

In the Spotlight  
**Guido Imbens**  
a Nobel Prize  
winning alumnus

Meet our Alumnus  
**Léon Vervooren**  
A clear goal beyond  
the pitch

Research  
in a Nutshell  
**Importing waste for  
more sustainable  
heating**

# Back to Bone Magazine

# Preface

Dear reader,

**W**elcome to this edition of Backbone, the corporate magazine of Erasmus School of Economics. Here, we delve into the heart of our academic endeavours and the profound impact we continue to make on society. At Erasmus School of Economics, we have a strong commitment to excellence; we are dedicated to actively shaping a better world through multifaceted contributions in education, cutting-edge research, and direct societal engagement.

At the core of our mission is our belief in the transformative power of education. Through our rigorous academic programmes, we strive to shape the next generation of leaders, equipping them with the knowledge, skills, and ethical foundations needed to navigate the complexities of the modern world. Our commitment to teaching extends beyond the classroom, fostering a community of critical thinkers and problem solvers with the aim to make a positive impact.

Erasmus School of Economics is also renowned for its high-level research that transcends theoretical boundaries and directly addresses real-world challenges. Our faculty members do their research in diverse fields ranging from macro-economics to behavioural economics, unravelling complexities to

pave the way for informed decision-making. This research does not merely exist in the ivory tower of academia but translates into tangible solutions and insights that contribute to the advancement of society.

In addition to teaching and research, we take pride in our role as active contributors to societal development. Through various initiatives and collaborations,

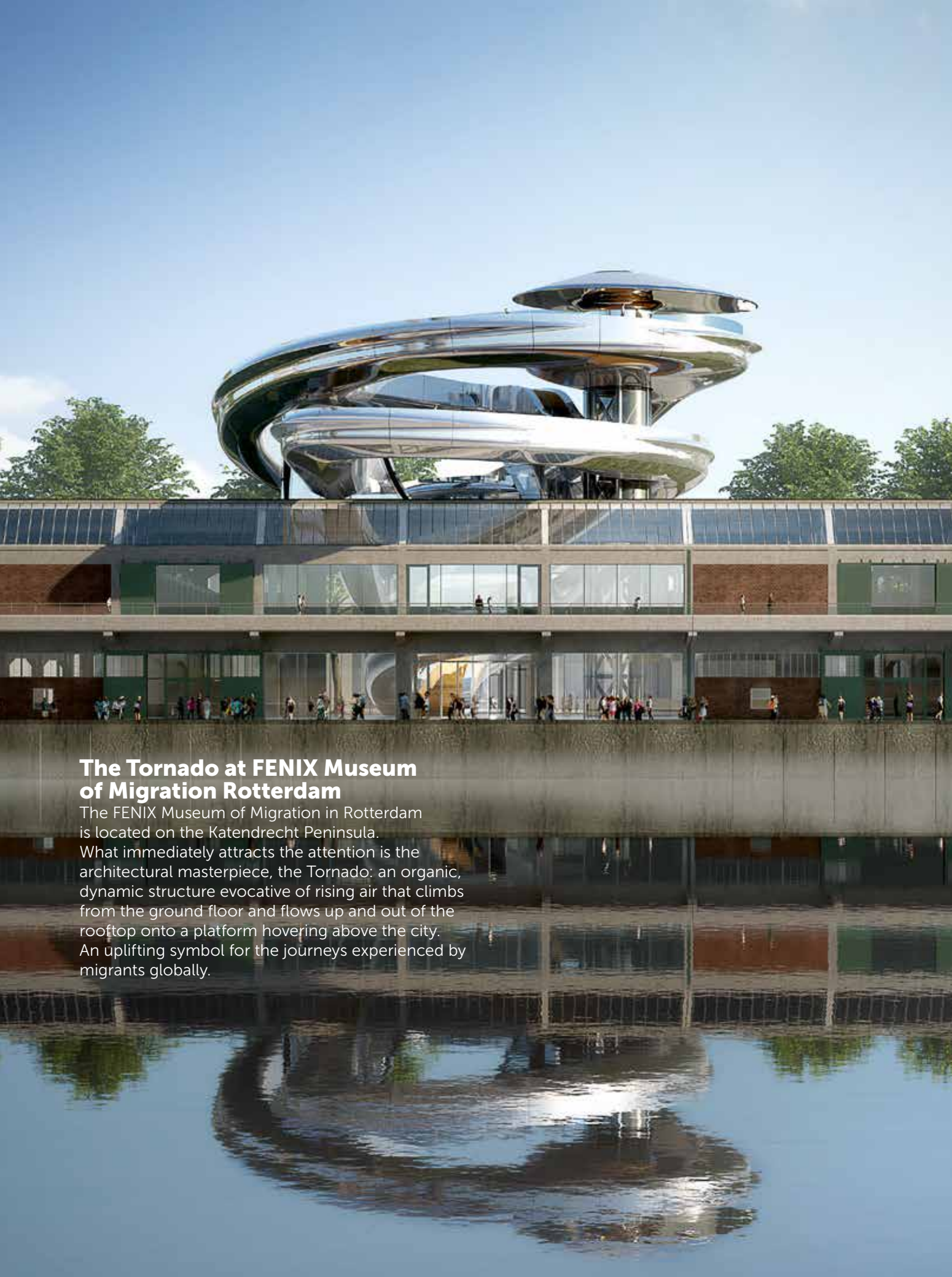
we strive to make a positive difference in the world. Whether it is partnering with communities, advising policy-makers, or engaging with industry stakeholders, we are committed to societal impact in everything we do.



This magazine serves as a testament to our dedication – a platform where you will discover stories of transformative research, inspiring education, and impactful contributions to society. Join us as we delve into the heart of Erasmus School of Economics, where knowledge meets action in shaping a brighter future. This Backbone provides an insight into our School: its students, professors, alumni, activities, research, and education.

Enjoy reading!

**Prof. Patrick Groenen**  
**Dean of Erasmus School of Economics**



## The Tornado at FENIX Museum of Migration Rotterdam

The FENIX Museum of Migration in Rotterdam is located on the Katendrecht Peninsula.

What immediately attracts the attention is the architectural masterpiece, the Tornado: an organic, dynamic structure evocative of rising air that climbs from the ground floor and flows up and out of the rooftop onto a platform hovering above the city. An uplifting symbol for the journeys experienced by migrants globally.

**Meet our Alumni**  
Christina van Spaendonck



**Research in a Nutshell**  
The battle with mental health problems among university students

**Meet your Professor**  
Thomas Peeters



**Meet Rotterdam**  
Rotterdam: the ever-developing city



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# Rotterdam, city of culture

## Theatres in and around Rotterdam

Hey! My name is **Dagmar Verkleij** and I am currently studying two bachelor's simultaneously: Economics and Business Economics, and Fiscale Economie (Economics of Taxation) at Erasmus School of Economics. Next to my studies, my main hobby is practising ballet. During my time in high school at the Royal Conservatoire in The Hague, I practised ballet professionally. When choosing my studies, the city where I would spend the most beautiful years of my life was very important to me. I still remember the first time I visited Campus Woudestein; it felt like home. Apart from the high academic standards here, the city itself has a lot to offer too, especially in terms of culture. Rotterdam has a lot of theatres with daily shows varying from cabaret, musicals, concerts, drama, and dance to opera! I have already visited a few theatres and I am positively surprised by the stage they offer to talented performers. Additionally, most of the theatres offer great student deals! Read on to learn more about theatres in and around Rotterdam.



## Rotterdam Theatre – TR25 Schouwburg

Rotterdam Theatre's location Schouwburg (see the previous page) is considered the cultural heart of Rotterdam. With its many halls, varying in size, the TR25 Schouwburg venue offers a wide range of events such as music, dance, and theatre performances. It is also home to Scapino Ballet Rotterdam, one of the largest dance companies in the Netherlands, with some of the world's best dancers and choreographers. Their productions are made for everyone; even people who have never seen a dance performance in their lives. A visit is not expensive: people under the age of 30 can attend a show for 10 euros.

'Apart from the high academic standards, I chose Rotterdam for its cultural scene'

## Old Luxor Theatre

Having opened in 1917, the Old Luxor Theatre is one of the oldest theatres in Rotterdam. Additionally, it is also one of the few theatres to have survived the war. With a maximum capacity of 900 visitors, the theatre is quite small. However, the old building together with the modernised interior really engenders a beautiful atmosphere. Weekly, the theatre offers shows in all sorts of categories, and offers a 50% discount for students. This really is a place you must visit!

## New Luxor Theatre

When demand for theatre shows rose, it was decided that a more modern, larger theatre was desired. The New Luxor Theatre mainly features a longer series of performances of major productions to create a high-quality programme that moves, inspires, entertains, and motivates. Here, students also enjoy a 50% discount.



## De Doelen

With around 450,000 concert visitors and 600 concerts a year, De Doelen is the second-largest concert hall of the Netherlands. De Doelen has four halls, each with separate entrances and facilities. The Doelen's main tenant is the Rotterdam Philharmonic Orchestra. Appealing for students: De Doelen charges a fee of 10 euros for people aged 30 years or younger.

## Dutch National Opera and Ballet

As I have a penchant for ballet, a theatre close to my heart is the Dutch National Opera and Ballet located in Amsterdam. This theatre is easily reachable by public transport. The stunning building is home to the world-renowned Dutch National Opera and Dutch National Ballet. You can, of course, find age-old classics performed here, but I am particularly enchanted by their unique, progressive productions. If the show is not sold out, students have a standard discount on performances, no matter which seat or row is ordered! From 13:00 on the same day as the show takes place, students can order a ticket for 19 euros.



# Importing waste for more sustainable heating

By: Elbert Dijkgraaf

In many countries, negative associations are often attached to the import of waste. Our research evaluates whether this is the case from an economic point of view, using an estimation of the net social cost of producing district heating in Sweden. The study finds that using imported waste is economically advantageous compared to biofuel, primarily due to lower fuel costs and environmental impacts of greenhouse gas emissions.



## 'Using waste to create energy is often more efficient and cleaner than some traditional fuel sources'



**T**he motivation of our research is to address the growing need for sustainable waste management and energy production solutions. It aims to assess the economic and environmental viability of using imported waste for district heating in Sweden, a practice that could offer a sustainable alternative to traditional fuels and contribute to the circular economy. However, many objections are present in press, public, and political discussions. A scientific analysis of all relevant costs and benefits can help to add facts to these discussions.

### All costs and benefits

The methodology of the article involves a detailed cost-benefit analysis to evaluate the net social cost of using imported waste for district heating in Sweden. This analysis includes private costs, environmental externalities, and fuel transport costs. We compare different scenarios, including various fuel types and sources, to determine the economic and environmental impacts. Consequently, we quantitatively assessed the costs associated with each aspect, such as the cost of acquiring fuel, the environmental cost of emissions, and the cost of transportation. The methodology is comprehensive, incorporating a wide range of factors to provide a holistic view of the cost and benefit implications of using imported waste for energy production.

We utilised a range of data to support the analysis. This includes detailed information on fuel prices, transport costs, and environmental externality costs associated with different fuel types, specifically focusing on imported waste and biofuel. We also incorporate data on greenhouse gas emissions from various stages of the waste management and energy production processes. Moreover, our study draws on existing literature, statistical data, and empirical studies to provide a comprehensive view of the economic and environmental factors involved in using imported waste for district heating in Sweden. This diverse data set allows for a thorough comparison of the net social costs of different energy production methods.

### Is import favourable?

Our main findings are that producing district heating in Sweden using imported waste is economically beneficial compared to using biofuel. The study reveals significant advantages in terms of lower fuel costs and environmental impacts, particularly regarding greenhouse gas emissions. Despite the higher external costs associated with waste incineration, especially from distant sources, the overall societal benefit remains favourable. This highlights the potential of using imported waste as a sustainable and economically viable energy source in a circular economy.



**Elbert Dijkgraaf** is Professor of Empirical Economics of the Public Sector at Erasmus School of Economics. Additionally, he is the coordinator of the Master's programme Economics of Sustainability. His research is mainly organised around sustainable development, environmental policy, and public sector economics.

The reduction of environmental impacts in the context of using imported waste is attributed to several factors. Primarily, this approach diverts waste from landfills, reducing landfill emissions. This is quite important as much waste is still landfilled in the European Union and not all waste is suitable for recycling. Additionally, using waste to create energy is often more efficient and cleaner than some traditional fuel sources, leading to lower overall greenhouse gas emissions. This method effectively utilises waste as a resource, contributing to a circular economy, which is inherently more sustainable. These factors collectively contribute to a net reduction in environmental impacts compared to traditional energy production methods.

### Beneficial for all countries?

Our conclusion, specifically regarding the use of imported waste for district heating in Sweden, may not be universally applicable to other countries. This is because the economic and environmental benefits are highly context-specific, depending on factors like local waste management practices, energy infrastructure, environmental regulations, and the availability and cost of alternative fuels. Each country has unique circumstances that could significantly influence the feasibility and benefits of such a practice. Therefore, while the findings provide valuable insights, they need to be assessed and potentially adapted to suit the specific conditions of other regions or countries. For colder countries, the conclusion could be more relevant due to their higher demand for heating. These countries might benefit more from efficient and sustainable heating solutions like waste-to-energy systems. ◀

**Seema Velan**  
International Bachelor Economics and Business Economics

'Here, you gain the foundation to realise your ambitions'

# Econometrics: an excellent preparation for becoming CEO

By: Madeleine Kemna

**Alumna Christina van Spaendonck** became CEO of VANLIER in 2023 at the age of 26. It was not her intention to take the helm of the 200-year-old premium shoe company, but now that she is in post she enjoys finding solutions to business challenges others were unable to solve. At the same time, she acknowledges that she is still learning. In her view, denying this would rob her of a chance to grow even further.

**C**hristina has always been intrigued by numbers. 'I chose to study econometrics because I figured it was a combination of mathematical puzzling and insights into the way the world is structured with a special focus on companies. I chose Erasmus School of Economics because its international approach appealed to me, as did the multinational character of the city.'

#### Surrounded by math wizards

'At first, I had to get used to the fact that there were so many people who were also good at math. It was very motivating to be among such a talented group, but I really had to up my game. The bachelor programme was a bit more theoretical than I had expected, which I did not always enjoy at the time. However, it provided me with a very solid base and gave me an analytical mindset to approach numbers in a structured way. This made the rest of my studies easier. In hindsight, I must say that the study programme is very well designed, but you do not realise this when you are in the middle of it.'

I really appreciated the active approach toward first-year students. The responsibility for doing the work lay with us of course, but there were regular sessions in small groups with teaching assistants. In addition, there was a mentorship programme that offered support during the first year of living on your own. It also helped me to understand that everyone was in the same boat; we were all used to being 'the one who is good at math' and now facing daunting assignments in a class with very able peers.

