

nekst

Volume 21, third edition, April 2013

Interview SER Chairman Wiebe Draijer
Building bridges in society

Fascinating Mathematics in Nature
Looking for an excuse to get outside?

ASSET



Econometrics



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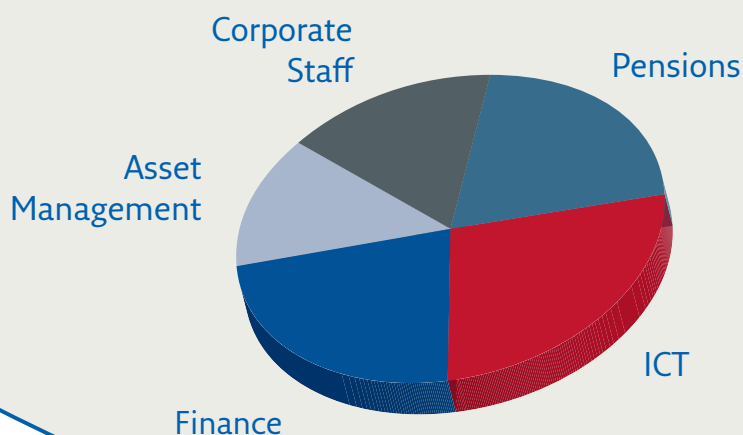
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Preface

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Correspondence

Asset | Econometrics
Tilburg University
Room E 110
P.O.Box 90153
5000 LE Tilburg
Telephone: 013 466 27 47
info@Asset-Econometrics.nl
www.Asset-Econometrics.nl

Editorial staff

Anouk Claassen
Daniëlle van Dalen
Michiel van Erp
Robbert van Gaal
Tim Gijssbers
Frank Hardeman
Lauran van Hoof
Vera van der Lelij
Chris Pustjens
Ernst Roos
Ennia Suijkerbuijk
Suzanne Vissers

Contributions

Joris Blonk
Roland Daamen
Myrthe Dekker
Rutger Engbers
Dennis Jaheruddin
Juil Kooijmans
Joe Li
Denise Ligthart
Ronald Mahieu
Cleo Mauritsz
Maarten Meeuwis
Roel Nagy
Robbert van Oosten
Masum Rahman
Corné Ruwaard
Martin Salm
Daniël Schotanus
Arthur van Soest
Joris van Toor
Linda Vos
Emy van der Wielen
Fang Qi Wu

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Refreshing Spring Ideas



Spring is coming! I consider this as the most pleasant time of the year. During the winter, the world is cold, gray and sorrowful, while in the spring everything is joyful and lively. Moreover, new ideas arise easier when the surrounding is also renewing, which turns out to be also true for Nekst.

Although I must say that I am rather content with the latest two editions of Nekst, they were quite conservative and safe. During a long holiday break, my fellow editors and I took the time to reflect on how we wanted Nekst to look like contentwise in the future. During the meeting the most divergent and peculiar ideas emerged. "Let us make a horoscope which predicts whether you will pass Statistics or not!", "No, no, let us design a relationship tree with all econometricians in it!" I must confess that in my enthusiasm during the meeting, I considered these ideas to be excellent. However, after being recovered from the meeting I had to face reality: these ideas were not that appropriate.

However, this does not mean that no good ideas were put forward. On the contrary, we came up with some interesting ideas for specials, resulting in not one, not two, but even three specials, all with an experimental nature, since we are considering making them recurrent rubrics. The first special is about mathematics in nature, and can be considered a successor of the special in Nekst 1, which was about mathematics and politics. Why not continue this tradition and write about mathematics and ... on a regular base? Moreover, we as a committee decided that it might be interesting for alumni, who also receive this magazine, to read about the experiences from other alumni. Therefore, apart from a report about the Former Active Members' Activity, we asked alumni and former board member of Asset | Econometrics Linda Vos to share her experiences about her board year, which is also very interesting to read for people considering to apply for the board in upcoming years. Last but not least, in line with the points of focus of the current board that is striving to involve more international students within the association, two editors invited two Chinese econometricians to go ice skating and interviewed them about their experiences in the Netherlands.

