



# CASES OF INNOVATION AT CBS

**C**BS focuses on creating value for society. Our core services are research and education for a constantly changing world. Innovation has always been and will always be a part of CBS' DNA. We are internationally recognized for our innovative approach and lead the field with an interdisciplinary perspective on both research and education.

On the following pages, we offer an insight into our perspectives on innovation in the research and education area. We have selected eight examples of initiatives that illustrate how CBS is currently working with innovation. The examples cover a wide range, but they all represent new methods and approaches with the aim of creating value in the form of knowledge - for inspiration, for change and for society.

Enjoy your reading!

## 1 PROBLEM SOLVING ACROSS ACADEMIC DISCIPLINES

CBS focuses on breaking academic boundaries to facilitate innovation across disciplines. We have established interdisciplinary platforms to enhance the collaboration between research and teaching across the organization in order to find solutions for complex challenges faced by society and the business community.

## 2 INTERDISCIPLINARY GRADUATES ENSURE INNOVATION IN COMPLEX SECTORS

CBS' interdisciplinary graduate programs within the bio-industry and health care sector combine industry-specific, scientific ideas with commercial success and digital business development. The result is pioneer graduates who have the potential to innovate and ensure continued development in complex sectors.

## 3 FLEXIBLE PATHS TO FURTHER EDUCATION

Lifelong learning is vital for growth in Denmark. The keywords describing CBS' strategy for continuing education are flexibility and availability. Our programs must fit the needs of society and the individual.

## 4 THE CORPORATE SECTOR WANTS GLOBETROTTERS

Denmark's economy highly depends on the interplay with the world around us. The talent and exchange program GLOBE at CBS supplies the largest companies with a very special kind of graduates. They are taught at the highest level across three countries and obtain an international network which only few people can achieve.

## 5 BETTER CORPORATE DATA

CBS is in charge of a new data warehouse which will give Danish social science the opportunity to conduct special research and to acquire unique knowledge about interrelationships in Denmark. The quality of these socio-economic studies will give a much better foundation for political decisions on Denmark's growth and welfare.

## 6 DIGITAL TECHNOLOGIES FACILITATE NEW LEARNING OPPORTUNITIES

We believe that learning must be placed in a context of current opportunities and visions for the future. Future education at CBS will take place in a dynamic interplay between traditional and online teaching activities, which invites completely new learning opportunities.

## 7 PERCENT BRIDGES THE GAP BETWEEN ACADEMIA AND THE DANISH PENSION SECTOR

CBS' research centre PeRCent is a result of the collaboration with the Danish pension sector which is established to ensure that the Danish pension system remains the world's best. Solid research enables us to address challenges, and the partnership with the sector ensures transformation of knowledge into concrete application.

## 8 START-UPS AND STUDIES

Realizing ideas and creating value for society are key priorities which, over time, have placed CBS next to the leading institutions of education in entrepreneurship. With the CBS initiative Copenhagen School of Entrepreneurship (CSE), education in entrepreneurship has found a quite new and practical-oriented form, as the students establish start-ups as a part of their studies.

CBS researchers explore academic junctions in the pursuit of solutions to the most complex challenges faced by society and the business community. The programs are upgraded concurrently with advancements in research.

# PROBLEM SOLVING ACROSS ACADEMIC DISCIPLINES

Complex challenges related to socio- and business economics must often be understood and solved by breaking boundaries; boundaries between disciplines, departments, universities and the external environment. Several scientific approaches are crucial to solve the most complex problems. CBS has thus strengthened interdisciplinary cooperation through the establishment of the so-called Business in Society platforms where CBS researchers across departments, centres and sectors work closely together on common research fields. The result is a much broader perspective on some of the biggest challenges in Denmark.

### MARITIME CREDITS

Within the platforms, research teams at CBS have worked together on competitiveness, entrepreneurship, maritime Danish challenges, etc. These partnerships have resulted in the establishment of a new bachelor program, International Shipping and Trade, which is organized in close collaboration with the maritime sector. The program differs from CBS' other programs with its clear focus on just one industry. Besides the general understanding of business economics, the students develop a deep understanding of how shipping companies operate and develop strategies and business networks in an industry that works in a global context. In 2017, fathom news, a big international shipping medium, named CBS one of the best universities globally to conduct research and pro-

vide education within innovation in the maritime field. These results would not have been possible without the platform collaboration.

