





Preface

Dear reader,

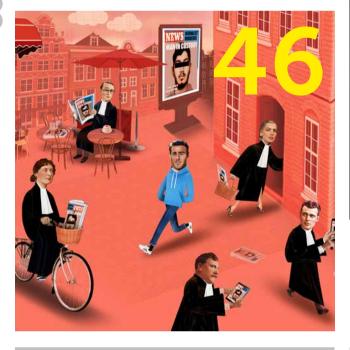
t is my absolute pleasure to welcome you to of ideas, craftmanship, and cultures. Some students this year's edition of Backbone, the corporate even became permanent citizens. Or mayor;) magazine of Erasmus School of Economics. As an alumnus of Erasmus University Rotterdam, So, it is fair to say, Rotterdam understands the I am flattered to have been asked to write this preface. Like you, I chose to pursue an education at Erasmus University Rotterdam and make this city my home. Personally, I did not go to Erasmus School of Economics, but as a student I have walked in your shoes. Relocating to an unknown city, leaving all familiar things behind. Exciting, yes. A bit overwhelming at times, also yes.

But Rotterdam is well prepared to hold you in a edition of Backbone. warm embrace, to make you feel at home. Due to our long history as a port city, we have ample experience in integrating people from all over the world. We have welcomed sailors, merchants, and students alike. Full of foreign knowledge and skill sets and eager to learn ours. And vice versa. Our and our city warm and welcoming! city greatly benefited from that constant exchange

benefits international exchange provides. We appreciate the strength and growth it brings to student and university. To city and country. As does Erasmus School of Economics, highly appreciated for its excellent research and educational programmes. Both city and School take pride in having the world reflected in their people, their international perspective, and their connecting cosmopolitan flair. You can read all about it in this

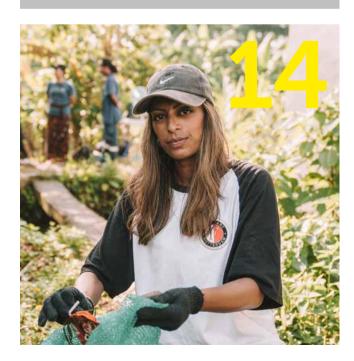
I have no doubt that numerous national and international businesses and organisations are interested in Erasmus School of Economics' future graduates. In you. Together, we will keep our economy thriving

Carola Schouten **Mayor of Rotterdam**











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---- BackBone

Between books and bars

The most popular

student bars in Rotterdam

Hey! My name is **Stan Verspoor** and I am currently studying two bachelors simultaneously: Economics and Business Economics, and Fiscaal Recht (Tax Law) at Erasmus School of Economics and Erasmus School of Law. I live in a student house in Kralingen with ten roommates, who all study here in Rotterdam. Of course, your time as a student is not all about studying; you should go out and have some fun too! It's all about finding the right balance between hitting the books and enjoying your time here. Read along to get to know some of the student bars in Rotterdam.



Oude Haven

One of the most vibrant places in Rotterdam is the city's oldest port: Oude Haven. The Oude Haven is known for its beautiful, old buildings. Het Witte Huis, which you can overlook from the lively terraces in the Oude Haven, is Europe's first skyscraper. Nowadays, the Oude Haven is one of the most crowded places in Rotterdam, with several bars, restaurants, and terraces. In summer, this is the place to catch the most sunlight. Definitely a place to visit!



Closest to your lecture room is Café in de Smitse, the bar located on campus. The café is run by a team of enthusiastic students, who voluntarily spend a year running the bar. Their spacious bar fits up to 300 people, even more, when their terrace is open. After a tough day of lectures and tutorials, you can enjoy yourself with a cheap beer! With over 40 different types of beer, there is definitely something to your taste here.







Hoekzight

Located in the heart of Kralingen, the neighbourhood known for housing the majority of Rotterdam's students, Hoekzight is the place to be for students. Also known as the best bar in Kralifornia, Hoekzight is a pleasing place for all students in and around Rotterdam. The café has a warm, almost living roomfeeling interior and even has a portrait of Desiderius Erasmus on the wall. Behind the bar is the heart of Hoekzight: bartender and manager Ramon. Ask him about his favourite stories and experiences, you'll be entertained for hours.

De Gele Kanarie

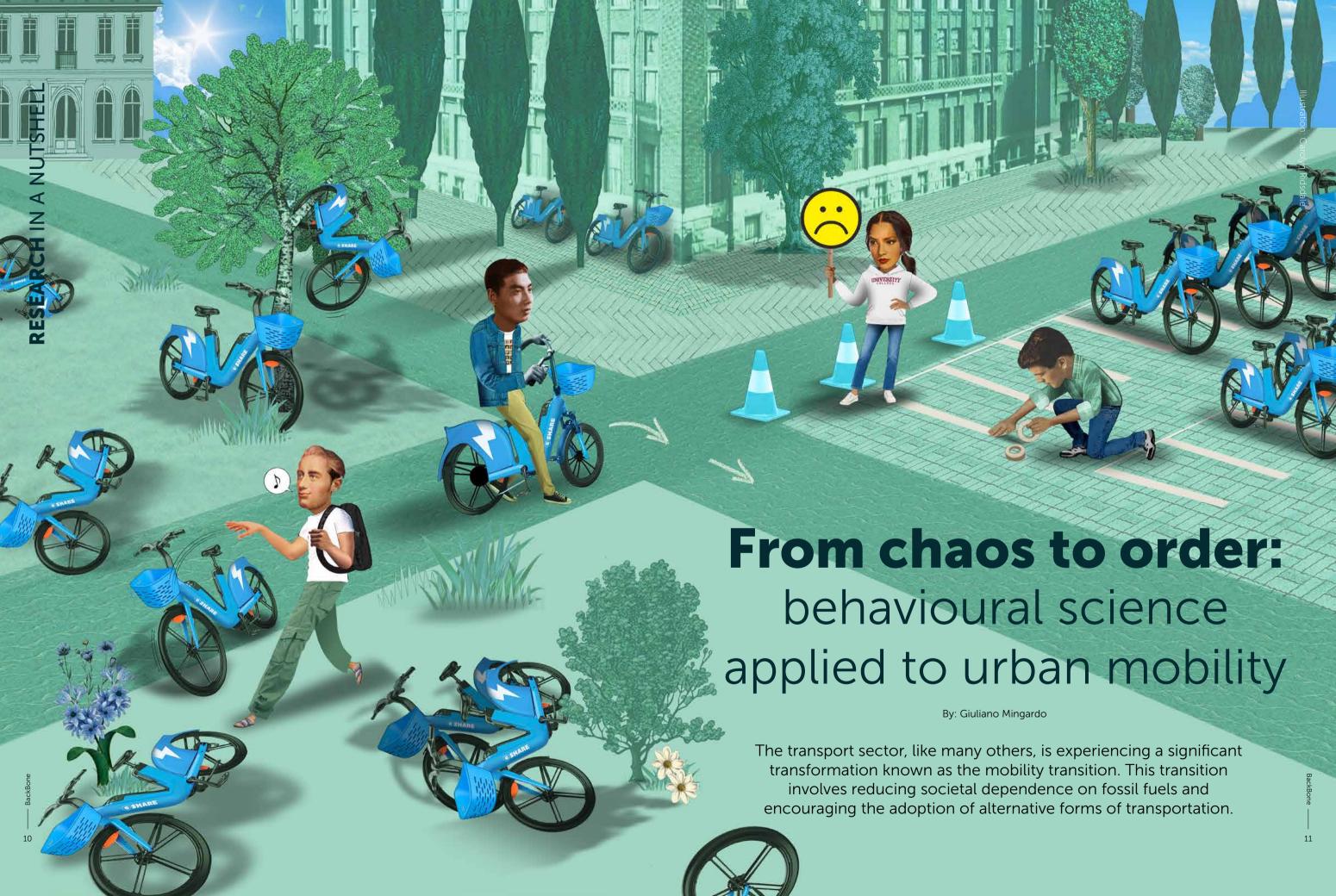
Last but not least: De Gele Kanarie, a real Rotterdam pub located on both Goudsesingel and Binnenrotte. What makes this pub so special is that besides a wide menu, they also sell home-brewed beer. Moreover, you can see the beer tanks through the glass floor. Another highlight is the Rotterdam Marathon, you can cheer on your friends and acquaintances from De Gele Kanarie's terrace as they near the finish line!

Wunderbar

Located on the lively Witte de Withstraat, you can find Wunderbar. As a part of the alternative and cultural centre WORM, this is more than just a bar. Just go inside once and you will see for yourself! There are club nights, art exhibitions, music concerts, and more surprising performances. With never a dult moment, this place is full of surprises, especially if you are interested in arts and culture. Fancying a relaxed night? Just drinking a beer on the terrace is possible too.



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'The effects are visible even beyond the boundaries of our campus: that's what we call creating positive societal impact!

n urban areas, this means decreasing reliance on cars and promoting active travel methods such as cycling and walking, along with other forms of mobility. Among these alternative transportation methods, shared electric bikes, mopeds, and scooters have seen rapid development in recent years. These modes of transport are commonly referred to as floating mobility, micro-mobility, or shared mobility services.

Although there is no scientific proof yet that micro-mobility reduces congestion and emissions in cities, these services have rapidly become part of the urban landscape. Despite their popularity, shared mobility services also pose challenges, with parking being the most significant (and visible) issue. Images of poorly parked or fallen bikes, scooters, and mopeds are common in many cities. This issue affects both aesthetics and safety and, more in general, the quality of life in urban areas. Local authorities currently have limited enforcement power over shared mobility services. These services are relatively new, and legislation has not yet addressed them. Therefore, fallen scooters or improperly parked bikes on curbs or green areas may be unsightly, but are not illegal.

Micro-mobility providers have tried to address the parking issue. They have implemented both negative (fines or account disabling) and

positive incentives (extra credit for correct parking), but neither has been effective. Moreover, they are hesitant to strictly enforce penalties to avoid alienating customers.

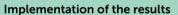
The behavioural approach

How can we encourage proper parking of shared vehicles without law enforcement or fines? Behavioural economics can help. Combining psychology, neuroscience, economics, and sociology, it aims to better understand human behaviour.

Since 2017, Erasmus School of Economics has offered a master's course in Behavioural Transport Economics. In this course, unique in Europe, students learn to apply behavioural techniques to solve transportation-related societal issues and conduct real-life experiments. In recent academic years, we

addressed the issue of chaotically parked shared e-mopeds within our campus. Armed with a lot of creativity, some posters, and duct tape, students have applied some of the basic principles of behavioural economics - mainly social norms and framing – to nudge visitors to park the e-mopeds in a correct way.

> How do you do it? Each experiment involves taking before-and-after measurements and using nudging techniques. Students must collect data on the number of incorrectly parked shared e-mopeds before and after their intervention to assess its impact. Students typically use two nudging techniques. The first involves posters promoting good behaviour (e.g., parking e-mopeds properly) or discouraging bad behaviour (e.g., improper parking). Posters can test various messages, colours, and images. The second technique uses duct tape to mark parking spots, guiding users to park correctly.



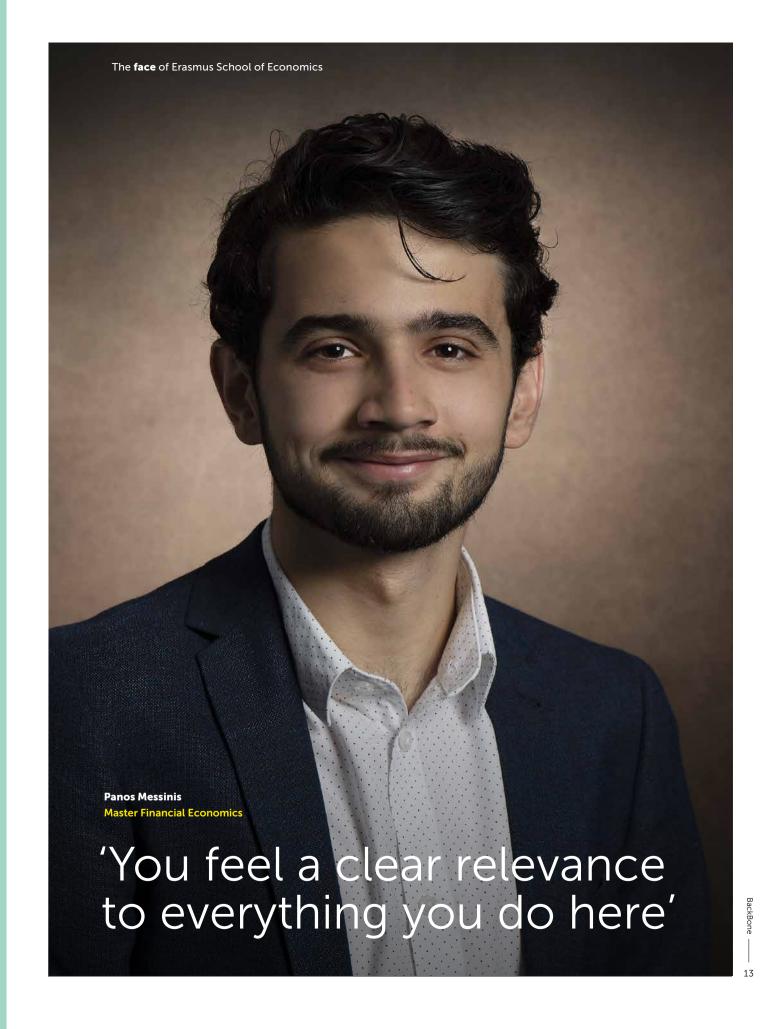
The experiments were very successful, leading the university to design permanent parking spots for e-mopeds at various locations within

Of course, not all issues can be resolved with a simple line or poster. For instance, when the number of e-mopeds exceeds the total parking capacity, individuals may still park them improperly. Additionally, behavioural principles can sometimes have adverse effects. If the first user in the morning parks the e-moped incorrectly (e.g., diagonally occupying two parking spots instead of one), subsequent users may follow suit, thereby establishing a social norm.

Yet, behavioural science has effectively reduced the nuisance of shared mobility services on campus with minimal investment. And the effects are visible even beyond the boundaries of our campus. In the last two years, the municipality of Rotterdam has implemented this approach in several areas, naming them mobility hubs. Other Dutch cities are following suit. That's what we call creating positive societal impact!



Giuliano Mingardo is a senior researcher in Urban and Transport Economics at Erasmus School of Economics. His research interests lie within the field of urban mobility. parking policy and management, and shared mobility services and mobility hubs.