I would almost forget to mention that besides these three specials, we have a bunch of other interesting articles to read. An absolute eye catcher of this edition is the interview with prominent Wiebe Draijer, chairman of the SER and speaker during the LED. I am sure that his interesting view on society may inspire many of you. Furthermore, we all know that the financial future of econometricians looks good. Therefore, one might consider reading about golf, a sport often related to businessmen. Our freshmen and second year students already got a glimpse of the sport during the First and Second year Activity, during which they played street golf. If you want to know even more about golf, then the article about the passion of Thom Hopmans is also an advisable read.

Thank you for reading about my weal and woe (and yes, this seems to be good English) of being responsible for this magazine. I hope that you, the reader, will again enjoy this spring edition of Nekst.

Suzanne Vissers

A handwritten signature of Suzanne Vissers in black ink.

Editor-in-chief

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During the LED, chairman of the SER Wiebe Draijer gave all the participants an inspiring lecture. If you want to know more about his life and occupations, then read this interview.

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For those of you who are considering applying for a position in the board of Asset | Econometrics, this article written by a former board member is definitely a must-read.

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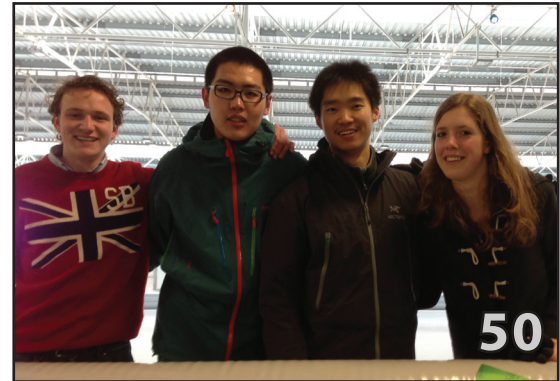
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Dear Members,

FROM THE
BOARD

After an eventful period with lots of activities such as the National Econometricians' Day, two committees had the honor to organize two brand new events: the Econometric Business Dinner and the OR Activity. Furthermore, preparations are already being made for our 7th lustrum which will take place in March 2014.

However, this is not all keeping the board busy. The busy new second semester kicked-off with the National Econometricians' Day on February 5, organized by Asset | Econometrics on behalf of all econometric study associations in the Netherlands. The venue was the astonishing Beatrix Theater right at the heart of Utrecht. After a debate with prominent econometricians, cases, a speech by Wiebe Draijer and a tasty formal dinner with companies, students were able to exhale during a party in the city center and a stay-over afterwards. Following in the National Econometricians' Day's tracks, two formal activities took place specified for either QFAS or ORMS. The Econometric Business Dinner took us to Villa de Vier Jaargetijden to dine with four QFAS related companies, while we were happy to welcome two lecturers and two companies at the OR Activity to excite us for Operations Research.

Less formal, but nonetheless very popular, was our Members' Day trip to the Efteling. During this day we had the pleasure of welcoming 80 members. The week after, the COdE Beercantus and our infamous beer race drink also provided a nice opportunity to relax between lectures and assignment deadlines. For those reluctant to say Carnaval goodbye we organized our annual Après Ski Drink famous for its beer mugs and Tiroler music. Lastly, the freshmen and second year students explored the city center with golf clubs playing street golf.

Perhaps an activity somewhat less visible to the current members of our association was the Former Active Members' Activity which took place on Saturday March 2. We enjoyed a cooking workshop, which, speaking for myself, was direly needed. We prepared Indonesian dishes, and were amazed by the fact that you are not only able to deep fry potatoes, but also ice cream wrapped in bread. If you are already a more tenured active member finishing your studies soon, do not forget to become a