### ENHANCED PROGRAMS

In addition to providing solutions to complex societal problems, CBS' DNA prescribes that all research must benefit the individual programs. Thus, we make a great effort to integrate research conducted within the platforms into teaching activities. This way, the platform collaboration guarantees that students have access to the latest research-based knowledge about areas of great regional and global importance. An element contributing to the establishment of CBS as a key institution within Danish as well as international business economics. Consequently, the interplay between research and education is just as important for the formation of a platform collaboration.

### NEW PLATFORMS ARE LAUNCHED

In 2017, CBS initiated the set-up of several new platforms. The platforms 'Transformations', 'Inequality' and 'Diversity and Difference' will set the framework for the interdisciplinary cooperation until 2023. The aim of the platforms is to create value for society, the research community and CBS' own students through interdisciplinary relations in the same way as the previous platforms.

### THE BUSINESS IN SOCIETY PLATFORMS (BIS)

The BiS platforms are not permanent structures at CBS but are used as incubators to kick-start initiatives, which the involved departments can continue under their own auspices. Each platform receives financial support from CBS for five years.

### Platforms 2018

- INEQUALITY
- DIVERSITY AND DIFFERENCE
- TRANSFORMATIONS
- MARITIME

CBS does no longer fund the following platform initiatives. They are nevertheless still highly active and valuable for CBS and are instead supported by the participating centres and departments.

- SUSTAINABILITY
- COMPETITIVENESS
- PUBLIC – PRIVATE
- ENTREPRENEURSHIP





# INTERDISCIPLINARY GRADUATES ENSURE INNOVATION IN COMPLEX SECTORS

CBS' two interdisciplinary graduate programs within the bio-industry and health care sector combine industry-specific, academic ideas with commercial success and digital business development. The result is pioneer graduates with innovation skills who can ensure continuous development in the sectors.

In 2013, the first CBS interdisciplinary graduates from the Bio-Business and Innovation graduate program entered the job market in the Life-Science industry. With a combination of in-depth industry expertise and an understanding of business economics and competences in practical entrepreneurship, they were highly attractive and quickly recruited by Danish bio-tech companies. In 2016, a new, similar program emerged. The program Innovation in Health Care focuses on the healthcare system but is also based on an interdisciplinary approach. Common to both programs is that the students combine their bio- or health-scientific bachelor degrees with a

business perspective. They acquire the tools for commercialization and implementation of new technologies in each field, and they learn to search for innovative solutions to problems encountered by the specific sectors.

## BIG CHALLENGES AWAIT

Bio-pharma and the healthcare sector are areas of considerable importance for Danish economy, and both sectors are up against a number of difficult challenges. Bio-pharma is going through a transition to completely new business models and competes on increasingly pressured market conditions. Thus, Danish companies need innovative solutions to maintain their market position. Within the healthcare sector, large generations of elderly are in sight, the pathological picture is getting increasingly complex, and there is a profound need for effective preventive measures. These challenges call for innovative solutions. The graduates of the Innovation in Health Care and Bio-Business and Innovation programs are trained in producing, commercializing and implementing such solutions. Both programs are developed on the basis of great societal challenges. They are organized on the basis of in-depth dialogue with companies and the individual sector about their needs for future competences.

## FROM SCIENCE TO BUSINESS

The interdisciplinary programs are not necessarily a solution fitting all professional fields. They make most sense in cases of complex contact points between a deep contextual understanding and advanced skills. These contact points characterize both the Life Sciences industry and the healthcare sector. For example, the rather long time perspective imposes quite specific requirements on the commercial part of a pharmaceutical company. It can easily take up to 25 years from the first university-related research discovery of a medicament until a concrete product is manufactured. The same complexity is found in the healthcare sector where both financial structure, working procedures and clinical conditions matter when you develop or sell new solutions to for instance hospitals. A great need for interdisciplinary competences is therefore evident in exactly these two areas. The business community has already given the graduates a warm welcome and spotted their unique qualities: to actively bridge the gap between the research community and the commercial part of the company and help boosting key markets of the Danish economy.



## ABOUT INNOVATION IN HEALTH CARE

Innovation in Health Care is a collaboration between the University of Copenhagen and CBS and is a two-year (120 ECTS) graduate program with an annual intake of 50 students. The program is the first graduate program in the world concentrating on health innovation. It enrolls students with different healthcare-related undergraduate degrees (from e.g. public health science, medicine or life sciences) or with an undergraduate degree in business economics.

