

# NEKST

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## LUSTRUM

35 YEARS OF  
ASSET | ECONOMETRICS



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Econometrics



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# Preface Lustrum Overload



It is almost impossible to have missed it: Asset | Econometrics' seventh Lustrum. This edition of Nekst is filled with articles, photos, a special on luck and last but not least the lyrics of our very own Lustrum song. For more information on the last five years of our association I refer to the beautiful almanac, also presented during our Lustrum. Therefore I will not tire you with even more Lustrum talk and information right here. Instead I would like to direct your attention to the other interesting articles we have written for this edition.

First and foremost, we have two business interviews. Estelle Jonkergouw and Alfred Slager from the Dutch Actuarial Institute talk about the changes in their basic actuarial program. Besides that Lieke van der Horst tells us all about her experiences as a trainee at APG. Furthermore, we have an interesting scientific article provided by PwC on strategic workforce planning.

Besides these interesting, yet slightly formal, articles we have again managed to find interesting econometricians to interview as well. Thijs Verhaegh, for example, has a passion for running and is participating in a run from Hamburg to Rotterdam this summer. Moreover, we paid the parents of Vera van der Lelij a visit in the small city of Nuenen. Once again I give you the following advice, relax, sit back and enjoy the read!

**Ernst Roos**  
*Editor-in-chief*

## COLOPHON

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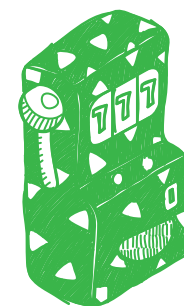
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René Peeters illustrates how hard it is to explain mathematics to your loved ones, especially when they have little clue themselves.

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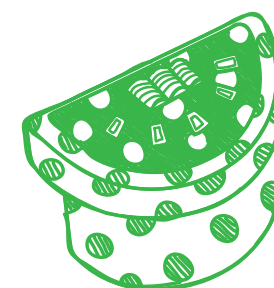
In June Thijs will participate in the Roparun. In this article you can read all about his passion for running and how it helps him in his daily life.



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From this page on you can read everything about all the wondrous activities that took place in the Lustrum. Moreover, the lyrics to the Lustrum song can be found, as well as numerous pictures.



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## ● FROM THE BOARD

NEKST SPRING 2014

# Dear Members,

The lustrum week was an unforgettable week. All elements representing the econometrician's main interests were present; ranging from a company day to a beer cantus, from gambling insights to playing dodgeball on trampolines. If I got the chance, I took a moment to stand back, look around me and enjoy all smiling faces of our members. Me and my fellow board members absolutely enjoyed the atmosphere during the lustrum week and seeing the priceless enthusiasm of all members.

Exactly 35 years ago I bet that no-one imagined on what kind of level this association could be today. Starting from a small group of enthusiastic econometricians, we changed into a solid, flourishing and prosperous association that is serving almost 600 econometricians in Tilburg. 35 years ago we did not have a full time board, we did not have three rooms in Building E, we did not have fancy software to support our work and above all, we did not have that many students to serve. Not at all. The Tilburgse Econometristen Vereniging consisted of a few ambitious students, believing in the growth potential of the association and striving in their spare hours for the establishment of an association which is now called Asset I Econometrics. Not a single board member ever wanted to leave behind the association in a "fair" condition. No, every single board member had the ambition to expand the association, to make it better and better. And let me not forget to mention our active members, who are the fundament of this association. All our active members spend time and efforts in Asset I Econometrics. Apparently, we are doing a good job, since the association attracts new active members every single year. And I should also not pass by on our passive members, who attend our activities; students who feel they are welcome and whose attendance is appreciated.

The past five years were, as you might know, quite hectic for Asset I Econometrics. After the name change from Tilburgse Econometristen Vereniging into Asset I Econometrics, quite some problems occurred related to Faculty Association Asset. Ultimately, the decision was made to merge with all Asset associations. And yes, we had to relinquish some independence. But, without going too deep into the state of current affairs, I can promise you that because of the rational decision making that has been made

last years, in the end we came out stronger than ever before, resulting in a strong and solid position within Asset.

I would also like to inform you about the fact that since a couple of weeks, the mobile application of Asset I Econometrics can be downloaded in the Google Play Store. I would like to invite all Android users to download it. In the application, information about upcoming events can be found, your Tilburg University agenda can be found and all the pictures of past activities can be seen. Urgent information: if all your committee members have downloaded the application, you will receive points for the lately introduced committee ranking!

Let me end my writing by thanking the Lustrum committee for their hard work! You did a tremendous job, so please be proud of yourself! Furthermore, I would like to thank the Almanac committee and the Lustrum Trip committee for bringing this year to another level. You all did a great job!

On behalf of the board,

Suzanne Vissers  
Chairman Asset I Econometrics  
2013-2014





# Committee Introduction



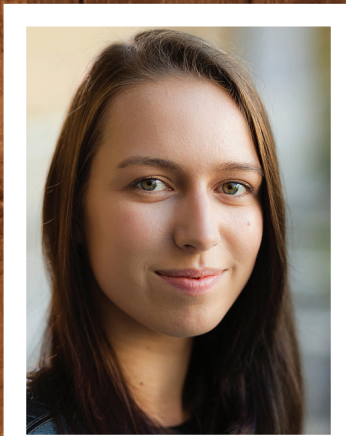
## Nicole Verbeek

Nicole Verbeek is 20 years old but is still a freshman. The word that best describes her is adventurous. She backpacked through Australia during the year after high school and fell in love with the country. So much even, that she would like to move there someday. She shot and skinned a deer and a wallaby, enjoyed jumping off high places, swam with crocodiles and is captivated by anything fast. Nicole is not just a daredevil however, she also likes to write album reviews for Festivalinfo and is very attached to her sleep. In a past life, she would have probably been a koala. If koalas usually eat whole lemons, that is.



## Christian van de Koppel

Christian van de Koppel is also a freshman, aged 18. He is very athletic: he enjoys rowing and watching sports and his greatest inspiration is Muhammad Ali. His personal motto is "I am not giving up, I am starting over" and he feels that winning is simply the best feeling in the world. That is why, if he would be a cartoon character, he would be Ash Ketchum so that he could become the best Pokémon trainer in the world. You can always wake him up for a holiday trip and if he had all the courage in the world, he would borrow a million dollars, take the first flight to Vegas and play roulette.



## Cleo Mauritsz

Cleo Mauritsz is 20 years old and a third year bachelor student. Most peculiar about her is probably how she is continuously fiddling with her hair. If she only had one day left to live, she would spend it with friends, family and her pet bunny while stuffing her face with Big Tasties with Bacon from a certain fast food restaurant. She describes herself as eccentric, passionate and extremely curious, while her best friends unanimously name "short" as her most striking feature. When she is all grown up, she would like to own a pony and travel the world, but right now she just enjoys debating and driving her car in her free time.

# Selling Mathematics

When Rian was not yet my wife but just my girlfriend, she decided at some point it was a good moment to show interest in my profession. She asked me what mathematics was all about. At first I did not know what to answer. First of all I hate open questions. Furthermore I needed an answer that she could understand and that was at the same time fully correct. After some hesitation I said that when mathematicians want to know the number of sheep they count the number of legs and divide by four. She was not really impressed. In fact according to

ornaments and above all she regretted to have asked me the question about my work.

My colleague farmers also regularly ask me questions about what I teach our students. I used to feel uncomfortable with this interest but in the mean time I have developed a standard answer. I say that I explain our students that if in the morning you first put on your socks and then your shoes that then in the evening you take of your shoes first and then your socks. If a person is

very clearly, but I think her biggest fans are colleague mathematicians like me : people that already know the result but want to understand it better. Last year I saw an appearance of Ionica in the Dutch talk show 'Pauw en Witteman'. The topic was a programming contest concerning the painting Victory Boogie Woogie of Piet Mondriaan. Within a minute she tried to explain the hosts the difference between an efficient sorting algorithm (with complexity  $O(n \log n)$ ) and an algorithm with complexity  $O(n^2)$  using eight books of different authors and of different sizes. It was wasted energy.

Despite my weird profession Rian still decided to marry me, and last week we even had a conversation about logic. I told her that the statement that every cow is a ruminant is equivalent to the saying that everything that is not a ruminant definitely is not a cow and that it is also equivalent to saying that everything is a ruminant or not a cow. She smiled immediately. 'Ah, so I am not a cow!', she said...

## 'Her biggest fans are colleague mathematicians like me'

her the answer was ridiculous. I tried to retrieve the situation by saying that it also holds for cows, goats, pigs, horses, dogs and cats and that one can even generalize the result to chickens, insects, spiders and centipedes. "That is trivial", she said. I explained that in mathematics we concentrate on statements that are true and that we always start with trivialities. Using this sheep-counting-principle one can for instance count the number of different possible chains of six beads if there are beads of four different colours available. This might not be trivial, but it is straightforward. One finds out that the number of chains with 7, 13 or even 37 beads is much easier to count than with six beads because these numbers are prime. But Rian already dropped out. She is not interested in

interested in more examples I tell about the guy wearing two t-shirts: If he pulls them inside out at the same time both t-shirts are inside out, but the order of the t-shirts changed. Also in these cases I often get the remark that it is trivial and ridiculous. This might be the case, but the pass rates tell otherwise.

I think it is a hazardous task to explain mathematics to ordinary people. At least I am not exceptionally good at it. Fortunately in the Netherlands we have specialists for this. The best known is Ionica Smeets. She writes columns for "de Volkskrant", articles for "Nieuw Archief" and regularly appears in talk shows. I admit she has some very nice articles and presentations in which she explains all kind of mathematical results

## René Peeters

René is a part time assistant professor in mathematics at the Tilburg School of Economics and Management. Together with his wife he runs a dairy farm in Dongen. He is interested in discrete mathematics, Celtic music and athletics.





# Soft skills are also important

**The Dutch Actuarial Institute (AI) is completely renewing the basic actuarial program. One of the important changes is that risk management will be integrated into the program and will be combined with soft skills. 'More and more actuaries work as risk managers,' says Estelle Jonkergouw. She is the Director of Studies of the Actuarial Institute's Executive Master of Actuarial Science (EMAS). Dr Jonkergouw has to make sure the basic program offered by the Actuarial Institute (AI) provides a smooth transition to the master program.**

**Original text by: Paul Jurriëns. Translated by: Robert Ensor.**

To arrive at a renewed basic program, the AI first consulted the financial sector. It emerged from this, for instance, that employers prefer actuaries with a good grounding in risk management. This area of expertise has become increasingly important to financial institutions, mainly due to new regulations, such as Solvency II and the Financial Assessment Framework.

'The basic program in its present form might have paid too little attention to risk management,' in Estelle Jonkergouw's opinion. If you do not study further in Risk Management, your knowledge of risk management will not be sufficient. The renewed program will change this. Besides that, the transition from the basic program to both the EMAS master's program and the CERA (Certified

Enterprise Risk Actuary) program, which is the in-depth program in the area of risk management, will be better.'

On 1 January 2014, the fourth cohort of students started EMAS. Alfred Slager is the Academic Director of this master's program. Together with Estelle Jonkergouw, he looked at ways of improving the link between the two programs. The links were sought at the subject level. In relation to each subject, the question they asked themselves was whether the requirements of the basic program correspond to the entry level assumed by lecturers of the EMAS program. 'There are some differences there,' according to Slager, 'but they can be bridged.'

## New developments

'There are all sorts of developments occurring that make the job of an actuary more exciting and interesting, which is also a reason why the bar is being raised,' Slager continues. One of these developments is risk management. 'Traditionally actuaries have implicitly been risk managers. In recent years, however, we have identified their role and added value for the organisation much more clearly and explicitly.'

According to Jonkergouw, 'Solvency II regulation, for example, demands explicit risk policies. This is one of the reasons why risk management should be a substantial part of the basic program. However, social skills should also be a part of this, since it is not just about



**Prof dr A.M.H. Slager**  
Professor of Pension Fund Management at TiasNimbas Business School (Tilburg University), and Academic Director of the Executive Master of Actuarial Science (EMAS). Professor Slager is also trustee of the General Practitioners' Pension Fund and Chairman of the Dutch Association of Investment Professionals (VBA).



**Dr E. Jonkergouw**  
Head of Integrated Risk Management and Model Validation at Achmea. After holding the position of Professor of Econometrics at the University of Pretoria (South Africa), she started working at Rabobank as a risk manager in 1998. After having held several positions within Rabobank, she took up her present position within Achmea. Dr Jonkergouw also lectures at the Dutch Actuarial Institute (CERA, Certified Enterprise Risk Actuary).

numbers. Soft skills, social skills, are also important. You need to be able to interpret quantitative data properly, develop arguments and report on your results. How do you write a clear report, for instance? How do you discuss it and vary the way you do so when reporting to your manager, the board of directors and the supervisory board?'

'To develop soft skills such as these, EMAS works with cases which not only cover numerous knowledge domains, but also cover numerous competences. These may be cases on negotiating and dilemmas, for instance, in which roles are assigned to students. In these cases, students learn about themselves and about how they can act best in certain circumstances. In the new basic program, soft skills will also be integrated into the

mathematical abilities. Risk management will always have a grey area in which soft skills are essential. How do you enter a debate on whether or not to take risks? The development of these competencies is an important part of the revised program.'

Slager: 'Specialization will take place. Which work does the actuary like most? For example, some actuaries do not like talking to a board of directors.' Jonkergouw continues, 'Possibly an actuary such as this could be assigned a different role. He could, for instance, produce reports, while someone else takes responsibility for communicating the reports. Being aware of your own competencies is also very important i.e. that you are unable to do something or simply do not like doing it.'

## 'Should not all actuaries become risk managers?'

theoretical subjects to ensure that the development of soft skills is more closely related to professional practice.'

## Choices

'For didactic reasons, the EMAS program increasingly makes use of simulations,' says Slager. 'You can approach the hedging of risks theoretically when dealing with derivatives. From a practical point of view, however, the subject and choices are less simple. What choices will you make when market movements are extreme? And what will that do to you? These are aspects you cannot easily learn from books. Actually, actuaries are already developing the desired soft skills in practice. Twenty-five years ago, only numbers were presented, so to speak. Nowadays actuaries provide more information on the dilemmas you have to solve and how to do so.'

Jonkergouw: 'Actuaries have to develop these abilities further, although they will also still be needed for their

According to Slager, 'It will always be possible to find responsibilities you do like. Besides, most students actually express their desire for the broader role.'

## Dangerous territory

Actuaries increasingly seem to progress towards positions in risk management. The differences between the roles of the actuary and the risk manager are not well defined, according to Estelle Jonkergouw. 'The Actuarial Institute will have to consider this. Maybe I am venturing into dangerous territory, but should not all actuaries become risk managers?'

Slager: 'Maybe they have always been risk managers. Both professions have a broad perspective. Actuaries can deepen their knowledge in particular areas. They are aware of the foundations on which a story is based and what the consequences and their interrelationships are. That is extremely valuable.' ●

Photo by: Jacques Kok





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More information can be obtained from the websites of the two partner organisations, the Dutch Actuarial Institute ([www.ag-ai.nl](http://www.ag-ai.nl)) and TiasNimbas Business School ([www.TiasNimbas.edu](http://www.TiasNimbas.edu)).



