, Benedikt

Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 66,689 €
2015 – 2016

Testing hypotheses on regression coefficients in linear models with correlated disturbances is a topic of central interest in econometrics and statistics. Even in a Gaussian setting this is a non-trivial testing problem due to the presence of the (possibly infinite-dimensional) nuisance parameters that govern the dependence structure. Most tests available in the literature are F-tests that are corrected for the autocorrelation in the data (also known as "autocorrelation-consistent" or "autocorrelation robust" tests) and are justified on the basis of a standard asymptotic analysis. Recently, Preinerstorfer and Pötscher (2013) have shown analytically that in finite samples these procedures typically break down into either the size of these autocorrelation- corrected F-type tests is equal to one, or the nuisance-minimal power is equal to zero (which of the two cases arises depends on an observable quantity being either above or below a certain threshold). Furthermore, they identified the cause for this effect, namely a concentration effect due to strong correlation. Exploiting this observation they suggested an adjustment procedure for autocorrelation-corrected F-type tests that can render such a test immune to the concentration effect. For the adjustment procedure to work, assumptions concerning the behaviour of the correlation structure at its "singular boundary" and the number of its so-called concentration subspaces have to be satisfied (which is, e.g., the case for autoregressive models of order 1). The goal of the proposed project is to understand the testing problem for more complex correlation models that do not satisfy these assumptions, and to design appropriate adjustment procedures that perform well in terms of finite sample size and power properties of the resulting tests in these more difficult settings.

Green City Hubs: Developing Sustainable Logistics for Delivery whithin a City

Contact person: Dörner, Karl (project collaboration with external partners)
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)
Funding: 63,900 € (attributed to our Faculty; total funding of project 355,700 €)
2014 – 2016

The research project "GreenCityHubs" develops a concept of sustainable inner-city delivery logistics using inner-city distribution centers (City Hubs) and alternative fueled

vehicles. The problem is addressed from the technical, urban planning and transit oriented view. This explicitly interdisciplinary research approach should lead to an economically, socially and ecologically balanced result, which will be evaluated by metrics of delivery service, economics, energy usage and environmental emissions.

New Ways to Support Decision Making and to Guide Production Processes

Contact person: Dörner, Karl (project collaboration with external partners)
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)
Funding: 60,000 € (attributed to our Faculty; total funding of project 603,500 €)
2014 – 2016

The project "i2V NPS 2" investigates new methods for priority-rule-based guidance and control of flexible, volatile production processes at the operational shop floor level according to user-defined strategies. To do so, complex priority rules are automatically synthesized and iteratively optimized by using meta-heuristics and simulation models. To specifically define the desired production strategies, economic, environmental and work psychological indicators are merged by holistic rating models.

Consumer Responses to Country-of-Origin, Region-of-Origin and Brand-Specific Cues:

Cognitive and Affective Dimensions
Contact Person: Diamantopoulos, Adamantios
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: Dr. Theo and Friedl Schöller Forschungszentrum für Wirtschaft und Gesellschaft
Funding: 50,000 €
2011 – 2018

Through a set of complementary studies, this project investigates the impact of alternative intonations (cognitive vs. affective) of country- and region-of-origin information on consumers' brand perceptions, buying intentions and willingness to pay. Particular emphasis is placed on (a) the relative importance of cognitive and affective dimensions of origin designation on consumer responses, (b) the role that multiple (i.e. national and regional) consumer identities play in shaping such responses, and (c) potential variations across different product categories.

Radiotherapy Patient Scheduling

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: EBG MedAustron GmbH
Funding: 10,000 €
2015 – 2017

The research project deals with the scheduling of radiotherapy treatment appointments for critically ill patients at the radiotherapy center MedAustron in Wiener Neustadt. When scheduling these appointments, various constraints must be considered, e.g. some activities can be performed on alternative resources. Furthermore, the daily irradiation starting time should remain stable among the treatment days for the patients. Additionally to the main appointments (irradiation) recurring control appointments need to be scheduled.

Externally Funded Graduate Schools[1]

Vienna Graduate School of Finance (4th Funding Period)

Contact person: Gehrig, Thomas; Hautsch, Nikolaus & Loranth, Gyongyi
Partner Institutions: Vienna University of Economics and Business (WU) & Institute for Advanced Studies (IHS)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 562,500 € (attributed to our Faculty; total funding of project 2,250,000 €)
Research Themes: Human Behaviour and the Economy (HBE), Changing Markets and Institutions (CMI), Corporate Strategies and Processes (CSP), Statistics and Risk Analysis (SRA)
2011 – 2016

Vienna Graduate School on Computational Optimization

Contact person: Bomze, Immanuel & Pflug, Georg
Partner Institutions: Faculty of Mathematics, Faculty of Computer Science, Vienna University of Technology (TU), Institute of Science and Technology Austria (ISTA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 398,949 € (attributed to our Faculty; total funding of project 1,595,795 €)
Research Theme: Statistics and Risk Analysis (SRA)
2016 – 2019

Other Fundings

Working Group "Financial Crises"

Contact Person: Gehrig, Thomas

---

[1]For more details on the graduate schools, see page 57

Research Theme: Changing Markets and Institutions (CMI)
Funding Source: ÖFG (Österreichische Forschungsgemeinschaft)
Funding: max. 15,000 € per year
2013 – 2019

The working group "Financial Crises" is a forum for scientific analysis and of the European economic crises of the new millennium. It focusses on creating public information as a basis for public discussion to cope with those crises and prevent future even more challenging ones. Therefore, the working group contributes to providing facts and raising awareness for public debates on financial crises and crises in general. It addresses the fundamental question whether, and in case how, liberal social systems can be organised in a resilient manner.

Economic Coordination under Time Pressure: Evidence from Experiments

Contact person: Sonntag, Axel
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: Graf Hardegg'sche Stiftung
Funding: 7,500 €
2016 – 2017

Many if not most important economic situations involve some kind of time pressure, either in the form of explicit and fixed deadlines or because time is money. In this project we consider the role of time pressure for interactive situations that involve an essential element of coordination. We are interested in the following questions: Will increased time pressure affect the likelihood that a coordinated agreement will be reached, and what kind of agreement, if any, is reached? The first of these questions is related to the efficiency implications of increased time pressure; the second concerns the nature of the division of the surplus. One possibility that we are especially interested in investigating is whether people may become more likely to reach a coordinated outcome the less time they have available. This could happen because higher time pressure affects the kind of reasoning decision makers engage in. For example, a tight deadline might make decision makers more likely to select a fair outcome that gives equal money earnings (see Rand, Greene & Nowak, 2012 for a public goods game setting), rather than end up in a dispute over outcomes that offer unequal money payments and are preferred by different players. Since it is very hard to vary deadlines in real situations, or to get natural data from cases where the deadline was varied, we will pursue an experimental approach. This has the advantage that we can collect data from a controlled environment, where we can vary the kind of time pressure faced by the decision makers and study its impact on behaviour.

Business Partnership

Contact Person: Sopp, Karina
Research Theme: Corporate Strategies and Processes (CSP)
Funding Source: EY Wirtschaftsprüfungsgesellschaft mbH Wien
Funding: 2,990 €
2015 – 2016

Realisation of a so called "business partnership" in the lecture "Financial Statement Analysis and Business Evaluation" to promote the practical relevance.

Sponsoring of Research Activities

EULOG Conference

Contact Person: Dörner, Karl
Funding Source: RISC Software GmbH
Funding: 9,000 €
Research Theme: Management of Resources (MR)
September 14, 2016 – September 16, 2016