[www.cbs.dk/IHC](http://www.cbs.dk/IHC)



## ABOUT BIO-BUSINESS AND INNOVATION

Bio-Business and Innovation is the result of an interdisciplinary collaboration between CBS, the University of Copenhagen and the Technical University of Denmark. The first year of the two-year graduate program corresponds to the first year of the graduate program in biology/biotechnology offered by the University of Copenhagen, the Technical University of Denmark or international universities. The second year is taken at CBS and encompasses a range of innovative courses which are relevant for bio-tech companies in connection with finance, market access, contractual and regulatory conditions, etc. A prerequisite for enrollment in the graduate program is an undergraduate degree in life sciences; but CBS students can take parts of the program through electives.

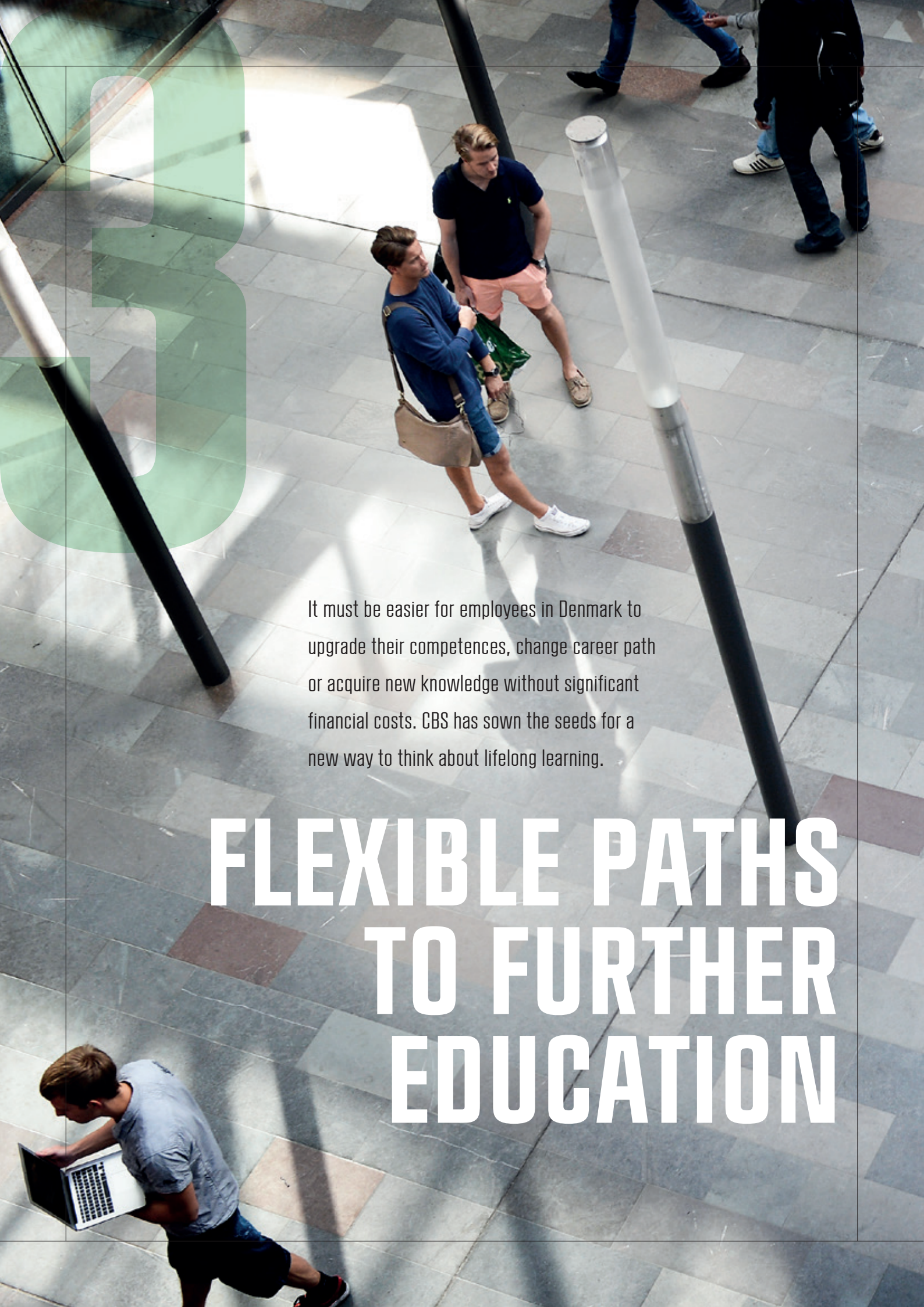
[www.cbs.dk/bbip](http://www.cbs.dk/bbip)