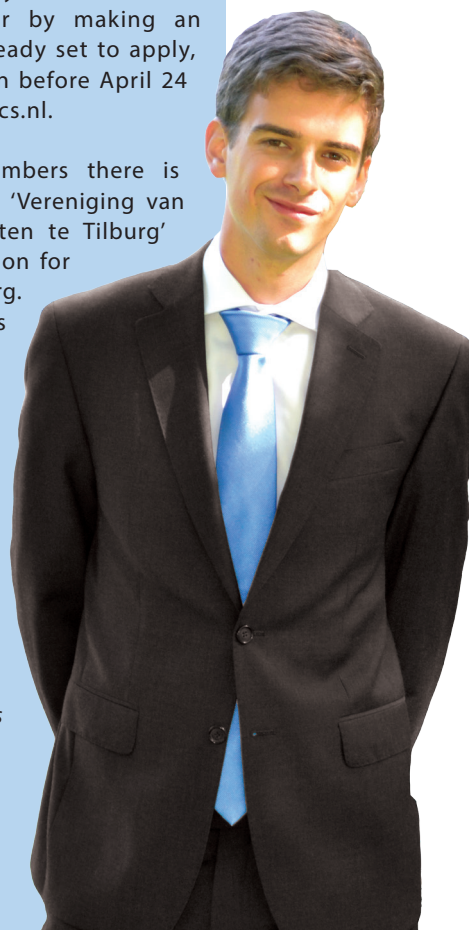
Former Active Member, as you will have the opportunity to see fellow students after your studies now and then.

One of the attendees of the Former Active Members' Activity, Linda Vos, wrote an article about doing a board year at Asset | Econometrics in this edition of Nekst. Perhaps this year's finals may seem a bit far away, but besides organizing new activities, Asset | Econometrics has already started looking for new board members. Part of this search is providing members information on what it would be like to become a board member. At the time you are reading this article, the Board Information Session will already have taken place. If you have missed it and are thinking about doing a board year next year or in future years, do not hesitate to contact us at any time at a drink, the association's rooms or by making an appointment. If you are already set to apply, please send your motivation before April 24 to board@Asset-Econometrics.nl.

For non-former active members there is the opportunity to join the 'Vereniging van Afgestudeerde Econometristen te Tilburg' (VAET), the alumni association for econometricians in Tilburg. They too organize nice events related to econometrics after your studies. Of course, currently you are still member at Asset | Econometrics. Therefore we hope to keep welcoming you at one of our next events in the near future.

On behalf of the board,

Corné Ruwaard
*Chairman Asset | Econometrics
2012-2013*



SER: Building Bridges Towards a Better Society

Following an inspiring speech by Wiebe Draijer, the President of the Social and Economic Council of the Netherlands (SER), at the National Econometricians' Day (LED) 2013, we had the opportunity to interview him. As he comes across as a very friendly and interesting man, we were looking forward to talking to him.



Name:
Wiebe Draijer

Position:
Chairman SER

One of the main questions we had was related to the SER. We were wondering what the SER actually does and what are the issues it considers to be important. As luck would have it, Wiebe Draijer not only talked about this during the interview, but also in his speech. "Just imagine if we could break the negative spiral of confidence that this country has. What is fascinating is that we have one of the highest wage levels in the world. We have one of the highest levels of productivity, we have one of the highest levels of employee participation, and when it comes to working hours we work the shortest amount of time on the planet. We have the happiest youth culture, we have one of the best social security systems and we have low unemployment. We have a competitive economy that is ranked number five in the world, up from number eight last year. Then why is it that we have such a negative spiral of confidence? Is there something fundamentally wrong or is it a confidence myth that we need to break?"

"What if we could show that house price developments in the last couple of months or years are a fair reflection of corrections on the housing market? What if we could show that current house prices are roughly in line with their fair value? So that if you were to buy a house now you would be buying bricks and mortar and not simply air. What if we could explain that the pension system is actually prepared for the levels of uncertainty that we are facing as opposed to not being prepared? And what if we could arrive at a situation in which the government or the central bank imposes a low interest rate? And what if that low interest rate were to reach the end-consumer and allow him or her to start spending? This country is so strong from a structural point of view and we have this fantastic set of intrinsics. So if we could break the negative spiral of confidence, what would that mean in terms of our ability to emerge

from the crisis? These issues are central to what we are currently trying to discover at the Social and Economic Council."

Background

Now that we know a little more about his views on the present and future, it is time to return to the past. What does the background of a SER president look like? Wiebe Draijer already knew at an early age what career he wished to pursue: journalism. However, he was advised by a family member not to follow training in journalism but to opt for a subject such as econometrics or mechanical engineering. If he still wanted to be a journalist later on it would be easier since he would already have an area of expertise to write about and if he did not, he would have job opportunities in his field of study. Consequently, Wiebe Draijer chose to study mechanical engineering. However, this proved to be insufficient and as journalism obviously appealed to him, he decided to apply for a position at NRC Handelsblad, a famous Dutch newspaper. He remained there almost until he graduated.

