

FACULTY OF BUSINESS ADMINISTRATION

ANNUAL REPORT 2022

OF THE FACULTY OF BUSINESS ADMINISTRATION



MESSAGE FROM THE DEAN



Hamburg, October 2023 Prof. Henrik Sattler Dean, Faculty of Business Administration

In 2022, Universität Hamburg was ranked second in Germany for business economics research in the prestigious WirtschaftsWoche ranking. Up from fourth in 2019, and third in 2020, the ranking affirms the University's place amongst the leading German universities for business research.

After two years of restrictions due to the COVID-19 pandemic, life came back to the University's campuses in 2022. About half of the courses in the Summer Semester of 2022 were once again offered in presence. That semester, the Academic Office re-started on-site advisory services, and in the Winter Semester, the orientation sessions for first-semester students were once again held on campus.

In the two years of restrictions, digital formats were established in the Faculty. To ensure that students do not have any time problems switching between digital and presence formats, many workplaces for students have been installed on campus. At this year's (virtual) "Unitag," a day for prospective students to learn about the University's degree programs, the Faculty presented its bachelor's degree programs in Business Administration and Industrial Engineering. During the online study orientation for incoming students in the Summer Semester, the International and the Academic Offices introduced themselves to the incoming students.

The Faculty welcomed two new professors. In August, Prof. Dr. Simone Neumann, previously at the Helmut Schmidt University (the University of the Federal Armed Forces) joined the Faculty as a Professor of Sustainable Logistics and Mobility Systems. As part of the Excellence Strategy of the Federal and State Governments, Universität Hamburg also appointed Prof. Dr. Anne Lauscher. Prof. Lauscher joined us as a Professor of Data Science in Business Administration/Computer Science in October.

Several Faculty members received awards for excellent research and contributions to society. A doctoral student at the Faculty and the deputy chair of BUND (Friends of the Earth Germany), Myriam Rapior, received the German Environmental Award (Deutscher Umweltpreis) from the German Federal Foundation for the Environment as well as the Professor Niklas-Medaille, the highest award of the Federal Ministry of Food and Agriculture.

In September, the newly established Advisory Board met for the first time with the Faculty's Management Board and Advisory Professors to advise the Faculty on strategy, accreditation, equal opportunities, internationalization, and transfer.

The Faculty also continued to support those interested in starting a business by opening the Management Transfer Lab's Coworking Space.

Finally, in what proved to be a very busy year, the Faculty launched its Strategy 2027 as well as its Programs and Students and its Internationalization Strategies. Throughout 2022, the Faculty also prepared for the EQUIS Accreditation Visit in 2023.

The Dean's Office would like to thank all Faculty members for their outstanding contribution to the results achieved in 2022.

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O1 STRATEGY

O1.1 STRATEGIC DEVELOPMENT

Formulation of General Strategy and Internationalization Strategy

The Faculty of Business Administration aims to go from being one of the top business schools in Germany to becoming a leading business school in Europe for excellent quantitative and empirical research and research-based education. Its mission and vision, as well as its SWOT analysis form the basis for defining the Faculty's strategic direction. For the period 2022 to 2027, the Faculty's focus is on addressing areas with weaknesses and on further developing its key strengths:

| Strategy area | Key measures |
|---|--|
| Internationalization (area with weaknesses) | |
| Increase international students in programs | M.Sc. Business Administration: English-language track Bachelor: Increase number of courses in English Double-degree master programs Marketing |
| 2. Increase exchanges | Revise network of partner schools (quality & quantity) E-exchanges Summer School |
| 3. Internationalize faculty and staff | Core faculty, especially research associates Visiting faculty to also teach International guest professorship Promote administrative staff's international skills (language, exchanges) |
| Programs and Students (area with weakness | ses) |
| 1. Update flagship programs | Course portfolio & course formatsMarketing |
| 2. Expand program portfolio | Interdisciplinary master in statistics and data analytics Double-degree programs Summer School |
| 3. Strengthen student services | Facilitate student self-selection Job and internship platform Extend mentoring initiatives |
| Research (strong area) | |
| Increase publications in top international journals | Grant applications (e.g., DFG Collaborative Research Center) |
| 2. Maintain/increase third-party funding | |
| Connections with Practice (strong area) | |
| 1. Strengthen entrepreneurship activities | New entrepreneurship application |
| 2. Increase visibility of Management Transfer Lab | Strengthen alumni activitiesMarketing |

Table 01a: General Strategy 2027

EQUIS Accreditation

In 2021, the Faculty was deemed officially "eligible" to apply for EQUIS accreditation in 2023. A visit from a "Peer Review Team" was scheduled for June 2023. The team would then make a recommendation on accreditation to the EQUIS board. Throughout 2022, preparations for the visit, and the extensive documentation to be provided to the team, took shape.

Inaugural Advisory Board Meeting



Board members and professors from the Faculty. Copyright: UHH/Lichtliebe

Back (left to right): H. Sattler, F. Wenzlaff, M. Spindler, A. Hoelscher, P. Verhoef, W. Bielert, J.-R. Martinen, P. Steinorth. Front row: J. Perrey, K. Gedenk, M. Clement, S. Voß, D. Krauss, D. Freise, M. Ostermayer, W. Drobetz.

The first meeting with the Advisory Board yielded valuable feedback on the Faculty's general strategy and its strategic differentiation. Key recommendations included:

- Starting Position: The suggested image of research connected to the city's <u>Economic Clusters</u> is a convincing point of departure for impact and a distinctive profile.
- Transfer and Connections with practice: The relation of the core research areas to Hamburg's Economic Clusters seems to be a good focal point for further development. The connection with the city is likely important, even crucial, for a business faculty.
- Incremental Improvement vs. Disruption: The members of the board are more inclined to recommend the Faculty develop a more disruptive vision.
- *Competition and Strategic Positioning*: The Faculty should more clearly define the fields in which it competes and wants to achieve a leading position, and it should clearly define where it is or wants to be distinctive or unique.
- *Priorities and resources*: The Faculty should set priorities, and define key performance indicators and the resources available/required to reach its goals.

O1.2 RANKINGS AND AWARDS

Table 01a: Awards

| Researcher | Award |
|--------------------|--|
| Sophia Bock | Excellence Award of the Verein zur Förderung der Versicherungswissenschaft in Hamburg (VFVH) "Zwillingsstudien in der Verhaltensökonomie" |
| Timo Greve | Excellence Award VFVH "Einsatz von Machine Learning und Robo-Advising in der Versicherungsvermittlung" |
| Dr. J. Hartmann | Wissenschaftspreis 2022 |
| | Laura Bassi Scholarship |
| Dr. S. Klaaßen | Wolfgang-Wetzel-Prize of the German Statistical Society (DStatG) "Instrument Validity Tests with Causal Forests" |
| Elena Koch | emma Best Paper Award und Best Paper Presentation Award for "Pricing strategies for bundling platforms in the news industry when competing with free content" |
| Prof. A. Lauscher | One of the "Top 100 Women in AI Ethics for 2023" |
| | Nominated for the Dissertation Award of the German Informatics Society |
| Thomas Mayer | Scholar of the "Deutschlandstipendium" Federal Ministry of Education and Research & Hamburg University of Applied Sciences |
| Dr. T. Moll | Public service award: Eimsbüttler of the Year |
| Sören Radtke | Best Paper Award Marketing ZFP – Journal of Research and Management "The Interface Between Marketing and Sales: The State of the Art and a Research Agenda" |
| Myriam Rapior | German Environmental Award (Deutscher Umweltpreis), Category Honorary Award of the German Federal Foundation for the Environment; Professor Niklas- Medaille (highest award of the Federal Ministry of Food and Agriculture) |
| Prof. J. Recker | Best Published Paper Award (Runner-Up) Communications, Digital Technology, and Organization Division of the Academy of Management "Managing Artificial Intelligence" |
| | SIGGreen Best Paper Award "Mobilizing IS Scholarship for a Circular Economy: Review, Synthesis, and Directions for Future Research" |
| Dr. A. Schulz | GOR Young Researcher Award "An ALNS Algorithm for the static Dial-a-Ride Problem with Ride and Waiting Time Minimization" |
| Prof. P. Steinorth | Elected First Vice-President of European Group of Risk & Insurance Economists |
| Prof. S. Voß | Informs Best Paper Award 2022 "Optimal Steiner Trees under Node and Edge Privacy Conflicts" |

Table 01b: Rankings

| Ranking | Year | Area | Globally | Germany |
|------------------|---------|-------------------------|----------|---------|
| WirtschaftsWoche | 2022 | Business administration | 5* | 2 |
| ARWU (Shanghai) | 2022 | Management | 201-300 | 4 |
| | | Business administration | 151-200 | 5 |
| URAP | 2021-22 | Business | 202 | 2 |
| US News | 2022-23 | Economics and business | 222 | 7 |

Source: Wirtschaftswoche, ARWU, URAP, US News.