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# The Vasicek Story

In a manifest attempt to spice up my teaching in the Financial Models class, I sometimes tell a story about the Vasicek model, which is one of the most important models in that course. More precisely, the story relates to the model's originator. Oldrich Vasicek is a Czech-born mathematician who moved to the US after political events in Prague in 1968. In his new home country, Vasicek started to work for a bank, which at that time was quite unusual for a mathematician. He published his famous model in 1977. Here is how my story goes.

In the summer of 2002, the second World Congress of the Bachelier Finance Society was held in Agia Pelagia on the beautiful island of Crete. Starting from the beginning of the millennium, this congress has taken place every two years, and it is now generally viewed as the leading conference in mathematical finance. Being at the conference gave me the opportunity to hear about the latest developments in the field, and to meet colleagues from all over the world. There were some fringe benefits as well. For instance, the conference gala dinner, with music by a traditional Greek combo, provided the opportunity to evaluate the proficiency of several authors of mathematical finance textbooks in dancing the sirtaki.

At the end of a full conference day, participants typically wander off into the city in small groups, in order to find a nice place for a meal. Agia Pelagia is

a small town, and the obvious place to look for a restaurant is at the waterfront, so it frequently happened that several groups ended up at the same place. One evening, I shared a table with a number of fellow scientists from Germany and Switzerland, discussing matters of common interest while enjoying the tasty Greek food. At another table, there was an Italian group together

still engaging in quiet conversation. The climax of evening came when a photo shoot was arranged with Vasicek in the middle of two admirers. The Italian girls were delighted to have their picture taken with a model, and, judging from their looks and the expression on Vasicek's face, he may have felt the same way. Mrs. Vasicek was standing aside, looking mildly amused. Later, on

## 'The field of finance was no longer monopolized by guys in suits'

with Vasicek, who was also in Crete for the Bachelier meeting, and his wife. Especially for the younger members of the group, it may have been surprising that the name-giver of the celebrated interest rate model from the very early ages of mathematical finance actually turned out to be a firm man in his early sixties. Conversely, for Vasicek it may have been a revelation that the field of finance was no longer monopolized by guys in suits, but was now attracting a much more varied crowd including, for instance, pretty Italian PhD students.

As the evening progressed, everybody was having a great time at Vasicek's table. The restaurant owner poured free ouzo, motivated by Cretan tradition or possibly also by research on the correlation between the spiritedness of the evening and the size of the tip. No ouzo bottle appeared at the Swiss-German-Dutch table, where we were

the plane back to Schiphol airport, I saw Mr. and Mrs. Vasicek again; there was no indication that the evening in the restaurant did not end safely.

In June there will be the eighth Bachelier meeting, which this time will be held in Brussels. Of course I am looking forward to hear research talks on stochastic processes, pricing methods, and risk measures. But, perhaps, there will also be an opportunity again to observe some of the human side of science.

## Hans Schumacher

Hans Schumacher is an applied mathematician affiliated with the Department of Econometrics and Operations Research at Tilburg University. His activities in the modeling and control of dynamical systems have led him first to engineering and later in life to economics and finance.







# Studying in Cambridge

## A unique experience

**After four pleasant years and with two diplomas in my hand, I left Tilburg last summer. I moved to Cambridge to enroll in a research master's program. In my opinion, there are many aspects of studying in Cambridge that are special, interesting, and sometimes incredibly odd. In this article I will describe my experiences of the past seven months.**

It all started early in 2013. Since I was pursuing an academic career and I wanted to gain international experience, I decided to apply for the MPhil in Finance program at Cambridge Judge Business School. The selection process was highly competitive and I was very pleased to receive an offer. After I graduated from the QFAS program in Tilburg and

finished my internship at Robeco, I was ready to take on this next challenge. In September my dad drove me to Cambridge and the academic year started.

I was among the first students to arrive in Cambridge for the new academic year. This was because all students in Finance and Economics had to attend a preliminary course in mathematics and statistics. For me this was just a refresher, but it was a great opportunity to get to know Cambridge and my fellow students before things really started off. Our MPhil in Finance class consists of 23 students. About half of them are from Europe and the other half has an Asian background. Although I spend a lot of time with my classmates, this is mainly outside the lecture rooms. The reason for this is that our program consists of different specializations: the Finance track, the Accounting track, and the Financial Engineering track. With my quantitative background from Tilburg, the obvious choice for me was Financial Engineering.



Most people from my class have a less quantitative background and we were strongly advised that "this is not the time to challenge yourselves", so this is the smallest track.

The fact that my program is an MPhil means that it is a research master's degree. The program is seen as a first year of PhD and is particularly suitable for people that are pursuing a career in academia, like me. Therefore, quite a few people will stay in Cambridge or go elsewhere to do a PhD next year. The other people from my class will most likely launch their careers in industry after graduating. Most of them want to work in London for a bank or a consultancy firm. Obviously the competition for these jobs is enormous, and in contrast to the Netherlands the job application deadlines are very early. This meant that very soon after arriving in Cambridge, everybody had already to decide on the planning for the following years. Not so much of an easy start.

The thing that I like most about the Finance program in Cambridge is that we have a lot of freedom in choosing appropriate courses from different faculties. Our program is hosted by the business school. We have our basic courses such as Corporate Finance and Asset Pricing here, with a strong focus on academic research. We can also take courses from the Faculty of Economics and the Faculty of Mathematics. The large differences between the faculties are fascinating. Each faculty really has its own type of students, staff, buildings, atmosphere, and organization. The Faculty of Mathematics is the most impressive to me. The so-called "Part III" master's degree in mathematics is

### ● EXCHANGE REPORT

world-renowned and has some of the brightest professors and students on earth. You can imagine that it can be a bit intimidating to take courses with them.

One odd thing about Cambridge is the planning of the academic year. It is divided into three relatively short terms of about ten weeks. Basically everything happens during these ten weeks; all academic activities and all social activities. During the term everybody works really hard to keep on track with the coursework and participates in extracurricular activities as well. When the term is over, it is time for revisions and for visiting family and friends. The undergraduate students even have to leave their houses for a while and the city suddenly becomes quiet. The last term is the exam period. This is definitely going to be very stressful. Almost all exams are at the end of the year, which means that you have to hold on to your courses for the whole year.

When friends of mine are visiting Cambridge, one of the first questions they always ask is where the campus is. Most of them have something like Tilburg in mind, where all university buildings are in one particular area. However, my answer then is that the entire city is the campus. The small city of Cambridge consists almost completely of university-related buildings and fields. Through Cambridge flows the river Cam. Punting tours on the river are a great

way of sightseeing. The city center is also known as the "Cambridge bubble", because students spend their whole student life in this area and this student life is nothing like living in the "normal world".

The most important aspect of student life and the unique element of Cambridge is the college system. Every student and every research fellow belongs to one of the 31 colleges. Although these colleges are not involved with the actual coursework of graduate students, they play an important role in daily life. For instance, the colleges offer accommodation, dining facilities, and social activities. The colleges are generally very old and have a lot of endowments and traditions. The most famous colleges are Trinity College, St John's College, and King's College. They all have beautiful old buildings and own a lot of money.

The college that I am member of is called Darwin College. Darwin is celebrating its 50<sup>th</sup> anniversary this year and is therefore a relatively young college. Because it is a college for graduate students only, it is very diverse and internationally oriented. In the dining hall or in the popular college bar ("DarBar") it is very easy to meet new people and have interesting discussions. The most popular social activities are formal halls and bops. Formal halls are frequently organized by all colleges. The idea is simple: you



**Maarten Meeuwis**  
**AGE: 22**  
**Began studies in 2009**

dress up like in a Harry Potter movie and enjoy good food and wine in company of your friends or colleagues. During a bop, the Cambridge word for party, hundreds of people come to DarBar for a theme party.

For me, sports also play an important role in student life. Virtually all sports that you can think of are practiced in some form in Cambridge. Most sports are organized by the colleges. Traditionally, rowing is the most popular of all. I am a member of the Darwin tennis team. Although we compete against other colleges, this is mainly for fun and everybody is welcome. The best athletes of each sport are selected for the university team. The university sports teams play at a high level and compete against other universities. The highlight of the year is the match against Oxford, called the Varsity. The rivalry between both universities is so strong that people in Cambridge do not even want to pronounce the name Oxford. It is simply known as "that other place".

At the time that I am writing this, the second term just has finished. Now it is time to prepare for the upcoming exam period and finish our essays and problem sets. The last exams are scheduled at the end of May. After this period of working very hard, we will have the well-deserved end of the year celebrations. During the May Week in June (even this is possible in Cambridge), all colleges organize large balls and other activities. This will be a great end of an unforgettable year!•





# Econometric Modeling for Strategic Workforce Planning

*Bringing mathematics in the boardroom*

Text by: Jacques de Swart, Lau Akkermans and Linda Vos

**“How will my workforce be distributed over the different seniority levels in ten years? Will my company have to deal with redundant employees? How does the demographic aging affect my staff population? What kind of interventions will ensure that our average seniority level increases?” These are just a few of the questions that might keep a Human Resource (HR) manager awake at night. And many organizations are keen to know the answers to these questions. But how to quantify staff flows? How to quantify the impact of possible management interventions? A workforce optimization model could support in HR executive decisions on strategic workforce planning. We built a model to answer the questions raised above: The Business Simulator.**

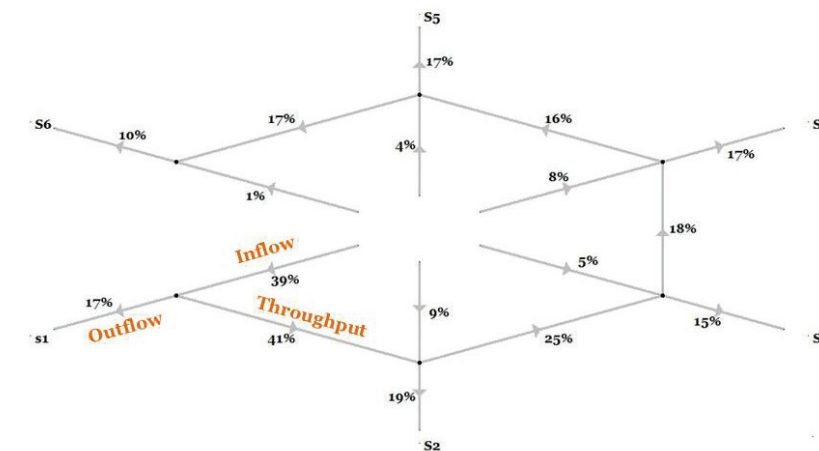
Due to, amongst others, the difficult economic climate and aging of the population, workforce prediction modeling is becoming a hot topic, especially for organizations with large, comprehensive workforces. These organizations wish to quantify their HR strategy, but generally do not have technically trained employees to substantiate and quantify the desired future solidly. Looking into the HR software market we found to our surprise that most software developers only build static models with less focus on modeling staff flows. We therefore decided to develop our own dynamic workforce optimization model.

In this paper we will define how we distinguish three types of staff flows in The Business Simulator: inflow, throughput and output. Once these types are determined, we will elaborate more on how these can be modeled and what objective function will optimize a desired future workforce.

## Mathematical models in a Human Resources context

The simplest form of a workforce modeling system treats the modeling of a group of people having the same job. The size of the group changes due to recruitment and outflow. More complex systems incorporate a set of different function levels and enable the modeling of a flow of promotions.

In this article we will incorporate the workforce flows for a company having six different function levels and recruiting mainly people from university. This can be seen as a common and general business model for amongst others banks, insurance companies, governmental organizations and hospitals. The generic function levels are named: S1, up to S6. As modeling environment we decided to use AIMMS, since this is a very powerful language in visualizing data flows in networks while it is a broadly recognized optimization package as well.



**Figure 1: Example of workforce flows for a company with six function levels for a given year.**

Figure 1 shows the flows of a workforce having the six function levels, for a given year. It is created as a circular network graph, using nodes and arcs to visualize the flows from and to function levels. The black nodes are defined as the function levels. In addition, the displayed percentages show the proportion of inflow, throughput (promotion) and outflow.

In- and outflow probabilities can easily be defined by taking the proportion of in- and outflow of total employers. The promotion scheme is usually presented by a throughput matrix. Several historical career paths and the capability framework in the career model were studied in obtaining realistic throughput probability values.

## Desirable workforce composition

Besides the historical workforce flows, we need to specify suitable ratios per function level to build effective teams. By using these ratios we can fill in the seniority degree of freedom, i.e. we can determine the appropriate seniority level of new joiners. Another way of looking at these desirable staff ratios is viewing these as a desirable population pyramid for the staff.

We will elaborate on the other input variables for The Business Simulator after we have explained how the optimization engine of this model works.

## From the Mehlmann model to The Business Simulator

To give a flavor of what these models from the literature look like, we describe

a representative model designed by Mehlmann. It uses dynamic programming - in which every decision influences future decisions - to determine optimal promotion schemes and recruiting targets (Mehlmann, 1980). The set of decision problems consists of deciding on promotions and inflow every year, such that the deviation from a desirable workforce structure is as small as possible.

Although the Mehlmann model offers good insight in the principles of manpower planning models, we cannot use this model for our purposes due to two reasons. First of all, the model only focuses on the structure of resource pools and does not take into account the available staffing budget. Secondly, the model needs the future total sizes of resource pools as input parameters, whereas we would like our model to consider these as output parameters.

The first conclusion from studying the Mehlmann model is that we can keep the model quite simple by treating the promotion scheme as a fixed input parameter (rather than decision variables), and the inflow at different function levels as the only decision variable. Furthermore, a shift in emphasis is necessary to fit the particular model needs. Unlike Mehlmann, we also want to exploit predictions about future staffing costs. Therefore we combined those basic principles into a new PwC model: The Business Simulator. Our

model is summarized in Figure 2.

On the left we have all input parameters. We listed these parameters in decreasing order of influence the decision maker (i.e. the HR manager) has to determine them. The current staff is given and an organization hardly has influence on the costs of the workforce. Outflow and promotions start to become easier to influence and the organization at stake is totally free to choose the desirable workforce composition and to predict what future budget they will spend on their workforce.

Before we run the model to compute outputs, we can set our preferences. Regarding these preferences, one can think of the calibration method or the number of years to predict. The most important outputs are the budget gap, the desirable workforce composition gap and the recommended inflow. The first is the difference between the future budget and the amount computed by the model to spend by the organization on their workforce. The second gap is the deviation per function level between the desired number of FTE and the

**‘40% projected growth in global data generated per year vs. 5% growth in global IT spending’  
McKinsey, 2011**

actual number computed by the model. Having the outflow and the throughput per function level, the model determines the recommended inflow per year and per function level. Based on this output the organization can build its recruitment strategy.

Next to these three outputs, we also want to track the resulting average length of employment. This can support in the quantification of social plans, in which the length of employment is an important factor to decide whether or not an employee can stay. Finally, we want to be able to follow the dynamics of various flows of resources.

## Creating impact in a boardroom setting

In our opinion one of the essential →

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Je hebt tijdens je studie alle mogelijke kennis opgedaan. En nu wil je aan de slag. Op een plek waar je al je ambities kwijt kunt. Waar de lat hoog ligt en waar je samenwerkt met professionals. Je start je carrière vliegend en gaat recht op je doel af. Dat is: het beste in jezelf naar boven halen.