At that time, he wanted to specialize in technology, as he had developed a passion for this subject during his studies. His first wish was to obtain a Ph.D., but unfortunately there were no funds available to him to study abroad. Instead, he was persuaded to go and work for McKinsey. Persuaded, because at the time, he did not think it would be something he would be particularly good at or which appealed to him. However, following meetings with staff at McKinsey, he really looked forward to working there. It turned out to be a wise decision and he stayed for 23 years. Although he really enjoyed his time at McKinsey, he also pursued other interests. He was a founding member of 21minuten.nl, a website mainly about generating public debate on political issues. He was also member of the supervisory board of the Kröller-Müller Museum and a member



of the advisory board for World Press Photo, to name just a few of the many valuable things he has done.

Becoming President

Wiebe Draijer believes that these activities were one of the main reasons he was asked to be President of the SER. Although a consultant may not be the most logical choice for this position (and neither is a mechanical engineering graduate), an involvement with society and its problems is definitely an advantage for the job. He thinks there are two other major reasons why he was approached. Firstly, he belongs to the more practical

It goes without saying that we were not only interested in why others wanted him to become President of the SER, but also why he agreed to take on the job. The main reason was related to his fascination for breaking the negative spiral referred to earlier. Moreover, he was looking forward to re-energizing the consultative economy (as characterized by the polder model). Fortunately, he has discovered the job is even better than expected, since one of its favourite aspects was quite a surprise. Initially, he accepted the job with the idea that it would probably mainly consist of trying to get various parties (which often have opposite

them compete with the new private networks emerging at that time. He wrote a brilliant theoretical analysis on this topic that predicted quite accurately that the viewing habits of Dutch citizens were influenced to an important extent by the weather. Although it was an amazing analysis, with a correlation close to 100%, it was mostly a waste of time. This was because it was of little use to anyone, as the weather is something you cannot influence. Consequently, he realized the importance of a balance between a solid theoretical background and relevance to people you are researching for. "You can research all

‘Just imagine if we could break the negative spiral of confidence that this country has’

younger generation and an energetic personality was required. Secondly and most important, his fascination for bringing people with different ideas and interests together. This was, of course, something he used to do when working at McKinsey. Former Dutch Minister of Social Affairs Henk Kamp shared this opinion and therefore arranged a meeting with Wiebe Draijer. Henk Kamp wanted to talk about the future of the Dutch polder model of consensus-based social and economic policy. Before he knew it, Draijer was asked to become President of the SER and the rest is history.

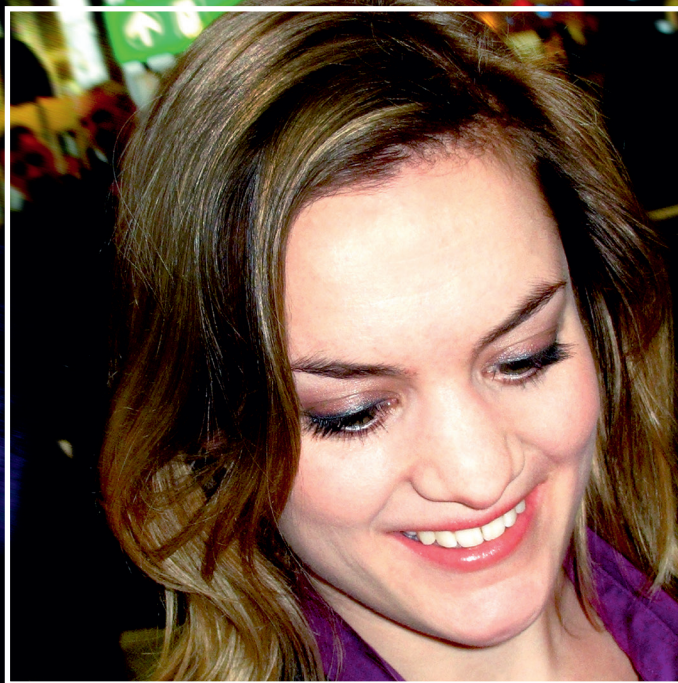
interests) to agree with one another. However, there is also a great deal of opportunity for fundamental research based on new and fresh ideas. This research can be used to find the best, or at least, an effective solution to a problem. The SER then discusses this solution to see if all members support it.