Soon our cohort started to bond and we became a group that supported each other and worked together very well.'

#### Extracurricular activities

In her second year, Christina joined Erasmus Social Network, which organises activities for students from all faculties. She also became a student ambassador. 'It was a conscious decision to focus on my studies during the first year. However, econometrics is a field in which soft skills receive less attention, so I was keen to learn to present and explain the educational programme to others. I also worked for a financial start-up called Aulin. My job was to help write programmes to extract news about particular companies from the media. This was a great way of gaining experience in applying the knowledge I acquired in my study.'

I had applied to participate in the exchange programme to go to Japan or Singapore. At the time, I did not realise that your grade point average is very important for the selection process, so I lost out to stiff competition despite the fact that my grades were pretty good. Instead, I went on a trip to Japan with FAECTOR, the econometric study association. It involved a two-month internship in the Netherlands to raise money for the journey. Together with other students, I built a model for T-Mobile and it was great to see that it was able to add value in decision-making on pricing and promotions. During my master's studies, I became a teaching assistant for Master's programme specialisation Data Science & Business Analytics, which was for students without previous econometric experience. It helped me to gain an even deeper understanding of modelling.'

'The fact that I have a bachelor's and a master's degree in econometrics helps me to get in on the conversations'





### Changing plans

Christina combined writing her thesis with an internship at Philips for four days a week. However, the pandemic put a stop to that and she had to change her plans. 'After graduation, I could not work for Philips in Japan as I had planned because foreigners were no longer receiving visas. It looked like I was going to be freewheeling for a while, but I thought it would be good fun to spend some time at my father's company VANLIER. Necessity is the mother of invention, so the fact that all shops had been closed because of COVID actually helped to give a push to increase our online presence and introduce data analysis.'

### An unintentional way of becoming CEO

The previous CEO recognised Christina's ability for analytical thinking and taking people along in the new approach. It had convinced him that it would be a good idea if she were to succeed him a year later when he planned to retire. She thought about it for three days and decided to embrace the chance to learn more about business.

'To build an econometric model, you have to go back to the basics and look at all variables and the effects of various actions. This has given me the ability to understand complex issues and understand the implications of all options. In my experience, the role of CEO is mainly solving problems that have been escalated because others in the company were unable to come to a solution. That is right up my street since I enjoy puzzles. My affinity with numbers also means that I feel comfortable with financial statements and other business data.'

### The role of data at VANLIER

VANLIER is a well-known provider of men's shoes with a proud history dating back to 1815. However, when Christina arrived, she found that this venerable age also showed in things such as ICT, the sales organisation, and the web shop. 'Everything was based on the notion that the brand is the supplier of the wholesale channel, which sells to retailers in the high street. Twice a year a new collection would arrive so it could be presented to the wholesalers and after that, the commercial team would go into quiet mode for five months. In the new approach, you have to supply customers every day and you are much closer to the end-user.'

Data for the sake of data is not interesting. The transition I started, focused on deploying the information we obtained online to service the customer optimally. For this, you need to make sure you have enough stock based on the know-how derived from the behaviour of web visitors. This approach helped us to make an informed selection for the next collection of shoes. It also had a positive impact on logistics. On top of that, our data-driven approach makes us significantly more sustainable. Our waste has fallen to about 5%, meaning we sell about 95% of our stock, while most competitors are left with 30% waste.

The change is going slower than I would have liked. As a student, I was used to acting swiftly based on analysis of the data. I have learned that in a company it is important to take everybody along.

That means implementation of new plans requires time. In our case, we also have to take into account our 200-year legacy. Today's steps must guarantee that we will still be there 200 years from now.'

### Being CEO in your twenties

Christina is conscious of the fact that she is still learning and does not know everything. 'Nobody can expect me to. I definitely have the ambition to acquire all that knowledge and I enjoy gaining new insights in conversations with my colleagues. What I do know is where I can add value now and where this will be the case at a later stage.'

The role of CEO is so broad that I can choose my own approach. I lead in choosing the direction we take. What is really important to me is to show respect toward other professionals who have knowledge that I do not possess yet, but I also expect them to respect me for what I bring to the organisation.'

### Networking

Although it is changing rapidly in many sectors, networking in retail still means encountering mostly grey-haired men. 'The fact that I have a bachelor's and master's degree in econometrics helps me to get in on the conversations. It prevents people from brushing me aside as dumb or too young. Those conversations may not be as deep as they would have with others who have been working in this sector for decades, but there will be an exchange of analyses and ideas. Sometimes, I can make these old hands look from a different perspective. For example, looking at customers' expectations and the retail experience. These things are not reflected in numbers and therefore often overlooked. I also try to get to know more women in business, for example through the Erasmus Trust Fund. This is an initiative here at the university, which connects and supports entrepreneurial women'

### Shares in VANLIER

VANLIER was recently listed on nx'change. 'My father is now 63 and wanted to make the company more accessible. Therefore, he has made available part of his shares and put the money back into a share premium account on our balance sheet. I agree that the listing is a good way to make loyal customers literally feel more invested in VANLIER. There are various perks, depending on how many shares people own, which has proven to be very popular. We do not need the money right now, but it is good to know we have the financial room to execute our growth plans when the time comes.'

### The future

'I have to say that so far it looks like my study has prepared me very well for this role because of the analytical approach I have been taught. There is still a lot I would like to do at VANLIER, and I also intend to continue learning as much as possible. I can see myself going back to programming and number crunching at some point, still solving puzzles but in a different way.' ◀



**In 1815** Govert van Lier started manufacturing shoes in Loon op Zand. Christina's father, Geert van Spaendonck, bought the company in 1991 from the Van Lier brothers. The company is best known for its premium brown leather men's shoes, but nowadays about 40% of revenues come from sneakers. Production of the latter takes place in Portugal, while the leather shoes are made in India since they need many manual operations that require skills that are no longer available in Portugal.



**'If people do not like your questions, you are probably asking the right ones'**

# Meet Thomas Peeters

My name is Thomas Peeters, I am Belgian and working at Erasmus School of Economics. Here, I am an associate professor in Applied Industrial Organisation.

As a child, I always wanted to become a politician. My biggest dream was to be the Prime Minister of Belgium. When I was a student, I was a member of a student fraternity at some point. Also, I did a lot of voluntary work and even organised some concerts.

**M**y path to becoming a researcher was a coincidental choice for me at some point. But once I had reached that point, I really wanted to excel in it as well; and that could only be done by working hard. If you want to become a researcher you have to be determined, especially in the first few years. At first, I thought some things would be too difficult for me, but I actually managed to study it.

The main topics of my research are the economics of professional sports and the economics of how people matter to organisations. My paper about tourism and the 2010 World Cup was primarily motivated by a moral feeling about how the football governing body FIFA dealt with developing countries. We therefore felt that we needed to tell this story scientifically. Namely, that FIFA does not invest what it should in the development of the countries where its tournaments are held. The reason that these developing countries start to host more and more of these events is twofold, I believe. First, developing means that many sectors in a country will continue to develop as well, so they are not as poor as they used to be. Second, in many of these countries, the government has a bit of a bad reputation and feels that these tournaments can help polish the reputation of the country or at least of the regime. This is a motivation that is absent in many of the developed countries or western democracies.

#### **Economic benefits**

From an economic perspective, I do not think that organising major tournaments in developing countries is a smart idea since most of these countries will actually lose money by organising an event. If you talk about economic benefit, it is probably negative. The organisation of these tournaments diverts money away from

the needs, like education and healthcare of ordinary people, and directs it towards, in my opinion, wasteful investments in stadiums that nobody needs.

If you think about the benefits, people always cite two main benefits. The first one is increased spending on tourism. The second one is the idea that you are more open to trade and that you will therefore attract more investments and so on. There is indeed some evidence that there are very modest gains to be made from these tournaments. The problem is that there is one big cost factor, which is the building of ten stadiums of 40.000 plus seats. Often, nobody needs them in these countries.

#### **A permanent Olympic village**

To make an event successful in terms of tourism for a developing country, you need a couple of things. First, you need a country that has room for tourism, so where it is a viable industry in the long run. You also need a country where tourism is still under development, so where it can still grow. Moreover, a country needs to be at least somewhat developed enough in terms of law, safety, and economic terms, so that tourism is in the end able to sustain even after the event is gone. With this in mind, it might be better to organise the Olympics in a permanent Olympic village. This would be built somewhere and everyone would contribute, which sounds great and in economic terms is probably an efficient solution. But, as with many things, efficiency is not the primary goal of policymakers. In this case, with everybody involved: the regimes that do organise these events, the people that give away the rights to organise these events, and to some extent, the building lobby and everybody who is behind this kind of industry, they all have incentives to not want this thing to happen. ◀

# When passion meets ambition

By: Apollonia Duijster

Babette de Leede has recently started as a professional cricketer for Western Province, Cape Town, South Africa, and finished the Master's programme specialisation Quantitative Marketing and Business Analytics. She grew up playing cricket and made her debut in the Dutch women's team when she was 14. What is it like to combine top-level sports with studying at Erasmus School of Economics?

## Deciding to do both

When I was 18, I got to play against some professional teams in England. That experience made me realise that the difference in skill level between me and the world-class players was not that big at all. I always really enjoyed playing cricket, but at that moment, I thought: 'Okay, maybe I can get far with this.' There were still many things I had to work hard to improve, but I did have the realisation for the first time that maybe I could do more with it than I ever imagined.

There is no professional cricket in the Netherlands, and I am currently the second Dutch woman ever to become a professional cricketer. Because of that, when I was younger, I did know that I needed to have a very good safety net. So, I decided to do econometrics, which I enjoyed right from the start. It was not about learning things by heart but learning to apply what you have learned. I was allowed to use logical thinking and solve puzzles. Besides Erasmus School of Economics' reputation, Rotterdam was a logical choice. Studying there allowed me to stay in the Ring City, the only area in the Netherlands where cricket is played.

## Burnout

Combining cricket with econometrics was very tough. My first-ever grade was a zero, I only had my name and student number right. It all quickly became way too much. Besides studying, I also wanted to discover student life. So, on a day I first had training from 10 to 12, then lecture from one

to five, then training again and, in the evening, I would go back to Rotterdam to do something with friends. Moreover, the school board made no exceptions for me, despite my top-class athlete status. During the last exam week, I was not there because of cricket with the Dutch team, but I only had three resits. All of this resulted in me having a burnout during my first year. I could not do anything and was very tired. It was terrible. My student advisors were very helpful, though. They were really on my side and helpful, but they did not always succeed.

Because of the COVID-19 pandemic, everything fell silent, and I could not play cricket for a month. That felt like a tremendously long time because without

and people were more willing to adjust to my schedule. I am glad that COVID gave me the opportunity to attend my lectures and take my exams online. During my master's programme, Erasmus School of Economics helped me a lot. For example, I was occasionally allowed to take an exam online when I was on tour and I was able to follow many lectures from Cape Town.

## What did you learn?

I learned to say no. I always wanted to do everything, participate in all training sessions, and attend all lectures. Listening to your body and saying no every once in a while is very important. That sounds cliché but it is true. And I found it a lot harder than it sounds. Know what you are willing or able to do!

**'Moments where you just read a book or watch a series are invaluable'**

cricket I feel worthless and get terribly bored. However, it did allow me to completely refocus on my studies. I had to, otherwise I would not have made it through my second year.

From then on, I had the advantage that many things were offered online. So, I could continue training and watch lectures around that. Moreover, it gave me the freedom to pause or rewind a lecture if I did not understand something. In my third year, I had more freedom anyway

That is why it works for me to make a schedule for the week: the times when you study, when you exercise, etc. But also deciding when you will do nothing at all because moments where you just read a book or watch a series are invaluable.

For me, studying can be combined very well with top-level sports. It is important that you really like your studies. As I said, I truly enjoyed studying econometrics, and without that, I never would have made it. ◀



# The battle with mental health problems among university students

By: Pilar García-Gómez, Teresa Bago d’Uva, and Vahid Moghani

Globally, half of all individuals will face a mental health issue at some point in their life. These mental health issues contribute to over 4% of the global GDP loss and are the main cause of work disability. They impair human capital development, lead to talent misallocation, and contribute to labour market disadvantages. Yet, most mental health problems go untreated. Mental health disorders primarily start before the age of 24 but young people lack necessary mental health care. Among (Dutch) university students, these problems are prevalent and have increased with the COVID-19 pandemic. In this study, we also show that at Erasmus School of Economics prevalence is higher among disadvantaged groups and that inequalities have widened during the pandemic. Policy action is needed to tackle these problems.

# 'A smoother transition from childhood mental health care to adulthood mental health care services is desirable'

**B**efore the start of the COVID-19 pandemic, around 20% of Dutch young adults had or were at risk of mental health problems. Studies suggest that these numbers have increased with the pandemic, also among university students in the Netherlands. We surveyed first- and second-year students at Erasmus School of Economics in fall 2020, fall 2021, and fall–winter 2022–2023. Of these students, 37% are female or non-binary, 39% are international students, and 14% are Dutch students with an immigrant background.

In 2020, a shocking 26% of the respondents reported that they suffered often, mostly or continuously from sadness, low mood, and depression, and a striking 72% experienced a worsening since the start of COVID-related restrictions. Consistent with existing evidence, we find that mental health problems are more concentrated among international and Dutch students with a migrant background, female and nonbinary students, as well as those with lower socioeconomic status. Additionally, our results suggest that the pandemic has widened these socioeconomic, ethnic, and gender inequalities in mental health. The 2021 survey was conducted during a period of return to campus, before a new lockdown. It shows considerable improvements, namely: 17% of the respondents reported suffering often, mostly or continuously from sadness, low mood, and depression; 55% reported an improvement over the last year; and only 16% reported worsening. We do however not observe a sustained improvement: in fall–winter 2022–2023, the proportion reporting mental health problems was 23%, while 45% reported an improvement and 18% a worsening.

## Policy recommendations

Since mental health problems among university students during this critical period for human capital accumulation have

not improved enough yet, there is scope for cost-effective interventions. These could be either supply-side, for instance from the university, or demand-side policy interventions, such as tackling attitudes towards mental health care and support. On the supply side, it would be desirable to smoothen the transition from childhood mental health care to adulthood mental health care services a bit. The abrupt increase in mental health care costs at age 18 in the Netherlands has troubling implications for the mental health care-seeking behaviour of individuals in this age group. Additionally, supply-side policies should focus on reducing waiting times, which are very long in the Netherlands, and target high-risk groups. Policies facilitating digital care and self-care could partially, to the extent that they suit individual care needs, tackle insufficient supply.