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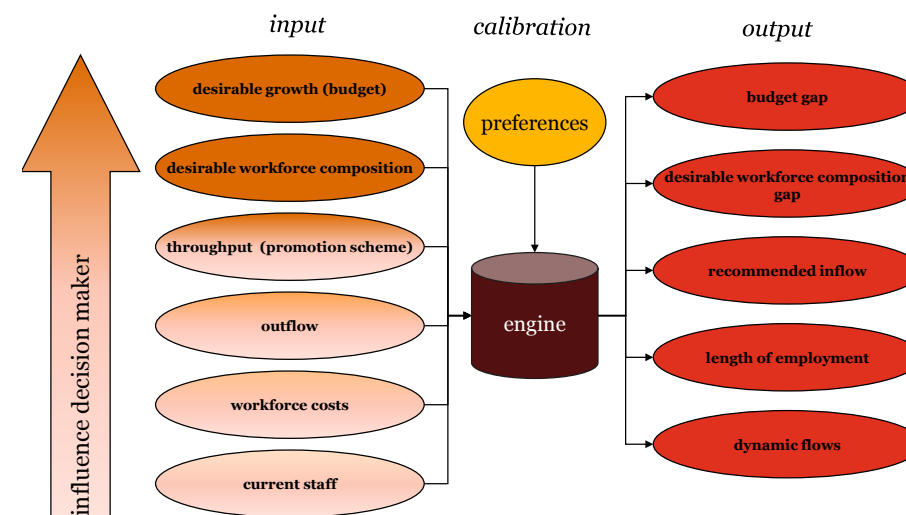
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**Figure 2: Structure of The Business Simulator**

characteristics of any type of model is the capability to be suited to many different circumstances, which cannot be predicted precisely beforehand. Examples are the introduction of new function levels and unemployment. As people started to build tools that could help to define actions in such occasions, two classes of models started to evolve: explanatory models and normative models.

Explanatory models are limited to yield insight in how the current workforce policy works and how it would react to certain stimuli. These models range from very simple models that can be used by

profit, or minimize outflow. An example of a normative model with a target is the attempt to arrive at a pre-set leverage of senior employees.

One important thing to realize as a model developer is not to forget the ultimate goal of the model. In case of The Business Simulator the final model will be used to support HR managers and directors making more solid policy by showing the quantified impact of their decisions. This implies the model builder should also spend enough time in the design of the output and, more common, on the user-friendliness. Of course, the algorithm should be right as

## '60% potential increase in retailers' operating margins possible with big data'

**McKinsey, 2011**

almost any type of organization, to very elaborate complex stochastic simulation models for the study of specific types of HR flows.

Normative models - sometimes also called binding models - are more powerful in the sense that they can compute a set of optimal decisions, given a set of objectives and predictions about changing circumstances. The set of objectives is normally translated into one value by using an object function. Within the set of normative models, a distinction can be made between models that make use of object functions with or without targets. Without targets, the normative model would for example compute a set of decisions that maximize

well, but that is the basic expertise and knowledge you might expect from an analytical consultant.

In conclusion, we see building quantitative models as an iterative process in which the client is strongly involved. The model should be able to anticipate quickly on questions uprising in demo presentations. Consequently, the modeler needs to have a grasp of storytelling: "A new kind of professional has emerged, the data scientist, who combines the skills of software programmer, statistician and storyteller/artist to extract the nuggets of gold hidden under mountains of data" (The Economist, 2010). •

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### About the authors

Jacques de Swart and Lau Akkermans work in the Quantitative Analysis (QA) group of PwC. This group, consisting of econometricians, mathematicians and physicists, focuses on the application of mathematics in business by modeling in its widest sense. Linda Vos works in the Pensions, Actuarial and Insurance Services (PAIS) department. This department mainly consists of econometricians and actuaries. Their main activities are advising public and private companies, pension funds and insurers, both from an actuarial point of view and from a strategic, fiscal and legal perspective. Within PwC, Jacques, Lau and Linda combine their strengths in projects on the cutting edge of actuarial and quantitative analysis, such as strategic workforce modeling. Jacques, Lau and Linda wrote this article on their own title and it therefore does not necessarily represent the opinion of PwC.



# Lustrum Trip Hamburg

This year is Asset | Econometrics' seventh lustrum and because of that, the Lustrum Trip Committee organized a weekend to Hamburg which 35 members of our association could join. This trip took place during the weekend of 31st of January until the 2nd of February. There was nothing that could ruin a great weekend, not even cold weather and heaps of snow all around. We simply countered it with drinking hot chocolate during the day and beer during the night!

## ● LUSTRUM TRIP



Milan van der Kamp

AGE: 19

Began studies in 2013

After a night without much sleep, we gathered at the car park of Tilburg University around 5a.m. After a few minutes the bus that would bring us to Hamburg arrived. Much to our surprise, a female bus driver stepped out to put our suitcases in the bus, since it is safe to say every single one of us expected a man to be our driver.

Even though it was still very early, the atmosphere in the bus was remarkably good. We watched a movie called Beerfest and listened to German songs to get acquainted with the German culture. The drive lasted for seven hours, after which we went to the hostel where we would stay for the weekend. The hostel was quite something. With five floors, an actual bar and half liters of beer for €3.50, we felt at home right away. However, since we were a tad early, only two rooms were ready. Luckily, my group was one the two groups who got their room immediately. The other groups could drop their luggage in our room temporarily.

We had two hours to lunch, which was plenty of time, so we were already able to explore the city a bit as well. In the afternoon we visited the St. Michaeliskirche. From the church tower, we had a great view over Hamburg and most of us were sporty enough to climb the 453 stairs instead of taking the elevator. Later in the afternoon, the biggest part of the group went to

the Hamburg Dungeon, while four of us went to the Kunsthalle to check out some art.

In the Hamburg Dungeon, we first made a picture of the group. We had to shout as loud as possible while Thijs', Emile's and Joep's head were 'cut off'. Afterwards, we went into the 'dungeons' themselves. I believe Willem was the most scared of everyone there. He did not want to walk at the back of the group and people even managed to scare him several times before we were in the actual dungeon itself.

In the last room of the dungeon, an old dirty woman (of whom most of us were already quite scared), was sitting in a cage, while we had to sit on chairs surrounding the cage. Suddenly, the lights went out for a few seconds and obviously we expected something scary to happen. The lights were turned on again and she stretched her arms through the bars of the cage to one of us. While we were all screaming, the lights were turned off again and we could hear her leaving the cage. I was really scared, scared enough to grab and squeeze Vera's arm. Some of us could see her standing in front of them. It was dark for some 20 seconds and then,

unexpectedly, our chairs were tilted a bit backwards, which again caused a lot of screaming. Next, the lights were turned on again and suddenly the woman had disappeared.

For dinner, the group was split into two smaller groups. My group went to an eatery, where we all had pizza and we could tell those who went to the Kunsthalle about all the funny (and the not so funny) moments in the Dungeon. Afterwards, we went back to the hostel, where most of us stayed for the evening. We spent our time drinking half liters of beer and there was a bar and music, so we did not mind staying in. Only the bass of the music annoyed us a bit. We even asked the bar keeper to turn it down, but he did not respond, thus forcing us to scream to one another instead of simply talking. We were told that we should not stay up too late, because a long city walk was planned for the next day.

The breakfast we had was very good. There were freshly baked breads and a large choice of fillings available. All in all, it was more than enough. Around 10a.m., we left the hostel for a guided tour through Hamburg. Our tour guide Brent, an American who moved to Hamburg, knew a great deal →







about the city and its buildings. The central subject of the tour was the great fire of 1842, which had destroyed over one third of Hamburg. Not surprisingly, most churches we visited had been burnt at the time and often have not fully been reconstructed yet.

When the tour ended, we had some spare time until 5p.m. Afterwards, we met at the hostel in order to prepare for a night at the Reeperbahn, the red light district of Hamburg. The Reeperbahn is not as 'in-your-face' as the red light district in Amsterdam, even though it is thrice its size. We were split into two groups again for diner and we met at a pub afterwards. The pub-keeper was very happy with us, although we had no clue why. When we left, however, it turned out that we had a bill of 250 euros. You might have come across a picture of this on the econometricians Facebook page with the caption "Lustrum trippers be like...". This might be a reasonable explanation for why the barkeeper was so enthusiastic.

Later that night, we went to a small pub where you could buy shots for only 50 cents. Sadly though, one of them tasted like tomato juice and was really

disgusting, whereas the other two tasted similar to plain lemonade. After we all had plenty of shots, we went on the next bar, which was a small sports bar. We ended the night in a rather big club, where some of us even stayed for the entire night.

The next morning around 7a.m., a visit to the fish market was planned. Some people went straight from the club to the market, so they were quite tired for the rest of the day. However, also quite some students preferred sleeping in, since we did have quite a lack of sleep already. After a collective breakfast, we took the metro to go ice-skating. Some of us were struggling, trying not to fall down, but balancing penguins were available for those who needed the extra help.

Later in the afternoon, a boat tour through the canals of Hamburg was planned. Unfortunately it was cancelled, because of the huge amount of ice on the water. Instead, we had the opportunity to warm up, have a lunch and sit somewhere to rest. Obviously, this was something we did not mind at all.

Around 5p.m., we stepped into the bus again for our trip back to Tilburg. I think we all had an amazing weekend and I personally liked the trip a lot. I really enjoyed the night at the Reeperbahn and also the Hamburg Dungeons, which was both very funny and scary. While Friday morning I hardly knew somebody, since I was not an active member and only started studying Econometrics this year, by the end of the weekend I really felt like I was a part of the group. This was (partially) the reason that I told the board that I wanted to become an active member, which I am right now.

So in conclusion, I think that all the participants will agree that we had an amazing weekend. For this I would like to thank the Lustrum Trip Committee. It is a shame that a Lustrum trip can only take place once every five years! ●

## Actively Thinking Along

**January 28: the Active Members' Meeting was again upon us. Once I entered the room, I was immediately photographed by Willem. After recovering from the flash I saw that only the board and Emile were present. Luckily after a few minutes more people came in, though not many.**

If I remember correctly we were there with thirteen people altogether, including the board. The upside to this rather small number was that making groups was quite easy, and perhaps more importantly, we were able to have better discussions. We had more time than usual because we did not need to evaluate so many opinions.

The first topic we discussed in our groups was 'Faculty Wide committees'. The main conclusion of our discussion

was that Asset and Asset I Econometrics feel very separated. Therefore we came up with several solutions to this problem, one of them being to communicate as one, for example to send one monthly e-mail.

The second topic was the new website. Since Asset I SBIT already has the new website up and running, we could easily compare our present site with the new one. We were all very enthusiastic about the layout of the new website. We had almost no remarks and the ones we had were rather small, for example that the moving banner with all the companies would be better if it was not moving all the time because it is a bit annoying. All in all we agreed it was a large leap forward.

Last but not least we discussed the promotion of the activities of Asset I Econometrics. A list with all the different methods of promotion that are already employed was shown. At the first item 'posters' the question arose: where are these posters? An important tip we gave, was to make the memo in the same style as the new website to give it a boost in

popularity. Obviously we had more tips and remarks than the ones pointed out here, and therefore it has been a very useful meeting in my opinion. I certainly hope to see you all there next time! ●

## You are a member, so let us hear your voice

**The first two study units for the freshmen and the first semester of this academic year for the other students have passed. Many activities took place during the first half of this academic year and many more will take place during the second half. During the Department Members' Meeting, we reviewed upon the first semester and looked ahead.**

Firstly, there was an update regarding the collaboration of Asset I Econometrics and Asset. This conjunction is again a point of focus this year. The new structure of the faculty association is very important and requires a lot of attention. If everything goes well, there will be more room for other points of focus next year.

Traditionally, there was a delicious cherry turnover for everyone during the break. So if you are curious about the current state of affairs at Asset I Econometrics there is a nice reward as well. In case you think that the DMM is maybe not interesting for you, do not hesitate next time. It is always interesting to hear about the current changes in your association and there will also be a nice reward during the break. You are a member, so let us hear your voice next time, for it is a useful addition!

After the break, each board member talked about the committees that he or she coordinates. It is without an exception interesting to hear a complete update regarding all committees. Many other topics were discussed as well, but this article is way too short to inform you on all of them. Of course, there was time for questions about the current policy as well and to give any critical notes. Again a great opportunity to make your opinion clear!

Even so, the favorite place for every econometrician to discuss is not the



**Roxanne Beerkens**

**AGE: 19**

**Began studies in 2012**



**Emile Kragten**

**AGE: 19**

**Began studies in 2012**

'Gallery', but the pub. So after the evening we went to 'Van Horen Zeggen', for the New Year's Drink. ●



# Apprentice at APG Castle

Amsterdam, a city where many large companies have settled. High-rise buildings as far as the eye can see. One of these massive structures is the headquarters of a group of companies, one of them being Algemene Pensioen Groep N.V. (English: General Pensions Group, or APG for short, one of the more well known companies among econometricians. An impressive building in my opinion. It resembles a castle of sorts, which could relate to the fact that APG administers the pension assets of around 4.5 million Dutch citizens for its clients. Floris and I met up with Lieke van der Horst, a 23-year-old trainee at APG.

Born and raised in Helmond, Lieke studied International Business in Tilburg. After finishing her Bachelor and her Master in Finance, she decided to do a second Master program, namely Economics and Finance of Aging. During her studies Lieke also went on exchange to Orlando for half a year. In spite of the studies over there seemed easy to Lieke, it was a lot of work to study there in her opinion. The exams counted for only two percent of her final grade but she could not skip them. Despite this, she feels that it has definitely enriched her as a person and she has brought back a lot of knowledge.

Lieke is one of those people who knew what kind of work she wanted to do after her studies but was unsure as to the particular job that she would want to fulfill. For her, the APG traineeship was



**Lieke van der Horst**  
Trainee at APG

the perfect opportunity. The two year traineeship brings along the opportunity to see several sides of working at APG. You will work at four different departments for half a year each: Finance and Risk, Front Office, Mid Office and Operational Risk Management. While working there, you will work on a project. Lieke is now busy with a project in which she describes procedures within companies. The important thing to have in mind while working on this is, in Lieke's opinion, the fact that pensions can be looked at in a lot of ways. You have to account for a lot of things. This is one of the things that she discovered during her second master.

Roughly 150 people apply for the traineeship at APG. Only four people out of these 150 remain after a selection procedure. To apply for the traineeship, there are several steps to be taken. Firstly, you should write a letter of application. After this procedure, only 25 applicants remain, which is already a huge chunk of the interested people gone. The 25 people who were selected, were invited for a meeting called "APG Match", where they receive information about APG and the traineeship. After this, the applicants will engage in a sort of speed date, during which they will have fifteen-minute job interviews with several people from APG. After lunch, the applicants are given a case, on which they have to work within a group. This is

to see how you work within a group and to show your creativity, as the subjects are generally really broad. Next, a pitch will be held during which you have to tell why APG should hire you. After this long day, APG will select the ten best people who will be invited to take an intelligence and personality test. Subsequently, you will be given the results and someone from APG will talk to you about them and whether you recognize yourself in the results. Lastly, out of the remaining 10, four persons are selected as the definite trainees for APG. In Lieke's case, these were coincidentally all people with a Finance background.