Positive change starts with you

By: Madeleine Kemna

Gawithrie Vaanholt has a deep appreciation for the warm welcome and the many opportunities she has received after arriving in the Netherlands as an asylum seeker. As a result, she is naturally inclined to help those less fortunate. This ranges from supporting an orphanage in her birth country Sri Lanka to various initiatives on the Island of Bali and her involvement with Stichting Rotterdam Mooier Maken. After a successful career with Euronext, she realised that philanthropy was something she could do professionally. And because it is her passion, it doesn't feel like work.

was born during a brutal civil war in Sri Lanka. A good friend of my parents had moved to the Netherlands and his positive experience inspired my parents to follow him. They sold all their possessions to undertake the journey with two young children in order to ask for asylum here. We lived in a refugee centre for almost a year and although I was three at the time I do remember how friendly and helpful everyone was. Eventually, we were given a home in the province of Zeeland where my sister and I grew up.

Our parents instilled in us a drive to work hard and made sure we would get the best education possible, so my sister went to Rotterdam School of Management and I joined the first cohort of the International Bachelor in Economics and Business Economics (IBEB). I really enjoyed the numerical approach but what made it even more special was that we were studying with people from so many different countries. I even had the chance to visit some of my classmates in their home country.

What was your student time like?

In order to finance my study, I had to work several side jobs. I have been fortunate to be a student assistant twice. Professor Ronald Huisman supervised both my bachelor's and my master's thesis. He invited me to help him organise a conference on Energy Finance. This involved collecting data and inviting speakers from both academia and the corporate world. It was a great chance to learn and get to know many people. My second opportunity was with Ronald de Groot, the Media and Public Relations Officer at Erasmus School of Economics, a master in the art of networking. He taught me invaluable skills that have helped me ever since.

What came next?

After earning my bachelor's degree, I travelled in the United States, and when I graduated from the Master's programme, I spent several months in Asia. Broadening your horizons in this way is something I highly recommend.

In 2012 I started my career as a project manager for Euronext, the pan-European stock exchange. My job was to advise the top 500 companies in the Netherlands about the use of innovative technology in the field of marketing, stakeholder communication, e-learning, and engagement with staff. Companies with a listing on the stock exchange have to comply with stringent regulations regarding the timing and the scope of their communication so Euronext had developed specific solutions that would enable them to do so. I became an Account Executive for those listed companies. This meant working closely with the Investor Relations departments of Dutch corporates but also involved communicating with different levels of those organisations.

I also joined the board of the Netherlands Association for Investor Relations (NEVIR). In my role at Euronext, I had already witnessed the changes happening around such topics as environmental, social and governance (ESG) as well as corporate social responsibility (CSR) so I enjoyed helping to organise seminars on these developments at NEVIR. These events provided an opportunity for people to exchange their best practices.



How do Dutch companies compare internationally when it comes to ESG and CSR issues? Using the research skills I honed at Erasmus School of Economics, I demonstrated to Karma Points' founders that the Netherlands

Although Europe, and the Netherlands in particular, is ahead of the United States and Asia, there is still a long way to go. Unfortunately, greenwashing has not been rooted out entirely yet. However, in my experience, many firms genuinely want to make a difference. One example is the response I received when I was asked to join a panel of speakers at the Upstream Festival Rotterdam, which focused on the 'new economy': ways for companies to invest in social return by partnering with social entrepreneurs in the region. It was deeply inspiring to me that many organisations are happy to do so if the right connections and tools are available.

Can you tell us about your sabbatical?

It was a busy time: Euronext had set me challenging targets, which I managed to outperform, and, at the same time, I became a mother. Business was booming, especially during the pandemic, but after successfully juggling so many responsibilities, it was time to reset and re-energise. I took a sabbatical, which my family and I spent on the island of Bali. When it became time to return, the Netherlands was on the verge of another lockdown. We figured we would be safer and have more freedom by staying in Bali. I left Euronext but continued my board role with NEVIR.

There are already various initiatives that offer something similar, but what makes Karma Points unique is its reward system. In the app, the donor selects a charity they want to support. This can be with money or time. The karma points they receive when they contribute can be exchanged for discounts and freebies in the

Bali is now our second home. I became involved in several charitable initiatives there and invested in a social enterprise. Together with several Dutch investors and the people from moped-share company Felyx, we invested in scaling up the use of electric motorbikes (EVs) on Bali with the goal to offer affordable mobility, while diminishing noise- and air pollution. Even though my family and I returned to the Netherlands after lockdown, we have been coming back to the island for several months every year. When it became time for my son to start his education, we enrolled him in an international school in Bali, which he still attends when we are there. As soon as we return to the Netherlands, he gets on his bike to go to school with his Dutch friends. We feel very strongly that our main base is here in the Netherlands.

Can you tell us about Karma Points?

During my sabbatical I reflected on my next steps. I felt an increasing urge to make sure other people in need are given opportunities just as I was. When I encountered the organisation Karma Points, I knew this was a great way to channel such ambitions. Karma Points is a platform that was founded in India three years ago. It connects charities or non-governmental organisations (NGOs) with people and companies willing to donate time, money, or goods. After its successful start, it expanded to Australia and now they have appointed me to lead their launch in the Netherlands. Studies show that Dutch culture is inherently charitable, particularly among Millennials and Gen Z.

Using the research skills I honed at Erasmus School of Economics, I demonstrated to Karma Points' founders that the Netherlands was the perfect next step. I had also been taught how to write a business plan and that is exactly what I started doing. Last year was mostly about such groundwork. Now Karma Points is generating an increasing amount of buzz in the Netherlands, which gives me a lot of energy.

'Be mindful of your power and ability to be the change you want to see in the world'

but what makes Karma Points unique is its reward system. In the app, the donor selects a charity they want to support. This can be with money or time. The karma points they receive when they contribute can be exchanged for discounts and freebies in the Karma Points social-conscious brand store that offers items that have been provided by partner brands. For these businesses it is not only a chance to do something meaningful, but also an attractive way to showcase their products or services. A good example of our activities is our cooperation with Fonds Bijzondere Noden in Rotterdam, a charity that supports people in Rotterdam who can't afford their family's basic needs. On our platform, charities have the opportunity to organise crowdfunding for very specific projects. All volunteers are asked to provide their qualifications in order to assess whether they have a suitable background for the project. The charities will always have an intake interview with volunteers before they start. We highly value transparency. There are no hidden costs: recipients pay a platform fee, and we encourage donors to add a small contribution to support our operations.

What message do you want to give the current generation of students?

Your education is essential to obtain your professional goals. In addition, a combination of hard work, determination, curiosity, and reflection on your life goals will bring you to your ultimate purpose. Positive change starts with you. So, be mindful of your power and ability to be the change you want to see in the world. In volunteering for a charity or NGO, you can make a meaningful impact on society. In addition, you create an opportunity to obtain valuable experience, enlarge your network, and perhaps even find an opening for your first purposeful job. What goes around, comes around. \P





Meet Arjan Non

My name is Arjan Non. I work as an assistant professor at Erasmus School of Economics, and I am also a teacher at the Teacher Academy. In my spare time, I enjoy road cycling and football. One of my other passions is watching vintage cars. In Rotterdam, my favourite activity is walking along the river. The skyline provides a beautiful view, and it is a great way to get some fresh air. On campus, my favourite place is my office. This room feels like an extension of my home, providing a comfortable and personal space.

hen I was a student, I did not have a clear idea of what I wanted to do after my studies. I could envision myself working for the government, as I am interested in public economics, but my career path turned out differently. While studying at Erasmus School of Economics, I was exploring opportunities in government organisations. Then, my thesis supervisor, Robert Dur, asked if I would be interested in pursuing a PhD. I thought about it that night and told him the next day that I was excited about the opportunity. That is how I began my PhD at Erasmus University.

Field of interest

In my teaching career, my favourite subject to teach was macroeconomics, which studies the overall economy and large-scale economic factors, rather than focusing on individual markets or businesses. While it is not my primary research area, I find it fascinating. I view macroeconomics as one of the most classical forms of economics. It is all around us, so it is hard to avoid. Even in other areas of economics, macroeconomic implications often emerge. I find various fields interesting and see a lot of overlap between them, so I don't have one favourite economist.

Interesting new ideas

I come up with research ideas by reading extensively or discussing topics with my colleagues. Sometimes, the magic happens, and I come up with a new idea to explore. Unfortunately, there is no cookbook recipe for getting great ideas, because it is often the idea that makes the difference. One of the most interesting findings from my research is that workers' performance improves when they see that colleagues receive recognition for good performance. In our study, we also examined whether

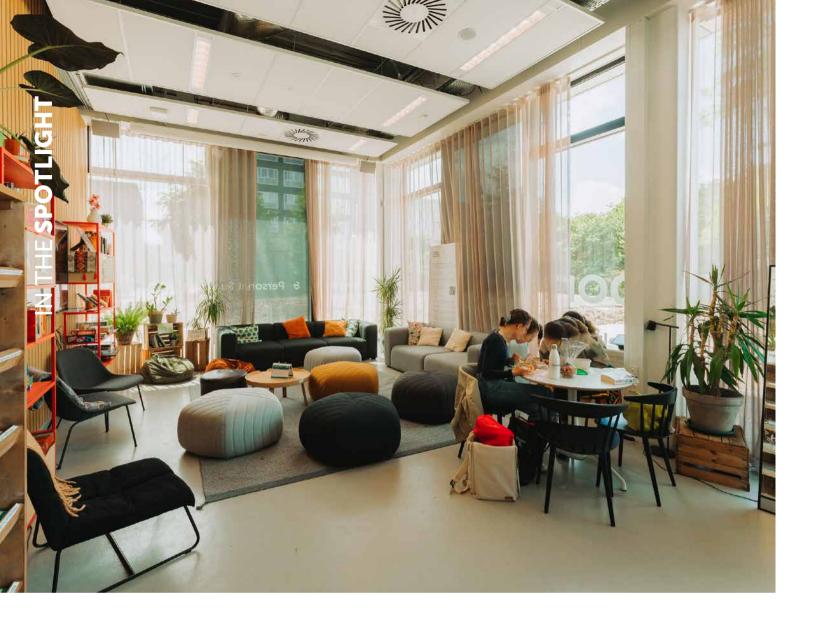
recognition should be given to all workers or only to a subset of the best performers. Surprisingly, we found that even workers who did not receive recognition but observed their colleagues being recognised improved their own performance. For me, this was an intriguing discovery.

'Sometimes, the magic happens and I come up with a new idea to explore'

Twenty years ago, it was more acceptable to conduct research with few observations and leave some open ends than it is today. Methodology has become much more rigorous, and I believe we are making significant progress. This trend will likely continue, leading to an overall increase in the quality of research in the future.

A word of advice

I would advise students to try out many different things. I mean discovering what you like and exploring it, for example through internships. Your student years are the perfect time for this, as it becomes much harder to switch careers later in life. So, take your time now to figure out what you want to do. \P



Talking well-being with Gen Z

Today's students have grown up in a digital world, surrounded by information and constantly connected. But being online doesn't always mean we speak the same language. At Erasmus School of Economics, we see it as our responsibility to support students not only academically, but also emotionally and socially. That starts with knowing how to talk to them.

What works for one generation might not land with another. So how do we reach Gen Z in a way that feels relevant, respectful, and real?



Yashira Groenendiik is a Student Adviser at Erasmus School of Economics and Student Well-being

f we want to reach Gen Z, we shouldn't just create messages for them - we need to create messages together with them. That's why I always involve student assistants and ambassadors when developing communications. They help me understand what language feels natural and what formats actually work. For example, two years ago one of our ambassadors, who is originally from outside of the European Union, came to us and said: "I have some things to share about our admissions procedure. I don't think it's inclusive." We invite this kind of feedback.

I think the Marketing & Communication department plays a big role in helping other departments communicate with our students. It's easy to fall into the trap of thinking "When I was their age...", but Gen Z grew up in a different world. We have to stay curious, keep asking questions, and let go of assumptions. They know when something feels inauthentic and that will make them switch off immediately."



ven though Gen Z is often described as more open about mental health.

we still see a lot of hesitation, especially

among international students. In some

cultures, it's still taboo to talk about stress,

anxiety, or to ask for help. That's why it's

so important to be mindful of cultural

differences when we communicate

about well-being. We try to use inclusive language and multiple channels to make

sure our message lands.'

Aleksandra Stuip is an Online Marketing Adviser at Erasmus School of Economics.

ur relationship with technology is quite interesting. Social media plays a huge role in our lives, and if you look at people's screen time, it can be an astonishing amount. The impact of COVID-19 on education has also shaped our needs. Some students had to take their final exams without a central exam, and we all spent two to three years at home. These experiences have influenced how we prefer to communicate. Many people I know dislike phone calls, for example. I don't mind them, but I understand it's a real issue for others. When it comes to student well-being, we prefer personal and informal communication.

Student well-being shouldn't just be about combating depression but also about promoting happiness. Making it easy for students to connect and do enjoyable activities alongside their studies is important. Encouraging openness and making both positive and negative topics discussable contributes to this."

ecognising signs of mental health problems in students who go unnoticed is what I'm dedicated to. Despite the increasing ease for young people to address issues and talk openly about personal matters, many still struggle in silence. We need to be vigilant about changes in behaviour, such as poor academic performance, absenteeism, or noticeable shifts in demeanour. By actively reaching out and offering support, we can help these students feel seen and heard, and guide them towards the help they need."

Lennart van der Veen

is a student in the Bachelor's

programmes Economics

and Business Economics

and Philosophy.



Jaarsma is a Student Adviser at Erasmus School of Economics.