<u>Note:</u> *The WirtschaftsWoche ranking is for business research in German-speaking countries (Germany, Austria and Switzerland).

O1.3 STAFF

Table 01a: Staff in FTE – for differentiation of status groups and gender, see Chapter 7

| | 2019 | 2020 | 2021 | 2022 |
|----------------------------|--------|--------|--------|--------|
| All staff (FTE) | 164.02 | 168.07 | 156.74 | 148.74 |
| Academic staff (FTE) | 128.82 | 135.90 | 127.69 | 117.31 |
| Of that third-party funded | 21.30 | 26.60 | 18.00 | 20.24 |
| Administrative staff (FTE) | 35.20 | 32.17 | 29.05 | 31.43 |
| Of that third-party funded | 1.75 | 0.75 | 0.00 | 1.00 |

Source: University Staff Statistics; reference date December 1st each year; Section 13 Institutional Research Unit.

Election of new Management Board

Dean Stefan Voß as well as Vice Deans Knut Haase and Martin Spindler resigned according the rotation schedule. The new Management Board from November 1st 2022 was made up of Henrik Sattler (Dean), Dorothea Alewell (Vice Dean for Studies and Teaching), Nicole Ratzinger-Sakel (Vice-Dean for Research and Graduate Education), and Stefan Voß (Vice Dean).

01.4 APPOINTMENTS AND ACADEMIC PLACEMENTS

Appointments

- Prof. Dr. Anne Lauscher joined the Faculty as Professor of Data Science in Business Administration/ Computer Science. As part of the Excellence Strategy, Prof. Lauscher was appointed as one of three open-topic professorships. Previously, Prof. Lauscher was at Bocconi University in Milan.
- Prof. Dr. Simone Neumann, previously at the Helmut Schmidt University—University of the Federal Armed Forces, was appointed Professor of Sustainable Logistics and Mobility Systems.

External Appointments | Retaining Professors

• Prof. Dr. Martin Spindler received an offer from the University of Passau for the professorship "Business Decisions and Data Science". The Faculty was able to retain him.

| Scientist | Academic Placement |
|-------------------|---|
| Dr. J. Hartmann | Assistant Professor (with tenure track) of Marketing Analytics & Data Science University of Groningen, the Netherlands |
| Dr. J. Kück | Professor of Economics, esp. Data Science in Economics University Düsseldorf, Germany |
| Dr. T. Schreiner | Postdoctoral Fellow for Econometric Modeling, Empirical Data Analysis and Consumer Behavior University of New South Wales, Sydney, Australia |
| Prof. H. Schröder | Professor of Finance and Accounting Europa-Universität Flensburg, Germany |

Academic Placements

Academic Job Advertisements

• The Junior Professorship (W1) leading to a W3 (Tenure-Track Professorship) for "Economics, with a focus on Managerial Accounting and Digitalization" was advertised from 15 December 2022.

| Scientists | Conference | Place |
|------------------------------|---|-------------------------------|
| Prof. M. Clement | Economics of the Music Industry Conference | Hamburg |
| Prof. M. Heitmann | DFG Conference on Innovative Marketing and Social Media | Hamburg |
| Prof. N. Ratzinger- Sakel | | |
| Prof. J. Recker | Track Chair for the track "Business Innovations and Digital Transformation" of the 24 th IEEE International Conference on Business Informatics (CBI 2022) | Amsterdam, the Netherlands |
| | Associate Editor of the track "Business Process Management" of the 30 th European Conference on Information Systems (ECIS 2022) | Timisoara, Romania |
| | Associate Editor of the track "Digital Business Models and Digital Entrepreneurship" of the 17 th International Conference on Business Informatics (WI 2022) | Nuremberg (online) |
| Prof. J. Schreyögg | 14 th dggö Annual Conference | Hamburg |
| Prof. E. Wild | Research Results live | Hamburg |
| Prof. S. Voß | Co-Organisation of the International Conference on Computational Logistics (ICCL 2022) | Barcelona, Spain |

01.5 CONFERENCES AND WORKSHOPS HELD IN 2022

O2 PROGRAMS AND STUDENTS

O2.1 KEY INDICATORS

Table 02a: Applications, Study Places by Agreement, Enrollments

| | | 2019 | | 2020 | | 2021 | | 2022 |
|---|------------|---------|----------|--------|------------|------|-------------------|------|
| B.Sc. Betriebswirtschaftslehre (Business Administration) | | | | | | | | |
| Study places: by agreement enrolled | 348 | 365 | 361 | 424 | 343 | 348 | 369 | 375 |
| Applications: total per study place | 2.312 | 6.6 | 2.407 | 6.7 | 2.674 | 7.8 | 2.835 | 7.7 |
| B.Sc. Wirtschaftsingenieurwesen (Indust | rial Engin | eering | and Man | ageme | ent) | | | |
| Study places: by agreement enrolled | 150 | 173 | 150 | 167 | 150 | 154 | 150 | 154 |
| Applications: total per study place | 840 | 5.6 | 815 | 5.4 | 970 | 6.5 | 993 | 6.6 |
| B.Sc. Lehramt an Beruflichen Schulen Wi | rtschaftsv | wissen | schaften | (Teach | er Trainin | g) | | |
| Study places: by agreement enrolled | 60 | 61 | 60 | 45 | 41 | 44 | 43 | 46 |
| Applications: total per study place | 255 | 4.3 | 181 | 3.0 | 160 | 3.9 | 102 | 2.4 |
| M.Sc. Betriebswirtschaft (Business Admi | nistration | ı) | | | | | | |
| Study places: by agreement enrolled | 193 | 203 | 194 | 217 | 160 | 160 | 166 | 164 |
| Applications: total per study place | 1.243 | 6.4 | 1.425 | 7.3 | 1.150 | 7.2 | 1.081 | 6.5 |
| M.Sc. Wirtschaftsingenieurwesen (Indus | trial Engi | neering | g and Ma | nagem | ent) | | | |
| Study places: by agreement enrolled | 80 | 100 | 80 | 93 | 80 | 68 | 80 | 81 |
| Applications: total per study place | 363 | 4.5 | 390 | 4.9 | 383 | 4.8 | 354 | 4.4 |
| M.Ed. Lehramt an Beruflichen Schulen Wirtschaftswissenschaften (Teacher Training) | | | | | | | | |
| Study places: by agreement enrolled | 50 | 60 | 50 | 49 | 31 | 41 | no restriction | 42 |
| Applications: total per study place | 67 | 1.3 | 62 | 1.2 | 53 | 1.7 | 49 | - |

<u>Source</u>: Reference date December 31st each year; Section 30 Advising and Administration; due to an alignment of the reference date, numbers of enrollments may differ slightly from previous annual reports.

<u>Note</u>: Study programs listed here are under the complete or part management of the Faculty.

<u>Note</u>: Study places "by agreement" indicate the minimum number of study places to be offered by agreement with Ministry, University and Faculty.