APG offers a project of self studying to earn the CFA - Chartered Financial Analyst - designation. Following this project is not obligatory but it is strongly recommended. The CFA designation is the most respected and renowned investment credential in the world. This project has been divided up in three levels, each level taking up around 300 hours of studying. There are five subjects during a level: Economics, Ethics, Quantative Methods, Investment and Wallet Management. The test takes up a whopping six hours with roughly 240 multiple-choice questions, of which seventy percent has to be answered correctly in order to pass the test. Besides the CFA designation, APG offers even more trainings. These vary from trainings focusing on presenting yourself

## 'There is a great work-life balance while working as a trainee at APG'

but also to improve your image with regards to how people see you.

For Lieke, there is a great work-life balance while working as a trainee at APG. She works from around 9 am until 6:30 pm but she tells us that it differs during every project. She also informs us that it is important to work on your networking skills, especially being a trainee. It is easy for her to get one hour off to have lunch with a colleague to show interest in their job and to get to know each other better. Lieke thinks that this important not only because it gives her a better vision on what she wants to do after the traineeship but also to be



known at APG, that people recognize her name.

The money that she earns is also not too little. Lieke admits that the salary, even for a trainee, is probably above the average of generally earned salaries. Obviously, there are other companies that offer a better wage to start off with but APG definitely offers the chance to take big leaps and many ways to grow

within the company, something that other companies have less.

Lieke has perceived that marks are definitely important during the application procedure. A mark of 7 to 7.5 is mostly required, while companies also focus on what you did besides your studies. They feel that experience from studying abroad is very important and that it is definitely not a hole in your résumé. In fact, they encourage people to have some experience in foreign countries for they feel that it is an enrichment of you as a person. It is also important to show that you can be assertive and take initiative in your job.

Lieke also noted that MatLAB is used a lot within APG and so it is definitely an addition to your résumé to have some skills in using MatLAB.

Lastly, Lieke has given us some tips for future econometricians and students in general. Be sure to profile yourself and to show companies that you have certain unique traits that would encourage them to take a shine to you. She stresses that networking is definitely important to be known across the company and to give yourself a better view of the jobs of other people. As an econometrician, you would not want to be busy a quantitatively all the time, although it is definitely not a bad thing to have a quantitative view on certain topics. Even though it seems that people with a Finance background seem to be selected for APG traineeships, it is definitely not secluded that others do not have any chance to become a trainee, as long as you know how to distinguish yourself from the others and you are confident in your abilities. •



## Searching for a Future Career



**February 11, 2014: The most important day of the year. The date on which you have the opportunity to impress your possible future employers, perhaps to ensure yourself that well-paid dream job.**

After forgetting to set my alarm clock, my day started a bit more stressful than I wished for. With some luck however, I still managed to catch my train in time. When we arrived at the central station in Utrecht, we still had to take the tram to the NBC Congress Center. After enjoying the final part of the trip in a very overcrowded tram, we arrived at the NBC. Upon arrival, my friends and I mostly discussed the companies we were assigned to. The Gods were in my favor, since I was assigned to all my first choices. For the morning case I was assigned to Flow Traders, my afternoon case was at EY(formerly Ernst & Young) and I had my dinner at BCG's table.

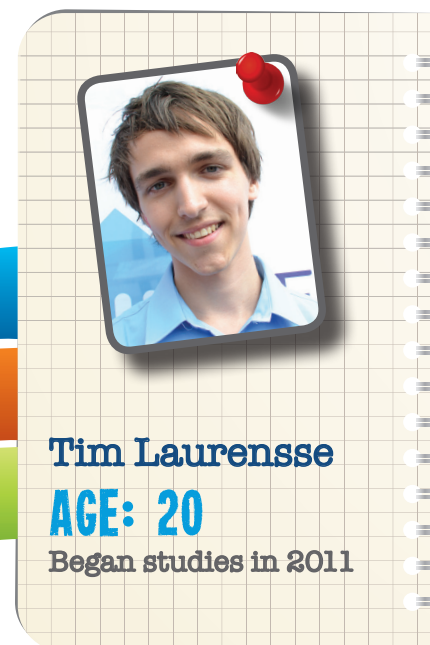
Eventually, we were asked to go to the main hall, where the chairman of the committee gave an opening speech. The word was then given to Alessio Rastani for the first speech of the day. This was quite possibly the most interesting talk I have listened to in quite a while. He really grabbed the attention and played with

the audience. However, with respect to its content, it could have been the most empty and meaningless speech I have ever heard. After the speech, it was time for the first case round. The recruiter from Flow Traders told us something about the company and afterwards we got a case. In this competition type of game you had to shout "BUY" or "SELL" whenever you could buy/sell an asset with profit.

Around 1 o' clock it was time for lunch. This was a perfect moment for me to eat as much as possible, since I did not have time to eat my breakfast this morning because of all the hurrying. It was also a great opportunity to talk to recruiters and employees of different companies, to get to know them and also to look at the possibility of possible internships/jobs there. Soon after this, it was time for the second case round. I went up the stairs to the room where EY was located. This case was about the premium an insurer should ask for a car-insurance for different people. The people were differentiated by e.g. age, sex, value of the car and other identifying factors. Every group had to decide upon a premium, after which we got some feedback from the consultants.

Subsequently, there was another speech. Margot Scheltema talked about her career path and how to apply for a job. Finally she gave us some tips and tricks

as well. After this speech, there was a networking drink, another opportunity to talk with various recruiters & employees. Around 19.00, the dinner started, so we all sat down at our assigned table and enjoyed the delicious meal. Afterwards, there was a fantastic party at club LUX in Utrecht: a great way to finish a great day! ●



Together with Christian, who is probably among the most athletic members of our association, Belle and my favorite board member Willem Jongen, I would have to bring the sports standard and physical fitness of our fellow econometricians to a higher level. Since our committee consisted of a rower (Christian), a swimmer (Willem), a volleyball player (Belle) and a football player (me), our interests appeared to cover a wide range of sports. We also started our studies in different years, so we were likely to reach a lot of econometricians directly to engage them for the activities of our new committee.

Our first new task was to keep the Champions League pool up to date. The Champions League pool was a new thing, started by Willem. The 30 participants have to make predictions about the matches in the Champions League. Since I had always been very interested in football, I decided to take care of the pool. From the beginning, at least five people have been leading the general ranking and still the pool is very exciting. Although some of the participants told me they see me as an expert, I have been in the relegation zone for quite a while myself. I still hope to reach the top three, because then my coordinator Willem must officially check all results to make sure I did not bend the rules to win.

## For all the sportive econometricians...

**After three years of participating in activities, consuming free beer at the drinks at Van Horen Zeggen and being asked to become active such that I could go to the Active Members Weekend with some of my also active classmates, last summer I decided to become an active member of our beautiful association. After a little chat with Janinke, I was placed in the Sport committee. A brand new committee, that I could shape, as I was chosen as the very first chairman of the Sport committee.**

On November 11 2013, not only 'Prins Carnaval' was chosen, but we also had our very first activity this day. Within two weeks, we arranged a sportive afternoon at the Sports Centre. Because of the renovations of the Sports Centre, we had to make a lot of improvisations, but the day was a great success. Playing sports like floorball and dodgeball, people felt like being in high school again. We got ourselves a lot of positive reactions and most people told us that they would definitely attend our second activity.

Before we knew it, winter was coming and so were the Olympics. Hence we decided to arrange a wintertime sport activity as our second activity. Since ice skating was the only decent option, we decided to go to the Ireen Wüst ice rink. Although we were not even close to the level of Sven Kramer, some econometricians displayed some great skills, with Jeroen Pars as the most talented and successful ice skater. Joep

Thijssen and his team almost reached first place, but unfortunately, he was just very unlucky. We drank some chocolate milk and ate a delicious 'eierkoek' (a



Dutch round light cookie, ed) and with that, the skating competition was a great successor of our first activity. We hope that our third activity will be even better. We are really excited about the activity that we have in mind and we truly hope that it will be a tremendous finish of the first year of the Sport Committee. And for all the football fans out there, there will be a World Cup Pool at the end of the year! ●



MIDPAGE

MIDPAGE



## Seventh Lustrum, here we go!

Asset | Econometrics celebrates her 35th birthday this year. This means that the association, founded on March 15 1979 under the name of 'Tilburgse Econometristen Vereniging', celebrates their 35/5= Seventh lustrum! To start things off, the opening took place on March 18.

As chairman of the Lustrum committee, Ashley had the honor of welcoming everyone and introducing the Lustrum. Our chairman Suzanne then presented us with a short history of the association. She was soon to be followed by the Almanac committee's own Cleo, who tried to trick us into thinking the almanac was not finished in time. The subsequent video showed the hilarious journey the

almanac made from the warehouse to the University. Absolute star in this movie was Floris, who displayed acting skills and a level of flair far beyond Hollywood. Eventually it was Esmée that ran the last part of the journey and elegantly presented the first copy of the almanac.

After that we had an interactive lecture by Ben van der Genugten about different kinds of casino games, which was in line with the theme of this lustrum: 'Lucky 7'. The first thing he 'taught' us was that in the end, the casino always wins. This good example of rocket science was luckily followed by more practical theory about optimal strategies in blackjack and a simplified version of poker. There was also a quiz to go with his lecture, which Daniël managed to win.

Then it was Willem Haemers' turn. Our recently retired teacher was asked to present the quiz made by the Lustrum committee. The questions ranged from the number of econometrics teachers

on the seventh floor of building K at a given moment, to the number of oceans in the world. Although not all answers were undisputed, i.e. javelin throwing is actually part of the heptathlon for women, some of us soon learned that the quiz was not that much about giving the right answers as that it was about pushing the buttons as fast, hard and often as possible (in that order). Unfortunately this was not meant to be for everyone, so an alliance was soon to be found. Mark and I both found ourselves in the top ten and were invited to join the final part of the opening: the Wheel of Fortune. It only cost us a possible share in the spoils of war with Vera. In the end, ten prizes were given away and Mark was lucky enough to have won the cinema tickets.

All in all, it was a successful opening to a wondrous week. Seventh Lustrum, here we go!

JIM PEETEN

## Case study LP optimality: Beer Cantus

For those who think 'beer cantus and econometricians... an awful combination!': I will prove you wrong in this article! It is obvious that a cantus is a typical linear programming problem. During a beer cantus everybody tries to maximize the following objective function: Max {the amount of free beer consumed by him/her}, subject to four types of constraints:

1) The nice constraints, i.e., everyone was only allowed to pee during the break (this constraint obviously makes it harder to maximize the objective value).

2) The hard constraints, i.e., one may only drink beer after the cantus singers sing 'trink bruderlein trink' and before the next song starts. Practically this means: bottoms up.

3) The capacity constraints, i.e., personal constraints like gender, weight and size of the liver. These constraints were very determinative for the optimal objective value!

4) The reluctant constraint, i.e., no beer may be thrown. Of course throwing or spilling beer would lead to a less optimal value of the objective function, hence all the econometricians had no problems fulfilling this constraint!

The cantus started around 20.30 hours and everybody was on time. This is a rare occurrence, but taking into account that there was free beer during the cantus it was not too surprising after all. Masum, Janinke, Annick and Pieter-Jan were the singers of the night. After apologizing for the fact that they were not the best singers they proved themselves wrong: they did a great job! All the cantus favourites passed by: Yellow four free beer, Joost is differently earthed, Jan-Klaassen is a trumpet player, It's raining sunshine and many others were the beginning of conga lines, ad fundums and lots of fun. Of course there were people who had to take some penalty drinks because they violated the cantus rules, or just because they were present... One can think of former board members. Different types of adjes (ad fundum, ed) had to be done:

adje-shoe, adje-serving tableau, adje-kangaroo, adje-stretch and more. There were even some people foolish enough to try a adje-hamburger. They both got a lump in their throat, but luckily Thijs Verhaegh was present to perform some first aid (for which yours truly is still very thankful!). After many beers, lots of fun and many songs by our great singers and the audience, everybody had maximized the LP problem given their own constraints. This was proven by the fact that there were only a few beers ordered when the cantus was done. Hence all the econometricians could return homewards with the reassuring thought: we have chosen the right study!

DIRK PARREN

## 'Bounz'ing in Beverwijk

On Friday during our Lustrum we gathered way too early after a great beer cantus at the university at 12.30 hours to take a bus to Beverwijk. During this 1,5 hour trip we watched a very appropriate film namely 'The Hangover 3'. Once we arrived we changed for 2 hours of fun on trampolines at Bounz. Not only the floor, but also the walls consisted of trampolines.

The 2 hours on the trampolines began with a training. There were a lot of exercises we had to do like just jumping, fall on your back and get back up, doing somersaults, jump into the wall and back. One of the funniest exercises in my opinion was lying on your back and try to get up by kicking in the air, which looked kind of silly. Unfortunately there were also some injuries along the way. Willem had only set one foot on the trampoline when he tripped and injured himself. He could unfortunately not participate the rest of the day, because he had to sit down with a pack of ice on his ankle.

After practicing for some time a lot of water and lemonade was used. After some resting there were relay races (running and jumping). But the biggest event of the day was playing 'Dodge ball'. Two sides, one middle line (also consisting of trampolines) and a lot of

balls were all the ingredients needed. If you got hit you had to sit on your knees in the middle. The team with the most people standing after a couple of minutes was the winner. In the end nice pizza was delivered which was really welcome after the 2 hours of sports. After the pizza it was unfortunately already time to go home.

In the bus back Masum asked us which film we wanted to watch. He had two 'really great' choices: 'Mamma Mia!' or a film about 'A boat with gay guys' (i.e. Boat Trip). There was some discussion but of course Masum decided that the second option was the better one. It was a really terrible movie, although it was somewhat entertaining.

Little did we now that after these 2 hours of jumping, pizza and the journey back to the university, we would have muscle aches in places we never knew we had any muscles to begin with. Two days later some of us still remembered this incredible day because of these muscle aches. All in all it was a really nice day.

JAN DE LEEUW

## Cheaters on the company day!

On March 19 the Lustrum committee organized a Company Day at 'De Postelse Hoeve' in Tilburg. It was the perfect chance for students to get in contact with companies and see how a possible future job would look like.

My choice for the morning program was SAS. At breakfast, we could already hear a lot of personal experiences from some employees. After a delicious breakfast we quickly made our way to one of the case rooms to hear more about this software company. It turned out that their main business is in programming software and analyzing data. The case at the end consisted of

an elevator pitch about SAS, in which you had to promote SAS to a board member of a supermarket chain. This was in my opinion quite short and maybe not the best exercise to get us interested in SAS. One of the most fascinating things of this session was the flip-over information cards of SAS on the table.

After the lunch, we had a small workshop about fencing. We learned a few basic techniques to attack and defend yourself. This was enough to do some short duels against other students. The one who is the first to hit the other five times wins the battle, but you are very dependent of your opponent, because he has to confess if he has been hit. I still believe that my competitors were not fair and honest, and won the duel in this way. Nevertheless, it was a good distraction from the formal activities.

In the afternoon, I visited a presentation of the consultancy company Districon. This Dutch company focuses on developing logistic solutions for companies and government. The most interesting part for me was that it was very concrete and focused on real problems in practice. The examples we discussed in the presentation were very attractive to me, because it is directed on the operations research part of Econometrics that I like.