Check

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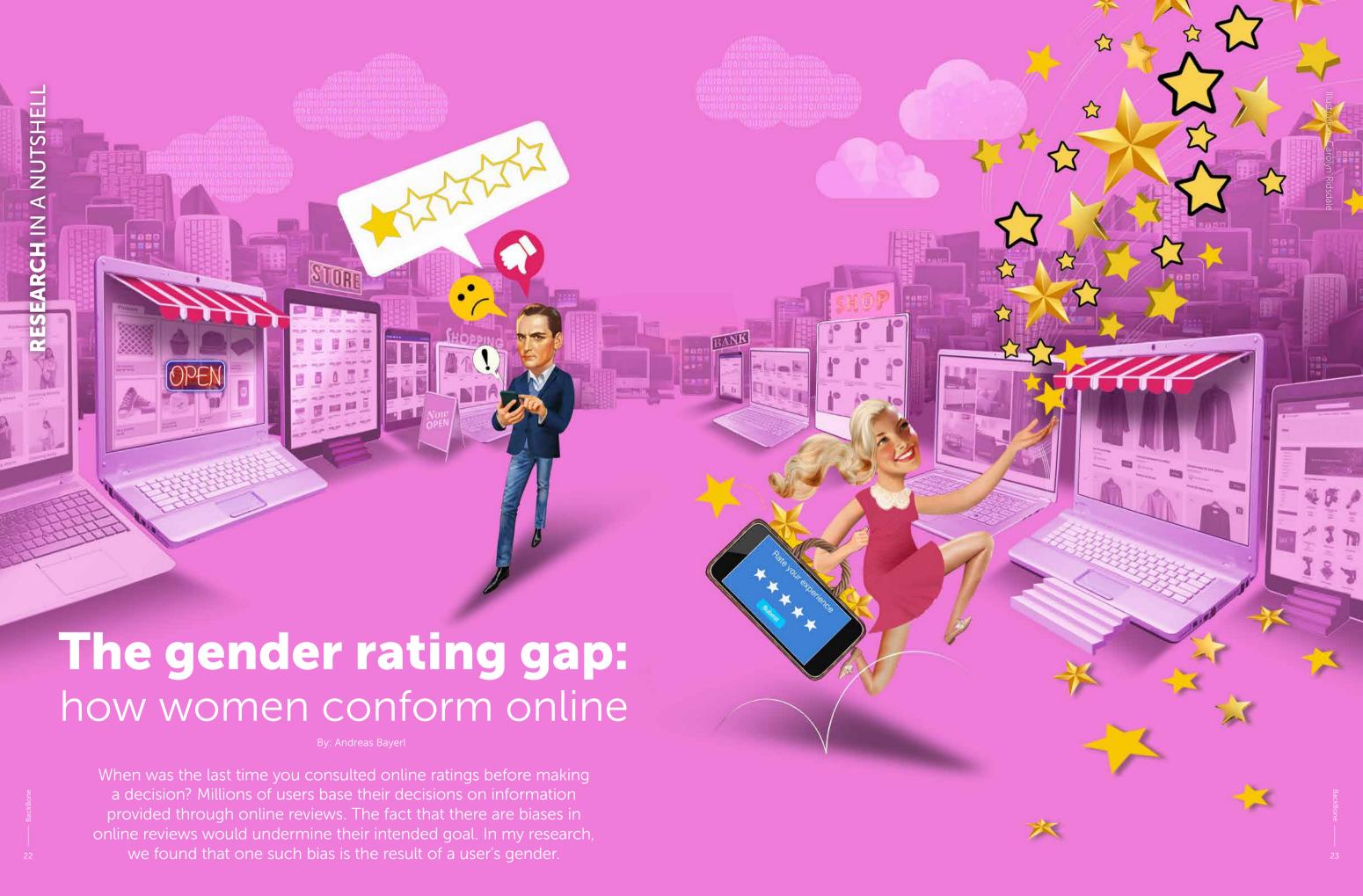
but also about

The Living Room is a place on campus accessible to all student without exclusion. In the Living Room you can relax, play board games, play pool, knit, and much more. There is always a trained student to welcome you.

ROOM is an innovative app using science-based tools and techniques to help students thrive academically and personally.

Student Wellbeing Week is a week on campus filled with activities and workshops to help boost your wellbeing.

this out





know from many other regards that there are gender differences, known as gender gaps. And they tend to show themselves online as well. For

example, on Wikipedia, there is a gender gap, where women contribute less, especially so to controversial topics.

Given this, we set out to study gender differences in the star ratings of online reviews. Originally, online reviews were introduced to level the playing field between buyers and sellers by giving consumers access to credible and relevant information, and, ultimately welfare. Indeed, online reviews significantly impact businesses and economic systems. However, this free flow of information, which was not easily accessible before digital platforms were prevalent, strongly depends on the motivation and willingness of people to share both their positive and negative opinions so that others may be better informed. This form of self-selection could be crucial to how representable and credible the shared information is and might vary by gender. In our Nature Human Behaviour paper called "The Gender Rating Gap in Online Reviews", we set out to study exactly that.

We started our study by analysing 1.2 billion online ratings across multiple platforms and industries. Then, we used Computer Vision to estimate users' gender from their profile picture or their usernames using existing databases of names. We observed the resulting gender rating difference across various contexts, such as different countries or different settings with many versus few other male/female reviewers. Our findings suggest that the average star rating submitted by women is significantly higher than the average star rating submitted by men.

We further explored where this rating gap might come from using a series of experiments with more than 2,000 respondents. We asked men and women to share their genuine

> attitudes towards products and followed up by asking if they wanted to post an online review about it. That's how we found a genderspecific selection of writing an online review that is probably at the core of the gender rating gap. In other words, women who are satisfied with their experience are about as likely as men to share their opinions online. By contrast, when dissatisfied, women are less likely to share online reviews. Upon asking further, we found out that women's reluctance to express negative opinions is likely due to women's fear of societal backlash, the fear of being judged, even though the internet is relatively anonymous. The gender rating gap is less present in countries with relatively modern gender roles or in contexts where many other women are reviewing.

> This research has major implications for platforms that rely on user-generated ratings. If women's ratings are systematically higher, businesses and AI models may overestimate

quality in ways that shape consumer expectations and purchasing behaviours. More importantly, it raises questions about how we should interpret online ratings in a world where gendered differences in evaluation persist.

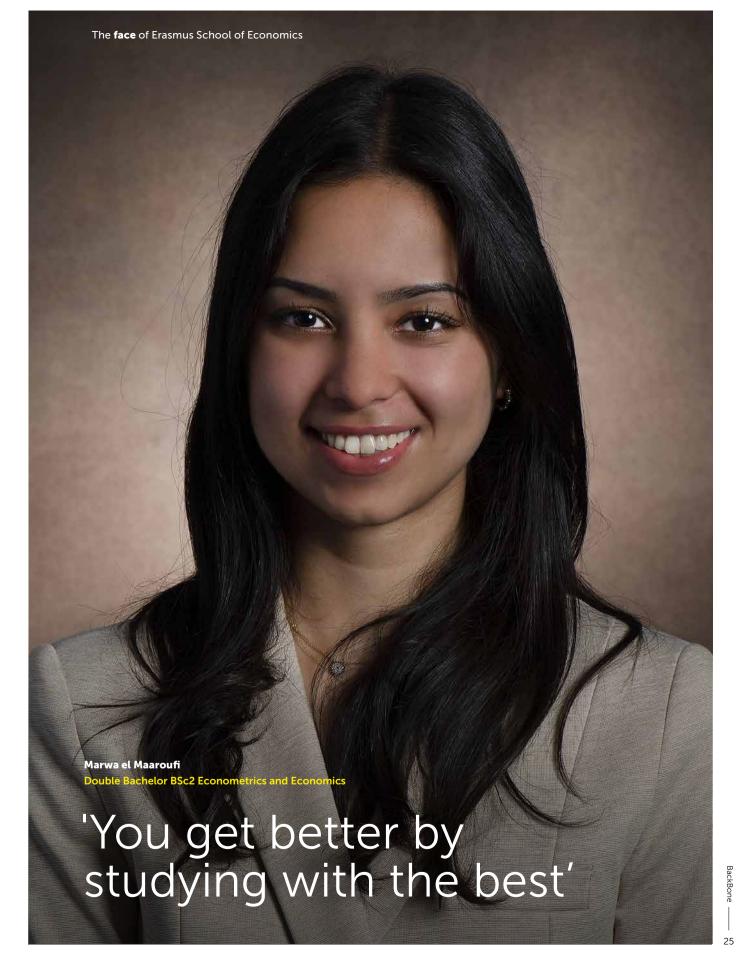
As Al continues to integrate user data for decision-making, we must consider how such biases impact automated recommendations and business success. Should platforms adjust for gendered rating differences? Or should consumers be made more aware of these biases when making decisions? These are critical questions for the future of digital marketplaces. So, next time you read an online review, remember that it might not be as representative as you think. <



Erasmus School of Economics,

specialising in influencer

marketing, the creator economy, and user-generated content. His research explores how people share information online and are influenced by it.







its story through architecture

Rotterdam is known for its challenging architecture, attracting many visitors every year. Due to the 1940 bombing, Rotterdam's city centre was almost completely destroyed. In the postwar period, this empty canvas attracted many enthusiastic architects, who started rebuilding the heart of the city. Different types of building styles were used interchangeably, making the architecture tell the story of Rotterdam.

re-war monuments

Not all buildings in Rotterdam were destroyed during World War II. The Witte Huis proudly remained standing. This 1898 building was Europe's very first skyscraper, with a height of 45 metres, and served as an office building for many

years. The Van Nelle Factory (1925) also survived the war. This building has even been on the UNESCO World Heritage List since 2014. Moreover, the city centre is home to the Laurenskerk, the only remaining medieval building. The church is still regularly used for various events.

Nieuwe Bouwen

Even before the bombing, important architectural reforms were taking place in Rotterdam. Nieuwe Bouwen is a movement that emerged in the 1920s and is characterised by functionality, simplicity, and an absence of ornamentation. In

Rotterdam at the time, this style was often combined with Bauhaus. A well-known pre-war example of Nieuwe Bouwen is the Van Nelle Factory. However, the international breakthrough of Nieuwe Bouwen did not occur until after World War II. In Rotterdam too this movement was continued, with the cube houses, Van Tijen's Bergpolderflat (the Netherlands' first gallery flat), and the Justus van Effenblok as examples of post-war Nieuwe Bouwen.

Seeking width and height

During reconstruction, Rotterdam was given the chance to be spacious and open. The Lijnbaan, for instance, became the Netherlands' first car-free shopping promenade. Iconic buildings from this period include the Bijenkorf and the Groot Handelsgebouw. As the city grew, the demand for living and working space increased. It became inevitable. Rotterdam had to go up. This led to the port city's distinctive skyline. The Erasmus Bridge then provided a better connection to the Kop van Zuid, allowing the city to develop further on the other side of the Maas.

Eyecatchers

Rotterdam's most remarkable buildings are located around Rotterdam Blaak. For good reason, this location is mentioned in the song De Allermooiste Rotstad, also known as the Rotterdam song. The Market Hall is not only a popular place to eat but also an architectural masterpiece thanks to its unique arch shape and the houses above it. Across the street is the Central Library, a recognisable building due to its yellow tubes. Next to it is the Potlood, another example of Nieuwe Bouwen. Together with the cube houses, this building contributes to Rotterdam's eccentric character.

Future

Rotterdam continues to innovate in terms of architecture. With projects such as Luchtpark Hofbogen, an almost two kilometres long park on roofs, the renovated Coolsingel with less access for cars, and the construction of new parks and neighbourhoods in Rotterdam. Architecturally, Rotterdam will always be an inspiring, innovative, and impressive city. **《**

'Together with the cube houses, the Potlood contributes to Rotterdam's eccentric character'





Erasmus School of Economics in numbers

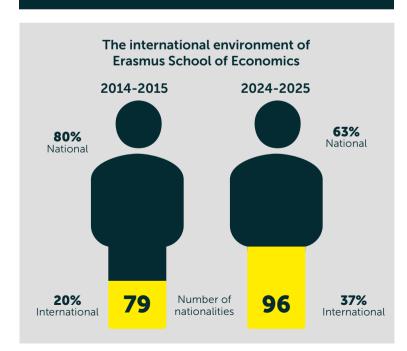
Erasmus School of Economics competes with the best universities in the world. To provide our students with the best opportunities we offer our students a variety of study programmes and lectures by top researchers. Here are some of the essential facts and figures about Erasmus School of Economics.

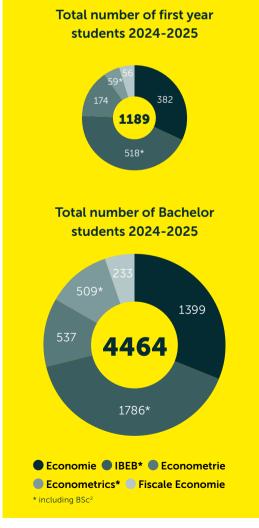
> Here are some of the essential facts & figures about **Erasmus School of Economics.**

Bachelor

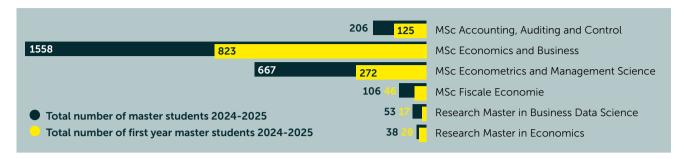
We offer the following Bachelor's degree programmes

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- (International) Bachelor Econometrics and Operations Research
- Bachelor Fiscale Economie (will discontinue from 2028)
- Double Bachelor BSc² Econometrics and Economics
- Double Bachelor in Economics and Philosophy of Economics
- Double Bachelor in Econometrics and Philosophy of Econometrics
- Dubbelstudie Economie en Recht

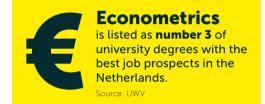




Master



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.



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

MSc in Economics and Business

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

Research Master programmes

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

MSc in Econometrics and Management Science

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

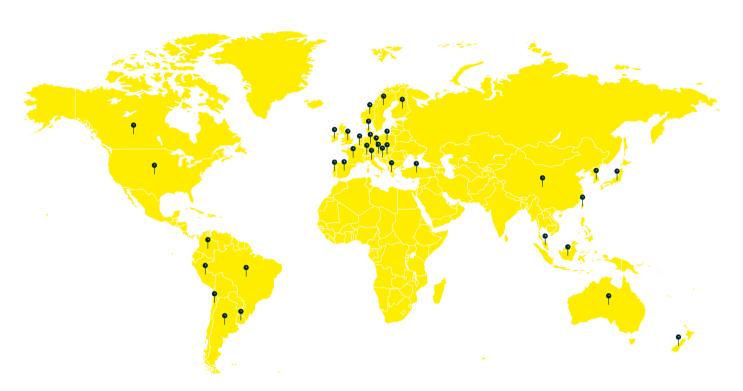
MSc in Accounting, **Auditing and Control**

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

MSc Fiscale Economie

- Directe Belastingen
- Indirecte Belastingen

For more information about our study programmes please visit: ese.eur.nl/education



Where do our students come from - and go to for exchange?

- Argentina
- Australia
- Austria
- Belgium
- Brazil
- CanadaChile
- China
- Colombia
- Croatia
- Czech Republic
- Denmark
- Finland
- FranceGermany
- Greece
- Hungary
- Indonesia

Ireland

- Italy
- Japan
- New Zealand
- Norway
- Peru
- Poland
- Portugal
- SingaporeSouth Korea
- Spain
- Sweden
- Switzerland
- Taiwan
- Turkey
- United Kingdom
- United States
- Uruguay

Check this out!