Although the research aspect is very appealing, its usefulness must also be considered, as Wiebe Draijer discovered early on in his career. One of the first projects he worked on at McKinsey was about improving the collaboration of public television networks to help

kinds of fascinating things, but if it is not relevant to what you need to do tomorrow, it is simply useless", Wiebe Draijer explains. That is a rule he still follows.

Problems

Enough about the past, we were also interested in the problems he encounters in his daily work. He believes there is only one issue of crucial importance: "How can we achieve economic growth in this country when people generally believe we are entering a period of stability, rather than growth?" This involves sub-issues such as: "How do we get



Marleen van Dijsseldonk, 26 jaar
Junior adviseur KPMG Advisory



*"Onderweg naar een opdracht bij een klant
in #Barcelona. Weekendje shoppen eraan
vastgeplakt met vriendin daar."*



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the labor market to focus on sectors where growth is being achieved or where it is possible?", "How can we create a wave of entrepreneurship which provides small businesses with the opportunity to grow?" and "How can we make better use of the growth in the world economy?". These are very complex questions. Take for example

Econometrics

Last but not least, we wanted to know what advice Wiebe Draijer would give to econometricians. Firstly, he cannot imagine a better time to study econometrics. Not only because it is a fascinating topic, but also because as we are still studying, there is time for the economy to pick up and for

economy grow, there are banks, there are government agencies, there are think tanks, there are many places where you can apply that knowledge and wealth of insights. If you are fascinated by the value of data and using data to obtain quicker insights into consumer behavior, there are many new jobs you can do. The only plea

‘You have a golden opportunity, so get out there and make your dreams come true!’

the labour market. The difficult aspect of this problem is that it requires employees to change. Simply changing a law or rule will not solve the problem. The specific point here is that young people entering the labor market have different contractual needs from older employees. Young people tend to switch jobs more often since they want to learn a great deal in different fields and about various subjects. Consequently, a permanent contract which lasts until retirement age is superfluous. The labour market needs to adapt, which is difficult as long as there are still many people in the system who do not have the mentality to do so.

jobs to be created for us when we graduate. According to Wiebe Draijer, econometrics "will play a crucial role in the next phase of the recovery" and will be "of increasing importance in the years to come". There are many opportunities out there, both in the public and the private sector.

Wiebe Draijer gives us the following advice." When you are confronted by the issue of what to do when you finish your studies, consider this. If you are fascinated by the wealth of insight that econometric analysis can bring to how this country is run, there are many things to do. If you are fascinated by the notion of how you can make the

I have is to really think this through. Where does your fascination really lie? You have a golden opportunity, so get out there and make your dreams come true!"

Text by: Ernst Roos



Statistics Netherlands: over a Century of Experience in Statistics and Society

In 1899 the predecessor of Statistics Netherlands was already applying statistics to develop a solid basis for government policy. At that time, statistical methods constituted a modern approach to social and economic issues, and today staff at Statistics Netherlands are still responsible for official statistics – which often play a decisive role.



Name:
Lenny
Stoeldraijer

Position:
Statistical
Researcher

When walking through the doors of Statistics Netherlands' impressive office in Leidschenveen, a suburb of The Hague, there is little to remind visitors of the long history of the organization. The futuristic office design with computers everywhere you look has replaced all traces of dusty archives. Statistics Netherlands is a modern organization; data is cool and for people who know how to handle all this data success is guaranteed. One of these people is Lenny Stoeldraijer, who works as a researcher at Statistics Netherlands and who was willing to answer some questions about her employer and about working as a statistical researcher. Moreover, she was nice enough to show us all the ins and outs of the department of demography where she works.

Student Days

As we were talking about how Daniëlle and I ended up at Statistics Netherlands, the subject of Asset | Econometrics soon came up and Lenny began talking about her student days. After a year of commuting between home, in Terheijden, and the university, she decided to move to Tilburg where she lived in lodgings for the remainder of her student life. It turned out that during this period, which ended only a few years ago - in 2008, she had

been member of the TEV, the predecessor of Asset | Econometrics. With this common background, we soon had a connection and we found out that Lenny had also studied Econometrics at Tilburg University. After completing her bachelor's degree she started the master's program MEEM (Mathematical Economics and Econometric Methods) and after obtaining her master's degree, she worked as an assistant researcher at the university for a while, using data collected by Statistics Netherlands. After that, she had to decide where to continue her career: consultancy, business or perhaps as a civil servant? In the end, she did not really choose: although the government is a major user of Statistics Netherlands' products, it is not the only user. Therefore Lenny works for the government, but also for commercial users.