## INTERNATIONAL VISION

Even though the teaching activities take place in Denmark, half of the students in both programs are actually international. The opportunity to be taught by experts from both the industry and the sector and work closely with the Danish system by solving concrete challenges attracts international students and gives them a new perspective on innovation. After completing their program, many accept positions in Danish companies either at the headquarters in Denmark or subsidiaries around the world.





It must be easier for employees in Denmark to upgrade their competences, change career path or acquire new knowledge without significant financial costs. CBS has sown the seeds for a new way to think about lifelong learning.

# FLEXIBLE PATHS TO FURTHER EDUCATION

**A** complete MBA or other executive degrees are an investment in an employee that many companies still want to make. Fortunately, it is also an investment in time that the individual employer still wishes to prioritize. However, in the future, we will need even more Danish employees to acquire new competences. Digitalization and automation will replace many of the jobs we know today. With the prospect of far more fixed-term project positions, freelancers and day laborers on the Danish job market, we cannot take for granted that companies will continue funding cost-intensive further education to their employees.

So, as a university, we must continuously develop the competences of employees. Especially when we wish to maintain our position as one of the world's leading business schools. This entails responsibility. For a while now, we have worked on adjusting our offers within further education, as lifelong learning is vital for growth in Denmark. As a university, it is one of our most important contributions to society that Danish employees have a strong position also in the future and are prepared for a job market under significant change.

## PROFESSIONALISM AS A FOUNDATION

Flexibility and accessibility are keywords in CBS' continuing education strategy. Because with a busy work life, family and hobbies, it can be difficult to dedicate a large part of your spare time for long-term, further education. However, with small amounts of research-based knowledge at the right time and place, we ensure easier acquisition of new knowledge of the highest academic level in the future. This is the basis of the programs and CBS' strongest trade mark. And it should stay this way. But the structure of the programs must match the modern life. CBS' latest executive degree, the Master of Business Development, is therefore organized according to a significantly different structure. A structure which is also implemented in two of CBS' other executive degrees, the Master of Public Governance and the Master of Tax.

## FLEXIBILITY AS A HIGH PRIORITY

The teaching activities in the new executive degree program are what we describe as flexibly organized. This means that students can choose freely between courses at their own pace. If you need specific knowledge and new perspectives here and

**CBS provides the academic framework and building blocks while the students are free to create their own path.**

now, you may only need to take one course. However, for every passed course, the student gets closer to completing an executive degree. Thus, further education of the future does not come in 'package solutions' identical for all. It should instead be understood as a wide range of single courses giving the students the opportunity to design their own unique profile according to wishes and needs. In contrast to traditional MBA programs, the final project does not have to be completed after two years of studies. With the new structure, you have six years to complete the program, which equals 60 ECTS in total. In this way, CBS provides the academic framework and building blocks while the students are free to create their independent profile.

## EDUCATION FOR MORE PEOPLE

With the new structure, we make it possible for more people to change profile. Not everybody needs to study for two years to build their career but can make do with one, two or three courses. This makes the costs associated with competence upgrading far more manageable. It also makes it possible for private persons to finance a career change themselves. In future, continuing education is not for the few but for the many.

## SUCCESS FROM THE BEGINNING

The Master of Business Development focuses on business development within companies and organizations and is consequently a special offer intended for the corporate sector and the challenges they have to overcome. The program enrolled the first class of students in January 2018 and has been a huge success from the beginning. With more than 100 students enrolled in the program, CBS reached its objective for 2018 already before the turn of the year.

## FLEXIBILITY IN MORE PROGRAMS

CBS has chosen to focus even more on further education platforms and with the Master in Business Development, yet another program is organized according to the new structure. Moreover, it is expected that other executive degrees, for instance the graduate diploma programs in business administration, will be reorganized to a more flexible form while simultaneously preserving the core academic disciplines.



# THE CORPORATE SECTOR WANTS GLOBETROTTERS

During the last 12 years, the talent and development program GLOBE at CBS has supplied major companies with a special kind of graduates. Besides receiving education of the highest level across three countries, the students have also established an international network only achievable by few.