MentorMe

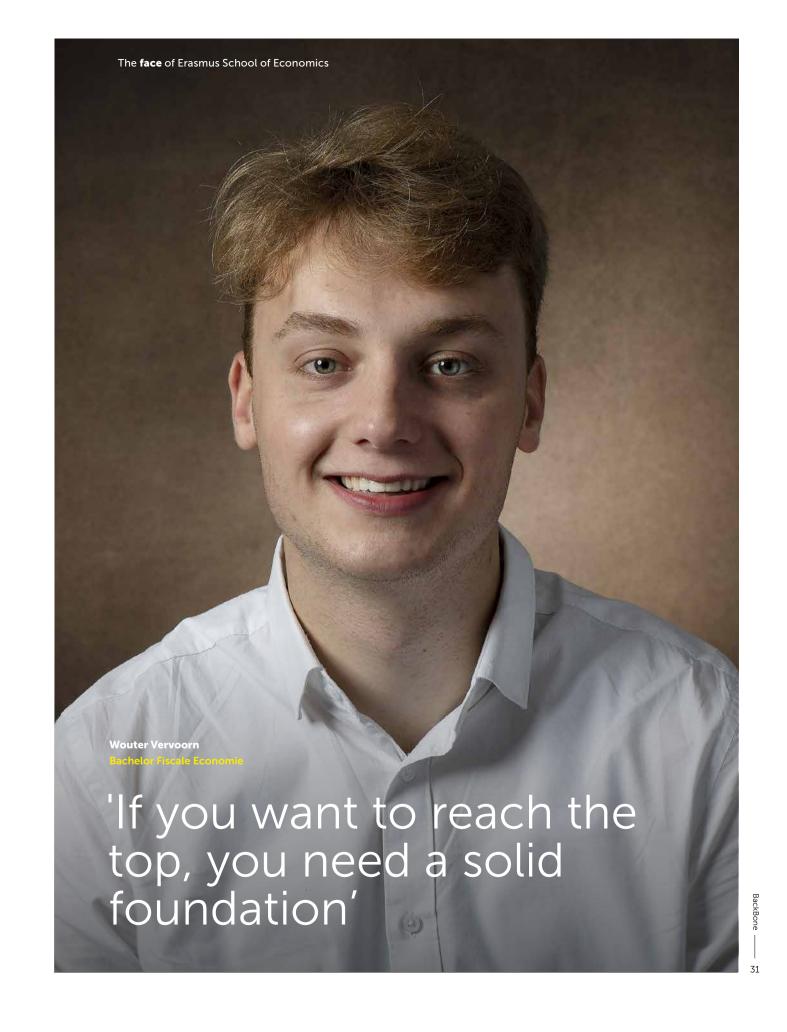
MentorMe is a free, online platform that connects current Erasmus School of Economics' students with alumni through mentoring. MentorMe is designed to develop voluntary, one-on-one relationships between students and alumni to share knowledge and insights gained through the years.

Thesis Coaching

Many students face challenges with planning, setting goals, stress, procrastination, or motivation at some point during their thesis. This can get in the way of progress and finishing in time. For Bachelor and Master students, Erasmus School of Economics offers thesis coaching to help during this process.

Erasmus Language Sharing

Erasmus Language Sharing (ELS) offers our students the opportunity to learn about a language and its culture in an interactive way. They take on a 'for students, by students approach', so they can offer affordable courses three times a year. Check out their site to see what courses they offer!







Meet Anastasija Tetereva

I am Anastasija Tetereva, an assistant professor in the Department of Econometrics at Erasmus School of Economics. When I was younger, I wanted to be a hairdresser. However, this changed when I went to school, where I developed a strong interest in subjects like mathematics, algebra, and physics. Although I found these subjects challenging, they were incredibly fascinating. As a result, I decided to pursue a career in something quantitative.

come from Latvia, where I studied Mathematics and Statistics. Later, I moved to Berlin to obtain my Master's degree in Statistics at Humboldt University. After that, I moved to Switzerland to complete my PhD in Economics and Finance, giving me quite an international background. I was searching for a vibrant and unique place where I could not only share my knowledge but also continue to develop myself. That is how I ended up in the Netherlands, as I really wanted to stay in Europe.

'Do what you love, as it is the only way to truly excel in your work'

Interest in academia

There was a strong match between me and Erasmus School of Economics, primarily because of its high academic standards. Additionally, the university collaborates closely with the industry, addressing real-world problems and striving to make an impact. Lastly, I enjoy teaching and research, but most of all, I value the people I meet in academia. They are not only highly skilled professionals but also genuinely curious about life. These are people striving to make a difference, engaging in fascinating and sometimes unconventional projects. I learn a lot from them and draw inspiration from their passion.

Research focus

My primary research focus is on machine learning in financial econometrics and finance. Currently, I am working on time-varying models that adapt to market conditions. For instance, during a crisis, one type of model is needed, while periods of stable economic growth may require a different type. My goal is to develop models that are as flexible as possible and driven by market dynamics.

Teaching

In my teaching, I strive to keep the content relevant. I want students to understand not only the importance of what they are learning but also why it is exciting. To achieve this, I incorporate numerous practical and applied examples, demonstrating how econometrics and machine learning can drive change in their fields.

My favourite spot on campus is the Langeveld building. It is green, filled with trees inside, and designed to be sustainable, all of which make it a great place to relax. Whenever I need a break, I go to this building to enjoy a coffee.

If I have any advice to give to my students, my first piece would be to do what you love, as it is the only way to truly excel in your work. Otherwise, it lacks meaning. My second piece of advice is to be brave - be open to new opportunities and take a few risks in life! **《**

Closing the gap:

what organisations can do to create an equitable remuneration policy

Erasmus Q-Intelligence is affiliated with the Econometric Institute of Erasmus School of Economics and helps organisations create positive impact through data analysis and Al. One of their focal areas is equal pay research. With their Equal Pay approach and Equal Pay Employer certification, organisations can comply with the Pay Transparency Directive.



ur board wanted to gain insight into whether we, as an organisation, comply with the principle of equal pay for equal work,' says Edwin Dortland, HR Manager at housing corporation Woonstad Rotterdam. 'We had already conducted several calculations ourselves based on payroll data, but we were looking for a transparent and proven methodology. Erasmus Q-Intelligence provided us with the desired insights. Last year, they conducted a pay gap study for us, after which we immediately commissioned them to carry out an in-depth follow-up study.

The unadjusted and adjusted pay gap

'The pay gap refers to the difference in remuneration between two groups of people. It often concerns gender, but can also relate to ethnicity,' explains Buis Boone, data scientist at Erasmus Q-Intelligence and the researcher involved in the pay gap study at Woonstad Rotterdam. 'There are two types of pay gaps. The unadjusted pay gap, firstly, compares salaries between men

and women, regardless of their role or position. Essentially, this means comparing a refuse collector to a CEO. This gap is large because men still tend to hold higher positions and work in different sectors more often than women.

To gain a true understanding of the principle of 'equal pay for equal work', the adjusted pay gap must also be determined. 'In this study, people with comparable attributes are compared, considering factors such as job level, education, age, and work experience. These are legitimate reasons for a pay gap, where gender or ethnicity are not. When adjusting for these factors, a clearer picture emerges of the extent to which employees receive equal pay for equal work.'

Pay gap research

In collaboration with Erasmus School of Economics, Erasmus Q-Intelligence has developed an integrated approach to pay gap research. The study at Woonstad Rotterdam began with the

provision of necessary data to populate the statistical models used by Erasmus Q-Intelligence, which in turn transparently revealed the pay gap. 'In order to determine a meaningful adjusted pay gap, it is important to understand the context of an organisation,' Boone explains. 'By considering context, you get a clearer picture of where the real issues lie, whether it's pay inequity within roles, promotion barriers, or recruitment biases. In several sessions with Woonstad, they provided us with all the necessary inputs to make meaningful comparisons. This allowed us to draft a clear report detailing the pay gaps across various categories of employees.

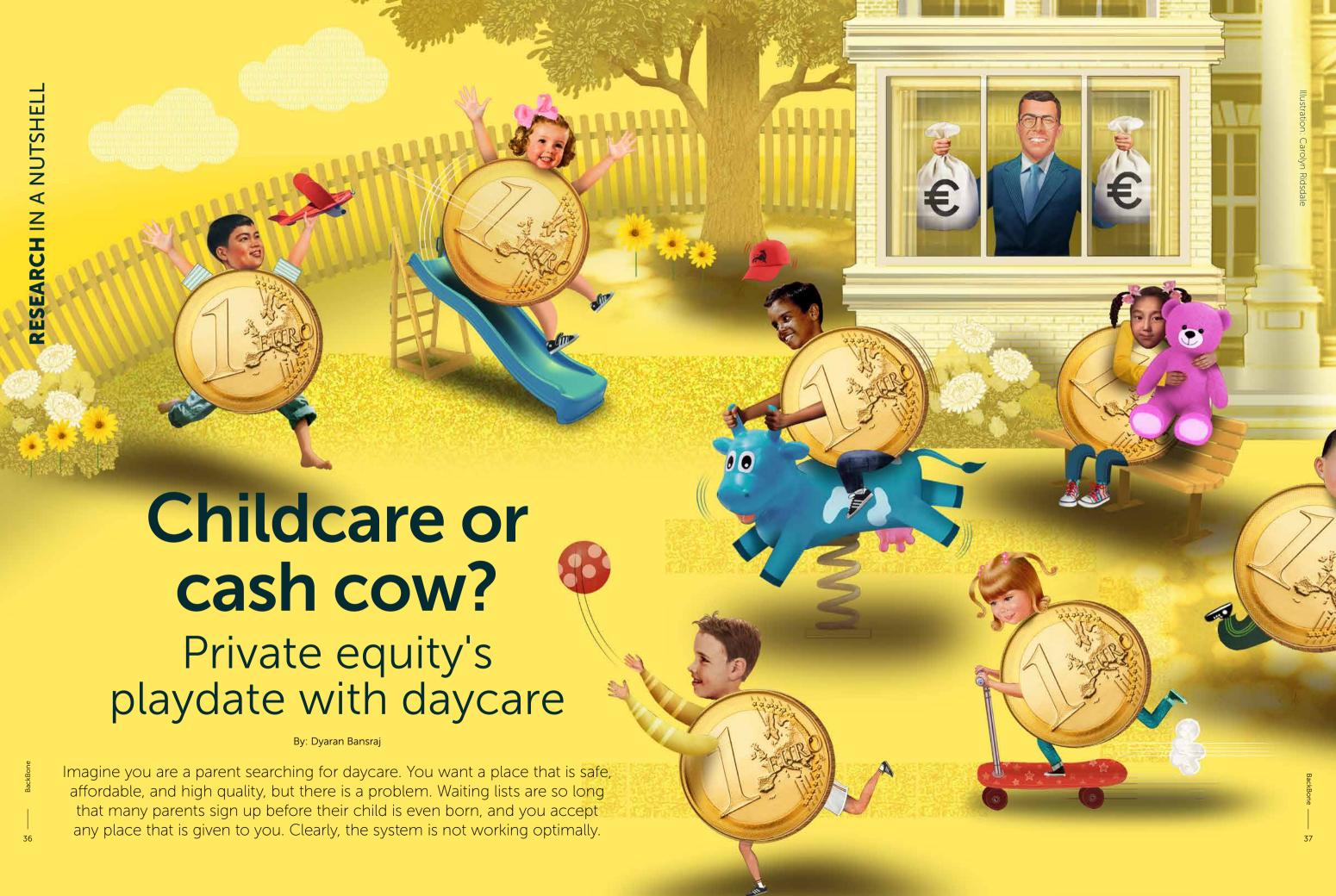
At Woonstad Rotterdam, an unadjusted pay gap of 8.3% was identified. Upon adjustment for gender-neutral, objective criteria such as job level and work experience, an adjusted pay gap of 1.5% remained. This is better than the average in the Netherlands, and it is below the 5% criterion following EU guidelines. 'Although these percentages are manageable, they still indicate room

for improvement,' says Dortland. 'That's why we immediately requested an in-depth follow-up study to gain even greater insight into the specific areas where the pay gap exists.

Certification

At the European level, the Pay Transparency Directive has been established to reduce pay inequality between men and women. From 2027, organisations with more than 100 employees will be required to report on pay inequality within their company and take corrective action if the pay gap exceeds 5% and cannot be justified by gender-neutral, objective criteria.

Erasmus Q-Intelligence offers organisations committed to equal pay the Equal Pay Employer certification. This certification ensures that organisations comply with the requirements of the Pay Transparency Directive. **₹**



BackBone

'Ultimately, the trade-off between efficiency and affordability is a political choice'





oreover, with major Dutch government reforms planning to make daycare almost entirely free, this situation could even get worse as this will increase the demand for daycare. A big worry is that forprofit businesses may take advantage of this growing market,

transforming an often essential service into a business strategy. In my research, I find that investment firms in the Netherlands are rapidly expanding their presence in childcare. This reshapes prices, quality, and competition in ways that affect families, and the economy.

For-profit ownership in daycare presents a trade-off. On one hand, private investors can bring efficiency, professional management, and economies of scale. Larger daycare chains may offer standardised care, improved compliance, and modernised facilities.

On the other hand, profit-driven daycare also introduces risks. With demand far exceeding supply, private firms may raise prices - especially when subsidies increase or when the market consolidates, reducing choice for parents. Private equity tends to restructure businesses to maximise profitability, which could lead to stronger financial management and higher compliance with regulations, but also cost-cutting measures that impact service quality.

Studying private equity in daycare

In this study, my co-author Dong Xu (Bayes Business School) and I aim to understand how private equity ownership impacts daycare pricing, quality, and market competition. By doing so, we shed light on whether financial investors improve childcare

services or simply make them more expensive, especially in a market already struggling with high demand and upcoming policy changes.

To understand how private equity shapes the daycare market, we analysed data from thousands of daycare centres in the Netherlands between 2016 and 2023. We tracked ownership changes, pricing trends, and regulatory compliance using government records, company reports, and financial databases. By comparing private equityowned centres to other providers, we identified differences in pricing, response to subsidies, and quality violations. Additionally, we studied how these centres adapted to stricter regulations. This approach allows us to separate natural market trends from the effects of private equity, providing a clearer picture of its role in shaping daycare accessibility and affordability.

Prices, quality, and competition

Firstly, we looked at how pricing was affected. When allowances rise, these centres adjust their





prices more aggressively, capturing a larger share of the subsidy. In regards to quality, private equity ownership presents a mixed picture. These centres have fewer overall regulatory violations, particularly in administrative compliance. However, they initially struggled with staff-related violations but adapted better after stricter regulations were introduced in 2019.

Another concern is market competition. While private equity-owned daycares represent just over 10% of the market nationally, their share is much higher in districts where they operate, exceeding 30% in some areas. Its growing market influence could limit competition and parental choice over time.