Around 16.30 hours the afternoon program was over and there was a little drink for all participants of this activity to discuss all the obtained information from the different companies. After an hour, the drink came to an end and all participants went home. It was a successful company day with a lot of new information about my future.

ETIENNE BAGHUIS



# The evening of econometrics, elaborate gambling, exquisite dining, and ecstatic dancing

The finishing touch, the pièce de résistance, of the lustrum week was the lustrum dinner and gala. All members and alumni were invited to this formal event, together with their significant other. Yours truly happens to be one of these outsiders and has been asked to write a short article on this event.

This celebration of 35 years of Asset I Econometrics took place at 'de Philharmonie', a beautifully renovated villa. The black tie dress code was lived up to, the Astrics girls looked gorgeous, the Astrics guys like gentlemen. After being welcomed by the committee, we were shown our places at the dinner tables where I was seated with a group of active members from the second year. It was a three course meal with every course being artistically presented on the plate. While eating we spoke of characteristics of an econometrist, the food, and the wine and I learned a lot of new names and faces.

After a sweet dessert there was a short break in which we drank coffee and had our picture taken. In the mean time the room was cleared, the band started building up and more and more members arrived. At ten o'clock the roulette and blackjack table opened, while 'Backstage', the band which recorded the lustrum song, started playing. Everybody quickly spread across the room, leaving for what they liked doing most. The gamblers tried their chances, which they probably calculated within seconds. The dancers moved their feet to the beat of the band. Although somewhat loud, they provided us with danceable disco and sing-a-long classics. The rest took a stand between the tables and the bar, or between the bar and the dance floor. Old friends caught up, new friends were made.

Time flew, I was having fun. At one o'clock the casino closed with a reward for the winner, the one who earned the most chips. Rick van de Meulenhof was the lucky winner and received a poker set for his efforts. Subsequently, the lustrum song was played with the lustrum committee on lead vocals. Everybody grabbed an almanac to look up the lyrics and joined in. Only an hour later the party already came to an end. Coats were fetched from the cloakroom and the attendees split up. A group went home to their beds, the rest assembled at Le Clochard for the afterparty, for a last outburst of the lustrum week.

WOUTER TAHEIJ

## Lustrum Song

Melody: Uptown Girl - Westlife

Who's the best?  
The asso(cia)tion that was meant to last  
And now for all the Astrics girls and guys  
Thirty-five years come to an end tonight  
Because it's time...

For our Lustrum week  
We're gonna celebrate our Lustrum week  
Stay up all night cause we don't need no sleep  
And we will make the greatest memories  
That's what we want

If you're afraid that  
your risk is too high-igh-igh  
There's a solution  
Make sure you diversify

And if you're out of luck  
Take a bet  
And you'll get what you're looking for

If you don't gamble you can never score  
'Cause luck is favoring the brave, you know  
So roll the dice and let your fortune grow  
Time for a show...

Oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh  
Oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh

Lustrum week  
Everyone likes econometric boys  
But don't forget the even nicer chicks  
Drinking beer and doing mathematics  
The perfect mix

And when we're drawing  
And solving our matrices  
And when we're searching  
For optimal vertices

And if you're out of luck  
Take a bet  
And you'll get what you're looking for

If you don't gamble you can never score  
'Cause luck is favoring the brave, you know  
So roll the dice and let your fortune grow  
Time for a show...

Oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh  
Oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh oh

Lustrum week  
Our Lustrum weeeek  
You all know it is  
Our 7th Lustrum week  
Our Lustrum week  
You all know it is  
Our 7th Lustrum week  
Our Lustrum week



PHOTO SPREAD

PHOTO SPREAD



# Luck is not a matter of fate, it is a matter of faith!

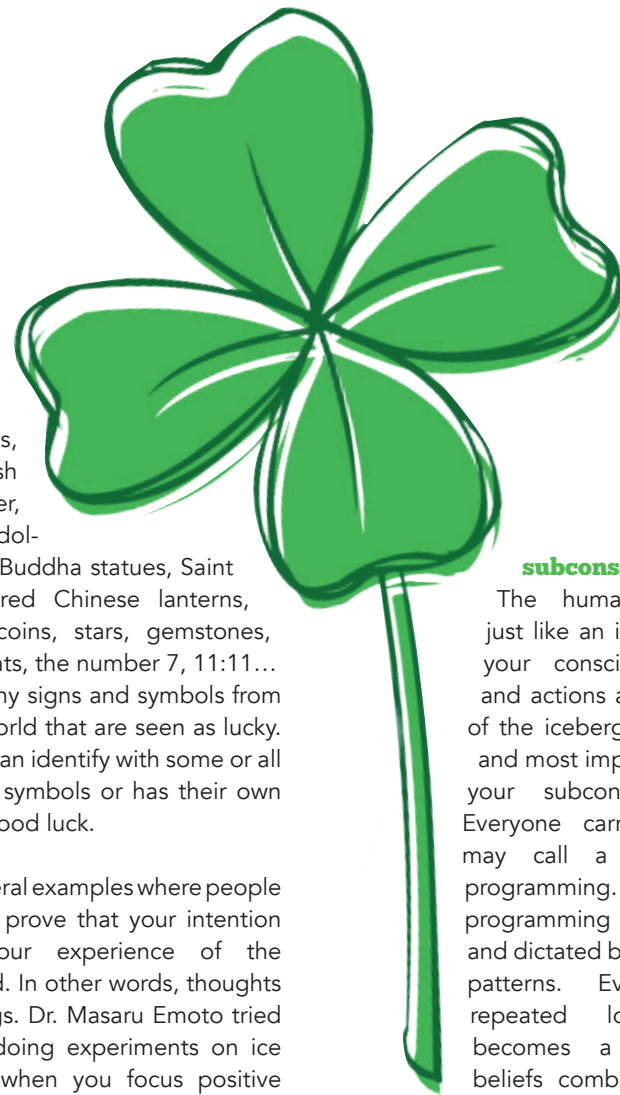
**How many of us consider ourselves truly lucky in our lives? We might be lucky to be in the college of our dreams, to have that scholarship we want, to have that great position at that prestigious company or to be with that perfect partner. On the other hand, something small like a compliment on a bad day may make us feel just as lucky as any of the events above. The concept of luck is therefore often deemed irrational, which is why one cannot approach luck as a pure science, without involving metaphysics. Metaphysics is the traditional branch of philosophy that tries to answer the questions "What is ultimately there?" and "What is it like?". To me, metaphysics is all about energy.**

**Text by: Maha Lharoui**

## Luck in the world

Lady bugs, butterflies, Irish four-leaf clover, rainbows, dolphins, tigers, Buddha statues, Saint Christopher, red Chinese lanterns, horseshoes, coins, stars, gemstones, crescents, hearts, the number 7, 11:11... There are many signs and symbols from around the world that are seen as lucky. Each culture can identify with some or all of the above symbols or has their own symbols for good luck.

There are several examples where people have tried to prove that your intention influences your experience of the physical world. In other words, thoughts become things. Dr. Masaru Emoto tried to show by doing experiments on ice crystals that when you focus positive attention on water, beautiful shapes form when it is frozen. Also, during a scientific experiment, the intention of the performer of the experiment and his expectation may actually influence the outcome. Beliefs and confidence influence outcomes in our lives, but more importantly, they influence the way in which we view these outcomes and deal with what we are given. In this respect, you are responsible for creating your own luck: if you believe you are lucky, you will become lucky.



## Luck is a subconscious process

The human psyche is just like an iceberg, where your conscious thoughts and actions are just the tip of the iceberg. The hidden - and most important - part is your subconscious mind. Everyone carries what we may call a subconscious programming. This programming is self-induced and dictated by your thought patterns. Every thought repeated long enough becomes a belief, and beliefs combine to become patterns that influence cognition and behavior. When a thought pattern is strong enough, it becomes planted in the subconscious, just like a seed in a garden. The stronger and longer a pattern is present, the more difficult it is to remove or change that pattern, nevertheless it is always possible. If you plant a lucky seed in your garden, by believing that you are lucky and luck can be your friend, your thought pattern will ultimately manifest into reality.

## Luck and the law of attraction

The subconscious is theorized to work with the law of attraction. What is important to note in this theory, is that the subconscious is what creates reality. The longer you believe something, the faster your subconscious will start creating events into your life as though you have attracted those experiences to yourself. And in truth, you might have attracted them.

Our thoughts act just like magnets, especially when packed with emotions. Personally, I have always believed that a magnet is stronger than a probability. Imagine you have a pile of identical looking objects with only one made out of iron, and you want to select that one object. You have a very small probability of drawing the right object. But if you have a magnet, you will certainly find the right one. The same thing happens with the law of attraction. Packing thoughts with emotions magnetize the thoughts. If your thoughts are magnetized towards luck, they will attract lucky events into your life.

## Attention filters

According to an individual's beliefs, he or she sees the world and interprets the events that happen to them in a certain way. If they believe they are lucky, they will start paying more attention to the events that support that inner claim, and less attention to the ones that do not support it. Have you ever noticed how when you desire something, you start seeing only that thing around you? You start feeling as if it is being presented to you. When I was about 21, I wanted nothing more than to drive a red Mini Cooper. Suddenly, I started seeing red Mini Coopers everywhere, as if they were multiplying just for me to see. Although I did not get the Mini of my dreams, I now do in fact understand how the mechanism works and how my mind was filtering around the information it wanted to believe.

## A learned mechanism

People need luck and are particularly superstitious when they are in periods of stress. Many have a lucky object; a necklace, a picture or something else that they hold to attract good luck. When I was a teenager, I had a lucky math shirt and it seemed I got a high grade each time I wore it to my math exam. One day the shirt was in the laundry and I had an exam, so I went without it and surprisingly I scored lower that time, so I knew that it was in fact a lucky shirt.

Now that my interest in psychology has grown and I feel that I have become more confident than before, I can see the bigger picture more clearly. I think that my tendency to score high when wearing my lucky shirt was simply a learned association. Let me give you the example of learning in animals: In the famous Pavlov experiment, a little bell was rung every time a dog was given food. Pavlov continued this for several days a week, until the dog learned to associate the bell ring with food. The dog was noticed to get excited as soon as he heard the bell ringing and eventually actually started drooling whenever it heard the ringing of the bell. The same process happens with humans, and the same thing happens when we



associate an object with bringing us good or bad luck. Also, it is a form of subconscious encouragement, as if something is meant to be: "I am wearing my lucky shirt, thus I must score high".

## Anthropology of luck

In many anthropological studies regarding metaphysics, religion and magic, luck is approached as a central topic around which many theories have been established. Magic has been analyzed as a way to control or force luck. I stay reluctant to the exact explanation of magic; I am just wondering how it could be completely unfounded if millions of people around the globe, Native Americans as well as Africans and Asians, believe in it. I remember hearing popular jokes about politicians using witchcraft to increase their chances of winning the elections. I thought that was relevant only to my country of origin, Morocco. It was totally amusing to hear the same joke when I travelled to the USA, where my stay coincided with the presidential elections of October 2008. Of course, effort and skillfulness - personal contribution - are the most deterministic factors of success in a performance. However, sometimes well-trained athletes can

perform poorly, while average ones can perform outstandingly. Because this fact is difficult to conceive, the explanation to exceptions is: "They just got lucky this time". •



# 'The Technician'

**Mr. Geert Monsieur is a new teacher at our beloved university, so naturally, our curiosity was piqued. Geert himself is actually not an econometrician, but some students may know him from the courses 'Computer Programming' and 'Computational Aspects for Econometrics'. Even though his connection with our department is not very strong (yet), we wanted to know more about this friendly face from Belgium, so I set out to interview 'the monsieur' himself.**

**Text by: Vince Dentener**



The 30-year-old Geert Monsieur was born in 1983 just over the border in Belgium, in the city of Maaseik. He currently lives in another Belgian city called Maasmechelen, which is located near Maastricht. He has already met his dream girl and they have been happily married for almost two years now. He works as a part-time professor



**Geert Monsieur**  
Researcher

at the economics department where he is known by his colleagues as 'the technician', due to his technical choice of study. He also works part-time as a researcher involved in a large European project.

When Geert was little, he was quite technical and frequently spent his time building websites and writing computer programs. Following this interest, he started studying Informatics at the University of Leuven, which is one of the oldest universities in Europe (founded in 1425). According to Geert, Leuven is a wonderful place to study. A quick fact check reveals that the university has a massive amount of students, namely over 55.600. With only 92.700 citizens in total, it is abundantly clear what he means. Naturally, Geert had a very active student-life, joining the student's association of Leuven in his second year. There he was responsible, among other things, for visually documenting the activities of the association and for organizing the associations' larger and more prestigious events. He stated that this took a lot of time, but he did

not mind since he very much enjoyed it and furthermore it did not interfere with his studies. That these activities did not delay him is evident, since he completed his studies in 4 years (which was the nominal amount in Belgium at the time).

After his studies, Mr. Monsieur was offered a PhD position at the University of Leuven, which he started immediately the year after graduating. His doctoral dissertation is in the field of information management, concerning web services and business process management. After a respectable 5 years, he completed his PhD in the end of 2010. He went on to do further research at the University of Leuven for another 6 months, before he jumped at the chance to give a guest-lecture here at Tilburg University. This lecture was in a computer-science related field, so a degree in informatics was a necessity. Quite satisfied with his performance, the university decided to send Geert to Australia for two months, where he did some additional research. Upon his return, he was immediately appointed a full-time position. He currently spends

about half of his time on teaching. The rest of his time is invested in the large Europe-wide project mentioned earlier, which he is very passionate about.

The project is called 'CitySDK' and it is about so-called 'Smart Cities'. More specifically, it is about using informatics and data generated by the city to make cities and citizens 'smarter' through the use of various apps and programs. As you can see, this is right up Geert's alley. The project is aimed at improving the social structure in a city and between the city's government and its citizens. For example, imagine when a citizen spots some form of vandalism or some kind of dangerous situation. Through an app Geert is helping to develop, the citizen can take a picture of the situation, add a description and file a report at the local city government. A case is then made and through the same app the person can follow the progress on the case in real-time, up to the point of completion. The next time the citizen walks by the place where he spotted the problem, he will see that the problem is now resolved, due to his own efforts. This and other apps are already being used in large cities in Europe, with Barcelona being the prime example, but also in our own Amsterdam this app is beginning to catch on. Another one of their programs is being put to good use in Barcelona, which is another nice example of the value of this project. In Barcelona namely, most trash cans are fitted with two sensors. One measures how full

the can is at any given time, whereas the other sensor can even detect the presence and intensity of foul odor. Every day these two sensors determine whether the can needs to be emptied or not. This data is fed to an optimization program which determines the optimal trash-can pick up route to be followed, saving money for the city government, making the city cleaner and thereby minimizing trash-can related irritation of the citizens. "These are only two examples in which the use of informatics and data can make a city smarter", Geert passionately states. The story inspired me and enthusiastically I asked him when these awesome apps can be expected here in our own Tilburg (since Tilburg could really use some of these). Unfortunately, this could very well take quite some time...