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| | 2019 | 2020 | 2021 | 2022 | | | |
|---|--------------------|-----------------|--------------|------|--|--|--|
| B.Sc. Betriebswirtschaftslehre (Business Administration) | | | | | | | |
| Number of graduates | 224 | 191 | 196 | 205 | | | |
| Ø Final grade* | 2.6 | 2.5 | 2.4 | 2.4 | | | |
| Ø Duration of study (semester) | 7.2 | 7.3 | 6.9 | 6.7 | | | |
| B.Sc. Wirtschaftsingenieurwesen (Indus | trial Engineering | and Manageme | ent) | | | | |
| Number of graduates | 112 | 85 | 92 | 84 | | | |
| Ø Final grade* | 2.4 | 2.3 | 2.3 | 2.2 | | | |
| Ø Duration of study (semester) | 8.0 | 7.8 | 8.1 | 8.1 | | | |
| B.Sc. Lehramt an Beruflichen Schulen W | /irtschaftswissen | schaften (Teach | er Training) | | | | |
| Number of graduates | 41 | 37 | 48 | 32 | | | |
| Ø Final grade* | 2.5 | 2.4 | 2.4 | 2.5 | | | |
| Ø Duration of study (semester) | 6.1 | 6.1 | 6.2 | 7.3 | | | |
| M.Sc. Betriebswirtschaft (Business Adm | inistration) | | | | | | |
| Number of graduates | 186 | 165 | 186 | 174 | | | |
| Ø Final grade* | 2.1 | 2.0 | 1.9 | 1.9 | | | |
| Ø Duration of study (semester) | 5.7 | 5.9 | 5.8 | 5.7 | | | |
| M.Sc. Wirtschaftsingenieurwesen (Indu | strial Engineering | g and Managem | ent) | | | | |
| Number of graduates | 49 | 84 | 65 | 80 | | | |
| Ø Final grade* | 1.8 | 1.9 | 1.9 | 1.9 | | | |
| Ø Duration of study (semester) | 6.3 | 6.3 | 6.2 | 6.2 | | | |
| M.Ed. Lehramt an Beruflichen Schulen Wirtschaftswissenschaften (Teacher Training) | | | | | | | |
| Number of graduates | 49 | 39 | 65 | 37 | | | |
| Ø Final grade* | 2.0 | 2.0 | 1.9 | 1.8 | | | |
| Ø Duration of study (semester) | 4.5 | 5.3 | 4.9 | 4.9 | | | |

Table 02b: Graduates, Final Grades, Duration of Study

<u>Source</u>: Official university statistics; according to examination year (Summer Semester and preceding Winter Semester); Section 13 Institutional Research Unit.

Note: Study programs listed here are under the complete or part management of the Faculty.

Note: The best grade is 1.0; the minimum grade needed to pass is 4.0; students can be awarded grades of +/- 0.3 (e.g., 1.7, 3.3).

| | 20 | 22 |
|---|-------|-------|
| Teaching methods | B.Sc. | M.Sc. |
| Assignments | 66% | 51% |
| Case studies | 57% | 55% |
| (Computer-based) simulations/games | 28% | 17% |
| Digital interaction with lecturers and/or between students | 49% | 46% |
| Discussions | 89% | 77% |
| Field trips (e.g. company visits) | 15% | 20% |
| Guest lectures | 51% | 56% |
| Digital materials and/or platform | 71% | 39% |
| Projects (group) | 25% | 27% |
| Projects (individual) | 21% | 23% |
| Software | 45% | 43% |

Table 02c: Percentage of Modules with respective Teaching Methods

Source: Analysis of Module Handbooks, 2022.

02.2 HAMBURG TEACHING PRIZE

On July 7, 2023, a total of 41 teaching award winners were honored at Hamburg City Hall.

From the Faculty of Business Administration, Dr. Arne Schulz and Dr. Birgit Schwartz-Reinken were honored for outstanding teaching. The award is worth 10,000€.

O3 RESEARCH

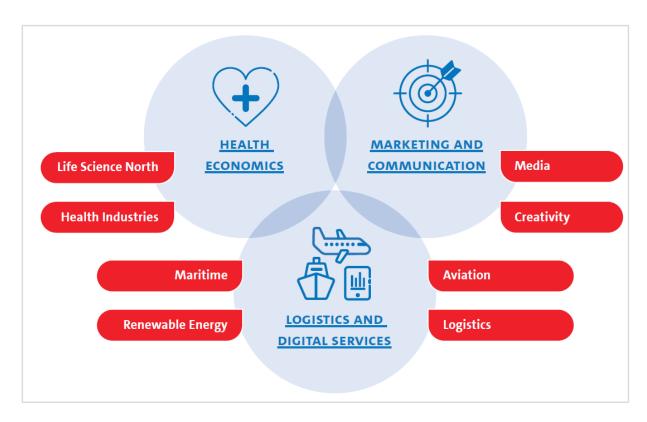
Table 03a: Publications

| | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|
| Research articles (peer reviewed) | 62 | 93 | 119 | 121 |
| TOP ranked research articles | 17 | 9 | 16 | 26 |
| Research articles related to Ethics, Responsibility and Sustainability (ERS) | 22 | 29 | 40 | 48 |
| Books (incl. textbooks) | 2 | 4 | 3 | 7 |
| Book chapters (incl. textbooks) | 22 | 23 | 13 | 26 |

<u>Source</u>: RIS (UHH Research Information System).

<u>Note</u>: Top ranked: Recent articles in leading journals, either in the <u>Financial Times Research Rank list</u> or listed as A+ or A journals in <u>VHB-JOURQUAL3</u>.

Key Research Areas and the City of Hamburg's Economic Clusters



O3.1 NEW THIRD-PARTY FUNDED PROJECTS

Table 03b: New third-party funded Projects in 2022

| Scientists | Торіс | Amount | Funding |
|------------------------|---|----------|---|
| Prof. W. Brüggemann | HafenplanZen: Entwicklung des Hafenplan Optimierers und der Visualisierung | €214,493 | Projektträgerschaft Innovative Hafentechnologie |
| Prof. M. Clement | Contract for the financing of a doctoral fellowship in the research field "Enter-tainment Science" | €60,000 | Warner Bros. Entertainment GmbH |
| | SUPPLY – Strengthening voluntary non- remunerated plasma collection capacity in Europe | €136,648 | Alliance (EBA), Netherlands |
| | Business Start-up VOIDS – Vision Of Intelligent Demand Shaping | €105,000 | Forschungszentrum Jülich GmbH (FZJ) |
| | EXIST Founder Scholarship: Planningo | €152,500 | |
| Prof. H. Sattler | Research Funding ZMM | €2,500 | Simon + Kucher & Partners |
| Prof. J. Schreyögg | StatAMed – Transformation des Patienten- pfades durch ein sektorenübergreifendes kurzstationäres allgemeinmedizinisch-orien- tiertes Versorgungmodell | €16,583 | AOK - Die Gesundheitskasse |
| | Health Innovation Next Generation Payment & Pricing Models | €453,813 | Università Commericale Luigi |
| Dr. A. Schulz | Ideen- und Risikofonds: Das Vehicle Routing Problem mit Telefahrzeugen | €42,257 | FHH Behörde für Wissenschaft, Forschung, Gleichstellung und Bezirke |
| Prof. M. Spindler | DDLitLab: FS-LP05: Digital Causality Lab – Dem "Warum" in den Daten auf der Spur | €46,100 | Stiftung für Innovation in der Lehre |
| | Ideen- und Risikofonds: Bestimmung der Unsicherheit von Maschinellen Lernmetho- den und künstlicher Intelligenz mit Anwen- dung auf Versicherungsdaten | €28,000 | FHH Behörde für Wissenschaft, Forschung, Gleichstellung und Bezirke |
| Prof. E. Wild | Wissenschaftliche Evaluation im Projekt Arbeiten 5.0 | €200,000 | Universitätsklinikum Hamburg-Eppendorf |
| | Transferfonds: FitnesspilotKIDZ – An App to fight the Obesity Pandemic | €30,000 | FHH, BWFGB |

Source: RIS (UHH Research Information System), Section 75 External Funding Management.

O3.2 SELECTED CURRENT RESEARCH PROJECTS

Studying and optimizing Innovation Processes (since 2021)

For the project Building Digital Products: Understanding the Interaction between Hardware and Software Component Development in Digital Innovation, the team headed by Jan Recker, professor of information systems and digital innovation, is receiving €280.000 from the German Research Foundation for a period of 30 months. In addition to the core team at Universität Hamburg, Universität zu Köln, Ruhr Universität Bochum, Vrije Universiteit Amsterdam, Case Western Reserve University in the United States, and Chalmers Institute in Sweden are involved.