Global trends and cross-sector impact

While this study focuses on the Netherlands, private equity's influence on childcare is part of a broader global trend. In countries like the United States, the United Kingdom, and other European nations, similar concerns have emerged over rising daycare fees, market consolidation, and the tension between profit motives and service quality. This trend extends beyond childcare - healthcare sectors, including nursing homes and hospitals, have also seen increased private equity involvement, sparking concerns over affordability, staffing shortages, and patient outcomes. The growing role of financial investors in essential services raises pressing policy questions about competition, affordability, and long-term quality. Our results suggest a clear trade-off from private equity presence in the daycare market. They make daycare more expensive but overall quality improves.

Political balance

A well-functioning daycare market is essential for families, yet balancing affordability, quality, and investment incentives remains a challenge. Private firms can help expand and optimise the sector, but their involvement comes at a cost. Higher prices driven by the need for financial returns. From a policy standpoint, maintaining a healthy mix of non-private alternatives and enforcing strong checks on quality, competition, and financial risk-taking is crucial. Ultimately, the trade-off between efficiency and affordability is a political choice.

The Dutch daycare sector is already under pressure, and upcoming government reforms could significantly reshape the market. The plan to make childcare almost entirely free by 2029 raises new questions about pricing dynamics, market entry, and competition. Our research sheds light on how private investors operate in a sector with a vital societal function, informing future policy discussions. •



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Dyaran Bansraj

is a lecturer in finance at
Erasmus School of Economics.
His research focuses on private
equity, financial markets, and
competition, with an emphasis
on buy-and-build strategies.
He examines how consolidation by private equity shapes
portfolio companies, market
competition, and broader
industry dynamics.

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Setting the bar high

By: Madeleine Kemna

Olympic gymnast Frank Rijken has mastered the art of achieving the perfect balance. This enabled him to reach the final of the Olympic all-around competition in Paris. He explains how alternating between the gymnastics arena and the university campus was the key to his success as an athlete and a student. He found that asking for help at the right moment increases the chance that all your hard work will lead to success.

hen I was nine years old, I started recreational gymnastics. Soon after, the intensity increased, and I I was training an average of seven times a week. I was also an ambitious pupil with a knack for maths and economics. After high school, I chose to study Business Economics in Tilburg because it allowed me to accommodate my gymnastics schedule, as the university helped me to reschedule my tests around big Due to my strict schedule, I only got to enjoy the social part competitions. By 2021, Erasmus School of Economics began facilitating remote exams, which made it possible for me to pursue a master's degree in Strategy Economics in Rotterdam and combine my study with international events.

What are the differences between studying in Tilburg and in Rotterdam?

Tilburg feels more like a village. In this relatively informal setting, it is easier to have access to your professors for example. The Rotterdam campus is much larger, with significantly more students, necessitating tighter organisation. While Tilburg has many international students, there is a bigger variety of nationalities at Erasmus School of Economics. People truly come from all over the world—I even attended a classmate's wedding

How did you manage to combine a demanding study with the life of an elite athlete?

Our cohort had around 50 students, but not everyone came to campus every day, especially in the aftermath of the pandemic. I preferred attending classes in person, as alternating between home, campus, and the gym gave me energy. Since it was my final year of study, I wanted to make the most of it by building

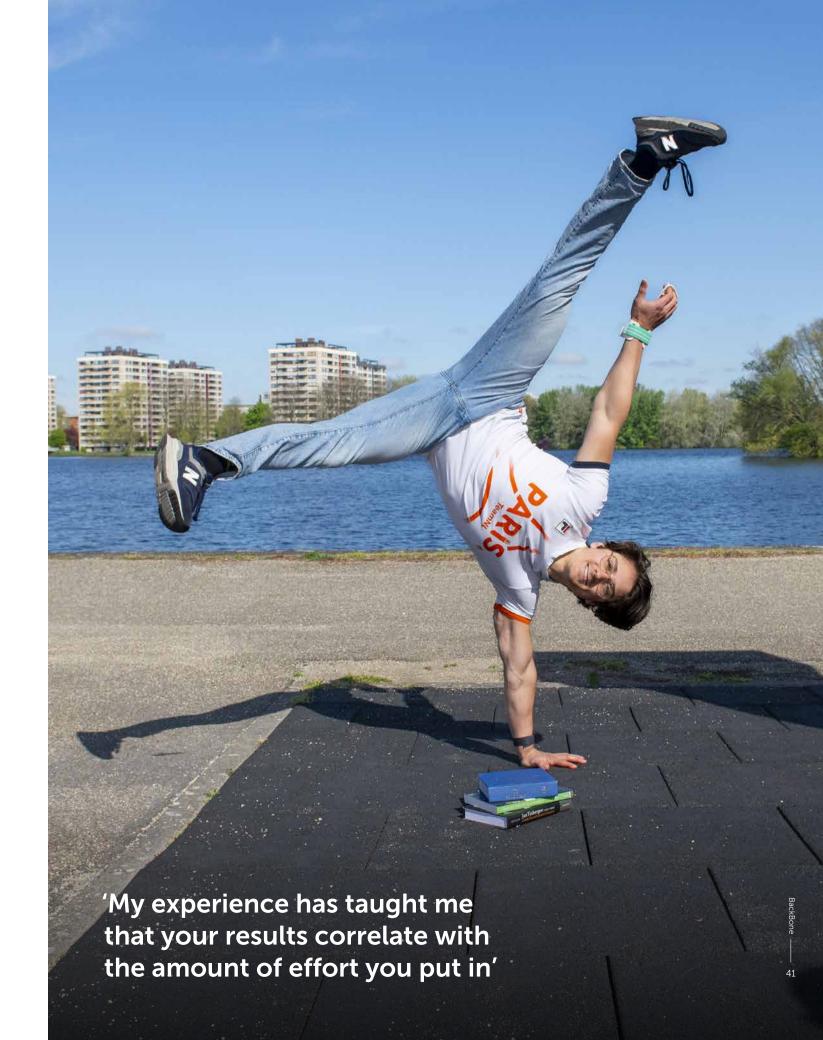
personal relationships, which is much more enjoyable in person than online. When I was training for the World Championship, began competing in tournaments. By the age of 13, I would be in the Topsport Centre (next to football stadium De Kuip) from nine in the morning till noon, then drive 15 minutes to campus for classes, and go back again for a few hours afterwards.

Did you manage to have a social life as a student?

during the last six months of my five years as a student, but it brought me great friends with whom I still get together regularly. Through one of these friends, I was introduced to several events where international students would cook together to share dishes from their respective countries. I also remember participating in a thesis excursion to Nijmegen. Mornings were spent working, while later in the day, we played sports on a beach along the river. And yes, there were also drinking games. Nowadays, I like to attend alumni dinners, which are often combined with events in town, such as a documentary festival.

Can you tell us about the diet of an Olympic athlete?

It depends on the type of sport. For gymnastics, which involves intervals rather than endurance activities, you need food with a relatively high protein content. The protein is needed to maintain enough muscle power to grip the bars. During periods that I trained a lot, breakfast and lunch typically included rice, porridge, or beans. In the evening, I reduced my carbohydrate intake, avoiding pasta or rice. Snacking was not part of the routine. Drinking plenty of water is always beneficial, but it also helps suppress hunger. After intense training, I consumed whey protein within 40 minutes. I still follow this diet, just eating slightly less since I no longer burn so many calories.



'If you don't try or don't dare to ask for help you will never know if it could work. Just go for it!'

Additionally, I was careful with alcohol. As an athlete, you have one goal: to be at your best when it matters. Drinking and late nights are counterproductive.

during your studies?

Definitely. My gymnastics coach always encouraged me to be proactive, which meant planning meticulously to achieve peak performance for upcoming tournaments. This skill was also important for my studies. In addition, my experience has taught me that your results correlate with the amount of effort you put in. This was very motivating and it helped me to develop an absolute will to perform in gymnastics, while also achieving high grades in my study.

Training or studying with others made the effort easier and more enjoyable. Communication was also crucial, I was never shy about asking for help. The only way I managed to balance my studies and gymnastics was by seeking support. If I struggled with a subject, I asked a classmate to explain it to me and I wasn't In Paris I reached top form. After performing in the all-around afraid to let them know if I didn't understand straight away.

Having clear goals, such as upcoming tournaments, also helped me develop a strong focus. This skill was beneficial when applying for my current job at PricewaterhouseCoopers (PwC), where the selection process involved three days of case studies and social events. I think leaving the nightly parties a bit sooner mental fitness.

How do you deal with stress management?

I always feel the nerves before a tournament, exam, or presentation, but my experience has taught me that it doesn't matter. I can still perform well despite them. Over time, I learned to view stress as a positive sign and enjoy it. Often, simply starting How did you manage to remain an elite athlete for the task at hand is the best way to manage the pressure.

I still engage in daily physical activity, whether it's a walk, a padel match, or a gym session. A friend from Erasmus School of Economics joins me on weekend cycling trips. Staying active is essential for my well-being, and it was also crucial when I decided to return to elite gymnastics after a two-year break due to work commitments

How did you decide to participate in the Paris Olympics?

My former teammates secured five spots for the Dutch team at the Paris Olympics, and I felt inspired. I asked my manager if it was possible to train while still working at PwC. He suggested Did the habits you developed as an elite athlete help you I propose a feasible schedule that ensured I could still do a good job for the company. I devised a plan to work from 8am to noon, train until 4pm, and then return to the office until 8pm. My colleagues supported me by covering tasks that could only be completed in the afternoon. Surprisingly, I found myself more refreshed and productive upon returning to work in the evening. To stay organised, I prepped meals during the weekend and planned everything for my week in advance.

> Initially, training was tough, but I found the right form during the Dutch Championships, finishing second and proving myself as a serious candidate for Paris. PwC was incredibly supportive, granting me ten elite athlete days for training camps and paid leave during my time in the Olympic village.

> tournament, I was heading to see my parents at the Holland Heineken House while others were still competing. I was pulled into a studio for a radio interview and during the conversation it turned out that my score was not topped by too many other contestants, which meant I had qualified for the final. It was a fantastic moment. I ultimately placed 22nd, surpassing my expectations.

to get enough sleep played a role in my ability to prioritise However, it wasn't always smooth sailing. Waking up early for training on a Saturday after an exhausting week at work and in the gym is challenging. Recently, while training for the European Championships, I realised I would prefer more time for volunteering, family, and friends. It felt like the right moment to retire from gymnastics.

almost 20 years?

It's all about balance. Combining sports and academics definitely helped. In the lead-up to a tournament, I trained eight times a week - three days with two sessions, two with one, and Sundays off. With such a rigorous schedule, studying provided a refreshing change of pace. In addition, it broadens your world and adds some perspective. The world goes on, even when you don't manage to perform your somersaults perfectly.



Now, at 28, I've stepped away from elite competition and am focusing on maintaining a healthy balance between work, family, and well-being. I enjoy playing sports with friends, particularly team sports. In my spare time I am currently a financial buddy for people that have problems with money. Perhaps I will also become involved in governing sports associations - who knows? I'm keeping my options open.

Whether you want to start a business or compete at the highest levels in sports, don't assume it's impossible. If you don't try or don't dare to ask for help you will never know if it could work. Just go for it! **∢**

EET YOUR PROFESSOR 'Failures are simply teachable moments that help us grow into better individuals'

Meet Michiel Van Crombrugge

My name is Michiel Van Crombrugge, and I am an associate professor in the Business Economics department at Erasmus School of Economics. I have been at Erasmus School of Economics since 2018, so I have been here for quite a while now. In my spare time, I enjoy playing football, going out, and travelling with my wife. Any other time off work, you can either find me in a cinema, as I have a great love for film, or, though I do not like to admit it, playing video games, which is one of my main hobbies.

hen I was younger, I dreamt of becoming a film director. Even when I left for university, I still held onto that ambition. However, I suppose the voice of reason eventually convinced me to pursue a more stable degree first, which for me was business engineering at KU Leuven (Belgium), where I also received my PhD in business economics.

The joy of teaching

Over time, I have come to appreciate the joy of teaching much more. It is an incredibly fulfilling job to be able to educate others and connect with students. While research remains my main passion, I truly value the fact that teaching is an integral part of my role. I teach two courses in our programmes: Empirical Marketing in the bachelor's programme and Marketing Analytics and Data Visualisation in the master's programme. Both courses demonstrate the benefits of using a systematic and analytical approach to decision-making in marketing.

Multichannel retailing and platform markets

My research lies at the intersection of marketing, innovation, and economics, and mostly focuses on multichannel retailing and platform markets.

In my retailing research, I use econometric models to study the drivers and market impact of retailers' and manufacturers' channel innovations. I have researched, for instance, the phenomenon of direct channels, through which brands or manufacturers engage directly with their end consumers, bypassing traditional independent third-party retailers or platforms. This is a fascinating area of study because it creates a competitive environment in which retailers, who have historically supported these brands for years, now find themselves competing with their own partner suppliers.

In my platform market research, I focus on managerial strategies and individual consumer behaviour within high-technology two-sided markets, such as video game platforms or streaming services. This involves, for instance, researching how subscription models or downloadable add-ons have changed how consumers engage with software and the platforms on which they are used.

A personal passion

One of the exciting aspects of my work is that I have been able to apply my professional expertise in coding and programming to something more light-hearted. As you can tell from my hobbies and research, video games are often not far away, and I am an amateur video game developer myself - though, admittedly, not a very good one! Progress is slow, and my games are far from polished, but it is a fun way to merge my professional skills with a personal passion. My ultimate goal is to transform this self-deprecating hobby into a successful indie video game. Perhaps even one that my students could play. But not during my class, of course!

Life motto

I was fortunate to grow up in a very encouraging environment, where as long as you gave it your best effort, it was okay to fail and learn from your mistakes. My life motto comes from the poem If by Rudyard Kipling. My favourite line is its advice to 'meet with Triumph and Disaster, and treat those two impostors just the same.' It highlights that while success should be celebrated, failure is also part of life. It is okay to feel disappointed when things do not go as planned, but ultimately, failures are simply teachable moments that help us grow into better individuals.



'Our findings emphasise the need for safeguards against bias in judicial decisionmaking, especially when external events heighten attention on specific groups'



ognitive biases can shape judicial decisions, particularly pressure. Psychological research shows that salience how much a particular feature stands out - can influence choices, sometimes reinforcing stereotypes. In the criminal justice system, reversed by higher courts, highlighting a key weakness in the this can lead to bias when external events heighten the visibility of judicial system's ability to self-correct. While clear legal mistakes in certain groups. We investigate such a case following the 2019 assassination of Dutch lawyer Derk Wiersum, who represented a key in sentence length - especially when they occur systematically witness in a major trial against a criminal network linked to Mo-

roccan-Dutch individuals. The extensive media coverage that followed intensified the public perception of Moroccan identity in a criminal context, providing an opportunity to examine whether this influenced judicial outcomes.