Besides his work, Geert also has some hobbies, traveling being one. Luckily for him he got to travel quite an amount during his PhD to visit international conferences and symposia. He states that doing a PhD is a lot like studying, unfortunately also financially. Therefore, like a true student, he used these trips to his advantage and would usually plan a vacation right after he fulfilled his academic duties. Including these PhD-related trips, Geert has travelled to America several times, Canada, Australia, Cambodia, Peru, Bolivia, Chili, Thailand and several less exotic countries in the European Union. In addition to travelling, Geert particularly

## Bert & Ernie Questions

Bert or Ernie?  
Ernie

Education or Research?  
Education

Computer or Pen & paper?  
Computer of course!

Cinema or Theater?  
Cinema

Beer or Wine?  
"I am a Belgian..."

Tilburg or Leuven?  
Leuven

Students or Colleagues?  
Students

Pancakes or Fries?  
Belgian fries!

Santa Claus or Sinterklaas?  
Sinterklaas, including zwarte piet!

enjoys photography, which explains his creative role in the student's association. Furthermore, he loves going to festivals. He smiles, remembering how like a true student, in a quest to save money, him and his friends dragged heavy cases of beer for several kilometers to the camping site just to save the festival tokens. Rock Werchter, Pukkelpop, Pinkpop etc. are the larger festivals he has visited with the latter being on his agenda this summer! Luckily his money-saving days are over, so this time he is going to save himself the trouble.

All in all, Geert is quite satisfied with the way his life is currently set up. Looking to the future, his goal is to progress in his academic career and eventually become a full professor here at Tilburg University. But "times are difficult", he states, referring to the financial crisis and how there are not many vacancies at the moment. Geert will try his best though, and we are confident that it will pay off! I want to thank Mr. Monsieur for his time and the chance for us to find out what is beneath the surface of this friendly Belgian. •







# 8 runners, 580 km...

The Roparun is a relay race of approximately 520 kilometers (Paris to Rotterdam) or 580 kilometers (Hamburg to Rotterdam) for charity. The motto of Roparun is: "Add life to the days, where often days can no longer be added to the life." Besides a physical challenge, the participants must make an effort to raise money for people who suffer from cancer. Over the past twenty-two editions of the Roparun, more than 57 million euros have been collected. This year the race from Hamburg to Rotterdam will start on 7 June and the runners will finish on Sunday 9 June.

## ... for charity

Text by: Nicole Verbeek



Thijs Verhaegh

AGE: 21

Began studies in 2010

**Thijs, can you tell us when you started running and why you decided to run a race like the Roparun?**

To be honest, I have not been running for such a long time. I used to play volleyball until the second year of my bachelor. At the time, I was done with it and tried a lot of different sports for a year. I have been running the Tilburg 10 miles for the past few years, without training, just for fun. I always liked running, but I never ran on a weekly basis. Via my old employer 'De Wever' (a foundation for elderly care) I got in touch with a group of runners, who had the idea of participating in the Roparun. From that moment on, which was in June last year, I became more

devoted to running. It is not as big a deal as it sounds, however, since I have always been quite sporty.

I have not participated in many races though. I only used to run the 10 miles, Batavierenrace and the Warandeloop (10km) in Tilburg. The upcoming months on the other hand, I will participate more often. I will run half a marathon in Drunen for example. Since it is only part of my training though, I am not aiming for a very fast time or a personal record. The Roparun adds a competitive aspect to running as well as being part of a team, which is nice, since running is quite a solitary sport. In training you feel like you have a goal and belong to a team, while simultaneously you are competing against yourself.

**Did you start to run more fanatically when you joined the running group from 'De Wever'?**

Well, I am in fact still training alone. The group enables us to participate in races and such. However, due to the decision to run the Roparun, I became a lot more serious about running. You do have an obligation to your team. At the moment, I run about three times each week. I actually prefer running on my own. I like to decide my own pace and

go whenever I feel like it. What is nice is that at 'De Wever' everyone shares the same passion for running. Some people train in a different running group, others run on their own. However, around April/May we want to start training together. We have other activities such as bowling and regular meetings in order to become more of a team, but at the moment everybody is running at such different levels, it is quite hard to go for a run together.

**Did you decide to join the team for the Roparun straight away, or did you have any doubts?**

I definitely had to think it through for a little while. It is not just training, but it is also about the organization, logistics, sponsorships and the tough distance of course. It was especially tough, since I am in my Master's degree, which also devours quite some time and energy. However, I still decided to just go for it and I have not regretted my decision for a moment since. Some runners in our group have ran the Roparun already and told me it is like a virus: once you are infected, you want to participate over and over again. It is the first time to participate for us as a group, so there are plenty things we have to take care of. In October, it was still doubtful whether

### ● THE PASSION OF

we would make it, but luckily everything turned out fine.

**How many people does a team consist of and how fast are you intending to run together?**

There are 25 people in our team, of which eight are runners and the rest are cyclists, chauffeurs, physiotherapists, cooks, coaches, and masseuses. The script is almost finished. It is a relay race from Hamburg to Rotterdam, so we split the group into two separate groups who run 60-80 kilometers in turn. The four runners in each group will switch after 1.2 kilometers in order to keep a pace of 11 km/h. This means that I will be running around 58 times, to make 70 km in total. Some places are not accessible for the cars, so the runners need to cycle as well.

We decided on an average of 11 km/h, since it is our first time and we want to be sure that we will make it to the finish line. Obviously, some of us may be a bit slower and others a bit faster. As a team however, it is not about being the fastest or collecting the largest amount of money. Because if the run turns out to be a success, we may participate again and then the script is already finished, so at that time it will be easier to focus on other aspects of the run.

For me, the training is the most important part of it. I have to be able to run and should not be concerned about anything else during the race. I am also the youngest of our team. Most runners are already in their forties and are extremely devoted to this race. The toughest thing about running is most likely the lack of rest. Your body will become very stiff as you cool down quickly in-between runs. However, for the other team members

We have already found a few locations, nevertheless we still need a couple more. We also hope to find sleeping spots in German elderly homes and fire stations. The cars and bicycles are thus far provided. We also have committees that take care of food and drinks during the race. However, I expect that there will still be a lot of last-minute work. It really helps that everyone has been on our team since the beginning, so everyone is closely involved with the whole process.

**How often do you train at the moment? Do you have a special schedule for it?**

Yes, I have. One of the members of our team is a running coach and he made training schedules for all of us. For me, that includes interval training on Tuesday, a climax run on Thursday and a long run on Sunday. A climax run means you run for example for 40 minutes at an easy pace, than 20 minutes slightly faster, than 10 minutes even faster and 5 minutes at a high pace... after which you hope to be back home again. On Saturdays, I also go to the gym for strength training, whereas on a Sunday I run for two hours or so. The upcoming weeks, I will run the Kruikenloop, which is half a marathon and maybe I will run the 30 of Tilburg too. You do not need to train for more than half a marathon, since that surely is enough for finishing the Roparun. In fact, the most important part is to be sure you will not become over trained and that you do not lose the joy in running.

**You are the only student in your team. To what extent did you have to change your lifestyle and how do you combine your studies with running?**

I did not need to change anything directly actually. In February and March, I did not have much to do, since I passed pretty much all of my courses and my

internship was not starting until April. So currently, I am at the bar five evenings a week and still doing fine. On the other hand, I do have more time to sleep now, so my body has a lot of rest as well. This is actually just as important as training. Besides, I have always been eating quite healthy, so I did not have to change my eating habits much. Around May, I might be a bit more serious about eating health-



hy, but I do not want to make a big deal out of it.

You can schedule your runs around all other activities, therefore making it not that hard to combine it with studying. I am good at planning, so for me the training is rather doable.

However, my first semester was quite tough, since I had six courses and not a lot of spare time. I also did not have my training schedule yet, so I could skip a run every now and then. It is probably going to be a bit harder during my internship, but I have found myself a room in Utrecht, so I do not need to travel as much. I actually expect my internship to be less time-consuming than my first semester.

**How are you raising money for the Roparun?**

Well, one way is by running the Kruikenloop together, which is a 15 km run. We will all participate in our Roparun clothing and go round for money, sell tickets for a lottery, those kinds of things. Schrobbeleer is also one of our sponsors. We have small bottles, about 2.5 shots, to sell for 2 euros. Since 'De Wever' is a foundation for elderly homes, we often visit those during the bingo and





other activities. The elderly from Tilburg actually like to have a drink as well, so the bottles are selling quite fast and it is a lot of fun to be there of course. We will soon visit all locations again to pick up the other donations.

Besides selling alcohol, we also sold split pea soup and sausage rolls and we collect empty bottles and old mobile phones and old bicycles. We are also organizing a dinner and of course we received quite some donations from various people and sponsors. For myself I already had to pay 250 euros to participate, but a part of that is also for meals and equipment during the race. I have sold a lot of tickets for the Roparun lottery already and I also put all the change in my wallet in a large bottle I have at home. Obviously, the coming months we will continue to raise money with all kinds of activities.

#### What are your best experiences with running, and which are the worst?

I remember running the Batavierenrace two years ago. Someone cancelled, so I had to run twice. It was around 4 AM while I was running through Germany. Rain was pouring down and I was completely soaked. The wind was incredibly strong... and I absolutely loved it, every single second. It was a mind-blowing experience.

The Tilburg 10 Miles is another great moment every single year. The moment you arrive at the neighborhood

Armhoefse Akkers and you see hundreds of people cheering at the sides of the road, especially when you only have a few more kilometers to go, that is just awesome! However, the best is yet to come of course.

One of the not-so-great parts of running is probably when you really, really need to go the toilet. It happened to me in Macedonia, where I was almost at the top of the mountain and I needed to run back for 45 incredibly long minutes because I desperately needed to go. Another drawback is when you have an injury while running and you have to stumble back in pain. It is also not so much fun when you are more or less obliged to go and you do not feel like running at all. Especially when it is winter, cold, rainy and stormy. Afterwards you are always happy you did go running, but it always remains quite hard to simply tie up your laces and go.

#### Would you be able to become a pro? And do you perhaps have any other goals after finishing the Roparun?

Running will always remain one of my hobbies, but I am actually not an extraordinary runner compared to others. If I would adapt my whole lifestyle I would probably book progress, but for me that is just not worth it. I do think I will keep running half marathons. When I finish my M.Sc. degree however, I would like to go on a trip around the world without money, so everything depends on that journey in some way. Who

knows, I may run another Roparun if I am back in time. Running a whole marathon is also on my list, for it would be great to complete that distance at some point. However, for the moment, that is not such a good idea. You simply cannot train for a marathon and a Roparun at the same time, since your body needs a lot of rest afterwards.

#### What aspects that you learned from running, can you apply in your daily life?

I learned not to give a full 100%, all the time, every time. In the case of running, you simply end up being over-trained and injured. The same goes for races; you do not need to keep pushing yourself at full speed. This is also a very useful thought for me in my daily life, since I have the habit of doing way too many things and pushing myself too far. Sometimes I really should slow down a little.

#### Can you tell us why other people should start running? What is so special about it?

Well, most people probably already know whether they will enjoy running or not. Personally, I like it because it helps me to clear my head. Other people will find it dreadfully boring. If you think you may enjoy running, just try. The first times are always difficult and the first kilometers are tough, no doubt. But as long as you feel good about it in the end, you should try to keep up with it.

#### Anything else you would like to share with us?

Yes, of course! The Roparun is a physical challenge as well as a way of collecting money for cancer patients and ex-cancer patients. Every year a big amount of money is collected and we try our best as well of course. If you feel like you want to donate and help us out, that would be absolutely amazing. For more information you can visit the website [www.dewever.nl](http://www.dewever.nl) or follow Team De Wever on twitter via <https://twitter.com/TeamDeWever>. Our bank account is NL89 RABO 0123 6390 18, in name of Team De Wever. You can also always come to me as well and I will make sure the money ends up in the right place. Of course, the small bottles of Schrobbeleer are also still for sale. Thank you all! ●



**It was a dark, sinister night in Tilburg. It was dead still on the streets, and who would deny it? Someone committed a horrible crime. It was the 12<sup>th</sup> of March and someone found Barry, good old Barry, dead in a hotel. Who would do such a terrifying thing? It was up to the active members of Asset to get to the bottom of this.**

Together with a team consisting of active members belonging to all Asset associations we would find the perpetrator of this murder. But the first man or woman who can solve a crime with an empty stomach still has to be born. That is why we first got to know each other during the unforgettable pleasure of a free pizza. After this enlightening meal we were ready to find some criminals.

Luckily, we got some clues in the form of a puzzle. While my investigating team was solving said puzzle, I got the time to bring my sporting clothes to the sports centre, not knowing that we would cycle through the beautiful city of Tilburg that night. Apparently all the suspects were hiding out in a different bar in Tilburg that evening, what a coincidence!

Our investigation started in the bar Heuvel 15, where Peter, the hotel's cook, was drinking his beer unsuspectingly. He just made us some nice pizzas, so we only asked him who the murderer of Barry could be. As it turns out the cook looked a lot like Nick Bombay,

the treasurer of Asset I SBIT. So as a former econometrician I would trust my fellow geek, supported by current econometricians Vera and.... where the hell did Denise go?

On the night of this murder, our biggest mystery was where our fellow investigation leader Denise was. Apparently the investigation would go on anyway, every man for himself! Luckily Denise was able to start an investigation herself to find her investigation team, so we could head on! Fully complete at the other side of the Korte Heuvel, we found another suspect. He was a butler who claimed to have nothing to do with the murder on Barry. But besides that there was another weird clue. Making sweet love to this very handsome butler (these characters were based on their real lives of course) would get you infinite points on the committee ranking of Asset I Econometrics. I would not dare to accuse anyone, but I heard that the lustrum committee is #1 right now...

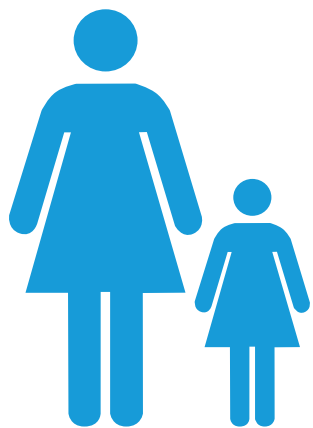
After interrogating some other suspects we arrived at our last suspect: some

# When preparing food keep it clean, a dirty area should not be seen

smooth guy who looked a lot like the chairman of Asset I Strategy & Logistics, my second favorite association (please do not tell them this, and please do not read my article in their magazine 'Channel' either).

To be honest, I have no idea who our biggest suspect was. The whole meaning of the evening was to find the killer of Barry. But apparently 90% of the whole faculty association failed to accomplish that mission. Only 1 investigation team succeeded in finding the right murderer. Of course, because of our lifelong experience and intensive research we... wait for it...completely failed to find the right guy. It appeared that our innocent beloved pizza-making cook was the murderer. It had something to do with a potential rape, a drunk guy and a hammer. In general we would just call this a monthly drink, although I think that the average econometrician would behave a bit better. After solving this crime, knowing that the streets of Tillywood are safe again, I could go back to the sports centre again with a whole different goal, a futsal goal. This has nothing to do with the active members evening, so I will not mention that we totally won that match! And we lived happily ever after. ●





# The Lelij Ladies

Text by: Ennia Suijkerbuijk

For this edition of 'The mother of', we Nekst editors did not only get the chance to have a drink at study association GEWIS in Eindhoven and taste some authentic 'hangop', but we also got to know the first female mathematics doctoral in Eindhoven. Obviously, Vera van der Lelij's talent for mathematics did not come out of the blue.