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EU4Health Funding Program (since 2022)

Plasma is a crucial raw material for many drugs and treatments. However, the supply of plasma greatly depends on a sufficient number of people donating. Much of the plasma for European products has to be sourced from the United States, for instance. The SUPPLY project specifically aims to research and strengthen the plasma chain, from plasma collection to further processing. For this purpose, researchers are cooperating with blood banks and national authorities from all over Europe. Led by the European Blood Alliance in Belgium, the SUPPLY project will also receive around €1.1m through the EU4Health program. €135.000 will go to the Faculty, where a team led by Prof. Michel Clement will primarily examine how to recruit and retain new donors. Among other things, they will focus on how financial and other incentives affect donations and which of the strategies used in Germany have proven successful. The team will also investigate the impact of the coronavirus pandemic. Once the overall project has been completed, recommendations and guidelines will be developed for the various stakeholders in plasma donation to help them expand plasma collection and achieve a resilient supply in the EU.

Extending the Chain Ladder Method for Actuarial Practice (since 2019)

In the non-life insurance industry, loss reserves in particular often represent one of the largest underwriting liability items on the balance sheet and thus also one of the largest risk drivers, which is why great importance is attached to adequate determination of the loss reserves. Therefore, forecasting these liabilities and quantifying their uncertainty is a key actuarial issue. There are different models for determining loss reserves – one of the most common is the chain ladder method. In their project "Extending the Chain Ladder Method for Actuarial Practice", Dr. Nataliya Chukhrova and Dr. Arne Johannssen want to investigate this method of loss reserving and develop new data science techniques to enable the calculation of loss reserves on a more plausible basis in order to improve the risk management of insurance companies. The German Research Foundation is funding the project with a sum of ~ €100.000.



Study on the Future of Music Use (since 2018)

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The long-term study on the development of music use in Germany, provides a well-founded analysis of how music is discovered, purchased and consumed in Germany now and in the future. The latest findings of the study call the current salary model for music streaming services into question. Profits that streaming services such as Spotify earn from user fees and advertising are paid to rights-holders using the pro-rata model. So, all profits are pooled and, on the basis of the share of total tracks, paid out to the respective artists. Also, users might be paying for music they are not listening to. The study, conducted jointly by Universität Hamburg and Kühne Logistic University, focused primarily on a comparison of the pro-rata model and an alternative, user-centric model. In the latter case, profits are assigned to the artist a user listened to in a given month, meaning the model is based on individual use. Compared with the royalty payments expected from the user-centric model, the researchers calculated a share of €66m per annum for rock songs and €30m p. a. for classical pieces using the current pro-rata model. The study also revealed that above all German and international hip hop were being subsidized to the tune of €109m. Researchers also determined that song lengths in the last 10 years have decreased in almost all genres.

O3.3 YOUNG RESEARCHERS

Table 03c: Doctoral Researchers, Doctoral Degrees and Habilitations awarded

| | 2019 | 2020 | 2021 | 2022 |
|-------------------------------|------|------|------|------|
| Enrolled doctoral researchers | 136 | 132 | 127 | 127 |
| Of that international | 17 | 16 | 21 | 22 |
| Doctoral degrees awarded | 19 | 18 | 24 | 17 |
| Habilitations awarded | 1 | 1 | 0 | 0 |

<u>Source</u>: Official University Staff Statistics; according to examination year (Summer Semester and preceeding Winter Semester); Section 13 Institutional Research Unit.

<u>Note</u>: Including third-party funded staff, scholarship holders and externals.

Funding to support young Researchers

Funding has been be provided for:

Conferences

participation in academic (online) conferences [provided one was presenting],

Other measures

- participation in (online) doctoral courses [provided one was a member of Faculty's Graduate School and had participated in two internal doctoral courses],
- acquisition of data sets [if no comparable data was available via the licenses co-financed by the faculty],
- payment of transcription costs, and
- proofreading of English-language texts.

Table 03d: Faculty's young Researchers Funding

| 2019 | 2020 | 2021 | 2022 |
|--------------|--------------|-------------------------|----------------------------------|
| €9,100 (30) | €2,592 (11) | €719 (3) | €9,308 (21) |
| €69,024 (45) | €29,343 (26) | €2,609 (9) | €9,095 (8) |
| | €9,100 (30) | €9,100 (30) €2,592 (11) | €9,100 (30) €2,592 (11) €719 (3) |

Source: SAP, Faculty of Business Administration.

The total level of grant funding provided to doctoral researchers by the Faculty decreased due to stricter eligibility requirements regarding funding for external courses.

O4 TRANSFER

To encourage entrepreneurship and strengthen the transfer from research to economy and society, the Faculty of Business Administration launched the Management Transfer Lab (MTL) in 2017. MTL works closely with the University's Knowledge Exchange Agency to:

- connect founders, investors, and other start-up enthusiasts,
- match competencies and needs across faculties and disciplinary boundaries,
- encourage university-wide entrepreneurship courses, and
- emphasize the transfer to economy and society.

O4.1 START-UPS

Ecosystem Website

In Hamburg, there is a range of support for potential entrepreneurs who wish to launch a company. A new <u>databank</u> with over 500 funding providers is now offering a comprehensive and transparent overview. Additionally, there are roughly 100 events such as founders' and business plan competitions. These kinds of activities also help start-ups develop and network with other regional start-ups. The databank also includes national funding programs used in Hamburg. Furthermore, there are plans for concrete projects to successively expand the databank to Schleswig-Holstein, Bremen, Lower Saxony, and Mecklenburg-Western Pomerania. To this end, researchers from the Management Transfer Lab are cooperating with other universities. The website was made possible by funding within the framework of the EXIST program.

Coworking Space



Copyright: MTL/UHH

The MTL coworking space was opened as part of the "Digital Innovation Lab" project format (led by Prof. Jan Recker). Here, interdisciplinary student teams develop innovative hybrid prototypes on selected UN Sustainable Development Goals.

The first pilot projects teams from business administration, computer science and engineering developed automated "smart" 3D printable ventilation solutions for Hamburg's old apartments, and an ai-based technology for automated monitoring of wild bee hives via audio signals. Both prototypes are available in the coworking space and can be easily replicated and further developed thanks to their open architecture.

For these and other projects, the coworking space offers a comprehensive set of hardware (including a 3D printer, 4K cameras, high-performance PCs, and maker kits) and software (e.g., Qualtrics and Sawtooth). It offers space for creative coworking, prototyping, validating one's own business idea, and serves as a central meeting and event space on campus. Complementary courses teach students about topics such as digital innovation, sustainable solution development, and artificial intelligence management. The rooms and hardware can be booked via the booking portal.

Start-ups

PLANNINGIO planning · integrated · optimized

PLANNINGIO: The founder team around Markus Mickein, Nikolai Heinrichs and Nils Roemer has recognized that conventional planning systems usually consider production stages isolated from each other (e.g. warehousing, procurement and distribution). With the help of PLANNINGIO, all relevant process stages and constraints can be mapped in an integrated planning system via one software. Through the end-to-end analysis of production systems, a significantly higher automation of the planning process can be achieved as well as operational cost savings can be realized through the efficient use of resources. The software solution also takes ecological aspects into account by reducing resources.



Hivesound: was founded by Kevin Kraus, a Universität Hamburg master's student, Dr. Michelle Maurer and Julian Obrecht. The company offers a solution that enables beekeepers to monitor the health and vitality of their colonies digitally and remotely. The monitoring system is based on the analysis of acoustic signals in beehives which are interpreted using a machine learning algorithm. This algorithm can provide important information, including detecting the absence of the queen bee, parasite infestations in the hive, as well as stressors in the environment that are stressing the bees. Hivesound emerged from the "Digital Innovation Lab" 2022, an interdisciplinary project format funded as part of the EXIST program.



CarbonStack: is fighting climate change with reforestation in Europe. The company stands for CO2 compensation without green-washing and offers other companies an opportunity to compensate for unavoidable CO2 emissions with regional foresting projects. Forty-five thousand trees have already been planted throughout Germany in a very short time. The reforestation projects are monitored using high-resolution satellite imagery and compensation efficacy is being tracked and quantified using the company's own AI solution. The satellite technology is being used to identify surfaces where new trees are urgently needed for a healthy ecosystem and the consequences of climate change are already visible. Using energy efficient blockchain technology, CarbonStack is making CO2 compensation transparent and tamper-proof for everyone involved.