Since 2007, CBS has carefully selected 18 students to participate in a talent and development program out of the ordinary. A program involving three continents, teaching activities of international excellence during three semesters and a unique sense of community with the students from the partner universities in USA and Hong Kong.

The Danish talents, who all come from the undergraduate program BSc in International Business, belong to the absolute elite. Together with 18 students from Kenan-Flagler Business School at University of North Carolina and 18 from Chinese University of Hong Kong, they constitute one class during the eighteen months where they study one semester at each of the involved universities and receive extraordinary teaching by some of the world's leading researchers and CEO's in the corporate sector. They get an in-depth understanding of the world's three biggest economies i.e. USA, China and Europe. And they become part of a community which is far more interlocked than what regular exchange usually results in.

## ON THE MAERSK RECRUITMENT LIST

With more than 70 applicants for only 18 spots, the 13th GLOBE program was once again extremely popular by CBS students and for good reasons. Many of the participants who complete the program will already after finishing their undergraduate studies be employed in prominent Danish and global companies and will assume top positions down the road. MAERSK, who also hosted a conference in connection with the program's ten-year anniversary, have selected GLOBE as a key program in relation to recruitment. And former GLOBE students make up approximately ten per cent of the employees at the consultancy firm McKinsey & Company in Copenhagen. One part of the explanation for the program's success is the students' encounter with three very different university environments. They get unique cultural insight and academic experience which span right from the communal Danish culture to the more competitive Chinese culture. And by accompanying each other through three semesters, the students develop

a sharp global mindset, learn to manage different cultures and create lifelong friendships across continents.

## GLOBAL COMPETENCES

Each of the three universities offer teaching activities which reflect relevant business-related aspects of the specific continent. At CBS, the focus is on financial institutions and market integration within the EU. In Hong Kong, the students are taught Asian business and finance in addition to marketing in a Chinese context. Last, in North Carolina, they focus on entrepreneurship and dynamic start-up environments. In total, this gives the students global competences at a very high level, which is especially needed in Denmark: Denmark's economy is to a great extent dependent on the interplay with the external environment. Today, the biggest companies generate the main part of their revenue outside country borders. This requires graduates of a special international character, which GLOBE students definitely represent.

## ELITE OFFERS ARE ESSENTIAL TO CBS

*Students with a global view are extremely important for the Danish economy and are very attractive employees, says Martin Jes Iversen, Vice Dean for International Partnerships at CBS.*

*What difference does GLOBE make for the Danish private sector?*

"In Denmark, we make a living of being integrated in the world economy in a totally different way than for example USA, France or Germany. If we do not as an educational institution have offers for elite students, the companies cannot maintain their position. This means that they will start moving jobs out of Denmark or recruit graduates from abroad. In other words, we need to keep up and not least be defining in relation to the internationalization. At the same time, CBS is putting a great effort in embedding the program in the special Danish education and learning culture. We are not headless globals. But the closer you get to other cultures, the more you understand your own".

*How attractive are GLOBE students when they return home?*

"Approximately one third of the GLOBE graduates are employed directly after finishing their undergraduate studies, and employers are standing ready. GLOBE is thereby boosting the undergraduate degree in Denmark. Most of them would probably have found an attractive job anyway but only after having completed their graduate studies. And why must almost all Danish students study for two additional, government-funded years when we can prepare students for full-time employment already at undergraduate level? The most skilled students have the potential. With the GLOBE program, we give them the instrument to unfold these skills".



# CBS LEADS THE WAY FOR BETTER CORPORATE DATA

A new data warehouse managed by CBS is to lift the basis for business research to the same level as personal statistics. Through new and improved data, researchers will be able to conduct far more detailed studies of essential socio-economic problems.

With the coming data warehouse pioneered by CBS, Danish social research will have the opportunity to conduct studies of a quite special character; studies that cannot be done other places in the world and which will ensure that Danish social science will continue to have a leading position. With the development of a register-based database for all Danish companies, the goal is to lift company data to the same level as personal data has been internationally known for in decades. Only a few other places in the world exist where researchers have access to registers at quality levels comparable to those in Denmark, and the new data warehouse ensures that the registration of the corporate sector reaches a similar level. The result is that researchers can obtain unique knowledge of relations in the entire Danish population by correlating health data with for instance data on private or corporate finances in the future. This is unique in an international context and will make socio-economic studies far more valid and detailed in the future. At the same time, it ensures a far better basis for political decision making in support of Denmark's growth and prosperity.