## Introduction at the TU/e

My fellow editor Vince and I met Vera at the train station in Eindhoven. From there we walked to Eindhoven University of Technology (TU/e), where Vera's mother Marloes van Lierop works as director of the bachelor study program Computer science and engineering. While walking through the brand new building, we practically bumped into Marloes herself, who just returned from a meeting. After quickly showing us her office, she decided to take us to the study association of the department Mathematics and Computer Science (GEWIS), which is situated in the same building.

Purely coincidental, there happened to be a drink right the moment we walked in, and so we were welcomed by quite an amount of students shouting: "Hey Marloes!". Within no time, we were handed a beer and blended in with the other math-loving students. Unfortunately we had to leave soon, since the four of us still had to travel to the small city Nuenen.

## An Interesting Romance

After a 15-minute car drive, we arrived at Marloes' house, where we were welcomed by her husband Ronald. Obviously we were eager to find out how the two had gotten to know each

other and when we asked where they first met, this resulted in a collective burst of laughter from both Marloes, Ronald and Vera. Needless to say this only increased our curiosity.

Marloes explained that when she was a student in Eindhoven, she went to a nightclub with a couple of friends. One of these was Frenske. Marloes: "Frenske was a passionate clubber and homosexual. That was never a problem, because we luckily did not have the same type. Until that one night..." Apparently, while Marloes and her friends entered the club, they immediately spotted Ronald, after which Frenske shouted: "That one is mine!" Obviously, Marloes decided not to let this happen and quickly went to the dance floor, where she started stepping on Ronald's toes 'accidentally'. A couple of years later, they were living together, married and expecting their firstborn.

## Marloes as a Student

After Marloes had prepared our main course, she began telling us some more about herself. As it turns out, Mrs. van Lierop is the youngest of seven and was born in Helmond, but raised in Asten. As the Benjamin of the family, she was the only one who went to college and she decided to go study Technical Mathematics in Eindhoven. After finishing her Bachelor and M.Sc., which, she honestly admits, took her 9.5 years, she decided to continue with a doctoral in computer science. She actually never left the University of Eindhoven and worked her way up to where she is now:

## THE MOTHER OF

director of the bachelor study program Computer science and engineering.

Nowadays, 25%-35% of all students in Eindhoven that are currently doing Technical Mathematics are female. Back in those days, however, there were very few women participating in bèta-studies. There were however already numerous campaigns aiming to attract more women to the technical field. One of those campaigns was called 'Studying, not just for gentlemen', which used posters saying: "Ik ben een meisje met een wiskundeknobbel. Zielig hè?" (Translation: I'm a girl with a talent for mathematics. Isn't that sad?) In fact, Marloes had this exact poster hanging above her desk for years while she was doing her doctoral. One day, her fellow students (all male of course) decided to take revenge and put her head on



top of the copy machine, so they could make their own poster. A couple of days later, the "Ik ben een meisje met een wiskundeknobbel. Zielig hè?" – poster could be found all over campus, but now with Marloes' head on it.

## Veertje

When Marloes and Ronald had both been working and living together for a couple of years, they were expecting their first child: Sanne. Not long after, Vera followed. The pair decided to each work 80% and managed to raise their kids at the same time, which was not always an easy task. As it turns out, 'Veertje' was not the easiest kid to deal with, not just for her parents, but a pain for her big sister as well. Vera: "I used to tease Sanne a lot, but she never really responded. This, of course, only made me more angry, so I started screaming and biting." Marloes: "Sanne was indeed rather indifferent about your behavior."

Luckily, the two sisters have now set

aside their differences and get along great. In fact, the four of them together come across as a loving, well-functioning family. This does not mean however that they do not have small discussions all the time, ranging from all sorts of topics. For instance, they argue about how tall Sanne exactly is, and also about who has more autistic characteristics: Vera or Ronald. For this matter, Vera's argument was based on the one time she asked her father to put the garbage outside, after which he answered: "No, I cannot do that, I am wearing my 'inside-pants'!" Ronald countered this argument by telling a story about how you could never tell Vera to do anything without giving her a timeslot. Marloes explains: "You always had to tell her how many minutes she could keep playing before we would leave." Ronald: "One year while camping, I told Vera she could keep swimming for two more minutes, after which we would leave. But Vera, stubborn as she was, did not approve. I actually had to put her over my shoulder and walk over the entire camping with a screaming and crying kid on my back."

## Dinner

After finishing our interview, Ronald presents our first meal: a dish of guacamole, nachos, toast, melon and mango. While filling our plates, more stories keep pouring out of the Lelij family members. About that one time Vera got in a big fight with her babysitter, about Marloes' & Ronald's passion for playing bridge, about how Sanne only eats pasta. Occupied by their stories, we start on the main course, which is a broccoli-camembert quiche that everyone is very fond of. While I have actually had quite enough already, we are presented with dessert: 'hangop',

a sort of yoghurt with whipped cream. While the hangop tastes amazing, we all have trouble finishing our dish (except for Ronald, who even manages to eat Marloes' portion as well).

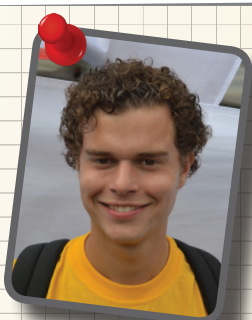
After we finished our plates, Ronald and Vera are kind enough to drop us off at the train station in Eindhoven and with stuffed bellies, we continue our journey. I would hereby like to thank the entire Lelij family for inviting us to their home, for letting us do the interview and also for the lovely dinner they prepared. We hope to see both Marloes and Ronald on April 4th, at the parents evening for the active members of Asset I Econometrics. •



Vera van der Lelij  
AGE: 20  
Began studies in 2011

Marloes van Lierop  
Residence: Nuenen





Bart de Peuter

AGE: 20

Began studies in 2012

## Anton, Heidi and beer: *a winter fairy tale*

So far, snow was nowhere to be found in our little country this winter, and the forecasts regarding these lovely white flakes are poor - there is still a thick layer of dust on our skis and snowboards. This, however, could not stop us from putting on our lederhosen and dirndls and going for a great Après Ski Party in De Boekanier!

When I arrived at the pub, all dressed up as Anton aus Tirol, I was happy to see the majority of the visitors – well, okay, some of them – were wearing après ski outfits as well. Shortly after entering, a lovely lady offered me a fabulous beer mug. The idea was to buy one of these and have it filled with various drinks throughout the evening. Beer, wine and soda could all be poured into your private mug this evening for just a couple of euros. Many made use of this great deal.

Even a greater surprise followed later on: the Drinks and Activities committee provided us with a hundred liters of free beer! While my vision was getting blurrier and my walking less steady, my fellow econometricians and I kept on enjoying the drinks. The place was getting more busy and noisy, some people carefully started to dance and I even caught some Antons obviously hitting on Heidis. Every now and then, the tremendous sound of breaking glass notified us that another beer mug had died in action.

Then it was time for the absolute highlight of the evening: the announcement of the winners of the famous Heidi-und-Anton-contest. Fang Qi Wu and I were the lucky ones to receive the prizes: the official green and orange scarf of the Tilburg Carnival association! A useful object for



what was the near future back then – carnival! I am not sure what convinced the rigorous judges to pick me as their best Anton. Maybe the fact that my lederhosen were made out of “real” leather did the trick. Or maybe my belly, which testifies of true Austrian amounts of beer? Who knows.

It got later and later and eventually the beer consumption stagnated. People started to wander off, happy and satisfied

from a great night out. Those of us who were able to hold on to their mugs all evening, could take them home with them to store as a valuable collector's item. All in all, this edition of the yearly Après Ski Drink was an enjoyable night out. I will see you all at the next drink, and until then: auf wiedersehen! ●



Renée Hekerman

AGE: 18

Began studies in 2013

On Tuesday February 25, the second freshmen activity took place. We were expected at café Havana at 19.30 to do a cocktail workshop and a pubquiz with the first and second year econometrics students. As usual some participants were a little late, but most of them were there on time. It was time for the activity to start.

First we were welcomed upstairs at Havana. We got some tickets for free drinks and we were divided into groups. We sat down for a while and then Amber from the Freshmen committee welcomed us with a little word. She told us what we were going to do this evening and how everything was planned. The group was split in half. One group was going to do the cocktail workshop and the other group started with the pub quiz at Café Karel.

My group started with the cocktail workshop. A bartender introduced us to the art of cocktail making. He started with the mojito. He told us several things about the history of the mojito and asked us several questions. Sadly enough almost nobody could answer them. I guess that we are better at mathematics than at the history of cocktails.

After the introduction we could start making our own cocktails. We had to



## Shake That Cocktail!

ask the bartender a few questions along the way but eventually everybody made his own lovely cocktail. We did this in groups so while you were waiting and watching the others making cocktails, you could drink your own cocktail. I have to say, mine was delicious.

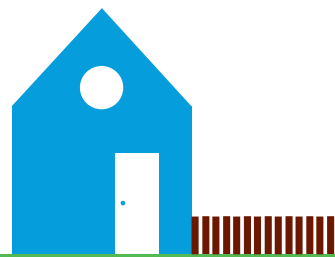
After everybody finished with their first cocktail, we were introduced to the second cocktail. This cocktail was called 43 sourz. The bartender showed us how we were supposed to make this cocktail. We had to shake it, which was different from the mojito. Now we could start making it for ourselves. The 43 sourz was a great success and most people preferred it over the mojito. When everybody finished drinking their cocktail, we switched with the other group.

We had to go to café Karel, which is actually next to café Havana. The pubquiz took place upstairs where the committee had placed a beamer and several tables. With your group you had to answer the questions. The group contained first and second year students so you got to know some new people. The pubquiz was divided into several rounds, like

music, geography and nature. With our combined knowledge we came up with an answer most of the time. When we did not know the answer, we tried to come up with a unique funny answer, just to answer something. While we were answering the questions we were enjoying our drinks and we could have a little chat with our group members to get to know each other.

When the pubquiz was finished, we got back to café Havana where the other group was. The group which answered most of the questions of the pubquiz correctly got a present. Of course it had to be in the style of the activity so they got a bottle of Apfeln. At the end most people stayed for a while to drink something together and enjoy the rest of the evening. All in all, I think the activity was a great success. We had the opportunity to get to know some new people and enjoy the evening with each other! ●





After a beautiful, sunny day, my fellow committee member Ennia and I traveled to the Blaak together on one bicycle (since mine was stolen on the university that same day) for an interview with Björn Floor. When we arrived at their place, we had to wait for Björn and Pepijn to welcome us, since they had to finish their game of FIFA first.

Text by: Jelle de Rooij

While we were cycling to Björn and his roommates, we realized once more what kind of maze the Blaak exactly is. At first we drove past their house, but we turned around the moment we saw a pile of beer crates in their garden. After entering, we caught Björn and Pepijn in the midst of a fanatic game of FIFA on the Xbox 360, who were shouting and screaming at each other in the meanwhile. After they finished their game, we were warmly welcomed.

## Why living in lodges

It has only been a couple of months since Björn started living in Tilburg. He decided to move to Tilburg in his second year, since it was only one and a half hour traveling to Veenendaal, and when you like it at home, that is not a hard thing to do. Besides, in his first year Björn was not sure whether he would pass the year, so he decided to play safe and wait somewhat before moving out. He also still has many friends who are living in Veenendaal, which is one of the reasons why he still goes to Veenendaal every weekend. Another reason why he often goes back, is because of his younger brothers, but also to drop of his laundry.

When we asked Björn how he found this room, he told us he had often been here before. "Last year, when I was in the D&A committee, I stayed over in this same house with Erwin quite some times. When there was a room available in the house, they invited me to dinner and asked whether I wanted to live there. Obviously, I immediately said yes."

## Roommates

Besides Björn, there live three more students in the house. First there is Pepijn van den Brink, who is a first year EOR student, and who has just been living there for one and a half month. Before he moved in, he already had a room somewhere else in Tilburg, but it was nothing compared to his new house. Pepijn: "It was like living in hell."

While we were chatting with Pepijn, their second roommate Tim van der Molen Kuipers came home. Tim is currently doing a master in finance and had had his final class ever that day. While we continue with our interview, Tim goes to the supermarket like a good roommate, to buy the ingredients for our dinner.

# Living in the Maze



## LIVING IN LODGES

In that aspect, the location of their house is kind of ideal; the Jumbo is only five minutes by foot.

Their final roommate is Erwin van Oosten, who was actually also the TOP-papa of Björn. Erwin is currently traveling through Asia, so he will not be home for a couple of months. Björn thinks it is a shame, since it is simply more fun living with four, but he likes his roommates a lot and has nothing to complain about them.

## Room

The room of Björn is 24 m2, but because he lives in the attic, the effective space is quite a bit less. He does however has his own sink in his room, which he thinks is a big plus. Even though Björn has been living there for quite some time now, his room is still rather empty. One of the more personal things we find in his room is a cuddly Nijntje animal, which he has had ever since he was little. Björn explains that he is only in his room to sleep and to study, whereas the rest of the time he spends in the living room (often playing FIFA).

Apparently, FIFA is quite a big part of their everyday life. When I asked Pepijn what the worst thing about living with Björn is, he answered that Björn wins too often while playing FIFA. Surprisingly, or maybe not so surprisingly, when I asked Björn about Pepijn, I received the exact same answer.

## Traditions

Like every other student home, this house also has some traditions. One of them is a giant plastic head, which is also their mascot. Originally this type of sculptures was used in pharmacies, but they found it in an Asian restaurant. The



owners of the place wanted to throw it out, but Erwin, as one of their employees, managed to save it, and since then it has been their mascot. The first time Björn was in the house, was during the TOP-week, where he already encountered the statue within ten seconds. As it turns out, the mascot is mainly used as a type of punishment and apparently, one of their house rules is that beer cannot be spilled. Now after entering the house for the first time in the TOP-week, Björn immediately knocked over some beer bottles and so he had to spend the next couple of minutes in the hall, on top of the giant head.

Besides this statue, there are also some other impressive objects in the house. For instance, they have a huge orange cuddly fish in their house, of which "you do not want to know what has happened with it", as Björn gently puts it. There is also an extensive collection of rubber ducks on top of their TV in the living room. This looks pretty awesome, but too often they are being thrown all over the room by guests.

One other, perhaps not so pleasant tradition that they have, is that after entering their house, any visitor has to drink a shot of rice wine. Of course, Ennia and I were lucky enough to experience it ourselves and so after finishing our dessert, we both got a shot of rice wine, which is poured from a jerry can. I have to say that I never tasted anything like it before in my life. Or using Björn's words: "Alsof een engeltje over je tong plast."

## Stories

After having asked our standard

questions, Tim came home with the ingredients for dinner and started cooking together with Björn. They made wraps for us, which were delicious. During dinner we could talk some more with the roommates, and so Ennia and I learned more about them. One of the things we really wanted to know, is with whom they would really want to have dinner with sometime. We received the most beautiful answer from Björn: "It does not matter. Everyone is welcome this house!"

After dinner, when Björn left the room for a moment, we quickly asked Tim about Björn's shortcomings. Fortunately for Björn, he did not have any real comments, except for the fact that Björn is quite the sleeper. Tim: "He sometimes does not leave his bed before noon".

We did however hear some other things that could be better around the house. For instance, they once gave this great party, but forgot to tell their neighbors. Luckily, they were not that upset about it, but they were not amused either.