Studying bias in sentencing

We analyse comprehensive data on the Dutch criminal justice system, tracking cases from arrest to appeal. To isolate the effect of the salience shock, we compare sentencing outcomes for Moroccan-descent defendants before and after the event to those of defendants with no migration background, called a difference-in-differences approach. Crucially, our identification strategy focuses on suspects of Moroccan descent who had no ties to the criminal organisation at the centre of media attention, and who committed their offense (long) before the shock. This implies that observed differences are driven by bias and not by changes in the number or type of offenses committed. Our findings reveal a clear pattern: while police and prosecutors' decisions remained unchanged, judges significantly increased the prison sentences for Moroccan-descent defendants by 72%.

Notably, this effect was confined to sentencing length, which allows for the most judicial discretion and is consequently the most susceptible to subjective judgement and implicit bias. Moreover, the effect was strongest in courts where judges had less prior experience with Moroccan defendants. At the same time, we find no evidence of spillover effects to other minority groups, showing that judges rather specifically targeted the treated group.

Revisiting the long-term consequences

when decision-makers rely on practical methods under A critical aspect of our study is that judicial checks and balances failed to correct this bias. Despite the availability of appeals, harsher sentences imposed after the salience shock were not sentencing may be identified and corrected on appeal, variations across multiple cases - are less likely to be overturned. This

> appears to be what happened after the salience increase, something unlikely to be spotted and corrected by the system.

> Beyond sentencing, we examine potential longterm effects. While not statistically significant, our estimates suggest a negative trend in employment and earnings, consistent with broader research on discrimination.



Olivier Marie

is Professor of Labour **Economics at Erasmus School** of Economics. He is interested in studying crime, education, and discrimination from an economic angle.

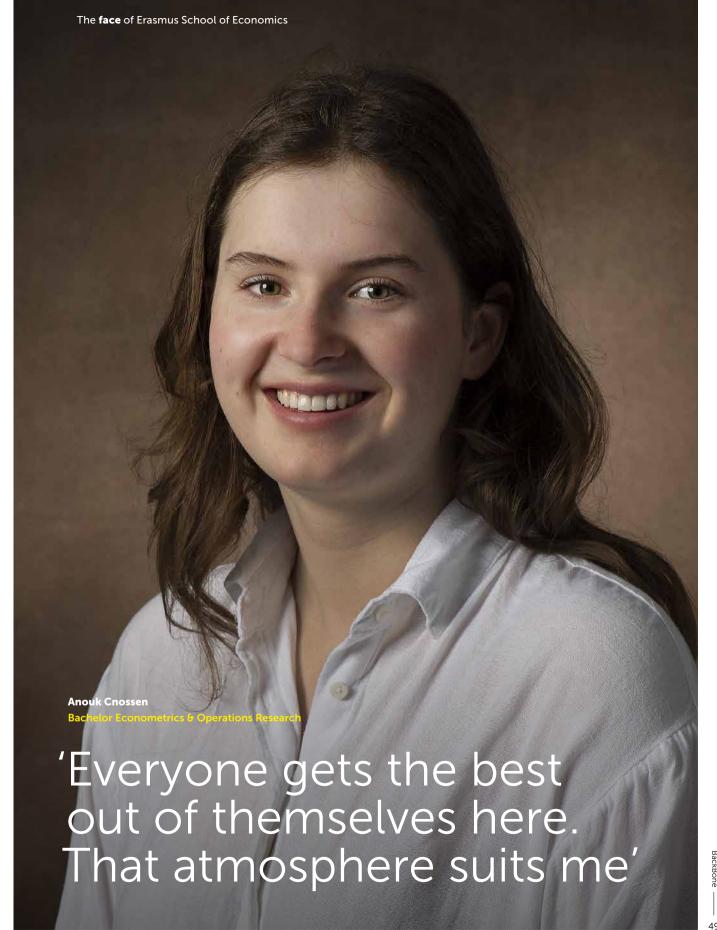


a recent PhD graduate from Erasmus School of Economics, is now a postdoctoral researcher at the University of Gothenburg, focusing on crime, education, and gender

Implications for justice and policy

Our findings emphasise the need for safeguards against bias in judicial decision-making, especially when external events heighten attention on specific groups. One possible intervention is to increase training to reduce the reliance on cognitive shortcuts, particularly for less experienced judges. Additionally, strengthening the transparency and review mechanisms in sentencing could help reduce differences between sentences. More broadly, our study underscores that the criminal justice system does not operate in isolation. Public narratives and media coverage can influence judicial behaviour in ways that reinforce systemic inequalities.

Addressing these issues requires a multipronged approach that includes policy reforms, public awareness campaigns, and continued research into the mechanisms driving judicial bias. By fostering a greater understanding of how external influences shape courtroom decisions, we can work toward a legal system that better upholds principles of fairness and impartiality.





'In this innovative concept the return is sent to a next customer, where the next customer receives a discount for accepting such a return'



he C2C return concept

Almost everybody has returned items ordered online when these did not meet their expectations. This often happens in the case of clothes, as these have to fit. The customer returns them back to the seller, often for free. In turn, the internet seller receives the items, checks them, and stores them, ready to be sold again. Transporting and handling these returns is an enormous challenge for e-commerce sellers, especially in the clothing sector. All these transports create congestion and emissions, next to the handling costs at the warehouse. The question is how to address this issue effectively.

To answer this question, the C2C concept was proposed by Carl van Heijst from consultancy company Bearing Point. Together with Eline Tetteroo, a student in the Master's programme Econometrics and Management Science, we further developed and optimised the C2C concept. In this innovative concept the return is sent from the returning customer directly to a next customer, where the next customer receives a discount for accepting such a return.

In theory this is a nice idea, but to get it to work many operational details need to be specified. For instance, the return sender should be motivated to dispatch the return quickly. Additionally, do the discounted items cannibalise existing sales or would they lead to extra sales? This last issue would be crucial to an e-retailer to assess whether the concept is cost-effective.

Optimisation for profitable C2C returns

We guided Eline in translating the problem into a mathematical model and solving it with reinforcement learning (an Al optimisation



Wilco van den Heuvel

is an associate professor at the Econometric Institute of Erasmus School of Economics, and currently academic director of the track Analytics and Operations Research in Logistics. His expertise is in Operations Research, focused on the design of efficient algorithms, with applications in production planning and sustainable logistics.



Rommert Dekker

is Professor Emeritus of
Quantitative Logistics and
Operations Research at
Erasmus School of Economics.
He has been working on
port and maritime logistics,
sustainability, service and
reverse logistics.

tool), considering a continuous sale of a product. We tested the model on demand and return data from a large Dutch fashion retailer to determine the settings that yielded the best results. Additionally, we developed a second model that focused on an individual customer to gain deeper theoretical insights into the problem.

It appeared that the stylised customer-based model also gave good advice in case of multiple customers and that it outperformed the reinforcement learning method. The profitability depends on several factors though: how many customers participate in the concept, to which extent customers accept the returns, the cost of sending it to the next customer, and the time allowed to find another customer. In general, the results are promising. The socalled C2C concept yields an increase of 34% in expected profit in the most optimistic setting, while in pessimistic scenarios it is still 6% better. Finally, the amount of work at the e-commerce warehouse is reduced substantially, which is especially useful in busy periods.

From research to reality

A lot of dedication and persistence went into the research: developing and analysing the new model, redoing the calculations, and rewriting and polishing the paper. After some setbacks, we finally got our results published in a highly respected journal, a nice achievement for the researchers involved: Sena Eruguz, Oktay Karabag, Wilco van den Heuvel, and Rommert Dekker. Carl van Heijst even quit his job and created the start-up company It Goes Forward to commercialise the concept. Presently, the C2C concept is active at a webshop for sustainable clothing, and we hope many companies will follow. •



Turning challenges into opportunities

Mahrou Kharazi is an alumna who carves her own path, driven by a passion for impact and a pursuit of growth. Erasmus School of Economics provided a strong foundation, but Mahrou's success stems from her ability to push boundaries, leverage challenges as opportunities, shape her experiences, and elevate those around her. Her motto: 'If you think it could be better, do something about it!'

romavery young age, I had jobs to support myself financially.

As a teenager, I worked for a high-end greengrocer called De Econoom, which sold premium fruits and vegetables.

Customers often questioned why our strawberries cost €9.99 while supermarkets sold them for a fraction of the price. That experience sparked my understanding of value propositions and market positioning. I wanted to study a subject that would open doors worldwide, at an internationally renown institution. Erasmus School of Economics was the best choice. As an ambitious student, I enjoyed the rigorous programme of the International Bachelor in Economics and Business Economics (IBEB). It really pushed me to excel.

What did you do besides your study?

Erasmus School of Economics offers countless opportunities. I was looking for more international experiences, so I participated in an exchange programme with Bocconi in Milan, a fantastic university with great professors. During my stay, I made the most of the opportunity by following the maximum number of courses allowed. It was eye-opening to experience different academic cultures, and it reinforced my appreciation for the structured, high-quality approach at Erasmus School of Economics.

Beyond my studies, I actively engaged with the business world through in-house days, business courses, Marketing and Business competitions, and a board position at UniPartners academic consulting. Early on, I realised that I wanted to contribute to solving meaningful global challenges - whether in healthcare, energy, or poverty alleviation. Coming to the Netherlands as a

refugee at age three, I have always been deeply aware of the opportunities I have had and deeply feel a responsibility to give back.

How did you realise you wanted to make an impact with your work?

During my Master's programme in Economics and Business, I learned that my mother had lymphoma. I took on the role of carer and the university suggested I might want to take a year out. However, that is not something that fits with my Iranian background.

'I have always been deeply aware of the opportunities I have had and feel a responsibility to give back'

There was no way I wanted to give my mother the feeling that she might be the cause of a delay in my studies. Therefore, I decided to double the number of subjects I took, thinking that the ones I wouldn't pass would be compensated by other classes. It was one of the more challenging times in my life so far.



'Marketing is about finding a solution to your problem, not the other way around

Thankfully, my mother recovered and I managed to obtain sufficient study points to finish my degree. However, I decided to extend my student life and do all the things I might not be able to do anymore once I graduated. To eliminate the "if this wouldn't have happened, then.." excuse from my mind, I became a teaching assistant and taught marketing to bachelor students at Erasmus the Coronary and Peripheral Vascular space. Upon my return to School of Economics.

I had a defining experience while waiting with my mother for the hematologist in the waiting room at the Haga Hospital. I saw the front page of a newspaper that had an article about Philips Image Guided Therapy partnering with a drug delivery company to provide precision-targeted delivery of chemotherapy, minimising damage to healthy tissue. It struck a chord, as I had seen patients reach a point where their bodies could no longer tolerate treatment, shifting the treatment from curative to simply prolonging the patient's life. The article was a typical case of the right message, at the right time, for the right customer. It made it clear: I wanted to be part of developing solutions that truly make a difference in people's lives. Before this experience, I would have never considered joining the commercialisation of healthcare and pharma, as I had a visualisation of pushy sales reps trying to offload products at institutions. But now, I realised how life-changing innovations in this field are and how important technological development in MedTech is.

How did you build that career?

I was beyond excited to find out that Philips had just launched a Leadership Development programme specifically for Business graduates. With the clarity gained through my personal experience, I followed my heart and participated in the rigorous selection process, where I was hired as one of the four global participants out of thousands of applications. The programme consisted of several rotations through different departments, starting with healthcare IT (radiology). However, I also wanted to make a direct impact, which is challenging in a clinical specialty that has no direct patient contact.

I discovered Philips' Community Life Centres in Kenya, Africa, which partner with NGOs and governments to provide preventive care and reduce the burden on hospitals. Instead of waiting until pregnancy complications turned into emergencies, these centres connected women with diagnostic preventative care early on. I was able to finish the first placement of the leadership programme a bit early and start the second one a bit later so that in between I could be assigned to Philips Research in Nairobi, where I saw firsthand how sustainable healthcare solutions can transform communities.

To broaden my expertise, I set my sights on Philips Medical Devices for one of my rotations. The timing was perfect: Philips had just acquired Volcano, a company based in San Diego. I secured a six-month placement in the U.S., which eventually extended into a five-year journey integrating acquisitions and driving growth in the Netherlands, I was appointed as Head of Marketing Benelux

What is marketing for you?

Marketing is not about flashy campaigns or selling at any cost. It is about deeply understanding customers, both users and buyers, and co-creating solutions that deliver real value. Too often, overpriced innovations with unnecessary features are commercialised simply because they can be created, rather than their ability to solve a real need. Finding a problem for your solution instead of finding a solution for your problem, is not the way to go. For me, the most exciting part of marketing is shaping value propositions with cross-functional teams, ensuring that innovation is truly meaningful and sustainable.

You started your role as an Advisory Board member for the Master's programme in Economics and Business, what are you hoping to contribute?

Returning to the campus feels like coming home now that I recently joined the Advisory Board. In that capacity, I want to help elevate the school's global brand. Bocconi, for example, markets itself exceptionally well, emphasising its technology and infrastructure. Erasmus School of Economics offers just as much, potentially more, but we need to communicate that better. Additionally, I want to ensure that students understand the power of the strong, quantitative foundation they receive here. This is not a communications degree; it prepares students for highimpact roles in today's data-driven economy. My goal is to help maintain and strengthen that positioning.

In which other ways in your life are you trying to leave a positive impact?

In addition to my role as start-up coach for MedTech companies, one of the activities I really enjoy is serving as a jury member for the Dutch Effie-awards that recognise the most effective marketing communications campaigns in the Netherlands while also highlighting societal impact.

I really enjoy discussing the campaigns with other jury members. We all recognise the importance of companies being aware of what is happening in society and giving back. Economic impact is not just about numbers, but about people. That is why we came



up with the idea of Giving Back with Effie (Effie iets terugdoen). For our last volunteer night, we cooked dinner at the Ronald McDonald House in Rotterdam.

Having a seriously ill child in the hospital is every parent's worst nightmare. But imagine also being hours away from home while your child undergoes treatment. That is the reality for many families and exactly why Ronald McDonald Houses exist. Since 1985, the Ronald McDonald House Sophia Rotterdam has provided a home away from home for families of children receiving critical care at Erasmus MC Sophia Children's Hospital, the oldest and largest pediatric hospital in the Netherlands.

It was an incredible experience to cook for these families with the entire jury, especially knowing that the Ronald McDonald Houses rely entirely on donations and volunteers.

Do you have advice for current students?

Enjoy the opportunities you are given and truly make the most out of this exceptional period you are gifted, but don't be afraid to challenge the status quo. Make conscious choices, you have the power to shape your own path. \triangleleft



Meet Ronald Huisman

My name is Ronald Huisman. I am Professor of Sustainable Energy Finance at Erasmus School of Economics. My speciality is in what I call sustainable energy finance. For this, I study the financial economics aspects of energy markets, renewable energy, and nowadays, the transition towards a new energy system.

was a student at Erasmus School of Economics myself. I studied Econometrics and really liked the atmosphere. We did many projects that came from real companies and did a lot of group work, which I enjoyed. I saw myself as a normal student who liked going to bars with friends, but I was also committed to my studies.