## MICRO-LEVEL INFORMATION

The existing corporate statistics already answer several im-

portant key questions about for example job creation, export developments and financial results. Until now, it has been a challenge that all statistics are isolated. This limits the depth of the research, as it makes it impossible to examine connections and combine information from different registers. Another challenge is that the existing data have not been detailed enough. It has become far more important to get a better understanding of the market functions and conditions, especially in the wake of the financial crisis. Efficient markets are critical for growth, security and wealth, and the new data warehouse is facing a huge task in the establishment and maintenance of a long-term data structure where for example the identification of Danish companies, their ownership, key figures and management are to be maintained over time. In this way, profound financial analyses can be made possible. When the data warehouse is ready, it will be possible to follow all Danish companies over time and across different registers – regardless of the amount of different registration numbers a company has.

## ACCESS TO INTERNATIONAL DATABASES

The data warehouse, which is coordinated by CBS and rooted in Statistics Denmark, is part of the large national project

called Danish Research Data for the Social Sciences. With a budget of more than DKK 80 million (approx. USD 13 million), it is going to give relevant authorities, universities and organizations access to the best data worldwide. In addition to the data warehouse, we also have sufficient funding to open up for a large number of the most important international databases; an initiative that ensures Denmark's competitive position in both research and education on equal terms with the best universities in the world. It is not only Danish researchers who will benefit from the new data warehouse and the access to international registers – students will also have the opportunity to exploit the many data while they are studying. This puts Denmark on a par with leading international universities. Denmark already has some of the world's best databases for scientific use. With the coming data warehouse and access to international databases, the potential use of register data will be far more extensive and detailed than ever before and will ensure the international position of Danish research for the benefit of researchers, students and the political decision-making process.

## ABOUT DANISH RESEARCH DATA FOR THE SOCIAL SCIENCES (DRDS)


DRDS is a collaboration between Copenhagen Business School, Statistics Denmark, University of Copenhagen, Roskilde University, University of Southern Denmark, Aalborg University, Aarhus University, the Danish Center for Social Science Research, Danmarks Nationalbank (Central Bank of Denmark), Danish Economic Councils and the ROCKWOOL Foundation's Research Unit.

The project has a total budget of more than DKK 80 million (approx. USD 13 million) of which the Danish Ministry of Higher Education and Science contributes with DKK 36 million (approx. USD 6 million). Besides the data warehouse coordinated by CBS, the funding also pays for access to international databases with information on companies and markets and a project focused on improving voter data in connection with elections in Denmark.



When the data warehouse is ready, it will be possible to follow all Danish companies over time and across different registers.





Students at CBS must be given the best conditions for a future work life. Thus, in five years, the vast majority of our teaching activities must adhere to the principles of ‘blended learning’. A type of teaching that combines in-class teaching with online, technology-driven learning.

# DIGITAL TECHNOLOGIES FACILITATE NEW LEARNING OPPORTUNITIES

In 2023, CBS students will have a significantly different learning experience than currently. An experience where learning goes far beyond in-class teaching a few times a week. And where a great part of the teaching activities is organized according to the principles of Blended Learning. Blended Learning is not a pedagogical direction. It should rather be viewed as an extension of the current teaching activities where online activities are linked to what takes place in the classrooms. It is not a break with in-class face-to-face teaching, as this type of teaching is still crucial to the students’ academic development with room for discussion, questions, shared reflections and analysis. Neither is it a use of technology for the sake of technology. It is more about utilizing and developing new pedagogical types that combine both worlds, enriching teaching and learning activities and opening up for entirely new possibilities.

## STUDENTS AS ACTIVE CONTRIBUTORS

A fundamental precondition for learning is the relationship between lecturer and student. Students must be motivated to engage in teaching activities in order to be challenged academically. It requires skilled lecturers and an understanding of how you make the best possible use of teaching activities. Today, a significant part of the teaching activities at universities is based on transmission-oriented teaching: A professor who talks, and students who listen. Even though it can be a great experience and a good learning opportunity, the students are passive receivers rather than active contributors to the teaching activities. This is not optimal. From research in learning, we know that passive reception is less effective than active engagement. We want to make even more out of the time the students have with the lecturers. By uploading talks before lectures, we enable the students to use their time on campus much more efficiently, for example through discussion, reflection or feedback.