After Ennia and I had finished our 'delicious' rice wine, we said goodbye and headed out for the evening. We would very much like to thank Björn, Tim and Pepijn for the great stories and the great meal they prepared for us. •





# Conga Lines Everywhere

**On Thursday February 27 the annual pre-Carnaval party took place at "Café de Boekanier", organized by Asset. I heard a lot of great stories about the party in previous years, so I decided to buy a ticket. Everybody grabbed their best outfit and was ready to start carnaval. This year I went for the first time and had a blast, it was a party that I would certainly visit again next year!**

**Esmée Lucassen**

**AGE: 19**

**Began studies in 2012**

At the party, we saw people dressed up ranging from the Pokémon character Pikachu to army soldiers. Indeed, I was not underdressed and bought my outfit that Monday. Econometricians who attended the Après-Ski drink the week before could re-use their outfit at this party with no shame. In contrast with the Après-ski drink, at this party there was no contest and thus no price for the one that dressed up the funniest or the nicest, perhaps not a bad idea since there were a great deal of incredible outfits which made it nearly impossible to choose the price-winning costume (I am sure though, that Willem would have won if he wore a Heidi-outfit just like the rest of the new Asset | Econometrics Finance Expedition committee members).

The evening started several hours before the beginning of the actual party, with a nice dinner to admire each other's outfits and to set the mood for the rest of the evening. This was also the moment where we enjoyed our first beer of the evening watching the Dutch television program "Wie is de Mol?". Finally ready and gathered outside to leave, I forgot several things and needed to go back upstairs, but then we were fully set to leave to "Café de Boekanier" for the marvelous party.

We arrived at around 22:30 with bellies filled with delicious pasta and some beer, at a not too crowded café where we unfortunately needed to wait quite

a while to hang our coats. Halfway through the queue for the coatroom, however, we realized it became crowded soon enough. We eventually got rid of our jackets, which meant it was time for our first beer since we left home. Whilst waiting for a drink, a free barrel of beer was announced, which meant we could enjoy the refreshing drink for free, and that made it just a bit more delicious.

random subjects you can imagine and indeed beer, because after all it was the beginning of carnaval, which may also be the reason that I lack some details of the evening after a certain time.

Unfortunately, all good things come to an end and this party was no exception. I was exhausted and it became time for me to head to bed. I would like



At midnight, some people who participated in the annual Carnaval Volleybal Tournament also joined for the party. They were indeed very welcome to join for a beer and since they were dressed appropriately they fully blended in with the rest of the crowd at the café. The evening went on with some dancing, conversations about the most

to thank everybody at the party. It was undoubtedly a great way to start carnaval. •

# PUZZLE

**After mathematical brainteasers about cinemas and lotteries, this Nekst it is time to get you in the mood for spring and summer. Therefore we selected a puzzle about dividing coconuts on a tropical island for you. So grab a pen, paper and maybe even some sunscreen and start puzzling!**

Five sailors have survived a shipwreck and are stranded on a desert island. There is nothing on the island but some coconut palms and a single monkey. After gathering all the coconuts they are so exhausted they just want to sleep. Therefore they decide to go to bed and divide the coconuts the next morning.

At one o'clock the first sailor wakes up. He realizes he cannot trust the others and decides to already take his part of the coconuts. When dividing the coconuts into five stacks he is left with a single coconut which he decides to give to the monkey. He hides one stack of coconuts and piles the rest together.

At two o'clock the second sailor wakes up. Not aware of the fact that the first sailor already took his part, he also divides the coconuts into five stacks. He is left with a single coconut as well and also gives it to the monkey. He then hides one of the stacks as his own and goes back to sleep.

At three, four and five o'clock the third, fourth and fifth sailor wake up and all go through the same actions as the first two sailors.

In the morning, all sailors try to look as innocent as possible. None of the sailors mentions the significantly smaller stack of coconuts and neither do they admit to taking their own share. Therefore they once again divide the stack of coconuts into five and once again they are left with a single coconut. They decide to give this coconut to the monkey, who now possesses a grand total of six coconuts.

What is the smallest amount of coconuts the original stack could have had?

Please send your solution to [Nekst@Asset-Econometrics.nl](mailto:Nekst@Asset-Econometrics.nl) before the 29<sup>th</sup> of November. A crate of beer or a delicious pie, whichever the winner prefers, will be waiting for whoever has the best (partial) solution. Please note that as before, every recipient of this magazine is eligible to send in their solution, so members of the department are invited to participate as well. Good luck!



**Maik Dekker** is the winner of the previous puzzle. As a reward, he can come and pick up a crate of beer or a pie at room E1.10. The solution of the previous puzzle was  $1 - 1/(11!)$ .



# Quatsch!

**Masum op de lustrum trip: 'Fonduen, dat is toch van die natte gourmet?'**

**Myrthe Dekker tijdens de IBT: 'Wat zijn we toch een stelletje lelijkerds.'**

**Cas Luijten is aan het zoeken in een lijst met ANR's naar zijn cijfer: "Zo irritant hè dat dit niet op alfabet staat."**

**Annick tegen Willem: "Wat zit je toch te wippen, je lijkt mijn gehandicapte buurjongetje wel".**

**Roxanne en Emile hebben het over het artikel van Wouter voor Nekst. Emile: 'Roxanne zat net zo lang op Wouter tot-dat hij klaar was.'**

**Mitchell Dingemans tijdens de Lustrum Company Day: "Alles loopt echt gesmeerd." Floris loopt langs en hoest. Mitchell: "Behalve Floris dan."**

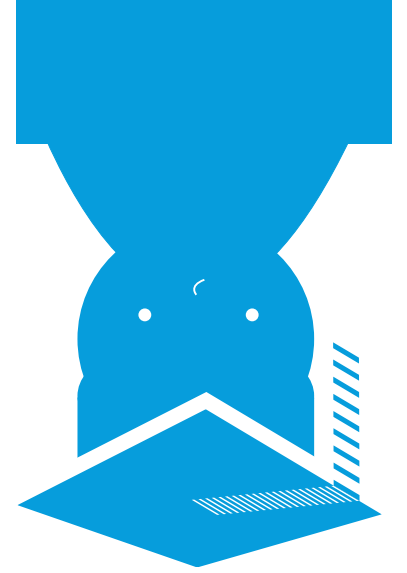
**Tijdens een gesprek zegt Fang Qi tegen Janneke: "En toen dachten ze dat je aardig was?". Janneke: "Nee, dat zou pas echt naief zijn."**

## Quatsch?

Over the past few months, the editorial staff of Nekst received many quotes that relate to the study of Econometrics and to the activities organized by Asset | Econometrics. Therefore, we present to you a selection of some striking and funny quotes! Please mail all remarkable quotes you have heard to [Nekst@Asset-Econometrics.nl](mailto:Nekst@Asset-Econometrics.nl)!

## GRADUATES

# Asset | Econometrics congratulates...



Name:	Ineke Bijlsma
Title:	Changes in Household Behavior after a Housing Wealth Shock
Supervisors:	Prof.dr. A.H.O. van Soest, Dr. O. Boldea
Name:	Gijs van Hunsel
Title:	The impact of the retirement age increase announcement on the Dutch stock market
Supervisors:	Prof.dr. B. Melenberg, Dr. S.J. Sender
Name:	Tim Hendriksen
Title:	Capacity Investment under Uncertainty with Iso-elastic Demand
Supervisors:	Prof.dr. P.M. Kort, Dr. K.J.M. Huisman
Name:	Elske Leenaars
Title:	A dynamic version of the Vasicek model the influence on capital requirements
Supervisors:	Dr. R. van den Akker, Dr.ir. G.W.P. Charlier
Name:	Ilse van Loon
Title:	The Modiclus: A Survey and an Analysis of Special Classes of Games
Supervisors:	Prof.dr. P.E.M. Borm, Prof.dr. A.J.J. Talman, Dr. M. Quant
Name:	Mervin de Jongh
Title:	Inventory Management and Production Planning in a Make-To-Order Environment: a Parker Hannifin Case
Supervisors:	Dr.ir.J. Ashayeri, Dr. R.C.M. Brekelmans
Name:	Wilbert Kistemaker
Title:	Scheduling Reefer Mechanics at Container Terminals: a case study based on Global Terminal, New Jersey, USA
Supervisors:	Dr. R.C.M. Brekelmans, Dr.ir.ing. M.J.P. Peeters
Name:	Geert Jan den Hertog
Title:	PD model performance and profitability in bank lending
Supervisors:	Dr. G. Nieuwenhuis, Prof.dr. J.H.J. Einmahl
Name:	Martijn Verspeek
Title:	Labelling of VAT codes: A clustering approach
Supervisors:	Dr. T. Klein, Dr. M. Salm

## ...on obtaining their Master's degree.



# Agenda

Spring 2014

AGENDA •



## Symposium and Beer Race Drink

Thursday May 1

The upcoming symposium has as theme 'Big Data' and we already found some interesting participating companies in really different fields! Besides that we have arranged some great speakers to make sure this will be a fantastic symposium. More information can be found on [www.Asset-Econometrics.nl](http://www.Asset-Econometrics.nl). In the evening there will be the traditional beer race drink. So find a nice team and prepare for this evening where you can acquire eternal fame.

## Batavierenrace

Saturday May 10

On Saturday May 10, the 42nd edition of the Batavierenrace will take place. Asset | Econometrics will participate with one team. The Batavierenrace is a relay-race for students from Radboud Universiteit Nijmegen to Universiteit Twente. The total distance of this route is 175 kilometers, and is divided into 25 stages (17 for men and 8 for women). For more information, you can visit this website. If you would like to participate, you can send an e-mail to [info@Asset-Econometrics.nl](mailto:info@Asset-Econometrics.nl) with your three favorite stages

## Freshmen Activity

Thursday May 15

In May the third and already the last Freshmen activity of this year will take place. We cannot yet tell what the activity will be, but after the success of the first two activities we are certain that it will be a great evening as well!

## Asset Champions League

Thursday June 12

The yearly football tournament of Asset will take place on June 12. If you would like to defend the honor of Asset | Econometrics then you can participate in this great tournament.

## Football Tournament & Announcement Drink

Wednesday June 18

A perfect combination, football, barbecue and a fantastic drink with lots of free beer in the evening. Besides that, the Candidate Board will be announced! This year however we have one extra ingredient to make this evening even nicer: we will broadcast a match of the Dutch soccer team on the World Championship!

## Announcement Drink Asset

Wednesday June 25

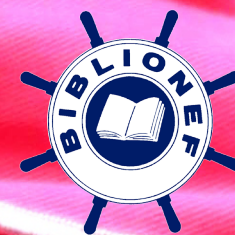
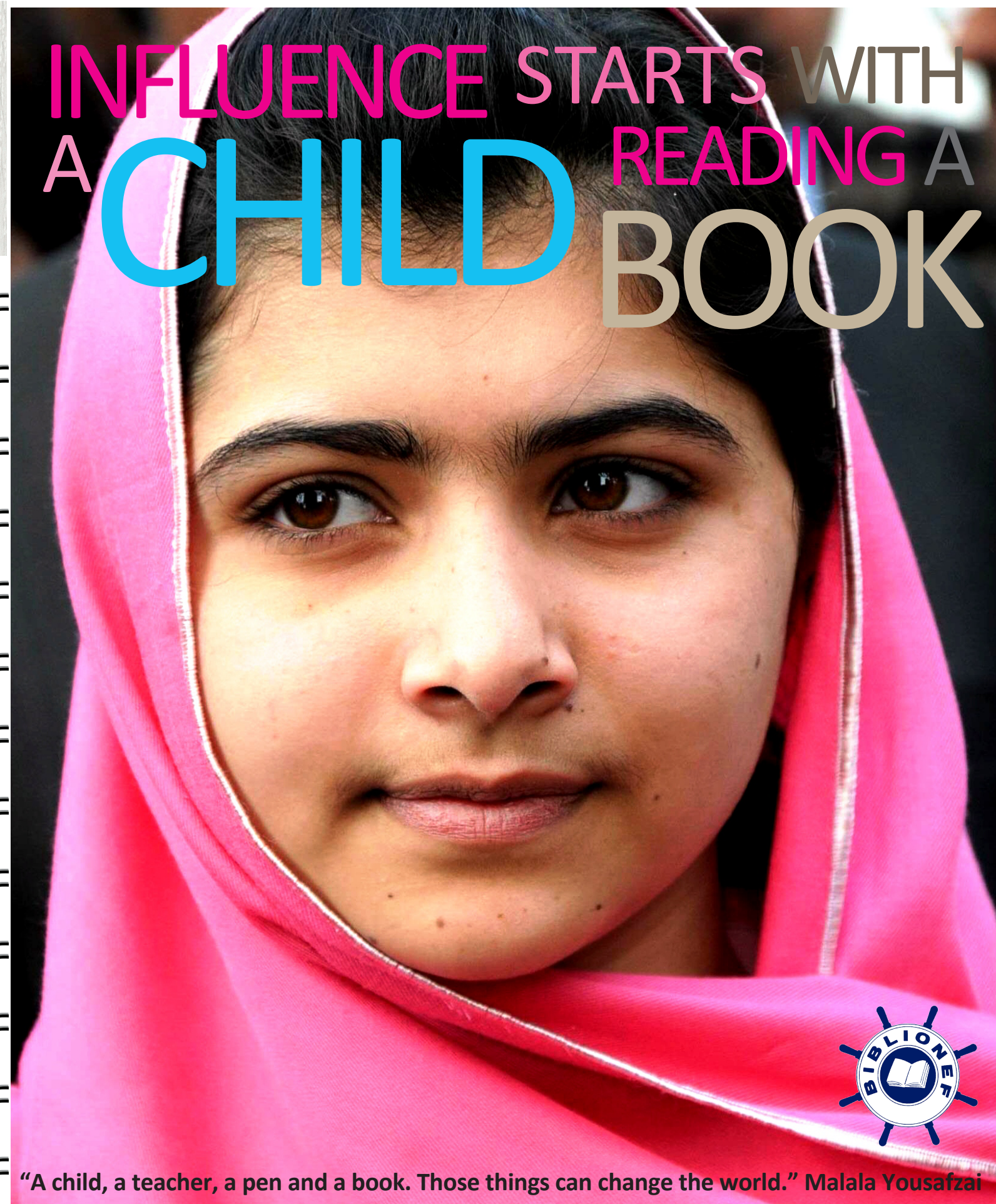
On this evening the candidate board of Asset will be announced! Also our candidate chairman will be part of the candidate board Asset, so make sure you do not miss this evening!

## Secret Activity

Friday June 27

Last but not least we have a Secret Activity. The AMD committee will make sure that there is a very nice activity and furthermore we will announce the winners of the Committee Ranking!

# INFLUENCE STARTS WITH A CHILD READING A BOOK



**"A child, a teacher, a pen and a book. Those things can change the world." Malala Yousafzai**

## Books can change a life. Together we can change many lives!

We all want children to become readers – to have empathy for characters, big vocabularies and imaginations, and to be able to immerse themselves in another world through a book. BiblioneF places a strong emphasis on reading for pleasure. Our goal is to make a profound impact on the lives of children and we are deeply committed to giving all children access to books. BiblioneF Foundations provide new books to library projects for children who have no access to books.

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tomorrow is today