There have been several initiatives at Erasmus University Rotterdam to support students' mental wellbeing— although it should be noted that they are not adequate when mental health problems are severe and not study-related. This includes the work and initiatives of the Erasmus University Rotterdam Student wellbeing team. For example, there are workshops and guidelines for students on mental health and wellbeing, and there is a Student Wellbeing week twice a year. Additionally, students have access to a wide range of online and offline services, including university psychologists— also prevention psychologists who focus on preventative rather than curative care; coaching; helpline; and peer-to-peer support (such as The Living Room). There may be barriers to the effectiveness of some of these policies. Several factors may impact young individuals' decisions regarding seeking mental health care, potentially contributing to a gap between experiencing mental health problems and accessing support services available at the

university. These barriers may include challenges related to public and self-image concerns, as well as a lack of awareness of mental health, and feelings of reduced autonomy. It is also important to make sure that sufficient and clear (while not too overwhelming) information is provided about the available support services. Seeking and using the available care also has time costs that may be, or perceived to be, incompatible with a heavy study load. The ongoing Erasmus School of Economics curriculum revision offers an opportunity to devote attention to this issue.

Erasmus School of Economics and Erasmus University Rotterdam are currently moving towards supporting students in their personal journey at university, changing the focus from study success to student success. Additional expertise and capacity are being created by appointing a new Student Wellbeing officer in each of the Schools. Improving mental well-being and student sense of belonging are crucial goals of this movement. Erasmus School of Economics is currently developing several policies recommended by the Student Journey working group towards these goals.

# 'Improving mental well-being and student sense of belonging are crucial goals of this movement'



**Pilar García-Gómez** is Professor of Applied Economics at Erasmus School of Economics and Research Fellow at Tinbergen Institute and Erasmus Centre for Health Economics Rotterdam.



**Teresa Bago d'Uva** is Associate Professor of Health Economics and Diversity Officer at Erasmus School of Economics, Research Fellow at Tinbergen Institute, and Erasmus Centre for Health Economics Rotterdam.



**Vahid Moghani** is a PhD candidate in the Department of Applied Economics at Erasmus School of Economics, Tinbergen Institute and Erasmus Centre for Health Economics Rotterdam.

# Rotterdam: the ever-developing city

Rotterdam is a constantly evolving city. Each year, many people move to Rotterdam, creating more difficulties in the organising and planning of the city. To also provide for a healthy environment, the city of Rotterdam is tackling all kinds of projects to create a sustainable city. These projects are innovative and future-focused, mainly focussing on more green areas with space for leisure, sports, and cultural events. Those new areas will mostly be built in spaces that were not usable before, like the riverside. Apart from recreational purposes, the goal of these places is for Rotterdam to be able to deal with rainwater more efficiently, to improve urban mobility, and to cool down the city.



## Improving squares

Firstly, various squares will be transformed into more accessible areas with lots of greenery and places to relax. Hofplein, which is now a busy road, will become a more pedestrian-friendly zone. The many car lanes will be transformed into a single lane surrounding the square, which leaves all the places near the fountain open to pedestrians. A water basin will be placed inside the fountain to be able to provide the surrounding trees with water in times of drought. On Schouwburgplein, there will be more space for people to sit and park their bikes. Moreover, there will be more plants to deal with flooding after periods with lots of rainfall. Lastly, Alexanderplein will slowly mature into a more quiet, sustainable, and gratifying square. Surrounding office buildings will be turned into apartments, creating an even more vivid area.

## Changing infrastructure

Taking the desire for more green even further, many roads will also be transformed into parks. The city of Rotterdam has big plans for Westblaak, a now busy road with many cars, pedestrians, and cyclists. The goal is to make this a more accessible, relaxing environment. There will be limited space for cars, making it less attractive to travel to the city centre by car. The exact plans for this project are still unclear, but with the help of residents and entrepreneurs surrounding the street, the city is working towards the most desirable solution. The purpose of this park is to reduce noise and air pollution, as well as to lower the temperatures in the city.

## Green city

Rotterdam offers many opportunities to visit nature, with the Kralingse Plas, Bergse Plassen, and Vroesenpark as the most well-known ones. However, most of those areas are in the northern part of the city. To spread out nature in other parts of the city, they will build new parks in places that do not have much green yet. Most of these will therefore be focused on the south of Rotterdam, where the city is still growing. Eventually, the goal is that every citizen of

Rotterdam will have access to nature within a fifteen-minute walk. An example of such a 'green park' is the Rijnhavenpark, which will partly be floating on water. Walkways and bridges will connect the park to the mainland, and there will be opportunities for water sports. Lastly, the planned

Nelson Mandelapark in Maashaven will have the size of approximately ten football fields, becoming an area with hills, lots of green and awesome views. Because it is located next to the water, it will also be reachable by water taxi. ◀



# Erasmus School of Economics in numbers

Erasmus School of Economics competes with the best universities in the world. To provide our students with the best opportunities we offer our students a variety of study programmes and lectures by top researchers. Here are some of the essential facts and figures about Erasmus School of Economics.

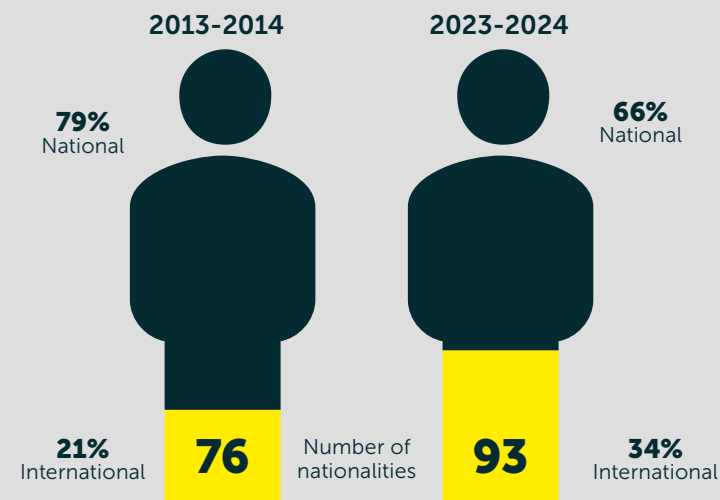
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## Bachelor

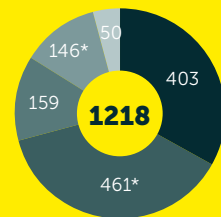
### We offer the following Bachelor's degree programmes

- (International) Bachelor Economics and Business Economics
- (International) Bachelor Econometrics and Operations Research
- Bachelor Fiscale Economie
- Double Bachelor BSc<sup>2</sup> Econometrics and Economics
- Double Bachelor in Economics and Philosophy of Economics
- Double Bachelor in Econometrics and Philosophy of Econometrics
- Dubbelstudie Economie en Recht

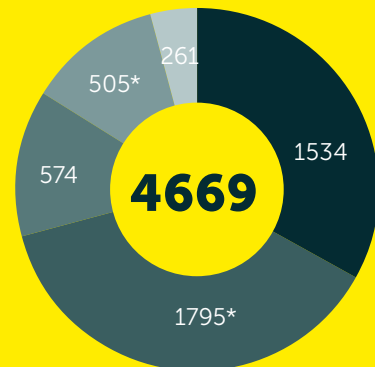
### The international environment of Erasmus School of Economics



### Total number of first year students 2023-2024

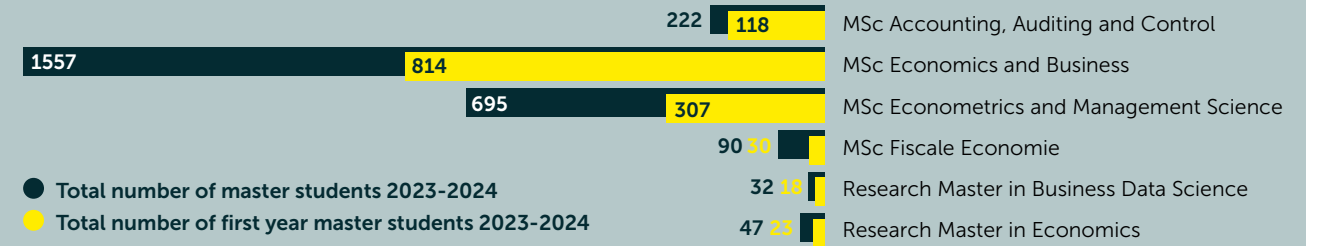


### Total number of Bachelor students 2023-2024



● Economie ● IBEB\* ● Econometrie  
● Econometrics\* ● Fiscale Economie  
\* including BSc<sup>2</sup>

## Master



67%



of the students who obtained their bachelor's degree at Erasmus School of Economics in 2023-2024 have **started the subsequent academic year with a master's programme** at Erasmus School of Economics.



**Econometrics** is listed as **number 3** of university degrees with the best job prospects in the Netherlands.  
Source: UWV

Erasmus School of Economics offers **5 master's degree programmes**, with a variety of specialisations:

### MSc in Economics and Business

- Behavioural Economics
- Data Science and Marketing Analytics
- Economics of Management and Organisation
- Financial Economics
- Health Economics
- Strategy Economics
- International Economics
- Marketing
- Policy Economics
- Urban, Port and Transport Economics
- Economics of Sustainability

### MSc in Econometrics and Management Science

- Business Analytics and Quantitative Marketing
- Econometrics
- Analytics and Operations Research in Logistics
- Quantitative Finance

### MSc in Accounting, Auditing and Control

- Accounting and Auditing
- Accounting and Control
- Accounting and Finance

### Research Master programmes

- Research Master in Economics
- Research Master in Business Data Science
- Research Master in Philosophy and Economics

### MSc Fiscale Economie (in Dutch)

- *Directe Belastingen*
- *Indirecte Belastingen*

For more information about our study programmes please visit: [ese.eur.nl/education](https://ese.eur.nl/education)



'I get so much inspiration from the interaction that I have with my colleagues and students'

# Meet Anne Gielen

My name is Anne Gielen and I am Professor of Labour Economics and Policy at Erasmus School of Economics. When I was younger, I did not know what I wanted to be when I was older, but I did know what I did not want to be: a professor. My dad is a professor, which is why I always figured I wanted to do anything but become an academic. But here I am now, loving every second of it.

**T**he best thing about being a researcher is that I can investigate things that I find interesting. I have a lot of freedom to define my own research agenda, which is great! Another great thing about my job is that I get so much inspiration from the interaction that I have with my colleagues and students. This makes the job worthwhile.

While I was doing my master's thesis, my supervisor encouraged me to do a PhD. Initially, I was hesitant, but while writing my thesis, I learned that I very much enjoyed doing research. On top of that, I realised that I was quite young so I figured that doing a PhD would not do any harm. During the time that I was working on my PhD, I came to the conclusion that I did not want to leave academia and eventually wanted to pursue a career in this world.

#### Research

My research interests lie in the field of labour economics, health economics, and policy-relevant topics like education and social security. Basically, I like topics that affect your daily life and everyone's life around you. One of the things I was researching was the question to what extent welfare dependency transmits from one generation to the next, so from parents to children. I started investigating this because we know that a lot of people are dependent on welfare. Welfare dependency is clearly a problem on its own, but the problem becomes even more concerning if welfare dependency is transmitted to future generations. The main finding from my research is that benefit receipt in one generation indeed has a direct impact on the well-being of the next generation, as measured by their welfare dependency,

educational attainment, and health status. Moreover, these intergenerational links spread to even a third generation of grandchildren. Further investigation of intergenerational mobility and the underlying mechanisms in the coming years is key for the design of future-proof social support schemes.

**'My advice:  
do the things that are  
close to your heart'**

#### Education

My research is also an inspiration in my teaching. I like to show students how issues that appear in the daily news can be studied with core economic theories and concepts. Moreover, I hope to inspire students that they can use the skills we teach them in our economics programmes to address societal challenges and ultimately contribute to better outcomes in society.

#### Advice for students

If I have to think of one special piece of advice to give to students, it would be to do the things that are close to your heart. It is not a problem to work hard in your life; that actually can be a very nice thing to do. However, it is important to remember that working hard is only nice to do when you work on the things that are close to your heart and that you are really interested in. ◀



# We need more research about research

It might seem a surprising topic, but nonetheless essential, according to Stefan Stremersch, holder of the Desiderius Erasmus Distinguished Chair of Economics and the Chair in Marketing at Erasmus School of Economics. In 2002, he published a conceptual article that was recognised as the best paper of the year by the Journal of Marketing and continues to be his most cited publication. It goes to show the importance of outside-the-box thinking. Stremersch continues his work on idea generation and design with his latest publication in the International Journal of Research in Marketing “How can academics generate great research ideas? Inspiration from ideation practice”, which may prove to be another groundbreaking paper.

## You are a staunch proponent of conceptual research, yet many young researchers are hesitant to embark on such projects. What would you say to them?

In 2010 Yadav wrote in the Journal of Marketing how conceptual articles had come to be increasingly rare. Sadly, that is still true. Reluctance by young scholars is caused by several factors: they avoid risk, their skill set becomes increasingly narrow, and many universities are not set up to incentivise such work.

Still, these studies can have immense paybacks to individual careers and research fields. By their very nature, conceptual articles can have a broader scope because unlike empirical papers they are not limited to the possibilities offered by a dataset. They shift minds and are important for theory development because they can take more degrees of freedom in their theoretical elaboration. The paper I published in 2002 with Gerard Tellis on the concept of strategic bundling of products and prices remains my most cited paper to this day. It was voted as that year’s best paper in the Journal of Marketing by its editorial review board. All scholars who researched bundling afterwards see it as a groundbreaking paper. Thus, we need to incentivise people better to write such papers and coach them better while they do so.

More and more, minds (also at Erasmus) are maturing to stop just counting publications or citations — as recommended

in a lead article Nuno Camacho and I wrote for the Journal of Marketing (published in 2021) — as opposed to actually read papers of colleagues that are up for promotion and judge them on their qualitative merits. Why not address the higher risk of such papers? Why not give colleagues credit for rejected papers that we feel got inappropriately rejected for publication? A lot of frame-breaking work is initially rejected. For example, consider how long it took George Akerlof to publish his groundbreaking Lemons paper. And this won him the Nobel Prize in Economics!

## What inspired you to get into the topic of idea generation and design?

My expertise brings me into contact with many sophisticated companies. Over the years I have come to realise that scholars in research institutions can learn a lot from the way companies innovate. Applying those practices to ideation can increase the originality and effectiveness of the way scholars come up with research ideas. We need more research about research.

## What can researchers learn from how companies come up with ideas?

Inspired by practice, I have developed solutions that can be applied in an academic context. I divided the process into three phases: domain exploration, domain immersion, and research project design. For example, companies increase their chances of original ideas by ideating across domains. Involving

people from diverse backgrounds further enhances this. In my experience, many marketing academics are at risk of focusing on areas where they have done work before instead of looking broader and spanning boundaries. I would like to encourage them to do something strange for a change.