04.2 RECRUITING & CAREER-SERVICE

ChefTreff summit: At the ChefTreff summit at the Hamburg Chamber of Commerce, talents and founders met today's successful entrepreneurs and role models. Top managers and CEOs from Google, Amazon and About You as well as personalities such as Fynn Kliemann shared their personal knowledge. Together with students, graduates and young professionals, ideas were exchanged and visions set in motion. In addition to subject-specific deep dives in lectures and workshops in the areas of tech, business and finance, there was a Founder Stage with various contributions around the question: "How to build and scale a start-up?" Because only those who know what the practice looks like can get an idea of the real challenges. The ChefTreff Summit is organized by the social-impact start-up ChefTreff, by former students of the University of Hamburg in cooperation with the University and supported with funds from the funding program EXIST – Start-ups from Science – of the Federal Ministry of Economics and Technology.

Hamburg Future Conference: In 2022, the first Hamburg Future Conference took place on the occasion of the 100th anniversary of the University Society of Hamburg with the support of the Hamburg Chamber of Commerce. Leading personalities from science, business and politics were represented at the Hamburg Future Conference. The focus was on excellent knowledge transfer in the fields of climate, medicine, energy, on entrepreneurship as well as on the social acceptance and political shaping of innovations. In the course of the various presentations, it became very clear that science and industry need to network even more closely in order to bring socially relevant innovations to application more quickly. Special thanks go to Fridtjof Detzner (Co-Founder, Planet A Ventures), who gave an inspiring lecture on today's societal challenges and gave the students and PhD students food for thought on how to consciously choose future career paths. The MTL was involved in the organization of the event and invited at its own booth to exchange ideas on the topics of transfer, innovation and start-up in a university context.

Meet&Match: The matchmaking event where people with ideas and people with skills come together to get off the ground as a start-up team. Individual founders or founding teams and people interested in founding a company from different universities and research institutions come together to exchange ideas across disciplines, network, share ideas, think them through further together - and in the process grow together to form ideal founding teams.

Mentoring Program

Mentoring moves careers (Mentoring bewegt Karrieren): This study module of the Mentoring Program has been developed and launched in 2019 in cooperation with the Faculty of Business Administration and the Exist funding as part of the program "Potenziale heben" (raise potentials) and is thereby aimed at selected young professionals: students in the master's program and doctoral students. Starting in the Summer Semester of 2022, PhD students and postdocs can also apply for mentoring through the Hamburg Research Academy (HRA).

Table 04a: Number of Mentees and Mentors

| | 2020 | 2021 | 2022 |
|---------|------|------|------|
| Mentees | 15 | 156 | 251 |
| Mentors | 0 | 20 | 50 |

Source: Faculty of Business Administration, MTL.

04.3 PROGRAMS AND STUDENTS

Table 04b: Percentage of Modules with respective practice-related Content

| Practice-related content and methods in | | 2022 | |
|--|-------|-------|--|
| modules | B.Sc. | M.Sc. | |
| Connections with practice/transfer is an important topic in the module | 68% | 49% | |
| Content, examples, and/or perspectives from practice | 84% | 64% | |
| Case studies and guest lectures by managers | 59% | 64% | |
| Research with empirical data sets and use of software from practice | 63% | 56% | |
| Students complete project work on topics from practice/companies | 35% | 38% | |

Source: Analysis of Module Handbooks, 2022.

Selected Lectures related to Transfer

Professorships offer a broad portfolio of courses that stimulate transfer between teaching, research and practice. Courses enable hands-on practical experiences or give members of leading organizations, founders of innovative start-ups or renowned industry experts a stage to share practical insights in guest lectures.

Table 04c: Foundation-related Courses and Events

| | 2019 | 2020 | 2021 | 2022 |
|---|------|------|-------|-------|
| Courses related to founding/ entrepreneurship | 4 | 13 | 20 | 24 |
| students participating in the courses | ~100 | 672 | 1,728 | 1,889 |
| Inter-faculty events on the topic of founding (mostly in cooperation) | 9 | 1 | 12 | 20 |

<u>Source</u>: Faculty of Business Administration, MTL.

| Lecturer | Title | Typ of course |
|--|---|---------------|
| Prof. Berding | Artificial intelligence in vocational training – development of an APP | Seminar |
| Dr. W. Bielert | Managing Digital Transformation | Lecture |
| Dr. T. Bockelmann | Entrepreneurial Thinking | Seminar |
| Prof. M. Clement | Strategic Management in Digital Transformation | Lecture |
| | E-Business | Lecture |
| | Business Pitch | Workshop |
| | INTIE Certificate | Workshop |
| Prof. M. Clement Prof. A. Stuhlmann | Entrepreneurial Media Podcasting | Lecture |
| Prof. F. Eggers | Digital Marketing | Lecture |
| Prof. M. Nüttgens | IT-Entrepreneurship | Lecture |
| Prof. J. Recker | Digital Innovation Lab | Seminar |
| | Advanced Topics in Technology and Innovation Management | Lecture |
| | Managing Artificial Intelligence | Seminar |
| Prof. H. Sattler | Business Simulation | Seminar |
| Dr. R. Seifert | Dr. R. Seifert Social Entrepreneurship | |
| | Website Design | Workshop |
| Dr. M. de Vries | Entrepreneurship for Non-Economists | Lecture |
| | Management for Entrepreneurs | Lecture |

Table 04d: Lectures with Transfer Relation Summer Semester 2022

Source: Faculty of Business Administration, MTL.



Advisory Board members Daniel Krauss and Wilhelm Bielert after the inaugural meeting. Copyright: UHH/Lichtliebe

| Practice Partner | Title of Module | Торіс |
|-------------------------------------|--|--|
| Planningio | Production Planning in the Beverage Industry | Programming and optimization |
| KPMG AG | Special Issues in Auditing/ Professional Profile of the Auditor | Auditing |
| Edeka.Digital | Digital Transformation of Retail Organisations: The case of Edeka | Digital Innovation & Stationary Retail |
| EY | Special Issues in Auditing/Audit of the Future | Auditing |
| KPMG AG | International Accounting and Auditing Fundamentals/Digitalization in Accounting | Accounting |
| PWC GmbH | International Accounting and Auditing Fundamen- tals/Practical Cases in International Accounting | Auditing |
| Dr. S. Spieckermann (SimPlan AG) | Methods of Decision Analysis/ Discrete Event Oriented Simulation, Digital Twin, Industry 4.0 and more | Simulation |
| EY | International Accounting and Auditing Fundamentals/IFRS 2 – Share-based Payment | Accounting |
| Möhrle Happ Luther | International Accounting and Auditing Fundamentals/Introduction to Auditing | Auditing |
| Benedikt Kriewitz (EnBW) | Charging Infrastructure for Electrical Vehicles | Programming and optimization |
| TUI AG | Special Issues in Auditing/Internal Audit | Internal Audit |

Table 04e: Practical Lectures in which Companies provide Insights into professional Life

Source: Faculty of Business Administration, MTL.

O4.4 RESEARCH

| Scientist | Торіс | Cooperation partner |
|-----------------------------------|---|---|
| Prof. W. Brüggemann | HafenplanZEN | Hamburg Port Authority, Hamburg Port Consulting |
| Nicole Ratzinger- Sakel | Auditing und Corporate Accounting: Transfer between Research and Practice | EY |
| Prof. M. Fliedner | Production Planning in Cellular Manufacturing | Condair |
| Prof. K. Gedenk | Brand Listings by Discounters – How do they affect Supermarkets? | EDEKA ZENTRALE Stiftung & Co. KG |
| Prof. K. Haase | Crowd Mangement für die Haddsch | Mekka, Saudi-Arabien |
| | Crowd Management | FIFA World Cup, Katar |
| | Strategic Product Planning | Feldschlössschen, Schweiz |
| Dr. Abtin Nourmo- hammadzadeh | Digitization and Electro-mobility: End-to-End Digitally Controlled Network and Charging In- frastructure for Land, Air and Water Electromo- bility | HSU (University of the Federal Armed Forces Hamburg) |
| Dr. C. Otten | Consumer Expectations on Movie Release Windows | Warner Brothers Discovery |
| Prof. J. Recker | Digital Sustainable Platforms | Vytal |
| | Digital Twins in Automotive Manufacturing | VW |
| | Digital Innovation in Retail | Edeka.Digital |
| Prof. J. Recker Imke Grasshoff | Ethically-aware Design of Artificial Intelligence | Guidecom Hamburger Sparkasse TUI |
| Prof. T. Stargardt | Effect of Discharge Management on Drug Supply | GWQ AG |
| Prof. EM. Wild | Work 5.0 – Harmonization of Processes and Duty Times (Transformation project 6.2), | UKE Hamburg |
| | Fitnesspilot | Dirk Sollbach und Dr. Annika Welte (upsquared GmbH) |
| Jingjing Yu | sharing.city.college: Shifting Modalities into Advanced Regional Transport/Trans-Modalities | FHH, Ahoi.digital |

Table 04f: Research Projects with Practice Partners

Source: Reports from professorships.