(Academic) career

First, I studied here in Rotterdam and then I did my PhD at Maastricht University, after which I started thinking about what I wanted to do next. I knew that I liked academia, but I also wanted to learn more from practice. For example, I knew everything about option models but had never actually traded an option myself. So, I started out in financial economics, which is a little more specialised. I learned to be a financial market person when I was trading equity options in Amsterdam on the exchange.

'I believe intrinsic motivation to read is the best thing to have'

There, I learned what financial markets can and cannot do and what the negative and positive aspects of financial markets are. Then, I gradually started to specialise more in financial markets.

Over time, I learned that I am an entrepreneurial person, but also an academic. I like both teaching and researching. What I like about research is that you discover new things and have the opportunity to really dive into a topic. It is also very entrepreneurial because you have a question to which you need an answer. I have taught in very large classrooms, which gives me a thrill. It is also very rewarding to see that students are inspired by what you say. It gave me the realisation that the combination of being a researcher and a teacher is what I want to be.

Intrinsic motivation

I don't give my students literature to study beforehand. Instead, I prefer to give them a case or a question and instruct them to solve it by using academic literature. But I do not tell them what they should read. This stimulates them to conduct their own research to find the right answers. Eventually, they read the same amount of literature as they would have read if they had been given the literature. I believe intrinsic motivation to read papers is the best thing to have. This is also a strategy I use to encourage my students to study more.

After completing my PhD, I didn't know what to do, but it felt good to work on the options exchange for a while. Although I only did that for two and a half years, I really enjoyed it. But then I moved on to something different, which brought me to where I am today - a place where I am completely happy. My life motto therefore is: a day without laughter is a day wasted. \P



'International peers play a crucial role in equipping native students with skills that open doors to highpaying careers'

competitive edge

Through a literature review, our research investigates whether exposure to peers from diverse linguistic and cultural backgrounds provides native students with a competitive edge. Two key skills stand out. The first skill is English proficiency. As the lingua franca of global business, English fluency is essential, especially in an export-driven economy like the Netherlands. Students frequently attribute their confidence in presenting and negotiating in English to the discussions and collaborations they had with international peers. The second skill is intercultural competence. The ability to communicate effectively across cultures enhances workplace collaboration and productivity. Graduates who have worked in diverse teams during their studies are better equipped to navigate different business styles, making them more adaptable and effective in multinational settings.

Measuring the impact on career prospects

To assess whether international exposure during university studies influences career outcomes, we analysed Dutch students who obtained master's degrees between 2006 and 2014. The study divided them into two groups: one with students from highly international classrooms and another with students from less diverse environments. By ensuring that the two groups were comparable in demographics, household background, and prior education, we isolated the impact of international classroom exposure on career success.

The results support our hypothesis. Dutch graduates from more international classrooms earned, on average, 2.3% more in their first year of employment than their peers from less diverse backgrounds. Over the next five years, this wage premium grew by approximately 1% per year, reinforcing the long-term benefits of an international educational environment.



is an assistant professor in the Department of Applied **Economics at Erasmus School** of Economics. Her research interests are in policy evaluation, migration, and firm strategy.



Bas Karreman

is an associate professor in the Department of Applied **Economics at Erasmus School** of Economics. His research interests are in firm organisation and emerging markets.



is Professor of Urban & Regional Economics at Erasmus School of Economics. His research interests are in policy evaluation and urban



Long-term advantages

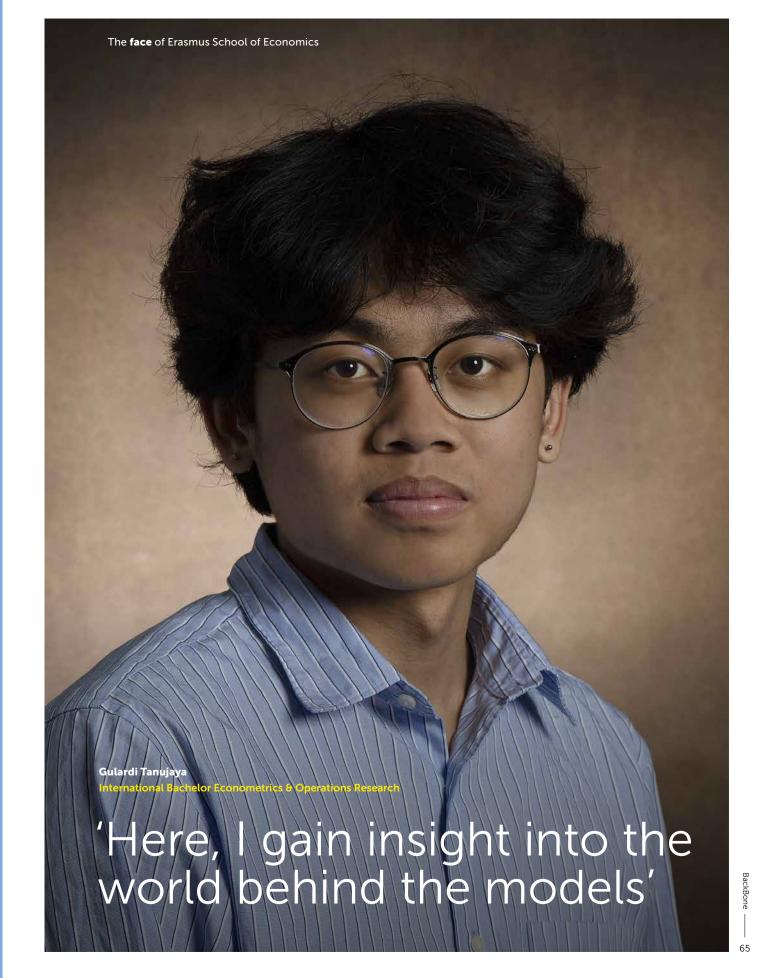
Our research explored three possible explanations for this wage advantage. The first was initial job placement. Graduates from international classrooms tend to secure roles in larger, often more multinational firms in export-focused industries, where global skills are highly valued. Secondly, we looked at career advancement speed. While both groups may start in similar companies, those with international experience may climb the corporate ladder more quickly due to their enhanced skills. Lastly, a possible explanation was job mobility. Graduates with intercultural competence may leverage their skills to transition between firms, negotiating better salaries along the way.

Our empirical evidence points primarily to the first mechanism: students from international classrooms are more likely to secure betterpaying jobs immediately upon graduation. The skills they develop in diverse university settings, such as English proficiency and intercultural competence, help them enter career paths with stronger long-term earning potential.

Rethinking the value of international

Current policy discussions often focus on limiting international students to protect Dutch graduates' job prospects. However, our findings suggest a different perspective: international peers play a crucial role in equipping native students with skills that open doors to highpaying careers.

By embracing global classrooms, we empower Dutch graduates to compete in an increasingly interconnected job market. Reducing international diversity in higher education could, paradoxically, limit the very opportunities that policymakers seek to protect. <



What does success look like?

By: Madeleine Kemna

After working in finance at Procter & Gamble, **Matthijs Visch** held leadership roles in France, Turkey, Japan, and the US, managing teams for Nike and Patagonia. Most recently, he was the CEO of luxury department store De Bijenkorf. He feels privileged to have been part of companies that feature in the Champions League of their sectors. This experience has convinced him that people across the world share a set of universal values.

rom a young age, I was interested in investing. As a high school pupil, I would visit investment fairs and the occasional shareholders' meeting. Economics was a natural fit, but when I started to work, I learned that I enjoy working with people more than working with numbers.

Can you tell us how this manifested itself during your career?

I had a pivotal experience when I was CEO of Nike Turkey. Two months after moving there, I read Half the Sky by Nicholas Kristof and Sheryl Wudunn. It puts the spotlight on the terrible circumstances of women across the world, while also providing stories of courage and inspiration. The book made such an impression on me that I decided to ask people in my own organisation to send me an email if they believed this issue was also prevalent in Turkey. Out of the 100 employees, 70 sent me a message indicating that there was indeed a huge problem. We set up a small team to investigate what we could do.

After speaking with various NGOs and other relevant players in the field, we concluded that we could have the highest impact by supporting an NGO that helps girls between 12 and 18 stay in school. Many families keep their daughters at home after they leave school for just a few years, which obviously makes them vulnerable. The reason the families do this is because these young women are needed to help in the house or work elsewhere. By supporting their families, we offered these girls a chance to become well-educated citizens. We organised fundraisers and got Nike to chip in as well so that after six months we had reached our target of ensuring the education of 20 girls. Encouraged by this result, we agreed that for every employee in our organisation, we wanted to send one girl to school. Within a year and a half, we

met this goal, securing an education for 120 girls. Emboldened, we decided to aim for a thousand. I left after four years, so that number was not achieved in my time, but it was eventually. Some of these young women even went to university, partly supported by our initiative.

The experience confirms the power of setting ambitious goals. If you raise the bar high, you often surprise yourself by managing to accomplish things you never thought would be possible. Apart from that, it gave me another important insight. Soon after my appointment as CEO of Nike Turkey, I introduced employment satisfaction surveys. After the start of the female education initiative, employee engagement scores went through the roof. Instead of costing energy, the scheme created extra commitment. We were chosen as the best place to work in Turkey for several years in a row. Since then, I have always sought to find topics that were close to the heart of local staff whenever I started in a new country. These might not be things that would have a direct effect on the bottom line, but it would make a real difference in terms of the passion and energy people brought to work.

Can you describe the companies for which you have worked?

I have been involved with American organisations most of the time. They all shared the fast pace, self-awareness, and ambition that many of us associate with the US. Part of the reason I enjoyed working at Procter & Gamble was that they are one of the top companies in the fast-moving consumer sector. Nike is the pinnacle of professionalism in sports. They really put their slogan "Just do it" into practice. Both feature in the Champions League of their sectors and after a while I wanted to work for a company that would have a similar profile in the area of purposeful entrepreneurship.



Patagonia definitely does have that profile, I consider myself very lucky to have had the chance to be their CEO for Europe. During the forty-plus years of their existence, they have been adding three or four new steps annually to live up to their mission "We are in business to save the planet." An example was that my management team included a Director of Environmental Activism, who, together with a staff of about 15 people, would support developments such as the energy transition. It takes time to build the necessary expertise and several years before you start making an impact. That is very different from developing a new running shoe for next season. I have met many companies that wanted to become like Patagonia, but it is not something you can realise overnight. Unfortunately, I left earlier than I wanted for family reasons.

Can you share some of the cultural lessons you learned?

The most important example is probably something I experienced in Japan. During the preparation for the move, I read that Japanese office culture has several unwritten rules and rituals. For example, the hierarchy is not always reflected by the organogram, since the oldest person in the organisation has a certain role to play. These more or less secret customs made me a bit nervous. The fact that only two people in my team of 25 spoke English didn't help. I was always accompanied by an interpreter and in the beginning, I would often ask her whether I had expressed myself correctly without offending anybody. When she told me to stop doubting myself, the penny dropped; the feelings and values we bring to work are universal regardless of culture. People everywhere would like to be respected



at work, have opportunities to grow, and appreciate honesty. From that day I have always confidently entered new situations, aiming to connect with my teams based on these universal values, while remaining humble and respectful of the culture in which I worked.

How do you view the Netherlands after living abroad for so long?

Amelie, Boaz, and Elias, our three children, were all born in different countries. My wife Adeline and I felt privileged that our family had the chance to live in so many countries, but we also wanted our children to be able to experience the freedom of moving around independently by bike or on foot. This is impossible in countries like Turkey or the United States. People warned us that it would be difficult to settle back in after such a long time, but in our case that was not true at all. The Netherlands is so well organised; infrastructure, health care, and education are all excellent. Of course, there are many things that could be improved, but it is a very nice place to live.

Can you tell us more about your decision to pause a successful career to care for your elderly parents?

When my mother was first diagnosed with cancer, I wanted to support her. Thankfully, she pulled through, but soon after her recovery, it became clear that she suffered from another form of cancer. This awful disease was unrelated to the first one, but it did mean that she had to endure a very tough treatment again.

After she managed to overcome this, the opportunity to lead De Bijenkorf presented itself. The company and its founders have played an important role in the post-war Netherlands. I felt very privileged to lead this organisation with its illustrious past and such an iconic brand. There were a lot of challenges, not only because of developments such as online retailing but also because successive private equity firms had eroded the base. The recovery plan we developed was well received by the employees and I was looking forward to working with them on the execution.

It was not to be. A month after I started, my mother died, much sooner than we had expected. Just as the rebuilding of the company was gathering steam, necessitating six-day workweeks with long hours, it became clear that my father was also in a critical condition. I had to take the tough decision to step down as CEO. Although I left on good terms, I know I disappointed some people. I really regret that, but there was no way I could have continued to combine this job with my family life at that moment.

Many people have a negative association with the last part of their parents' life, but I can honestly say that sharing it with them is a rewarding experience. Of course, there are difficult moments and things you would rather not do, but I am grateful for the conversations and the laughter I can still enjoy with my father in the time he has left here.

'Why not start today?'

What are your plans for the future?

During my break, I have been involved with charities that support the homeless and help female refugees to find employment. In addition, I play an advisory role in a major M&A transaction. Although combining several future roles on a part-time basis might give me the freedom to make some more time for leisure activities, I enjoy managing a team so much that I might go back to a full-time leadership role. The most important factor in this decision is whether I can wholeheartedly commit to the purpose of the business.

How do you look back on your time at Erasmus School of Economics?

I still have fond memories of my time in Rotterdam. Extracurricular activities, such as organising events at student association Laurentius and the Economic Faculty Association (EFR) have taught me a lot. The study has challenged me intellectually, but in hindsight, it is a pity that the curriculum consisted almost entirely of technical subjects related to profit maximalisation. They provide a good base, but since the majority of alumni are likely to end up in a management role, I feel very strongly that more attention should be paid to leadership skills. This is something companies often overlook as well, which means that managers have to figure it out for themselves. Your early twenties are a good time to discover your identity and learn to reflect in order to create a foundation that you can build on during the rest of your career. I enjoy coming back to campus for guest lectures or brainstorm sessions about the programmes at the economics and business schools. However, on these occasions, I don't get the impression that the curriculum has changed to the extent that it reflects the shifts that are taking place in the corporate world. Organisations cannot go on running their business as they have always done. This means they have to engage more in stakeholder management and consider new ways of assessing what success looks like. It can and should include much more than financial milestones. Taking into account the priorities of stakeholders such as your staff, the community, and our planet will provide the best long-term results, material and immaterial.