Companies have also left behind the isolated “lab” model and increasingly immerse themselves in the customer and stakeholder context in ideation processes, thereby opening up a rich variety of sources for inspiration. In my view, immersion in customer contexts is also pivotal for research success by marketing academics and other scholars. Therefore, I advocate learning from other parties outside the university. As such, obtained ideas can be worked on in isolation with focus and sufficient rigor.

Lastly, companies possess the “skill to kill” their bad research ideas. Traditionally, academics were taught to persist with a research idea. Companies are much bolder in deciding that scarce resources should not be allocated to projects that turn out to be suboptimal. They have developed structured processes for triaging good from bad ideas. For example, they use pitch templates that ensure bad ideas that are pitched well do not push out good ideas that are pitched badly. They also use scoring templates for picking out the best ideas.

## What other advice do you have for researchers to avoid habitual thinking?

They can use dark horsing, a concept derived from horse races. White horses are considered most likely to win, while dark horses often get overlooked as potential race winners. In ideation, we should not limit ourselves to well-known and safe ideas. We know from the literature that more ideas ultimately result in better ideas. But also that sometimes the wildest ideas that at first seemed not feasible later concur with the market. Nobody believed in Lithium batteries for automotive purposes, until Elon Musk (Tesla) showed everyone was wrong. Therefore, companies use dark horsing to give people a license to go out on a limb and generate ideas that seem at first crazy but some of those may land after all.

**‘I would like to encourage researchers to do something strange for a change’**

Additionally, researchers should feel more inclined to share their ideas in early stages of their research process. The academic publication process in marketing is a long one, so scholars fear their ideas may be stolen if they are shared early on. However, seeing or hearing other’s ideas can inspire and help overcome mental barriers. Nowadays there is a range of options that can facilitate sharing in an academic context. In my paper, I outline various ways that not only help to discuss ideas safely but may also force scholars to come up with more of them, rather than just stopping at the fine-tuning of a single one.

## Would you recommend your ideation approach for all scholars regardless of their field or the stage in their career?

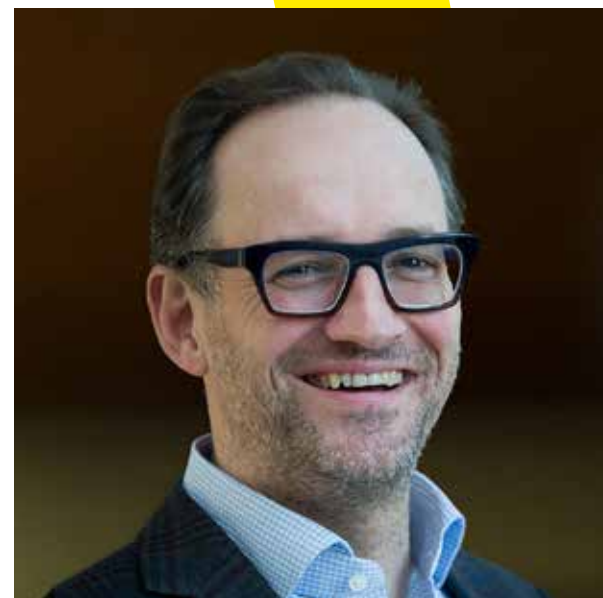
The approach is meant to be quite universal. We have deployed it in doctoral seminars in 12 different institutions including a pure science setting with chemistry PhD students. However, the way it is applied will be different for a PhD student compared to a more experienced scholar.

## What role could Artificial Intelligence (AI) play in all of this?

Depending on the topic, AI could help to analyse trends and how they relate to each other. In the future, AI may well monitor trends of interest for the researcher and suggest new ones. Unsurprisingly, studies on idea generation show that AI comes up with a higher volume

of ideas compared to humans. As a result of the sheer amount, it will also deliver high-quality ideas. However, AI seems particularly suited to incremental work and inventories of existing research. Humans come up with more radical ideas. The aforementioned dark horsing can help scholars to capitalise on this comparative advantage.

*S. Stremersch, How can academics generate great research ideas? Inspiration from ideation practice, International Journal of Research in Marketing, <https://doi.org/10.1016/j.ijresmar.2023.10.002>*





# The energy transition: how to operate a battery?

By: Ronald Huisman

To combat climate change, more and more renewable energy sources such as solar and wind farms replace fossil-fuelled power plants. However, this technology change is easier said than done. Renewables do not produce power when people need it; supply depends on the weather. To speed up the energy transition, we need demand response and power storage capacity. My research focuses on understanding the dynamics of power prices such that we can efficiently charge batteries and instruct people when to consume power and when not.

## 'Prices reveal information. A high price signals a shortage; a low price signals oversupply'



**E**nergy markets were liberalised worldwide at the end of the 1990s. Since then, power contracts can be traded on exchanges such as contracts for other commodities and stocks: the market sets the power price. When we study the dynamics of power market prices, we must understand the key difference between power and other commodities: electricity is not yet storable on a large scale. We need to produce power when it is consumed: supply is demand. Consequently, unexpected frictions in supply and demand immediately lead to enormous price fluctuations. The power price moving from +€1.000 / MWh to -€400 / MWh somewhat later is not uncommon. And, as the market share of supply from renewables increases, these frictions will occur more frequently.

Prices reveal information. A high price signals a shortage; a low price signals an oversupply. The extreme fluctuation of power prices signals that power markets need storage, and that consumption needs to be more in line with the supply of renewables. We have to charge/discharge batteries when prices are high/low or consume less/more. Power markets 'scream' for storage and demand response. For as long as there is insufficient storage capacity and power demand remains price inelastic, we will have to deal with the uncertainty of extreme price behaviour; an uncertainty that causes risk for energy companies and investors in renewable energy.

### Timing difficulties

Clearly, power storage is needed to better accommodate the supply from renewables. That, however, raises a question: how to operate a battery? It is obvious that one charges a battery in case of oversupply, but it is less obvious when to discharge it. If all batteries are discharged at the same time, an oversupply is created during another time. Batteries (and demand response systems) need to be operated in such a way that they flexibly cover the mismatch between supply from renewables and demand for power.

### Price fluctuations

This motivated me to study the dynamics of power prices. If we can predict when prices are extremely high or low, thereby revealing signals about shortages and oversupply, we can operate batteries accordingly. To do so, I applied extreme value theory (EVT) to help understand what drives the occurrence of extremely high or low prices. Consider that you want to know the probability that the power price exceeds a very high (or low) level at some future moment. The normal distribution function will not help modelling this uncertainty: extremely high or low prices are less likely to occur than what is observed in reality. EVT focuses on the shape of the tails. It enables studying the behaviour of extreme prices.

In my recently published paper "Fat Tails due to Variable Renewables and Insufficient Flexibility: Evidence from Germany" (co-authored by Evangelos Kyritsis and Cristian Stet), I apply EVT to study extreme power prices in Germany. We found that during periods with low supply from renewables and high demand, extremely high prices occur more frequently than extremely low prices. The opposite holds during periods with high supply from renewables and low demand: extremely low prices occur more often than extremely high prices.

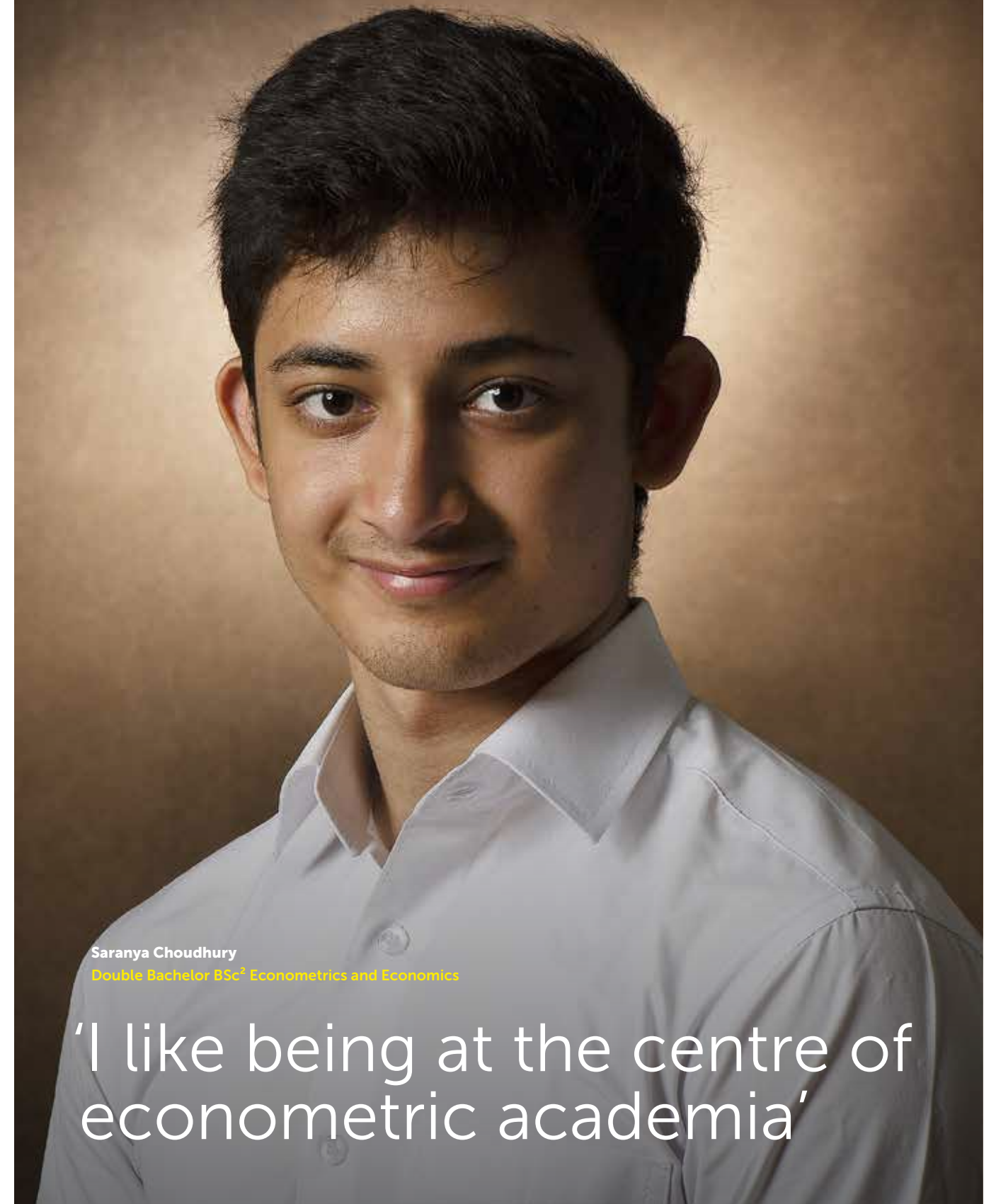
### Benefits of operating batteries

The results help to understand how to operate a battery and demand response systems. A fully charged battery is desired right before a period with extremely high prices. One wants a battery to be empty before a period with (expected) high supply from renewables and when demand is low. In such a way, operating batteries and demand response systems will help power systems to better accommodate the fluctuating supply from renewable energy sources. Moreover, focusing on charging and discharging when prices are low and high improves the profitability of power storage systems, which increases the willingness of investors to invest in the energy transition. ◀



#### Ronald Huisman

is Professor of Sustainable Energy Finance at Erasmus School Economics. He graduated in econometrics at Erasmus School of Economics and received a PhD in financial economics from Maastricht University. He focuses on sustainable finance and investing with a specific interest in the energy transition.



Saranya Choudhury  
Double Bachelor BSc<sup>2</sup> Econometrics and Economics

'I like being at the centre of  
econometric academia'

# A clear goal beyond the pitch

By: Madeleine Kemna

As innovation marketer for football club Feyenoord, **Léon Vervooren** was involved in the development of the club's proprietary streaming service Feyenoord ONE. Although Feyenoord is in his DNA, he assumed his job was the result of a series of happy coincidences. However, his previous activities and the choices he made might give reason to believe he was meant to end up in sports and entertainment all along.

**L**éon was born and raised in Rotterdam, so it was always his intention to spread his wings and study elsewhere. When it was time to make a choice, he realised that what really interested him was economics. He sought to capitalise on the strong foundation in math and economics he had built in high school by applying those subjects to business economics. In particular, he wanted to gain insight into the economics of ports and the maritime sector. 'Obviously, there is no better place to study these topics than Rotterdam. I opted for a bachelor's degree in Economics and Business Economics with a minor in Port Management and Maritime Logistics. For my major I chose Urban, Port and Transport Economics.

In hindsight, it is interesting to see that whenever I had a choice, I always opted for a topic in sports or entertainment. I like the business of fun! In high school, I secured an assignment at the Luxor theatre in Rotterdam, which involved analysing how revenues could be increased and costs cut. Another example is my bachelor's thesis, which dealt with the societal value of subsidised public events.'

#### Seeing Rotterdam from a different side

'Although I continued to live in the same city, I learned to see it in an entirely different way through the experience of student life and by joining student society Laurentius. Taking a break from my studies to serve on its board for a year taught me invaluable skills such as managing the relationship of your organisation with internal and external stakeholders. This may sound serious, but

it was a lot of fun. I was also actively involved in the Economic Faculty Association (EFR) and worked as a teaching assistant in marketing. Participating in extracurricular activities gives students a unique opportunity to learn by doing while having a great time.'

In 2017 when Léon was about to finish his bachelor's degree, he heard of the launch of the new Master's programme in Data Science and Marketing Analytics. The subject sounded so appealing that he decided to apply. It meant waiting a year because the first cohort would not start until September 2018. This gave him the opportunity to go to the United Kingdom where he worked in Cambridge at a Technology and Innovation Consultancy that specialised in product innovation for companies in the fast-moving consumer goods (FMCG) sector.

#### The road to Feyenoord

Upon his return to Rotterdam a friend invited Léon to accompany him to the Big Data Expo where he was invited to speak about marketing & data applied to Feyenoord. Never one to pass up an opportunity, Léon came along and saw that the talk drew a huge audience. 'The brand Feyenoord has a wide appeal, this results in extensive media coverage, but only very rarely do you find a publication on the business side of the organisation. Afterwards, over a cup of coffee, we concluded that Feyenoord would be an interesting case study for future research. As it happened, part of our master's programme involved a seminar where we would be working with case studies. Together we came up with the idea to see if the master students could team up with my friend's



'Participating in extracurricular activities gives students a unique opportunity to learn by doing while having a great time'

## ‘Every day I use the skills and experience gained during my study time’

company Sports Alliance to work on Feyenoord data. Professor Bas Donkers, who oversaw this block, was happy to add the club to the list of companies to be analysed. There was a competition with five groups of four and ours won. Afterwards, I was offered the chance to do more research at Feyenoord so I could write my master’s thesis about football club member clustering and season ticket purchase prediction. I had a great time. During the day I would be coding, but I also took advantage of the opportunity to discover more about the club by volunteering to help with activities for the fans such as the annual open day. Feyenoord has an important role in the community, which it takes very seriously.’