O5 INTERNATIONALIZATION

Internationalization Strategy 2027

The Faculty launched its new Internationalization Strategy 2027 in 2022. An implementation team chaired by the representative for internationalization Wolfgang Drobetz was set up. The following table reports on the progress on selected strategic goals.

Table 05a: Internationalization Strategy 2027 – Implementation of selected Measures

| Strategic goal | Progress |
|--|---|
| Increase international students in progra | ims |
| M.Sc. Business Administration: English-language track | Teaching staff committed to switch a number of modules to English language; track is ready to start in Winter Semester 2023 |
| Increase exchanges | |
| Revise network of partner schools (quality & quantity) | Several potential partners were identified. |
| Summer School | A draft proposal and funding opportunities were discussed. The School is on track to be launched in 2024. |
| Internationalize faculty and staff | |
| Core faculty, especially research associates | Job openings are required to be published internationally |
| Visiting faculty to also teach | Management board launched fund to finance additional teaching of visiting faculty (€20,000 p. a.) |

O5.1 PROGRAMS AND STUDENTS

Table 05b: International Student Numbers

| | 2019 | 2020 | 2021 | 2022 |
|---|----------------------------------|------|------|------|
| Bachelor (Business Administration) | | | | |
| International students | 115 | 94 | 99 | 95 |
| in % of all students | 11% | 9% | 9% | 9% |
| Bachelor (Industrial Engineering and Ma | nagement) | | | |
| International students | 62 | 63 | 62 | 68 |
| in % of all students | 11% | 11% | 11% | 12% |
| Master (Business Administration) | Master (Business Administration) | | | |
| International students | 97 | 113 | 117 | 158 |
| in % of all students | 14% | 18% | 19% | 29% |
| Master (Industrial Engineering and Mana | igement) | | | |
| International students | 20 | 18 | 24 | 13 |
| in % of all students | 7% | 7% | 9% | 5% |
| Doctoral | | | | |
| International students | 17 | 20 | 21 | 25 |
| in % of all students | 12% | 14% | 16% | 20% |

Source: Official student statistics; reference date December 1st each year; Section 13 Institutional Research Unit.

Table 05c: Percentage of Modules with respective international Content

| | | 2022 |
|--|-------|-------|
| International content in modules | B.Sc. | M.Sc. |
| International content, examples and/or perspectives | 71% | 63% |
| Research on international topics and/or research in English | 39% | 64% |
| Students present on or write about international topics, and/or are examined on them | 32% | 20% |

Source: Analysis, Module Handbooks, 2022.

Exchanges

The School has 125 annual exchange places with 38 partners. Of those,

- five are ranked in the top 100 internationally, and 11 in the top 300 in THE's 2023 subject ranking for "business and economics,"
- two have EQUIS accreditation, three have AACSB accreditation, and seven have both.

Table 05d: Outgoing Student Numbers

| | 2022 |
|---|------|
| Bachelor programs | |
| Business Administration | 17 |
| in % of all students 3 rd year | 9% |
| KPI Intl. Strategy 2027 | 15% |
| Industrial Engineering & Management | 7 |
| in % of all students 3 rd year | 6% |
| Master programs | |
| Business Administration | 51 |
| in % of all students 2 nd year | 26% |
| KPI Intl. Strategy 2027 | 35% |
| Industrial Engineering & Management | 4 |
| in % of all students 2 nd year | 5% |

<u>Source</u>: Faculty International Office (outgoings in Erasmus exchange program and through Faculty partnerships); Universität Hamburg's Dept. for International Affairs (outgoings through University-level exchange programs); Faculty of Business Administration's Academic Office (outgoing freemovers); Official university statistics; according to examination year (Summer Semester and preceding Winter Semester).

<u>Note</u>: For its outgoing KPIs, the School divides the number of outgoings by the number of bachelor students in their third year (semesters 5 and 6) and master students in their second year (semesters 3 and 4). This is because students typically go on an exchange semester in that period. In its Internationalization Strategy 2027, the Faculty has set the following targets: B.Sc. in Business Administration, 15% of students by 2027; M.Sc. in Business Administration, 35% of students by 2027.

<u>Note</u>: Numbers for the degree component program "Teacher Training" are not reported here, as those students go abroad via the Faculty of Education.

Table 05e: Incoming Student Numbers

| | 2022 |
|-------------------------|------|
| Bachelor students | 19 |
| KPI Intl. Strategy 2027 | 40 |
| Master students | 15 |
| KPI Intl. Strategy 2027 | 80 |

<u>Source</u>: Official university statistics; according to examination year (Summer Semester and preceding Winter Semester).

O5.2 RESEARCH



Copyright: International Office/UHH

Table 05e: International visiting Scholars 2022

| Scientist | Period | Origin | Funding |
|-----------------------|-------------------|---|---------------------------------|
| S. Bharill | Sep–Nov 2022 | Georgetown University Washington, USA | |
| M. Çolak | Dec 2021–Dec 2025 | Selçuk University, Turkey | Scholarship |
| A. Cürebal | Dec 2021–Dec 2025 | Kirikkale University, Turkey | Scholarship |
| Dr. A. Drechsler | Dec 2022 | Victoria University of Wellington, New Zealand | |
| C. Gerber | Dec 2022 | Stellenbosch University, South Africa | |
| Dr. J. Lehmann | Sep 2022 | W. P. Carey School of Business Arizona State University, USA | |
| F. Niebles Atencio | Since Oct 2016 | Universidad de la Costa, Columbia | Scholarship |
| Dr. Malek Sarhani | Sep 2019–Feb 2022 | Mohammed V University, Rabat, Morocco | Humboldt Research Fellowship |
| Prof. C. Urquhart | Jun 2022 | Manchester Metropolitan University Business School, England | |
| Jinglin Zhang | Mar 2021–Mar 2022 | DaLian Maritime University, China | |

Source: Reports from professorships.

| Scientist | Date | Destination | Funding |
|--|-------------------|--|---|
| J. Barg | Apr–Jun 2022 | Saïd Business School, University of Oxford, England | Scholarship of the Übersee-Club Hamburg |
| | Aug-Nov 2022 | Copenhagen Business School, Denmark | |
| Dr. P. Cammin | Sep–Dec 2022 | Kyoto University, Japan | University Partnership |
| Dr. N. Chukhrova Dr. A. Johannssen | Feb 2022 | École des Mines de Saint-Étienne, Gardanne, France | |
| Dr. A. Johannssen | Nov–Dec 2022 | Nantes Université, France | |
| Dr. S. Klaaßen | Feb-Aug 2022 | Massachusetts Institute of Technology (MIT), Cambridge, USA | Fulbright scholarship |
| Dr. J. Kück | Apr–Jun 2022 | University of Fribourg, Switzerland | Scholarship of the University of Fribourg |
| Dr. R. Milstein | Nov 2022–Jan 2023 | University of York, USA | Scholarship of the University of York |
| M. Mönkemeyer | Feb–Jun 2022 | University of Cambridge, England | |
| M. Rapior | Sep–Oct 2022 | ESCP Business School Madrid, Spain | Hamburg Global PhD |
| Prof. J. Recker | Oct–Dec 2022 | University of Liechtenstein, Liechtenstein | |
| | Several stays | University of Agder, Norway | |
| | Jun–Sep 2022 | Rotterdam School of Management, the Netherlands | |

Table 05f: Research Stays abroad

Source: Reports of the professorships.

O6 FINANCIAL SITUATION

Revenues

Core Funding: The level of core funding *(Grundzuweisung Landesmittel)* is guaranteed from 2021 until 2027 with an annual growth rate of 2%.

Additional Study Places Funding: For 2022, it is comprised of Hochschulpaktmittel (HSP) at €1.5m and the Zukunftsvertrag Studium und Lehre stärken (ZSL) at €0.7m. HSP-funding was for a fixed term and is being phased out. It is being replaced by permanent ZSL funding.