## THE WORLD UP FRONT

Blended Learning also gives us the opportunity to bring the world to CBS – and vice versa. CBS students can meet and cooperate with lecturers as well as students from other universities worldwide through virtual class rooms. They can join each other's projects, present relevant ideas to each other, ask questions and review each other's work. Professionals

across countries can be invited to virtual fora where they can give students feedback without having to leave their workplace. And the students no longer have to travel the world to be taught by highly prominent researchers from some of the world's most recognized universities. Internationalization makes increasing demands on the students' collaborative competences across languages, cultural mindsets and academic roots. By using the unique possibilities of technology, we can prepare our students even better for the work life waiting ahead.

## UNDERSTANDING OUR OWN PRACTICE

*In parallel with the implementation of Blended Learning, a group of CBS researchers examine how the new type of teaching actually impacts the students' learning. Vice Dean Annemette Kjærgaard explains why.*

“In the research project Research in Blended Learning, we try to understand our own practice and its implications for student learning better. Of course, the million-dollar question is which methods and activities within Blended Learning facilitate the best learning environment, and whether we can develop some models that improve student learning in general and can be used other places than CBS. We also look at which competences future lecturers must have to use Blended Learning in their teaching. This makes the research project rather unique because we combine practice and research in the area. It enables us to test new ideas and simultaneously study their value for student learning”.

## BETTER PREPARED

In other words, the future programs at CBS are far more flexible than those of today. The students will be free to organize their own learning experience, and they will be better prepared for the time they spend at CBS. However, Blended Learning is not a revolution in itself. Most of it could be achieved even without the use of technology. But this will require a totally different financial latitude. The universities have experienced a significant increase in the number of students during the last 20-30 years. This is a positive development, as more young people with a university degree generate societal growth. Nevertheless, it has also challenged the system, as students do not have the same access to the lecturers as they had just a few years ago. When more people have to share, there is less for the individual. It has therefore been necessary to find new ways to give the individual the same learning opportunities as before. With Blended Learning, we can achieve what we otherwise would not have been able to – and perhaps a bit more.



# PeRCent BRIDGES THE GAP BETWEEN ACADEMIA AND THE DANISH PENSION SECTOR

International surveys place the Danish pension system in the top year after year. We want this to continue, even though the sector is under an unprecedented pressure. Since 2015, CBS has worked together with the Danish pension sector through the research centre PeRCent to secure the system's position as the world's best.

Even though the Danish pension system has been placed in the top by international surveys year after year, many challenges still lie ahead. Future large generations of elderlies, the transition from a tax-based to a savings-based system, and the historically low interest rate in Denmark are just some of the problems that can cause the system itself to retire. In 2014, the whole industry therefore reached out to CBS with a wish to form a partnership that could shed light on the future of the system. The result was the research centre PeRCent (Pension Research Centre) which opened its doors at the beginning of 2015. Based on funding from the sector and CBS' competences within research and education, the centre has worked on bridging the gap between theory, empirical data and practice. The purpose is to secure the position of the Danish pension system, also in 25 years. It takes commitment to be the best.

## PENSION ECONOMICS AS SPECIALIZATION

Competent employees are essential to the sector's continued development. Especially when the sector grows and needs skilled employees at all levels. In the context of PeRCent, CBS has established a structural framework for educating students at the highest level. The result is several specialized PhD students who can continue the pension research at an international top level. However, CBS' MSc in Economics and Business Administration programs have been boosted with more courses in the area. Today, it is therefore possible to specialize in pension economics at graduate level. In this way, the pension companies can still draw on a relevant and qualified labor force.

## RESEARCH DEVELOPS THE FIELD

High-level research is the core of CBS. This includes PeRCent, which contributes to the high analytical level in pension economy - a precondition for the system's development. We

can only identify the weak spots with solid research. Our partnership with the pension companies ensures transformation of knowledge to application. Where the sector's own analyses are strongly based on Danish society, PeRCent's research is characterized by an international perspective. CBS' researchers publish in some of the most renowned, international journals; thereby connecting the Danish pension system with some of the most eminent researchers in the world. This has turned PeRCent into a Danish competence center of international character in a very short time. It fills a research gap an otherwise ambitious preparedness had yet to fill. And it helps securing the Danish pension system's top position. Today, tomorrow, and in 25 years.