Léon stayed in touch with Feyenoord, but immediately after his graduation there was no suitable vacancy. He went to work elsewhere, but when it emerged that Feyenoord was looking for a fanbase marketer focusing on sales of memberships, Léon started a new job in an office adjacent to Feyenoord’s stadium De Kuip.

### Feyenoord ONE

After about a year he became innovation marketer. ‘That was an amazing experience. As soon as your job title includes innovation at an organisation like Feyenoord, all sorts of parties start to approach you with new technologies such as cryptos like fan tokens or a stadium in the metaverse. It was quite challenging to determine which proposals would enable us to optimise the connection with the fans. Based on the club’s strategic marketing plan the team focused on developing a proprietary streaming service with a subscription model. In January 2024 we launched Feyenoord ONE after two years of preparation. This is quite long in the world of football, but of course, we had to make a business case and convince people internally. In addition, we spoke to organisations such as UEFA and Dutch broadcaster NPO, but also to clubs like Real Madrid, Barcelona, Manchester City, Fulham, and Borussia Dortmund to learn from them. Although football clubs are fierce competitors on the pitch, they all share experiences and know-how on the business side.

Feyenoord ONE is of great strategic value for us; it is not only a commercial opportunity, but also a way to deal with ongoing changes in the media landscape. We remain active on several social media platforms such as TikTok, X, Facebook, and Instagram. In addition, we still have our own WhatsApp and many fans follow us on YouTube. However, previously, we had to pay Google or Meta to reach our audience with a specific campaign. Now we offer a place where supporters can find all video content

so we can build a closer relationship with visitors. This enables us to analyse their behaviour on the platform. We want supporters to digitally interact with us and watch Feyenoord videos on our streaming service, something we can now achieve by offering unique behind-the-scenes content.’

### Feyenoord as a business

Feyenoord is unique in many ways. It has the reach of a multinational without the employee numbers. Léon explains that fans expect the club to deliver an optimal experience, while the organisation also has to manage a wide palette of revenue streams ranging from commercial partnerships to selling (season) tickets and managing an extensive range of activities for members. ‘Feyenoord employs athletes and the staff around them, but also press officers, content producers, lawyers, financial controllers, marketers, caterers, social workers, data analysts, groundsmen and many more. On top of strategic planning, budgeting, and marketing, we deal with additional dimensions other companies may not have. To learn more about these, I participated in a part-time course organised by Dutch football association KNVB. This offered me a chance to obtain insights into the sports industry and professional football in particular. We attended regular classes, for instance about the way a club can fulfil different roles in society. These may sometimes seem at odds with each other such as their social function and the business side. There were also field trips to clubs to learn about talent development for example. It is great to meet employees of other clubs, especially since everybody is incredibly open and eager to learn from each other.

My current title is Programme Manager, and in this role, I oversee various projects. The Feyenoord board determines the strategic initiatives I will be working on, but for someone with the Rotterdam mentality of rolling up the proverbial sleeves, there is a lot of room to do something extra. In March 2023, when it became clear that there was a good chance Feyenoord was going to win the league, a team was formed to plan for the celebrations. Such an occasion affects the entire organisation, every department pitches in enthusiastically to help with the preparations. I offered to facilitate the process and keep everyone on the same page. As a result, I was asked to chair. Together with the core team we oversaw the process of organising the party and the decorations in the stadium, liaised with the council and the police, and managed to get permission to transport the players in an open-top bus. Accompanying the team to the town hall was an incredible experience.’



### Toolkit

‘My experience at Erasmus School of Economics and Laurentius has given me an invaluable toolkit. Every day I use the skills and experience gained during my study time. Embracing the chance to leave my comfort zone and acquire new skills was something I learned when I started coding for my thesis project. That experience has given me the confidence to cherish that same attitude in my job.

At university, there are many career events, but you must determine for yourself what type of role you would like to do. When I graduated, I knew I wanted three things in my job: networking (internally and externally), organising and overseeing different types of projects, and solving issues, including implementation of solutions. That is exactly what I am doing right now. I enjoy developing projects with people from different departments and being involved in the implementation subsequently. When we are ready, I hand over to the relevant department and go on to my next task. This versatility is what makes me tick.’ ◀

# No matter what I do, I want to make it a success

By: Madeleine Kemna

Music has been part of the life of Econometrics student Jet Stibbe since she was six years old. Initially, her piano lessons focused on classical tunes, but during her teenage years, she branched out into other genres such as jazz and funk: 'Fortunately, my high school offered ample opportunities for musical expression through its various ensembles, so I performed in a variety of different band set-ups.'



**H**aving lived in Amsterdam my entire life, I figured it would be good to broaden my horizon by coming to Rotterdam, especially since I chose to study econometrics, a field in which Erasmus School of Economics has a unique reputation. My first year at university was predominantly spent navigating the challenges of lockdown due to the pandemic. This provided a chance for me to immerse myself in my studies. When everything started to reopen, I decided to make the most of it and join student society RSC/RVSV. Auditioning for its band, the Hermes House Band (HHB), was a pivotal moment for me. It usually takes around three to four months to become a full-fledged band member, so I decided to split the second year of my study into two parts by allocating an extra year to my bachelor's studies. This allowed me to balance my academic work, my music, and all the other things student life has to offer. Being a band member was a remunerated position. Every Tuesday night we met for a meal at café De Stoep, followed by several hours of rehearsal. Afterwards, we usually had a few beers together.

#### Composition of the band

The band definitely added an extra dimension to my time here in Rotterdam. On top of the weekly practice sessions, we performed around 70 times a year. Sharing the stage with fellow musicians from diverse backgrounds offered an opportunity to embark on a journey of shared experiences and growth.

Although most members of the Hermes House Band are part of RSC/RVSV, auditioning is not limited to members of our student society. Vacancies are usually advertised through social media and the website. During my time, the group included two people from student society Laurentius and one person from Skadi, the student rowing club. What we had in common is that we were all studying in Rotterdam, loved music, and knew how to get a party going. Our musical leader chose an arrangement of our setlist, to match the type of party and the audience.

#### Remarkable memories

For me, one of the most memorable events was our performance commemorating the band's 40th anniversary in 2022. It is hard to express what it felt like. We were playing in a sold-out Ahoy where all of my friends and family were present. It was a real honour to be on stage with about 130 musicians – including some well-known names from Dutch politics and business – that were all part of HHB at some point during the past 40 years. I cannot imagine I will experience many more nights like this in my life. When King Willem-Alexander and his family visited Rotterdam in 2023 we were invited to play on an outside stage at Blaak, one of the largest streets of Rotterdam, and when Feyenoord won the Dutch league that same year, we were also part of the celebrations.

On top of that, we performed for Dutch expats in places like Dubai, Bangkok, and Jakarta, where we were surrounded by stalls with herring and tempouce. Management of the band is done by the musicians themselves. One of us was in charge of the general management of the band and stayed in touch with the booking agency, which is quite a big job on its own, while another was chosen to take care of the financial side. We also had someone looking after the atmosphere in the group. I really admire the way my fellow band members fulfilled these roles.

#### A bright future

As a member of the music and drama committee at RSC/RVSV, I helped to organise musical events – such as a jazz night – and plays. Since we were celebrating a lustrum during the time I was in the band, I also wrote music for this special occasion. All in all, this role took me about one day a week. I had to compartmentalise my days into hourly slots and make choices, but I did not mind because I was having so much fun. Sharing a house with nine other girls also meant there was never a boring moment. I really enjoyed hanging out with them.

Following the completion of my Bachelor's degree programme, I will serve as the Treasurer on the Board of RSC/RVSV, specifically responsible for managing the cash flow of the student association. Subsequently, I plan to pursue the Master's degree programme Econometrics and Management Science, with a specialisation in Quantitative Finance. One of my housemates is organising orientation events for members of RSC/RVSV. Various companies give talks and provide us with insights into the professional world. This has prompted me to start thinking more thoroughly about my future career. Fortunately, it is still far away because right now there are a lot of options that appeal to me within the field of econometrics and finance, which makes it hard to choose. What I do know is that I will continue to stay in touch with the HHB alumni all my life. As far as work is concerned: no matter what I do, I want to make it a success!

**The Hermes House Band** is a Dutch pop group, established in 1982 by members of the fraternity Rotterdamsch Studenten Corps. They have released more than 25 albums and singles. The band rose to fame in 1994 in both the Netherlands and Belgium, with their cover of Gloria Gaynor's hit single, "I Will Survive". From the band's establishment onward, a member of the band who finishes his/her studies has to leave the band immediately. Currently, the band has about 75 former members.

## 'Auditioning for the Hermes House Band was a pivotal moment for me'





# Do employees speak their mind about sexism and diversity policies at work?

By: Josse Delfgauw and Anne Boring

Sexism in the workplace takes many forms, from subtle comments to outright harassment. The existence of sexist behaviour can be an explanation for why women exit male-dominated industries. To tackle this situation, firms are using diversity, equity, and inclusion (DEI) policies to address the behavioural problems. This is to make sure people from all different kinds of backgrounds feel comfortable and included. In some countries, like France, gender quotas for executives are implemented by the government. In other countries, like the United States, firms have implemented diversity training programs that inform workers about sexism and behaviour. So far, the effectiveness of these policies appears limited. A possible explanation is that employees covertly resist these policies. Therefore, we wanted to study whether workers openly voice their opinions about sexism in the workplace and DEI policies, or whether their reported views contain social desirability bias (SDB).



## 'Our findings suggest that a sizeable fraction of managers do not actually support DEI policies'



**F**or our study, we compared data from the United States to data from France, as those two countries have different approaches to DEI policies. We used a list experiment to obtain the relevant information. Respondents were randomly assigned to a veiled condition or a direct condition. In the veiled condition, respondents receive four lists of five statements and must say with how many they agree, not disclosing which ones in particular. One of the five statements in each list is potentially sensitive and relates to sexism or DEI policies. In the direct condition, respondents receive lists of the same four non-sensitive statements but must provide an answer to the potentially sensitive statement separately. The reasoning behind this is that people in the veiled group can express their real opinions without exposing them, whereas people in the direct group could be more inclined to give socially desirable answers. Comparison between the groups gives an estimate of the true attitude and an estimate of the degree of SDB regarding the sensitive issue.

### Substantial differences

The survey was distributed by an online panel company to employed workers in five male-dominated industries: information technology, finance, law, business consultancy, and engineering. Eventually, our sample contained 703 respondents for France and 921 for the United States. In our research, we found out that there are substantial differences between the



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two conditions for all four sensitive statements in France and for two sensitive statements in the United States. For instance, among French respondents in the direct condition, 75 percent agree with 'I dislike sexist jokes in the workplace.' However, the estimated difference between the direct and the veiled condition is 24 percentage points, implying that only about half of the respondents truly agree with this statement. For the statement 'Diversity, equity, and inclusion policies at the workplace do more good than harm', the difference in the (estimated) fraction of respondents that agree between the direct and the veiled condition is about 18 percentage points in both France and the US.

### Policy (in)effectiveness

Given the design of the list experiment, we can interpret the differences between the veiled and direct conditions as the extent of SDB. We conclude that there is widespread SDB in France and in the United States, which use fairly different DEI policies. Remarkably, we document SDB among both men and women. Our findings imply that it is important to disentangle changes in actual attitudes from changes in stated views in evaluating the effectiveness of DEI policies. Also, our findings suggest that a sizeable fraction of managers do not actually support DEI policies. This lack of genuine managerial support further hampers policy effectiveness. ◀

**Domitilla Roero di Montice**  
International Bachelor Economics and Business Economics

# 'Just a pass is not good enough here'

# Your gateway to success

School and study associations

The students in this photo are full-time board members of the Economic Faculty association Rotterdam, one of the ten school/study associations that are affiliated with Erasmus School of Economics.

With over 7,000 members, the Economic Faculty association Rotterdam is one of the most active and professional associations in the Netherlands. By organising academic events, recruitment occasions and social gatherings, the Economic Faculty association Rotterdam aims to bridge the gap between theory and practice. Yearly, the association organises large events like the EFR Inspiration Days, the Model United Nations Conference and the EFR/ Eenvandaag Election Debate.

# National Economics Olympiad

Each year, the recognised school association AEclipse organises the National Economics Olympiad. Founded in 2016, the olympiad is a problem-solving competition for bachelor and master students in Economics.

Students from all over the Netherlands compete in teams of three to solve challenging questions set by professors, encompassing topics related to the varied branches of economics.

The AEclipse committee embraces the challenges of organising this event, balancing its responsibilities alongside their full-time master's programmes and other commitments.

# Highlights



# of Events

'Rotterdam was the leading place for econometrics and offered an interesting programme; I knew this was the place to go'

## Guido Imbens: a Nobel Memorial Prize winning alumnus

Guido Imbens has always been interested in mathematics growing up. When choosing a university, it was quite clear to him what he wanted to study: econometrics. Specifically, the course at Erasmus School of Economics was appealing to him, as it was well-known and highly reputable. He studied with much excitement and enjoyed everything the course had to offer. His most impressive experience was a popular lecture by Professor Jan Tinbergen, one of the most esteemed econometricians in the world and who, together with Ragnar Frisch, was awarded the first Nobel Memorial Prize in Economic Sciences in 1969.



**A**fter his studies in Rotterdam, Imbens moved out of the Netherlands to obtain his master's degree at University of Hull in the United Kingdom. Not yet bored from doing research, the Nobel Prize Winner went to Brown University to obtain his PhD. He started teaching at different universities in the United States and the Netherlands and became a professor at Stanford Graduate School of Business in 2012. He enjoys the opportunities to work with great students and to help them improve to set off their own careers. Moreover, he has supported policymakers to better incorporate the meaning of statistics in their decisions.

**'It has been a lot of fun to see students set off on research careers of their own to help improve the way we analyse data'**

**Prizes and recognition**

All Imbens' efforts for econometrics were noticed and in 2021, together with his friends and colleagues David Card and Joshua Angrist, he received the Nobel Prize for Economic Sciences. This prize was awarded to them for their contributions to methodologies for the analysis of causal relationships.

Not only worldwide, but also in the Netherlands there is lots of recognition for the work of Imbens. In 2023, he was appointed Commander in the Order of the Lion of the Netherlands, from the Minister of Education. His bronze bust was then also unveiled in the Hall of Fame of the Ministry of Education, Culture and Science in The Hague.