Specific-purposes funding: includes all funding of specific measures. It largely encompasses the University of Excellence funding of two professorships.

Third-party funding: although a large DFG Research Group ended in 2021, the Faculty was able to maintain the level of funding through the acquisition of new projects.

| (All figures in thousands of €) | 2019 | 2020 | 2021 | 2022 |
|------------------------------------|--------|--------|--------|--------|
| Revenues, of which | | | | |
| University funding | 11,729 | 11,656 | 12,990 | 12,887 |
| Core funding | 9,604 | 9,683 | 9,769 | 9,972 |
| Additional study places funding | 1,411 | 1,411 | 2,413 | 2,213 |
| Specific-purposes funding | 715 | 563 | 808 | 703 |
| Third-party funding | 2,485 | 2,529 | 2,279 | 2,289 |
| Governmental funding organizations | 1,824 | 1,618 | 1,603 | 1,541 |
| Companies and other organizations | 660 | 911 | 676 | 748 |
| TOTAL REVENUES | 14,214 | 14,185 | 15,269 | 15,176 |
| Expenses, of which | | | | |
| Staff Costs | 13,441 | 13,935 | 14,489 | 14,074 |
| Academic staff | 11,417 | 11,957 | 12,531 | 12,118 |
| Administrative staff | 2,024 | 1,977 | 1,958 | 1,956 |
| Costs of materials and services | 1,634 | 1,736 | 1,308 | 1,357 |
| Teaching assignments and support | 371 | 465 | 345 | 302 |
| Public relations | 18 | 19 | 5 | 18 |
| Other | 1,245 | 1,252 | 958 | 1,038 |
| TOTAL EXPENSES | 15,075 | 15,671 | 15,797 | 15,431 |
| | -861 | -1,485 | -529 | -255 |
| Annual Result | -001 | 1,705 | 525 | 255 |

Table 06a: Overview of Revenues and Expenses

<u>Source</u>: Annual financial statement (Section 72 Controlling); Third-party funds reports (Section 75 External Funding Management); own calculations.

Expenses

Staff costs: The annual increases in salaries typically exceed the annual 2% increase in the Faculty's budget. This implies funding cuts in real terms. Please note: staff costs include third-party funded staff as well as staff financed out of capital reserves and *Freie Betriebsmittel* of professorships.

Costs of materials and services: Faculty and professorship expenses. *Other* mainly includes electronic media and databases, travel expenses, costs for promoting young researchers, and measures to promote equal opportunities.

Annual Result

The deficit of €255,000 in 2022 is explained by the net consumption of capital reserves and *Freie Betriebsmittel* of professorships to the amount of €162,000 and a Faculty deficit (which is covered by capital reserves of the university) of €93,000.

Table 06b: Breakdown of Staff Expenses by Group

| | 2019 | 2020 | 2021 | 2022 |
|------------------------------------|-------|-------|-------|-------|
| Staff group | - | | - | |
| Academic staff | 83.3% | 83.6% | 84.4% | 84.7% |
| Team assistances of professorships | 6.4% | 6.1% | 6.1% | 5.7% |
| Administration / Academic Office | 10.3% | 10.3% | 9.5% | 9.5% |

Source: KoPers via TM1; Section 72 Controlling.

Note: Including university funding, but excluding third-party funding.

07 EQUAL OPPORTUNITY AND DIVERSITY

07.1 KEY PERFORMANCE INDICATORS

Table 07a: Student Numbers

| | 2019 | 2020 | 2021 | 2022 |
|---|-------------------|---------------|------|------|
| B.Sc. Betriebswirtschaftslehre (Business / | Administration) | | | |
| Female students | 51% | 48% | 47% | 47% |
| B.Sc. Wirtschaftsingenieurwesen (Indust | rial Engineering | and Manageme | ent) | |
| Female students | 23% | 23% | 23% | 23% |
| B.Sc./B.Ed. Lehramt an beruflichen Schulen Wirtschaftswissenschaften (Teacher Training) | | | | |
| Female students | 52% | 55% | 54% | 52% |
| M.Sc. Betriebswirtschaft (Business Admin | nistration) | | | |
| Female students | 53% | 54% | 52% | 53% |
| M.Sc. Wirtschaftsingenieurwesen (Indust | trial Engineering | g and Managem | ent) | |
| Female students | 27% | 27% | 23% | 25% |
| M.Sc./M.Ed. Lehramt an beruflichen Schulen Wirtschaftswissenschaften (Teacher Training) | | | | |
| Female students | 53% | 54% | 60% | 58% |

<u>Quelle</u>: Official student statistics; reference date December 1st each year; including all cohorts; Section 13 Institutional Research Unit.

<u>Note</u>: including students on academic leave.

Table 07b: Graduate Numbers

| | 2019 | 2020 | 2021 | 2022 |
|---|------------------|--------------|------|------|
| B.Sc. Betriebswirtschaftslehre (Business | Administration) | | | |
| Female students | 58% | 51% | 61% | 59% |
| B.Sc. Wirtschaftsingenieurwesen (Indust | rial Engineering | and Manageme | ent) | |
| Female students | 26% | 25% | 22% | 27% |
| M.Sc. Betriebswirtschaft (Business Admin | nistration) | | | |
| Female students | 46% | 55% | 55% | 51% |
| M.Sc. Wirtschaftsingenieurwesen (Industrial Engineering and Management) | | | | |
| Female students | 27% | 25% | 32% | 24% |

<u>Source</u>: Official university statistics; according to examination year (Summer Semester and preceding Winter Semester); Section 13 Institutional Research Unit.

| | 2019 | 2020 | 2021 | 2022 |
|-----------------------------|------|------|------|------|
| Female doctoral researchers | 41% | 40% | 44% | 40% |
| Female doctoral graduates | 47% | 50% | 29% | 71% |

Table 07c: Number of Doctoral Researchers and Graduates

Source: Official university statistics (Amtl. Prüfungsstatistik); according to examination year (Summer Semester and preceeding Winter Semester); Section 13 Institutional Research Unit; StiNE. Note: Including third-party funded staff, scholarship holders and externals.

Table 07d: Staff (persons, not FTE)

| Staff category (reference to HmbHG) | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|
| Professors (incl. junior professors) | 26 | 26 | 26 | 29 |
| Of that female | 27% | 27% | 23% | 31% |
| Lecturers (§ 28 (3) Lehre; Sonstige) | 10 | 10 | 11 | 11 |
| Of that female | 50% | 50% | 55% | 55% |
| Postdocs (§ 28 (2); § 28 (3) Sonstige) | 10 | 12 | 18 | 16 |
| Of that female | 30% | 42% | 33% | 25% |
| Doctoral researchers | 98 | 98 | 83 | 78 |
| Of that female | 44 % | 46 % | 47 % | 43% |

<u>Source</u>: Official university statistics; reference date December 1st each year; each year including all cohorts; Section 13 Institutional Research Unit.

Note: Staff including third-party funded staff; excluding scholarship holders and externals.

07.2 REPORT ON EQUAL OPPORTUNITIES STRATEGY 2023-2027

The Faculty has developed a new <u>Equal Opportunity Strategy 2023–2027</u> with several new measures. The implementation status of the measures will be documented in this annual report in the future.

BWLternzeitmodell

The parental leave program for (post)doctoral researchers (*BWLternzeitmodell*) aims to improve the balance between family life and academic work in the Faculty while ensuring planning security for positions attached to a professorship. If certain criteria are meet, positions for (post)doctoral researchers on parental leave can be filled with new persons in advance. In 2022, two cases were financed.

O8 ETHICS, RESPONSIBILITY, SUSTAINABILITY AND DIGITALIZATION

O8.1 ETHICS, RESPONSIBILITY AND SUSTAINABILITY

The Management Board decided to become a signatory member of "Principles for Responsible Management Education (PRME)" from 2023. Membership in this United Nations-supported initiative requires a biannual report to account for responsibility in management education.

Table 08a: Research Articles related to ERS (peer-reviewed)

| | 2019 | 2020 | 2021 | 2022 |
|----------------------------------|------|------|------|------|
| Research articles related to ERS | 22 | 29 | 40 | 48 |
| in % of all research articles | 35% | 31% | 34% | 40% |

Source: RIS (UHH Research Information System).