Could you give some final suggestions for future generations?

What is really essential in my view is that young people realise that as they progress in their career, self-awareness and an authentic leadership style become the most determining factors for sustainable success. As such, continue to invest in your personal development, especially around these areas. If you haven't done so already, why not start today?

HISTORICAL PERSPECTIVE

The Phillips Machine: bringing economics to life

Academic start

Phillips' childhood

Alban William Phillips was born in 1914 on a

small dairy farm in Te Rehunga, a rural area of

New Zealand. His father, Harold, was ahead of

his time, equipping the farm with a flush toilet,

a waterwheel-powered generator, and electric

lighting, long before these became common in

neighbouring farms. Harold also nurtured his

children's curiosity, teaching them how to build

crystal radios, zoetropes, and various toys.

After spending his childhood in New Zealand, Phillips later moved to London and enrolled at London School of Economics.

Start World War II

When World War II broke out, he joined the Royal Air Force, which sent him back to the Pacific. As a RAF engineer, he worked to modernise outdated aircraft intended to defend British-held Singapore from Japanese forces.

However, after Singapore fell, Phillips was captured and spent three years in a Japanese prisoner-of-war camp. Despite the inhumane conditions, his ingenuity never wavered. To boost morale and keep fellow prisoners informed, he built hidden radios, including one small enough to be concealed in the heel of his shoe. He also designed makeshift immersion heaters, enabling prisoners to prepare hundreds of cups of tea each evening. The guards never realised why the camp's lights flickered at night. His exceptional out-of-the-box thinking during these challenging years ultimately paved the way for his groundbreaking engineering innovations in later life.

The Phillips Machine, also called the Moniac, or Monetary National Income Analogue Computer, was created in 1949 by the New Zealand economist Bill Phillips. It churns out solutions to equations, using hydraulics instead of differential calculus to calculate the answers. It is a simple computer, although not guite as simple as one might assume. It can solve nine differential equations simultaneously and within a few minutes, a feat that is impossible by hand. Even in the 1950s, economic models were worked out by rooms full of human 'computers'. It would be years before digital computers could support economic models as complex as the Moniac's.



Professor James Meade, 1993

1949

The Phillips Machine at Erasmus **School of Economics**

Out of the 14 machines Phillips has made, one ended up at the Netherlands School of Economics, the predecessor of Erasmus School of Economics. It is an absolute showpiece in the university's heritage collection, currently standing in the hall of the Theil building. The Municipality of Rotterdam donated the Phillips Machine for educational purposes on the fortieth anniversary of the Netherlands School of Economics in 1953.

1938 1940 1953 1975

1914 1949

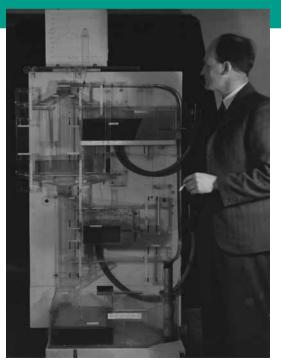
Post-World War II

After the war, Alban William Phillips returned to London and resumed his studies at the London School of Economics. Initially enrolled in sociology, he soon became captivated by the mathematical equations emerging in the new field of macroeconomics. Fascinated by their engineeringlike precision, he began skipping his sociology lectures, retreating instead to his landlady's garage in Croydon.

In his garage, he set about constructing a hydraulic model of the equations his lecturers were sketching on blackboards. One of those lecturers was James Meade. Rather than dismissing Phillips, who had practically abandoned sociology, Meade was intrigued by his unconventional approach. With Meade's support, Phillips was given the opportunity to present his remarkable invention at the prestigious Robbins seminar in late 1949.

The very first demonstration

As the demonstration began, Phillips worked behind the intricate array of Perspex pipes and tanks, activating a pump salvaged from a Lancaster bomber. Pink-dyed water gushed into a top reservoir before cascading down through the system, mimicking the flow of money in an economy. As the machine worked flawlessly, the assembled professors were stunned. The demonstration was a resounding success. Within minutes, the room was filled with excitement. Phillips had created the first-ever computer model of a national economy. His invention, initially called the Monetary National Income Analogue Computer (Moniac), became better known as the Phillips Machine. Using hydraulics rather than differential calculus provided tangible, visual solutions to complex economic equations - an engineering marvel that forever changed the way economists approached their field.



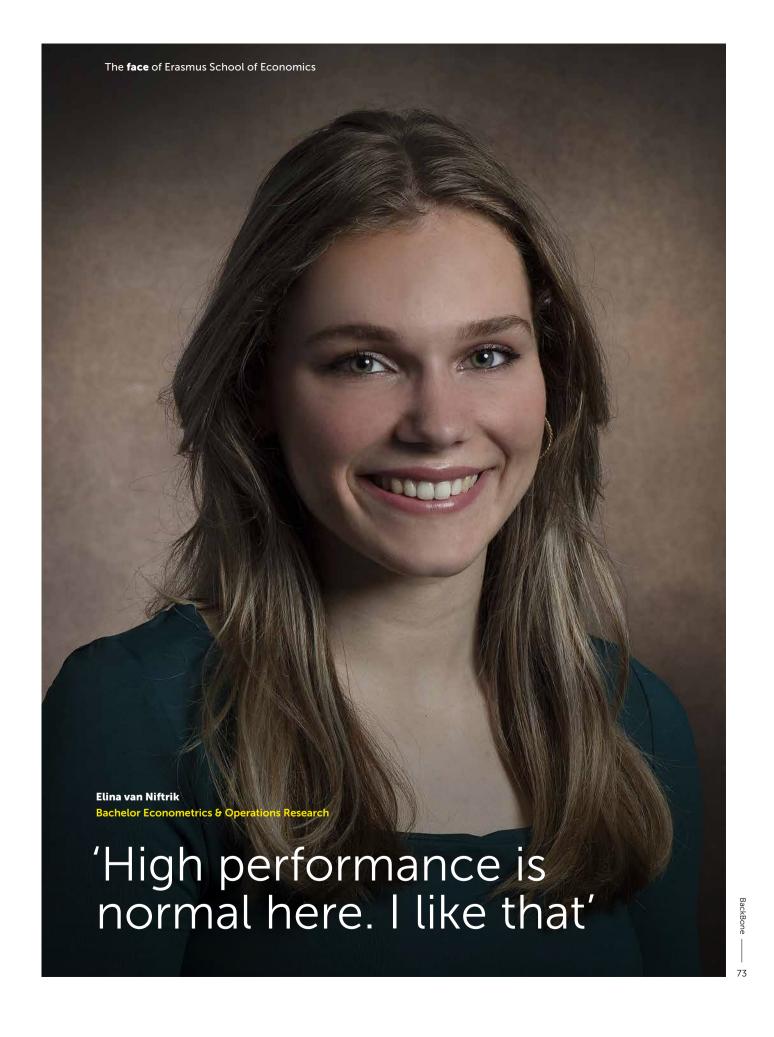
Professor A.W.H. (Bill) Phillips

How the machine works

The Moniac was a simple computer, but not as simple as one might think. It could simultaneously solve nine differential equations within minutes, an impossible task if done by hand. Even in the 1950s, economic models were calculated manually by rooms full of human 'computers', primarily women armed with paper and calculators, much like a mathematical version of a typing pool. It would take years before digital computers could handle economic models as complex as the Moniac's.

Phillips built 14 of these machines, most of them Mark II Moniacs, which were improved and expanded versions of the original. Standing seven feet tall and four to five feet wide, the Mark II appears both imposing and quaint by today's standards.





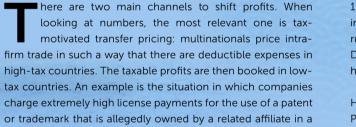


tax haven.

'Profit shifting is a problem, but OECD Pillar I and II might lead to even bigger problems'







The second main strategy is debt shifting: instead of investing non-deductible equity directly in high-tax affiliates, multinationals put the equity in an internal bank in a tax haven. The internal bank passes on the capital as loans to related affiliates. Such a structure creates tax deductions in high-tax countries and causes little tax payments on received interest income in the tax haven. Differently from transfer pricing, and more importantly, debt shifting directly reduces capital costs and fosters investment.

Earlier regulation: the BEPS Action Plan

There is no doubt that profit shifting is problematic. Empirical evidence suggests a direct loss in corporate tax revenue of about 10-15%, which translates into a loss of about 0.3-0.7% of GDP. These numbers are not extremely high, but they are substantial and justify concern. In response, the G20 tasked the OECD with developing the Base Erosion and Profit Shifting (BEPS) Action Plan, which was launched in 2015 and included

15 actions to curb BEPS. These actions particularly addressed interest deductibility, controlled foreign corporation (CFC) rules, transparency, and country-by-country reporting. The Dutch Ministry of Finance and various academic evaluations have reported positive effects from these measures.

However, there remains debate on whether the BEPS Action Plan has effectively reduced profit shifting. While the BEPS Action Plan has had some success, it is seen as weak in addressing issues in the digital economy and so-called homeless profits. To tackle these remaining challenges, the OECD launched BEPS 2.0.

BEPS 2.0: OECD Pillar I and II to target remaining issues

With BEPS 2.0, the OECD is aiming to address two remaining issues in international taxation: the pricing of royalties on intangible assets that are hard to value and homeless profits generated by digital firms with no physical presence in certain countries. To tackle these, OECD Pillar I proposes a partial formula-apportionment system, reallocating a quarter of residual profits (those exceeding a 10% return on turnover) to market jurisdictions where sales occur. This aims to reduce the importance of transfer pricing and target homeless profits.

Pillar II introduces a global minimum tax rate of 15% for large multinationals, ensuring that countries participating in the Inclusive Framework (IF) impose this minimum. This aims to prevent profit shifting to tax havens and curb international

tax competition. More than 140 countries, including all G20 nations, are part of the IF, and in 2021, they approved both Pillar I and II. While the Global Minimum Tax (GMT) is set to be implemented by 2024 in the European Union and other countries, the United States and China have not adopted it.

Criticism of Pillar I and II

Pillar I of the OECD's tax reform faces criticism for its complexity, potential for double taxation, and administrative challenges. It may also encourage firms to shift sales to low-tax countries, harming high-tax jurisdictions. Pillar II with the GMT apparently holds promise but could limit developing countries' ability to attract foreign investment due to their reliance on tax incentives. The GMT also introduces legal uncertainties, compliance costs, and could fail to resolve tax competition issues.

Evidence from Norway suggests that tightening transfer pricing rules yields small tax gains but incurs significant compliance costs, particularly when it applies to small firms. Similarly, although only targeting large multinationals already, the OECD's recent reforms could also lead to excessive regulation and new challenges.



Dirk Schindler

is Professor of International
Taxation at Erasmus School of
Economics. His research lies
within the field of international
corporate taxation, particularly
profit shifting and investment
effects. Together with Arjan
Lejour, he recently brought
together leading scholars for
the research handbook on the
economics of tax havens.



Taking in consideration the criticism on both Pillar I and II, an alternative could be to define virtual affiliates. For example, the Dutch website of Amazon would constitute a Dutch affiliate and trigger corporate tax liability in the Netherlands, meaning countries could apply their existing toolset, including the BEPS actions and royalty taxes. Such a setting might be easier to handle and could reduce a very complex problem.

Furthermore, the approach allows for beneficially differentiating between less harmful debt shifting and detrimental transfer pricing. And doing so is possible even in a unilateral fashion and under full tax competition: implement proper CFC rules and royalty taxation, but be more lenient on earnings stripping rules and debt shifting. The former two instruments are known for being largely robust to standard tax-competition incentives. •

Late Pope Francis received Brill Encyclopedia of Early

Christianity from Paul van Geest

After 15 years of hard work, Paul van Geest, Professor of Theology and Economic Thought at Erasmus University Rotterdam, finished the Brill Encyclopedia of Early Christianity. The six-volume encyclopedia covers a wide range of topics related to early Christianity. In total 650 authors have worked on the publication. Van Geest had the honour of presenting the first part of the encyclopedia to Pope Francis before he passed away. The Pope really showed his interest in each of the editors and their final product.





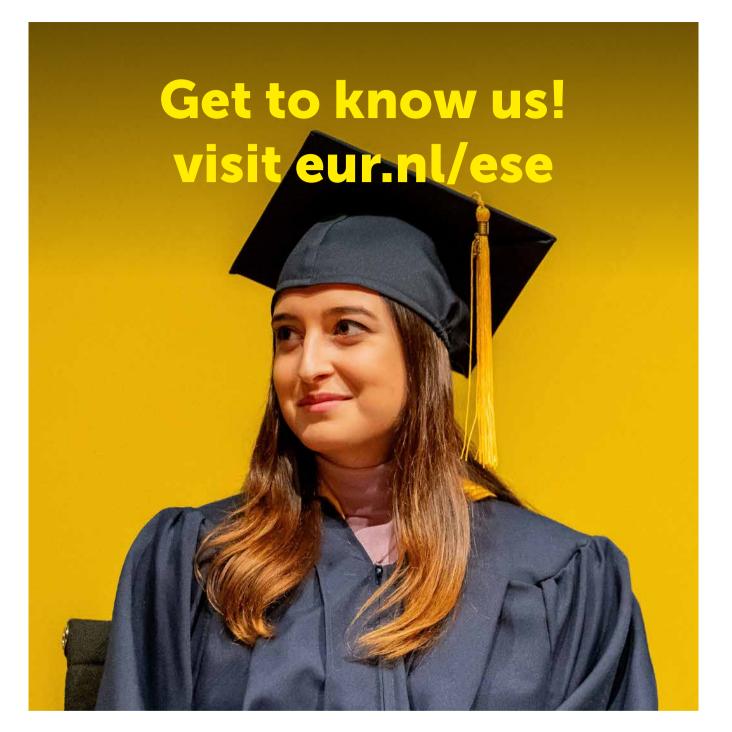
Lying game app: BestLiar

Launched by Sophie van der Zee, Assistant Professor at Erasmus School of Economics, BestLiar is a Dutch app that works by challenging players to deceive their opponents while also trying to catch them out. Players can record a short video of themselves describing an image, in which they either tell the truth or lie. Another part of the game involves watching other peoples' clips and determining which are true or false. Points are awarded for correct identifications of lies. On the leaderboard, players can compare their achievements. The app is currently only available in the iOS App Store in Dutch.

Boost your brain

Erasmus University Rotterdam offers a variety of Massive Open Online Courses (MOOCs). Recently, the MOOC Enjoyable Econometrics, constructed by former Dean and Professor of Applied Econometrics Philip Hans Franses, exceeded 25,000 learners. Another MOOC, named Advanced Valuation and Strategy, has over 150,000 learners and an average rating of 4.6 out of 5 stars. All MOOCs can be found here:





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