**Comeback to Rotterdam**

In celebration of the 110th Dies Natalis, Erasmus School of Economics honoured the success of their alumnus, by conferring an honorary degree, for his ground-breaking work in causal inference. Imbens was invited to the flag parade on the Boompjesboulevard along the Maas to raise a flag in his honour. This can be seen as an outdoor museum, with flags for many nationalities and important events in Rotterdam and the Netherlands. Additionally, for this special occasion, the Erasmus Bridge lit up in the green colours of the university. Moreover, Imbens participated in a game of chess at the Campus Woudestein. This chessboard was specially placed for Imbens' visit and is still there in memory of that day. ◀



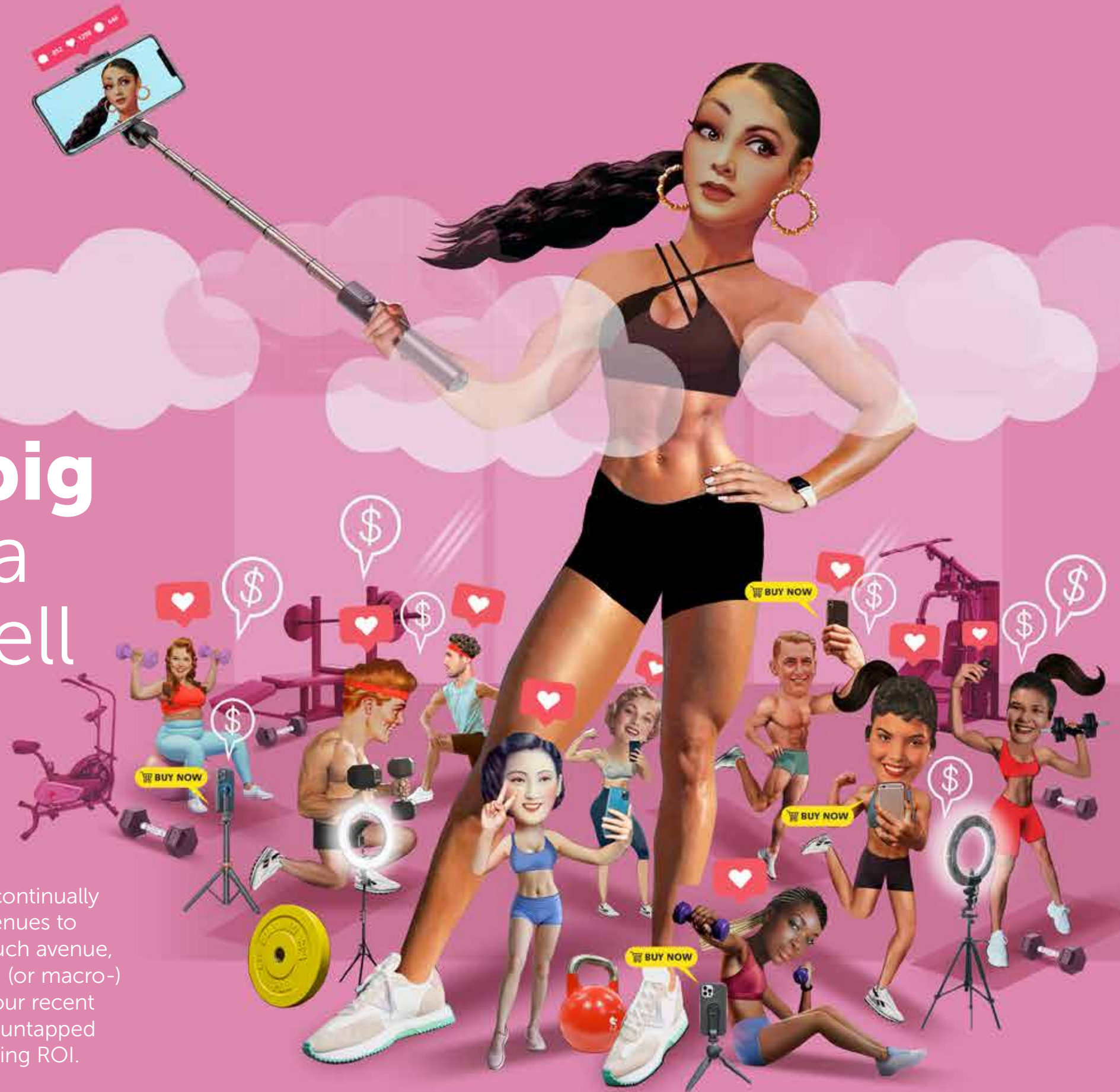
**Fleur van der Varst**  
Dubbelstudie Economie en Recht

**'I want to face challenges, every day'**

# Do small or big social media influencers sell better?

By: Andreas Bayerl

In an era where digital marketing strategies are continually evolving, firms are constantly seeking new avenues to maximise their return on investment (ROI). One such avenue, influencer marketing, has traditionally favoured big (or macro-) influencers for their extensive reach. However, our recent study introduces a paradigm shift, revealing the untapped potential of small (or nano-) influencers in driving ROI.



## 'Brands should consider leveraging nano-influencers, especially for campaigns with a sales focus'

Several aspects make it increasingly difficult for marketers to advertise on the internet. For example, users have become so accustomed to online display ads that they tend to see them less and less. This is called banner blindness. At the same time, changes in regulations and increasing privacy concerns make it more difficult to personalise ad content for users, undermining the ad's effectiveness. The swiftly evolving digital marketing landscape came up with a solution leveraging the fact that more and more time is spent on social media: influencer marketing.

We discovered that while the influencer marketing industry is expanding rapidly, with increasingly more companies starting to employ influencers for marketing purposes, there remains a significant gap in understanding the true return on investment of these campaigns incorporating both the achieved immediate revenue and the related cost. Our study aimed to shed light on this aspect, helping companies identify influencers who drive ROI.

### The complete influencer marketing funnel

Our Journal of Marketing article titled "Revenue Generation Through Influencer Marketing" (co-authored with Maximilian Beichert, Andreas Lanz, and Jacob Goldenberg) delves into the realm of influencer marketing, a sector that has ballooned to a \$17.4 billion industry. Focusing on this burgeoning domain, we have uncovered pivotal insights about the effectiveness of paid influencer endorsements. For the first time, we illuminate the entire influencer marketing funnel (i.e., from followers on Instagram, to reached followers, to engagement with the sponsored posting, and to actual revenue).

### Nano-influencers outperform macro-influencers

Our investigation led us to an intriguing conclusion: nano-influencers, those with a smaller following, are more cost-effective in revenue generation compared to their macro counterparts. This finding challenges the prevalent industry norm that places a higher value on influencers with larger audiences. We found that the engagement between influencers and their followers plays a crucial role in this dynamic. In essence, a more intimate connection between nano-influencers and their audiences leads to more effective marketing outcomes. We find that around 1.5% of the usual nano-influencer's followers would convert to buying, while it is only 0.2% for a macro-influencer.



**Andreas Bayerl**

is Assistant Professor of Marketing at Erasmus School of Economics. He conducts multi-method research involving big data, where he focuses on digital marketing topics such as online reviews, influencer marketing, and employee-generated content online.

### Implications for companies

These insights hold significant implications for firms and marketers. The industry's focus on macro-influencers needs a re-evaluation in light of our findings. Brands should consider leveraging nano-influencers, especially for campaigns with a sales focus. This approach not only promises higher ROI but also fosters a more authentic connection with audiences. Nowadays, this is easily feasible through influencer marketing tools that provide the infrastructure to manage hundreds of influencers at scale and automate processes such as 'The Circle', an ROI-Driven Influencer Marketing Platform does, founded by Erasmus alumnus Steven Lammertink. In conclusion, our research suggests that firms and marketers should consider the powerful impact of nano-influencers and the significant engagement they foster with their audiences. By doing so, they can unlock new potentials in influencer marketing, ensuring that their investments yield higher returns. ◀

### The attribution of sales to each influencer

We employed a combination of secondary revenue data and field studies. We analysed data from one of Europe's leading direct-to-consumer firms, which included influencer-specific discount codes shared on Instagram linked to nearly 1.9 million sold products, amounting to over €17 million in revenue.

Further, the results are confirmed also for YouTube and TikTok with additional data. Our analysis was complemented by three distinct field studies with 319 paid nano- and macro-influencers on Instagram.

### The proposed mechanism

A key aspect of our study was examining the level of engagement on an influencer's profile before a sponsored post. We followed social capital theory, which suggests that influencers with more followers might encounter lower engagement levels with their followers. And indeed, secondary data confirms this notion. We also used language style matching (LSM) on more than 0.5 million comments and replies to delve deeper into the relationship between influencers and their followers. Our findings indicated that nano-influencers align more closely with their followers' communication styles, enhancing their relatability and effectiveness in influencer marketing.



**Joost Smals**  
Double Bachelor Econometrics and Philosophy

'Here, they stimulate you to get the best out of yourself, to extend yourself and go further'

# Brain drain or brain gain?

By: Madeleine Kemna

After obtaining a bachelor in economics at the Anton De Kom University of Suriname (AdeKUS), **Tina Dulam** was one of five students selected to study for a master's degree at Erasmus School of Economics on a scholarship. Upon her return to Suriname, she started working long-distance on a PhD and taught at her alma mater. Since 2017 she has been back in the Netherlands where she lives with her husband and son. Her research interests include international labour migration and skills mismatches in the labour market.

Initially, Tina studied business economics, but her experience as a member of Suriname's youth parliament made her switch to international economics. She felt this would give her more tools to have a positive impact on society. 'I always knew I wanted to continue with a master's degree, but that option was not available in Suriname. When one of my professors told me that I could apply for a scholarship to enter the master's programme in Rotterdam I was thrilled. After submitting my grades and a motivation letter, I was invited for an interview with representatives of Erasmus School of Economics. Together with four of my fellow students, I was selected. However, only three of us managed to go.

## What was the transition like?

The life of high school pupils and university students in Suriname is quite different than in the Netherlands. Most people stay with their family and have a long commute, often hours, to attend university. In the district where we lived, in Commewijne, classes were often cancelled due to various strikes and protests. That is why my parents decided to send my brother and me to school in the capital city Paramaribo. It meant we had to undertake a daily crossing of the Suriname River by boat or ferry, which would

cost us more than three hours travelling time in total. While I was in high school, the Jules Wijdenbosch bridge was built across the river. From then on, my mother dropped us off by car before driving to work.

The first few months in Rotterdam were a bit of a culture shock, but I was very happy to be given the chance to do a master's at such a prestigious university. It felt great to live within walking distance of the Woudenstein campus, but it also meant buying new clothes and shoes to brace myself for the Dutch weather. The course was very demanding and although I had been among the top of my class during my bachelor studies, the transition to the master's programme was not really smooth. On top of that, it took some time to find my feet because I was living on my own for the first time. When we received our grades after the first block, I was not happy with my results. While reflecting on possible ways to improve my study progress, I realised that many other foreign students spent almost the entire day at Woudenstein. The fact that they would study in the library and eat their meals on campus meant they saved a significant amount of time. Initially, I did not like the food in the canteen, but spending more time at the university helped me to get into a productive rhythm.





## 'The first few months in Rotterdam were a bit of a culture shock, but I was very happy to be given the chance to do a master's at such a prestigious university'

Hanging out with other students was great fun and it also taught me a lot. One of the things I learned was to chill. We supported each other as a group and found that it was not necessary to stress too much if you prepared and studied hard.

### What happened after your graduation?

All three of us went back to Suriname to pass on the knowledge we had obtained in Rotterdam by teaching at the AdeKUS. During most of this time I also worked on my PhD under the supervision of Professor Philip Hans Franses who had been the initiator of the scholarship programme that brought me to Rotterdam for my master's. I am very grateful for his guidance and support. We wanted to help students in Suriname to make the most of their studies, so we introduced ideas for additional content in the existing curriculum and started new courses on statistics, research methods, and accounting. As soon as it became available, we also followed the teachers' qualification training. It gave us an understanding of various teaching formats and of designing courses that appeal to the intrinsic motivation of students. We managed to strike a balance between keeping students engaged and challenging them. They realised that to continue their studies in a master's programme abroad it is important to reach international standards in the bachelor courses. The AdeKUS now has its own master's programme in Accountancy. In addition, it recently started a new partnership with Erasmus University to offer an executive master's programme in Finance and Control. However, despite these developments, the choice for students wanting to pursue a master's degree in Suriname is still quite limited.

### Your personal experience as a Surinamese student going to the Netherlands aligns with your PhD research on labour migration. Can you give us an insight into your findings?

My dissertation, "Brain Drain or Brain Gain", looked at international mobility of labour, particularly between Suriname and the Netherlands. Brain drain refers to the departure of highly educated people. In Suriname, about 40% of people with tertiary education leave the country. Based on the work of Gibson and McKenzie I have contacted the three most successful graduates of every high school in Suriname from the years 1976 (when the Anton De Kom University was founded) until 2006. I found that 67% of them went to study in the Netherlands. Brain gain indicates the return of these people, which amounted to 40%. I do not know how this percentage varies over time, but looking at general migration data for Suriname it becomes clear that the decision to return is highly

correlated with political stability and macroeconomic data such as inflation, GDP growth, and the development of the exchange rate.

### What is your current role?

I am currently conducting research into numeracy skills at HU University of Applied Sciences Utrecht. To navigate life in modern society, people need to be able to work with numbers. Understanding your energy bill, finding your way in a hospital, filing taxes, understanding the choices you can make as a citizen, or simply helping kids with their homework, all of these activities involve numbers. However, in the Netherlands, there are around 2.1 million people that do not possess the necessary skills to cope with such demands. The government has launched a programme called "Tel mee met taal" which involves both literacy and numeracy. We are working on the latter by creating awareness through a conference we organised and by providing content to train the trainers. These are often teachers and basic skills specialists in local libraries, roc's (regional education centres), and volunteering organisations. An example of raising awareness is to show health professionals how they can effectively provide medical prescriptions to people with low numeracy. My work on numeracy offers me a chance to make a positive contribution to society by helping to support some of the most vulnerable people. In addition, I am a lecturer in economics at Utrecht University and my research there looks at skills mismatches and migration. It is interesting to see how tackling these issues may help to combat the tightness in the labour market and increase productivity. I am also taking up my dissertation topic again to see if I can gain more insight into the development of Suriname's diaspora over time.

### What advice would you give foreign students?

It can be quite tricky to organise yourself in terms of finances and residence, especially for students from outside the EU or EER. You cannot open a Dutch bank account until you have a residence permit, which is usually only after a few months. It is a good idea to prepare so that you can take out insurance and other vital things before you arrive in the Netherlands.