Table 08a: Percentage of Modules with respective ERS Content

| | | 2022 |
|--|-------|-------|
| ERS content in modules | B.Sc. | M.Sc. |
| ERS content, examples, and/or perspectives | 70% | 38% |
| Course and/or reading materials on ERS topics | 30% | 27% |
| Ethics in research/good scientific practice | 49% | 39% |
| ERS case studies | 20% | 30% |
| ERS in practice | 33% | 32% |

Source: Analysis, Module Handbooks, 2022.

08.2 DIGITALIZATION

The Management Board appointed Prof. Jan Recker as the Faculty's representative for digitalization in 2022. The representative Prof. Recker works closely with the CDO of the University. He advises the Management Board and represents the Faculty in University committees.

Digitalization of Processes

To highlight an important digitalization project implemented by the Academic Office: Since March 2022, academic reviewers have been able to submit first and second reviews for bachelor's and master's theses directly via SharePoint. This eliminates the need to send reviews, and simplifies and speeds up the process. In addition, reviewers directly indicate which language the thesis is in, whether it is based on literature or empirical research, and whether it relates to one or more of the following – "Ethics, Responsibility and Sustainability," "Practice," "Internationalization," or "Digitalization."

Programs and Students

Table 08b: Percentage of Modules with respective digital Content

| Digital content and methods in | | 2022 |
|--|-------|-------|
| modules | B.Sc. | M.Sc. |
| Digitalization is an important topic in the module | 34% | 29% |
| Digitalization: Content, examples and/or perspectives | 69% | 61% |
| Course and/or reading materials on digitalization | 49% | 46% |
| Data analysis and/or mining | 36% | 33% |
| Digital transformation (impact, process) | 41% | 37% |
| Empirical digital data | 40% | 39% |
| Ethics and data | 41% | 23% |
| Guest lectures on digitalization | 34% | 38% |
| Machine learning, artificial intelligence | 25% | 29% |
| Practical or practice-like applications | 63% | 39% |
| Programming | 23% | 18% |

Source: Analysis of Module Handbooks, 2022.

ANNEX

SELECTED PUBLICATIONS

FT-50 Ranking

Bockelmann, T., & Recker, J. (2022). How One Company Used Data to Create Sustainable Take-out Food Packaging. *Harvard Business Review*, *100*(November). <u>https://hbr.org/2022/11/how-one-company-used-data-to-create-sustainable-fast-food-packaging?ab=hero-subleft-3</u>.

Chalmers, D., Fisch, C., Matthews, R., Quinn, W., & Recker, J. (2022). Beyond the bubble: will NFTs and digital proof of ownership empower creative industry entrepreneurs? *Journal of Business Venturing Insights*, 17, [e00309]. https://doi.org/10.1016/j.jbvi.2022.e00309

Lehmann, J., Recker, J., Yoo, Y., & Rosenkranz, C. (2022). Designing Digital Market Offerings: How Digital Ventures Navigate the Tension Between Generative Digital Technology and the Current Environment. *MIS Quarterly*, *46*(3), 1453-1482. <u>https://doi.org/10.25300/MISQ/2022/16026</u>

Pentland, B. T., Yoo, Y., Recker, J., & Kim, I. (2022). From Lock-in to Transformation: A Path-Centric Theory of Emerging Technology and Organizing. *Organization Science*, *33*(1), 194-211. https://doi.org/10.1287/orsc.2021.1543

Schamp, C., Heitmann, M., Bijmolt, T. H. A., & Katzenstein, R. F. (2022). The Effectiveness of Cause-Related Marketing: A Meta-Analysis on Consumer Responses. *Journal of Marketing Research*. Designing Digital Market Offerings: How Digital Ventures Navigate the Tension Between Generative Digital Technology and the Current Environment https://doi.org/10.1177/00222437221109782

Jourqual-3 Ranking: A

Bäuml, M., Dette, T., & Pollmann, M. (2022). Price and income effects of hospital reimbursements. *Journal of Health Economics*, *81*, 102576. https://doi.org/10.1016/j.jhealeco.2021.102576

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Gómez Sánchez, M., Lalla-Ruiz, E. A., Gil, A. F., Castro, C., & Voß, S. (2022). Resource-constrained multi-project scheduling problem: A survey. *European Journal of Operational Research*. https://doi.org/10.1016/j.ejor.2022.09.033

Grisold, T., Kremser, W., Mendling, J., Recker, J., vom Brocke, J., & Wurm, B. (2022). Keeping pace with the digital age: Envisioning information systems research as a platform. *Journal of Information Technology*. <u>https://doi.org/10.1177/0268396222113042</u>

Hartmann, J., Heitmann, M., Siebert, C., & Schamp, C. (2022). More Than a Feeling: Accuracy and Application of Sentiment Analysis. *International Journal of Research in Marketing*. <u>http://10.1016/j.ijresmar.2022.05.005</u>

Jabbari, M., Recker, J., Green, P. F., & Werder, K. (2022). How do individuals understand multiple conceptual modeling scripts? *Journal of the Association for Information Systems*, *23*(4), 1037-1070. <u>https://doi.org/10.17705/1jais.00750</u>

Johannssen, A., Chukhrova, N., & Castagliola, P. (2022). The performance of the hypergeometric np chart with estimated parameter. *European Journal of Operational Research*, *296*(3), 873-899. https://doi.org/10.1016/j.ejor.2021.06.056

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Möllenkamp, M. K., Pongiglione, B., Rabbe, S., Torbica, A., & Schreyögg, J. (2022). Spillover effects and other determinants of medical device uptake in the presence of a medical guideline: An analysis of drug-eluting stents in Germany and Italy. *Health Economics*, *31*(S1), 157-178. <u>https://doi.org/10.1002/hec.4587</u>

Pfeiffer, C., & Schulz, A. (2022). An ALNS algorithm for the static dial-a-ride problem with ride and waiting time minimization. *OR Spectrum*, 44, 87-119. <u>https://doi.org/10.1007/s00291-021-00656-7</u>

Rabbe, S., Möllenkamp, M., Pongiglione, B., Blommestein, H., Wetzelaer, P., Heine, R., & Schreyögg, J. (2022). Variation in the utilization of medical devices across Germany, Italy, and the Netherlands: A multilevel approach. *Health Economics*, *31*(S1), 135-156. https://doi.org/10.1002/hec.4492

Roemer, N. D., Müller, S., & Voigt, G. (2023). A choice-based optimization approach for contracting in supply chains. *European Journal of Operational Research*, 305(1), 271-286. <u>https://doi.org/10.1016/j.ejor.2022.05.052</u>

Schulz, A., & Fliedner, M. (2022). Minimizing the expected waiting time of emergency jobs. *Journal of Scheduling*. https://doi.org/10.1007/s10951-022-00767-1

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Tanaka, S., & Voß, S. (2022). An exact approach to the restricted block relocation problem based on a new integer programming formulation. *European Journal of Operational Research*, *296*(2), 485-503. <u>https://doi.org/10.1016/j.ejor.2021.03.062</u>

Torbica, A., Tarricone, R., Schreyögg, J., & Drummond, M. (2022). Pushing the boundaries of evaluation, diffusion, and use of medical devices in Europe: Insights from the COMED project. *Health Economics*, *31*(S1), 1-9. <u>https://doi.org/10.1002/hec.4600</u>

Watson, R. T., Ketter, W., Recker, J., & Seidel, S. (2022). Sustainable energy transition: intermittency policy based on digital mirror actions. *Journal of the Association for Information Systems*, *23*(3), 631-638. [7]. <u>https://doi.org/10.17705/1jais.00752</u>

Widdecke, K. A., Keller, W., Gedenk, K., & Deleersnyder, B. (2022). Drivers of the synergy between price cuts and store flyer advertising at supermarkets and discounters. *International Journal of Research in Marketing*. <u>https://doi.org/10.1016/j.ijresmar.2022.10.001</u> FACULTY OF BUSINESS ADMINISTRATION

Universität Hamburg

Faculty of Business Administration

Moorweidenstraße 18 20148 Hamburg Germany

E-mail: bwl@uni-hamburg.de Fon: +49 (0) 40 42 83 8 - 40 94

WWW.BWL.UNI-HAMBURG.DE/EN