## About PeRCent

The Pension Research Centre is a collaboration between the Department of Economics and the Department of Finance at CBS. A panel of experts consisting of CEOs of pension companies, researchers from other universities and representatives of Danish pension industry associations has been appointed as discussion partners to the day-to-day management. The financing of the centre is based on a co-funding model where CBS adds 25% to the funds provided by the pension sector. PeRCent has a base grant of approximately DKK 10 million (approx. USD 1.6 million) at its disposal for the period 2015-20.

## A FRUITFUL PARTNERSHIP

*The partnership is beneficial for both CBS and the sector. But the principle of arm's length is decisive for how trustworthy the research is according to Svend E. Hougaard Jensen, Professor of Economics and Director of PeRCent together with Jesper Rangvid, Professor of Finance.*

*How do you ensure independent research when you receive financial support from the sector itself?*

"PeRCent does not engage in so-called public-sector consultancy. By not taking on consultancy tasks, we adhere to the principle of arm's length in relation to very specific tasks for the sponsors. The structure of the centre clearly respects the fundamental principles for freedom of research - it is solely up to the individual researcher to choose methodology and publication channel. We are not in anybody's pocket, and all results are strictly guided by research. Should the opposite happen, our trustworthiness will be completely gone. We have an Advisory Board, in which actors from the sector are represented. Their only task is to inspire us".

*What is in it for the sector?*

"The center contributes to the sector through highly skilled graduates as relevant employees for the pension sector. We also hold conferences that are instrumental in creating a fruitful dialogue between practitioners and researchers, and we have a strong voice in the public debate. The sector supports us because they see an advantage in getting access to our research contributions and want to be challenged in how to guarantee the sustainability of the system".



# START-UPS AND STUDIES

Entrepreneurship is not an inherited competence but can be studied on an equal basis with other university courses. Copenhagen School of Entrepreneurship has found a successful way to ensure that the students establish start-up companies as a part of their studies.

**A**n intelligent e-learning platform, legal help to stranded flight passengers, and a non-profit organization matching immigrants and refugees with potential employers. More than 680 start-up companies have emerged from the settings of Copenhagen School of Entrepreneurship (CSE) at CBS since its beginning in 2008. Today, CSE is Northern Europe's biggest growth house for students. A house where young people with visionary ideas start their own companies while benefiting from the solid, research-based knowledge CBS is known for. Entrepreneurship has always been deeply rooted in CBS' DNA. Over time, the key priorities to realize ideas and create value for society have guaranteed CBS a spot among the leading institutions within education in entrepreneurship. With CSE, teaching of entrepreneurship has taken an entirely new and practice-oriented approach where the students' projects and business ideas provide the basis for more or less all teaching activities. It has a positive effect when the students learn to train their innovative mindset. It requires that the students are familiar with the core principles of entrepreneurship - to create a network, seek partnerships and develop a business plan. And this is done best when theory and practice go hand in hand.

#### INTERNSHIP IN OWN COMPANY

In 2016, CBS changed the rules for academic credit transfer. Today, it is possible for people to take an in-

#### DIVERSITY AS A PRIORITY

CSE values diversity. Students from other Danish and international universities are therefore encouraged to apply for a place in the growth house on equal terms with CBS students. The result is a mix of companies ranging from music and design to tech and finance. Being open towards everyone ensures that the students learn to cooperate across disciplines and simultaneously get ideas from and become inspired by people with other competences and professional skills.

ternship in their own company and get ECTS (European Credit Transfer System) credits for it. From 2018, you can also study a part-time graduate program in e-business as an entrepreneur in your own company. This means that the student has 4 years to complete the program instead of 2 years.

Even though you can learn a lot as an intern in a well-established Danish company, the motivation is completely different when the company is your own. The big decisions are made by the students themselves, but help is at hand at CSE where professors, mentors and other entrepreneurial students always are within reach. The students get the opportunity to test their companies in a safe environment, and they can prioritize their studies as well as their company.

#### PREPARED FOR WORK FROM DAY ONE

The main purpose of CSE is to boost student motivation and ability to establish sustainable companies. The students get a solid, academic platform and a special set of competences enabling them to seek innovative solutions in external companies. CSE students know that not everything can be described through models. That the world is different when you have to apply theory in practice. In this way, CSE has managed to bridge gaps between research, education and practical entrepreneurship.



**CSE IN NUMBERS**

since its establishment in 2008

**686**

student-driven start-up companies

**1495+**

created jobs

**DKK 600 million**

in total revenues (approx. USD 94 million)