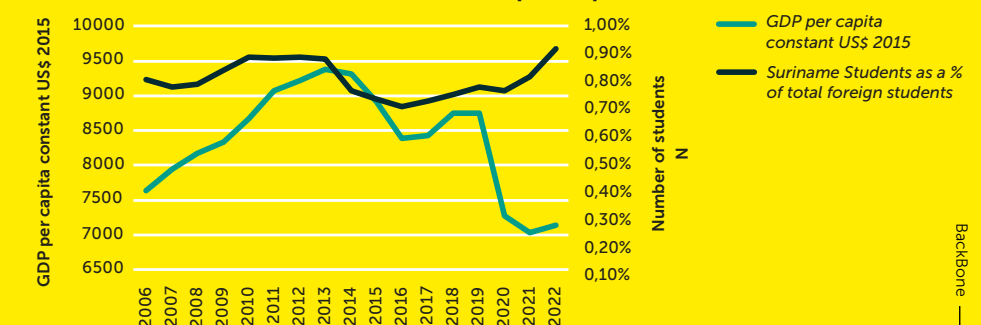
### Are you planning to return to Suriname eventually?

Maybe, because I would like to contribute to my country, but I do not know yet. Over time I have concluded that you can only maximise your impact if you have looked after your own personal and professional growth. At the moment, the Netherlands offers me a lot of opportunities to do just that. ◀



There appears to be a correlation between the number of students from Suriname and the economic situation in their home country. In addition, data from Nuffic shows that the number of students from Suriname still living in the Netherlands five years after graduation is almost three times as high as that of other foreign students.

### Students from Suriname and local GDP per capita





**'Always stay curious:  
never stop learning,  
keep asking questions'**

# Meet Patrick Verwijmeren

My name is Patrick Verwijmeren and I am Professor of Corporate Finance in the Department of Business Economics at Erasmus School of Economics. As a child, growing up in Rotterdam, I did not particularly think much about what

I wanted to be when I grew up. I really lived in the moment, like many kids do. Back then, I was mostly playing football. When I was a student, I still really enjoyed playing sports and hanging out with friends, but I also took my studies seriously. My focus was to develop myself while having fun at the same time. This was also visible when I ran a bar with some of my friends during college.

I started my career in academia almost by coincidence. When writing my master's thesis, my supervisor commented that I had talent and should consider doing a PhD. As I had enjoyed my time at the university – such a young and ambitious environment – I decided to stay at Erasmus and take on the challenge. My development as a researcher went in stages. The beauty of research is that you have questions and then try to come up with ideas on how to answer those questions. Luckily, people liked the questions I came up with and appreciated my insights on those questions. After my PhD, taking advantage of the international aspect of scientific research, I moved to Australia to continue my research there. I worked hard, got published in high-quality journals, and the ball kept rolling.

#### Financial return on art

My main topic of research is hard to define, as there is a lot of variety in the things that I study. One area of research is the financial return on art. At the beginning of this century, studies appeared that claimed that art is a really good investment, with financial returns that are even higher than those on stocks. These studies concluded this by looking at paintings being sold at auction. However, when comparing art to stocks, one should realise that for stocks you can observe the stock price of any given company at any given moment, while this is not the case for art. For paintings, you only observe market prices when the artwork sells. I found out that the

paintings that sell have a higher valuation than the ones that do not sell or take longer to sell. In other words, if you look at the returns of auctioned paintings, you will only see the paintings that did well, but not those that got out of fashion. To get an estimate of the real return on art investments, you will also have to take the less popular paintings into account. By incorporating sample selection biases, I discovered that the actual returns on art are lower than people previously thought. In fact, stocks are a better investment than paintings, on average. Of course, if you can predict the demand for art, you could very well invest in a particular painting, and I also find interesting differences across art styles.

#### Remarkable publications

I think the academic world liked my research on art by improving the econometric technique to account for self-selection, while practitioners found the estimates of the actual return on art and stocks useful. The article was picked up immediately after releasing it. Within a few days, we received calls from a range of newspapers, such as the Wall Street Journal. Together with related work that I have on a gender gap in art, this was my article that was picked up the most, and my art research was featured in Forbes and the Economist, among others. I think disseminating research findings to popular media is highly important, and I am continuously trying to come up with new research ideas that might be of interest to society. ◀

# Activating the long-term inactive:

labour market and mental health effects of an activation programme

By: Mareen Bastiaans, Robert Dur, and Anne Gielen

Despite the tight labour market, there is still a large group of people who live on benefits. Some of them have been living on benefits for a long time. Long-term welfare recipients are a precarious group with low job-finding rates and high rates of mental health medication prescriptions. Can government policies improve the situation for this group? In a recent paper, we studied an activation programme in Rotterdam that was tailored to long-term welfare recipients. We find limited effects on labour market outcomes, but favourable effects on mental health outcomes.





The activation programme that we study was implemented in Rotterdam in 2013 and targeted towards long-term welfare recipients. The programme requires benefit recipients to perform activities for at least 20 hours a week. These activities can include community services and informal care, but also following a Dutch language course or going to the gym. During a meeting with a caseworker from the municipality, a set of activities is agreed on which fits with the benefit recipient's interests, needs, and capabilities. Participation is not voluntary: not doing the activities entails the risk of losing part of one's benefit.

#### Predictions and public debate

The introduction of this programme led to fierce public debate about its effects. First, regarding the labour market effects, it was expected that there would be positive effects on job finding and earnings, but that the effects would likely be small as most people did not work for a very long time. Regarding the mental health effects, predictions diverged. Some people argued that the programme may be experienced as humiliating or stressful, particularly because of its involuntary character. As a result, mental health may decline. Others have argued that the programme may improve mental health, as it may help people expand their social interactions and social network, create a daily or weekly structure or routine, and may give rise to feelings of self-efficacy and a sense of purpose.

The public debate about this programme stresses the importance of a careful evaluation of the programme, a task that is complicated by the fact that a comparable control group is absent. We use the staggered implementation of the programme. For practical reasons, the municipality implemented the programme from neighbourhood to neighbourhood over a period of five years. As a result, we can compare labour market and mental health outcomes of benefit recipients that were already exposed to the programme to the outcomes of those



#### Mareen Bastiaans

is a PhD candidate at Erasmus School of Economics in the Department of Economics. Her research interests are within the fields of labour, family, and health economics.



#### Robert Dur

is Professor of Economics of Incentives and Performances in the Department of Economics. His expertise lies within the field of organisational and labour economics.



#### Anne Gielen

is Professor of Labour Economics and Policy in the Department of Economics. Her main research interests lie within the field of intergenerational mobility, applied microeconometrics, labour and health, and policy evaluation.

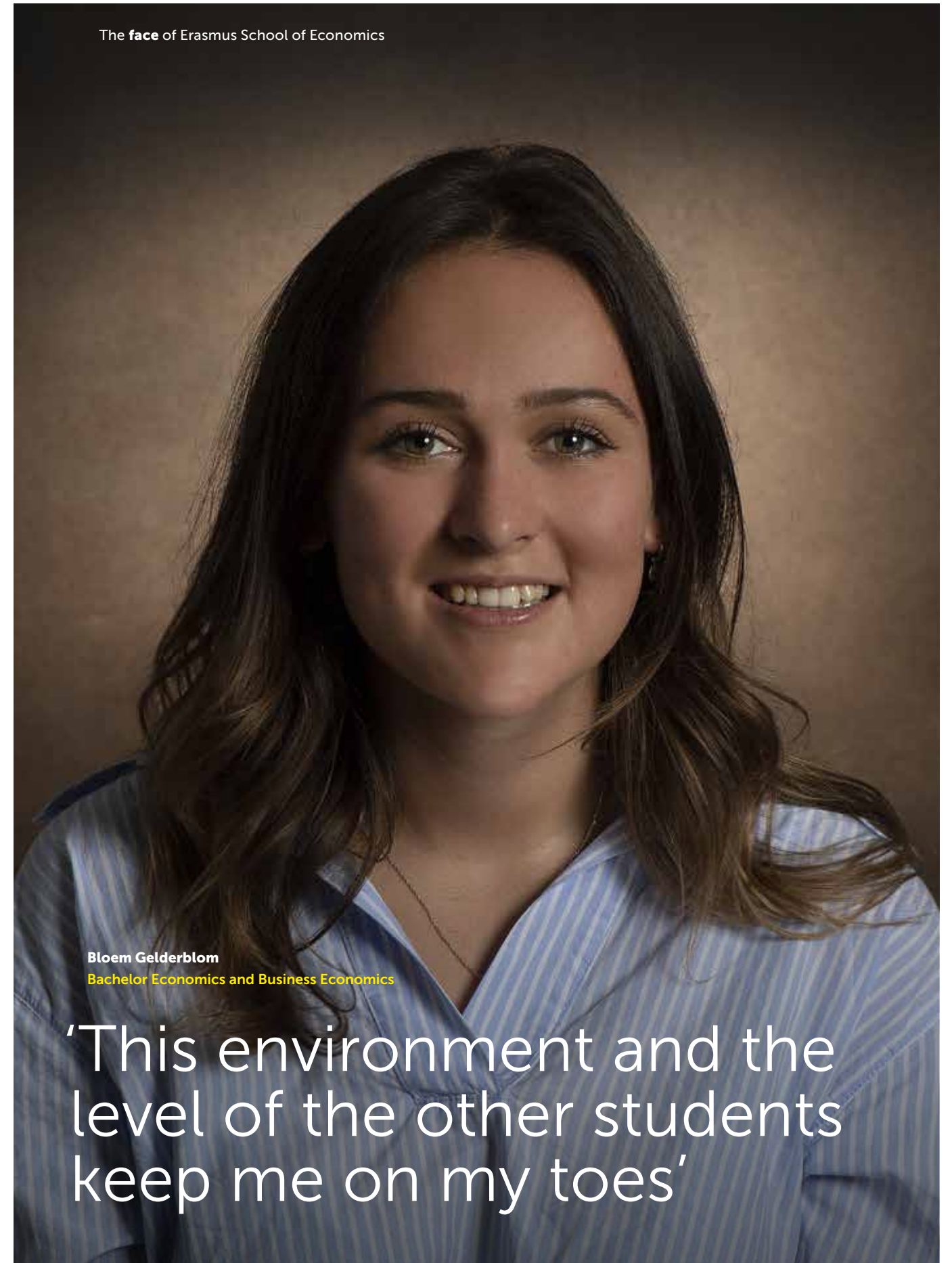
who were not yet exposed to the programme. Since there was no clear strategy behind the order in which neighbourhoods were treated, groups that are exposed early and late to the programme are initially quite comparable.

#### Surprisingly positive effects

We combine this methodology with rich data from administrative data sets which allows us to consider a wide range of outcomes. Statistics Netherlands collects data on people's labour market status, earnings, and mental health medication prescriptions. Information from the municipality of Rotterdam about the implementation of the programme was linked to the data from Statistics Netherlands. The linked data were anonymised by Statistics Netherlands and then made available to us for statistical analysis.

In line with the expectations, we find very small labour market effects, if any at all. However, we find favourable effects on mental health, which are particularly sizeable for men. More specifically, a few years after exposure to the activation programme, the share of benefit recipients being prescribed mental health medication dropped substantially as compared to the group not yet exposed to the activation programme. Earlier survey evidence points to similar favourable effects: people exposed to the programme feel happier, less nervous, and less often down and sad.

Although more research is definitely needed, we were positively surprised by the size of the favourable effect on mental health. This finding also highlights the importance of not only considering labour market outcomes but also other relevant outcomes when evaluating policies. Our results may help in further fine-tuning and targeting the activation programme. To help achieve this, we were very grateful for the opportunity to present our research findings in the city hall of Rotterdam to the responsible alderman Tim Versnel and a delegation of policy makers and advisors. ◀



**Bloem Gelderblom**  
Bachelor Economics and Business Economics

'This environment and the level of the other students keep me on my toes'

# The grandfather of behavioural economics

Honorary Doctor Daniel Kahneman  
(1934-2024)

In 2009 psychologist and Nobel Memorial Prize laureate in Economic Sciences, Daniel Kahneman, received an honorary doctorate degree on the recommendation of Erasmus School of Economics and in celebration of its 96th Dies Natalis.

Erasmus University Rotterdam conferred this honorary degree in recognition of Kahneman's groundbreaking work in the field of behavioural economics and decision-making. His research laid the foundation for understanding how psychological factors influence economic decisions and paved the way for the integration of psychology into economics. Seven years earlier, he was awarded the Nobel Memorial Prize in Economic Sciences for his contributions to behavioural economics, making him the first psychologist to receive this honour.

Kahneman's work in psychology had a profound impact in various fields such as economics, finance, public policy, and beyond. In collaboration with his colleague Amos Tversky, Daniel Kahneman developed Prospect Theory in the 1970s, which challenged traditional economic models that assumed people always make rational decisions based on maximising utility. Prospect Theory proposed that individuals make decisions based on potential gains and losses relative to a reference point, and they tend to exhibit risk aversion when faced with potential losses and risk-seeking behaviour when faced with potential gains. One of Kahneman and Tversky's most famous experiments involved the framing effect, where they showed that people's choices can be significantly influenced by the way options are presented or framed.

Kahneman's work also introduced the concept of cognitive biases, which are systematic patterns of deviation from rationality in judgment, often stemming from mental shortcuts or heuristics that the brain uses to simplify decision-making. Some well-known biases include confirmation bias, anchoring bias, and availability heuristic.

Daniel Kahneman received the honorary degree from the hands of Honorary Promotor Peter Wakker, Professor of Decision under Uncertainty at Erasmus School of Economics. Wakker has been well-known for his significant contributions to the study of decision-making under ambiguity, focusing on situations where probabilities are unknown or imprecisely specified. His research has shed light on how individuals perceive and evaluate uncertainty, offering valuable insights into real-world decision-making contexts such as finance, health, and public policy. ◀



From left to right: Bedel Ton Molendijk, Rector Magnificus Henk Schmidt, Daniel Kahneman and Peter Wakker.



From left to right: Willem Verbeke, Peter Wakker, Daniel Kahneman and Philip Hans Franses (Dean of Erasmus School of Economics at that time).

# From Rotterdam to Stanford

By: Madeleine Kemna

His affinity with math led **Thomas Brink** to obtain a bachelor's (cum laude) and master's degree (summa cum laude) in Econometrics at Erasmus School of Economics. On top of that, he obtained an MSc in Computational Mathematics at Stanford University, where he was a student of Dutch Nobel Prize laureate Professor Guido Imbens. He is currently working for technology start-up Spotnana in Palo Alto.

In high school, I followed advanced math courses and participated in various math-related projects. Choosing econometrics allowed me to apply mathematical concepts in real-world scenarios. It was immediately clear to me that I wanted to do this in Rotterdam. The Open Day and the student-for-a-day experience gave me a really good feeling about Erasmus School of Economics and the people that I met. Besides, I have learned that Rotterdam is a great place to live as a student.

## What did you enjoy here?

Outside of my studies, I was able to do a lot of different things. My housemates and I had a great time together and as a teaching assistant (TA) I taught several classes. Being a participant in the Honours Class gave me an opportunity to deepen my knowledge through workshops, guest lectures, and company visits. For me, the highlight was the research project we undertook, which gave me a taste of what the combination of theory and practice can do. I also really enjoyed all the international opportunities that the university offered, which allowed me to meet people from different cultures and broaden my horizon. For instance, I was able to participate in the NAHSS (Netherlands Asia Honours Summer School), for which I worked on a consulting project and attended a summer school in Sichuan, China. In addition, I also went on an exchange to Nanyang Technological University in Singapore, where I followed classes and learned about the local culture as well. I am grateful to Erasmus School of Economics for giving me these chances.

After finishing my BSc, I took a year out to gain practical experience by working at online retailer Picnic. During that time, I also made plans for my master's, for which I was hoping to go to Stanford University in California. I managed to get accepted and find a large part of the necessary funds, but then COVID threw a spanner in the works. For me, an important reason to go was the experience of life on campus and the interaction with new people. However, I had no idea whether classes would be online or in person, so I decided to postpone my plans for a year. Instead, I enrolled in the econometrics Master's at Erasmus School of Economics. It turned out that a lot of my fellow students had also taken a break from studying after their bachelor's, so I saw many familiar faces during the online classes. We even managed to study for exams together virtually. Overall, I had a pretty positive experience despite the pandemic.

## How was the selection process for Stanford?

It took me about six months to complete my application. This ranged from preparing a CV and writing a motivation letter to obtaining letters of recommendation from faculty staff and my supervisor at Picnic. In addition, I had to study for and sit tests to demonstrate my proficiency in English (TOEFL) and technical matters (GRE). Furthermore, I talked to various people who went through a similar process, which was super helpful. I would recommend anyone trying to apply to not be afraid to reach out to alumni. They usually really enjoy helping others and talking about their time at university!



### Can you give us an idea of the financial implications?

Studying at Stanford is not cheap; an academic year costs between \$60,000 and \$70,000 (including tuition, rent, books, food, and insurance). I was fortunate to have successfully applied for several scholarships in the Netherlands and, on top of that, worked as TA at Stanford for 20 hours a week. Stanford is one of the few universities that make it possible for students to fund a substantial part of their studies through work. The fact that, together with my scholarships, this work covered almost the entire cost of my Stanford adventure took away a huge amount of stress.

## 'I definitely look back very fondly on my time in Rotterdam'

### Can you describe the Stanford experience?

At Stanford, people are all-in once they set foot on campus. Students are extremely driven and push each other to go the extra mile. Whether it is a course project, working on a start-up idea, or doing research with a professor, no challenge is too big. This is extremely contagious; seeing people around you work on all these interesting things really inspired me. Also, with so many smart students and professors who have shaped their field, there is a lot to learn. However, students can also overdo it when it comes to hard work. Everyone pushes each other, and sometimes people do not know where to stop. In Rotterdam, where people also work hard, I found there to be much more emphasis on a healthy work-life balance.

This can be partly explained by the structure of universities. In the US, a university is not just for studying, it is also where you live, where your social life takes place, and where you find a plethora of clubs to join. I was a member of the Dutch society and joined the football team (or should I say 'soccer'). As much as I enjoyed living on that beautiful campus, I really enjoyed travelling to other universities for a match representing Stanford. You really do feel that the university is part of your identity, especially when playing Berkeley, the big rivals.

### How did you get to know Guido Imbens?

For one of my electives, I decided on a course in econometrics taught by Guido. Of course, it was very special to follow a course taught by a Dutch Nobel laureate. His lectures were very popular even though class started at eight o'clock in the morning. There was a lot of room for interaction. Guido asked us to submit questions beforehand and based on his answers an interesting discussion would ensue during which he would share his own experience with us. It was also really nice that outside of class, he

sometimes tried to socialise with his students as well, participating in extracurricular activities or inviting us over for dinner.

### What is life after Stanford like for you?

I have always been interested in start-ups, as I find it very satisfying to work on a product in a small team and be closely involved in the company's growth. Also, at Stanford and within Silicon Valley, so many exciting new ideas grow into companies, which is very inspiring. Currently, I am working for a start-up called Spotnana, a technology company based in Palo Alto (Silicon Valley) that aims

to modernise the infrastructure of the travel industry. I started there in 2022 as an intern focusing on data and decided to return after my graduation. My current job focuses on data science and machine learning. It is both technical and strategic in the sense that I am also involved in planning how best to deploy these techniques in the future. What I really like is the ability to come up with an idea, present it to leadership, and implement it within a reasonably short time. While I am really enjoying the US, I would eventually like to return to Europe and continue with this type of work while living closer to home.

### What have you learned in Rotterdam?

Erasmus School of Economics provided me with a very solid base. At Stanford, I would sometimes even go back to my slides and syllabi from Rotterdam. In terms of professional ethos, I am pleased that I learned to work independently, take responsibility for planning my own activities, and deal with pressure while maintaining a healthy work-life balance. I definitely look back very fondly on my time in Rotterdam. ◀





# Using drones, trucks, and mathematics for faster deliveries

By: Paul Bouman

The development of drones and autonomous vehicles inspires a bright vision for the future. Companies promise to deliver goods to your feet at any time. While bright dreams are only human, scientists must remain critical to separate valuable innovations from impractical marketing pitches. For example, what is the advantage of a drone that can be launched from a truck? Using clever mathematical tricks, researchers compute the increase in delivery speed with this technology.



## 'On average, a set of deliveries can be serviced 30% faster by truck and drone compared to a single truck'

The ability of drones to deliver goods is increasingly important to many companies. In 2013, the first plans for Amazon Prime Air were unveiled. In 2022, Wing Aviation LLC, a subsidiary of Google's parent company Alphabet Inc., made over 50,000 deliveries by drone. In 2023, Zipline International Inc. made more than 800,000 commercial deliveries, including important medical supplies in Rwanda.

Small drones can carry limited weight and often perform a single delivery per flight. Compared to traditional trucks, this limited capacity is a disadvantage when many deliveries must be made. As drones fly back and forth between the warehouse and their delivery point, the total distance travelled exceeds an efficient route driven by a single truck. Furthermore, only deliveries within the flight range of a warehouse are possible.

Since 2016, companies such as the US-based Workhorse have considered another idea: drones that can be launched from the roof of a truck. This combines the flexibility of drones with the capacity of a truck. Together with Prof. Niels Agatz and Prof. Marie Schmidt, I studied how efficient delivery routes for a truck and drone pair can be made. This allows them to compute the benefits of this emerging technology.

### A challenging puzzle

The search for the best route among multiple deliveries is famously known as the travelling salesman problem and is a challenging puzzle. It is hard to show that no alternative route is better. One idea is to enumerate and check all routes.



**Paul Bouman** is an associate professor in the Department of Econometrics at Erasmus School of Economics. He has a background in Computer Science and enjoys working on algorithm design and the implementation of algorithms, in particular in the context of logistics and the allocation of scarce resources. He teaches courses on programming and computer skills.

Unfortunately, even with 50 delivery locations, the number of routes is an astronomical number with more than 60 digits. Theoretically, even the fastest computers we can hope to build would need far longer than a human lifespan to check them all. Decades of research related to the travelling salesman problem resulted in clever mathematical tricks to compute the gap-percentage of a route. This percentage indicates room for improvement. A gap of 0% indicates the best possible solution was found, whereas a small gap of for example 1% still indicates the efficiency of a route without the need for full enumeration. Even though the best solution is difficult to find in practice, the gap allows researchers to analyse the quality of delivery routes they do find.

We adapted these ideas for truck-and-drone routes. A key issue that we address is that the truck and drone must wait for each other; a complication that does not occur with single vehicles. In our research, we introduced building blocks for a rigorous way to construct and analyse routes. Using this idea, we developed software that computes the best possible or at least high-quality routes.

### Faster service routes

With our software, we discovered that, on average, a set of deliveries can be serviced 30% faster by truck and drone compared to a single truck. We assume that the drone travels twice as fast as the truck and delivery locations are spread out uniformly. In case deliveries are concentrated around one or two centers with a few deliveries on the outskirts, the speed-up in service time becomes 38% on average. Our pioneering work is followed by various international researchers studying many aspects of drone transportation. ◀



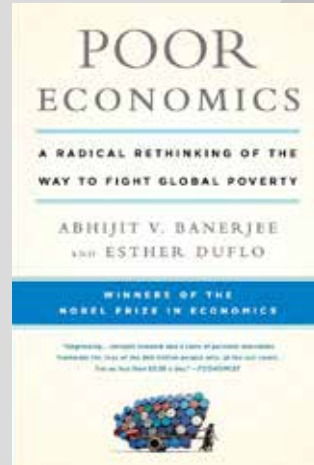
**Juliëtte Beerenhout**  
Bachelor Economics and Business Economics and Bachelor Fiscale Economie

'Here, you are only a part-time student on paper'

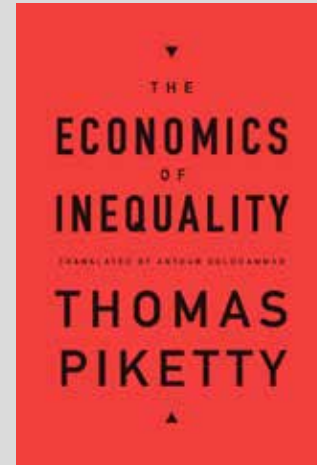
## Books for on your nightstand



**Capitalism Reconnected**  
by Jan Peter Balkenende and  
Govert Buijs

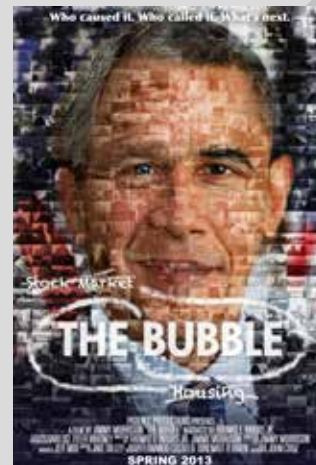


**Poor Economics**  
by Nobel Prize laureates Abhijit  
Vinayak Banerjee and Esther  
Duflo

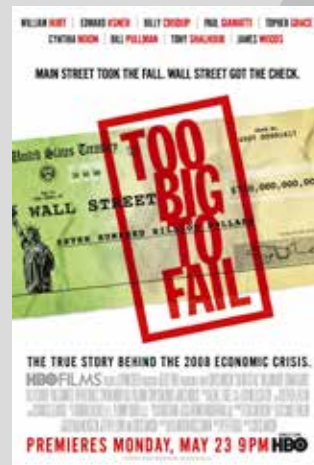


**The Economics of Inequality**  
by Thomas Piketty

## Must-watch movies



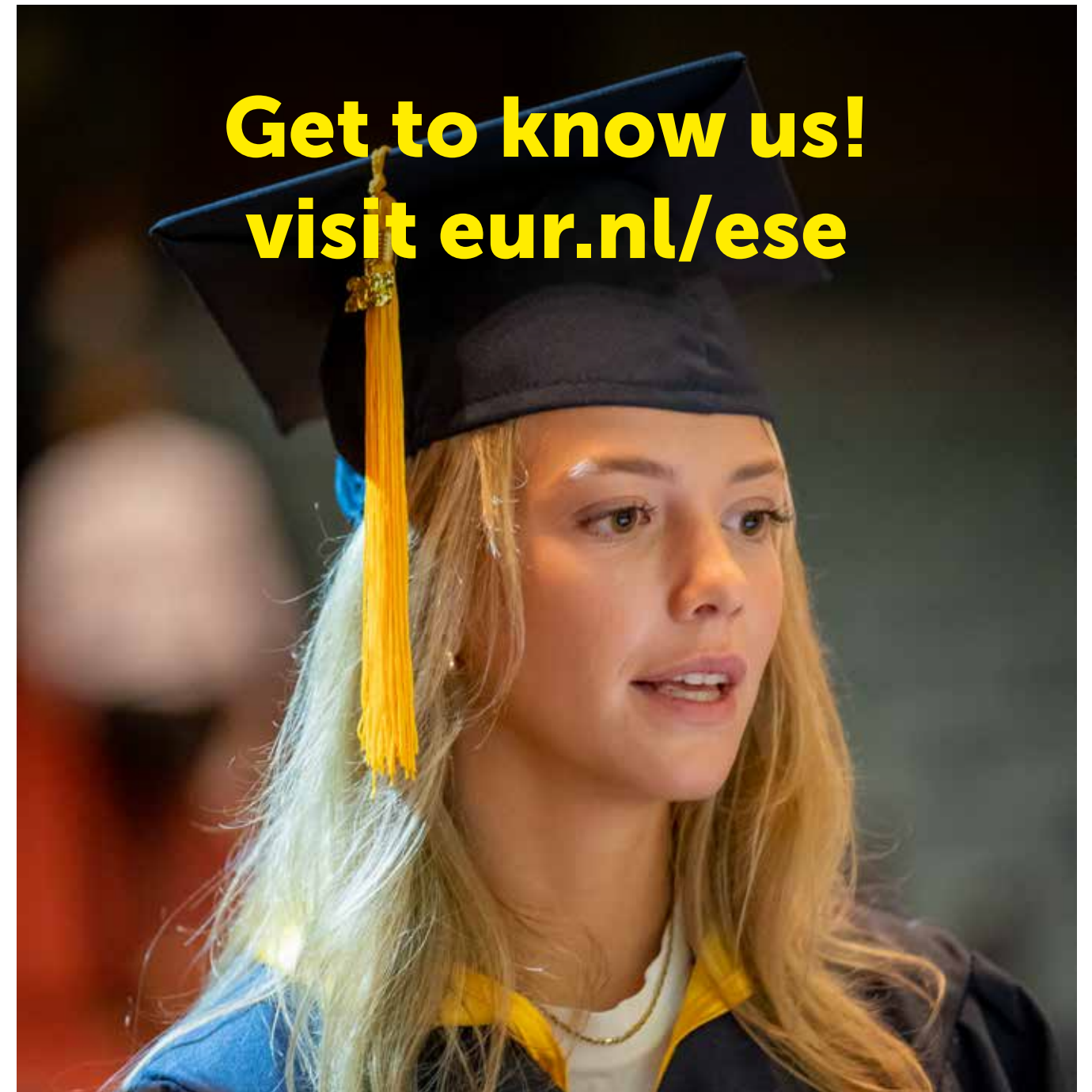
**The Housing Bubble**



**Too Big to Fail**



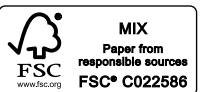
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