During her studies she did an internship for which she investigated the metal industry. This work included forecasting company sales, which she really enjoyed doing. So it is not strange that today she is performing similar tasks, since as a demographics researcher she now forecasts the growth of the Dutch population. At the moment, Lenny lives in The Hague, from where she can easily travel





to the office. Also, the city offers many benefits that belong to a major city, so she enjoys living there.

The Life of a Statistical Researcher

One of the great benefits of working at Statistics Netherlands is the flexible working hours. For example, Lenny works 38 hours - four and a half days - a week. It is mostly up to Lenny herself when she actually works, so she has quite a lot of freedom for planning other things. In her case, she really needs this time, as besides her daily job as researcher, Lenny is also working on her Ph.D., for which she makes aging and mortality forecasts. She hopes to obtain her doctorate within six or seven years, depending on the progress of her research. This is just one of the options open to ambitious employees at Statistics Netherlands. Staff can also do a number of wide-ranging courses, including management training programs. When asked what the most interesting aspect of her work is, she answers: "My job is very diverse: besides the population forecasts we make every two years, we also investigate other topics related to demographics. In addition, the ambience at the office is very pleasant. There is an open structure and a good atmosphere between colleagues. For example, last December we had a dinner with our department and last year I went on a study trip to the statistical office in Austria with Young CBS, in which the youngest employees are represented." This open structure is not only represented in the organizational structure of Statistics Netherlands, but is also visible in the structure of the office building. The offices are separated from each other

by glass walls, and most of them do not even have a door. This allows a lot of daylight in, resulting in a pleasant appearance of the workspace. Lenny explains that the facilities of the brand new building are quite good. For example, there are showers and changing rooms for employees who want to come to work by bike.

Naturally, Daniëlle and I were curious to know how many econometricians were currently employed at Statistics Netherlands. Lenny, who had checked this especially for us, told us that about 50 employees had studied Econometrics. Surprisingly, her colleagues come from very different disciplines. For instance, her colleagues include people who have studied physics, sociology and even some therapists. This makes Statistics Netherlands an organization with very broad awareness and specific knowledge in many fields.

The scope of Lenny's research extends mainly to demographics, just as all the colleagues on her floor. The data she uses are mostly obtained from the municipal population registration. Other data used at Statistics Netherlands are collected by interviewing people, for example, or are taken from the Tax Authority and the Dutch institute for implementing employee insurance (UWV).

For the most part, Lenny's work consists of applying econometric theory and several methods to interpret the results from all the collected data. For this purpose, she also does a lot of programming, mainly in the programming language R. All this data

analysis is not done without purpose. Lenny and her colleagues publish them in reports which are used by the government, the European statistical office Eurostat, and are published on the Statistics Netherlands' website where it is available free of charge to the public. This certainly implies that the results of her research often play a key role in government policy. As an example she cites the influence of higher life expectancy on the debate about the official retirement age (the age after which Dutch citizens receive a state pension). The results of her research are also often published in press releases, which she often writes herself.

We were quite curious about the pressure she feels with all these important releases. Lenny responds that work pressure is not that high. The only deadlines she has are when she has to publish her forecasts. However, with her team of professionals, this is never a problem.

After this interesting interview, we took the elevator back down and said goodbye. We thank Statistics Netherlands for giving us the opportunity to take a look inside and Lenny for making time for us and for this pleasant interview.

Text by: Michiel van Erp

An Introduction

Having been a valuable Nekst editor for four editions of Nekst, Leon decided to leave the Nekst committee to develop himself in other committees. To fill this gap, three fresh committee members have joined our editorial staff. Since this cannot pass by unnoticed, we provide you with some peculiar facts about Frank, Lauran and Ennia.



Frank Hardeman

Frank is a first year econometrician. He is 18 years old, and his hobbies are playing tennis and watching movies. However, the one thing he enjoys most is snowboarding; he is always up for a ride down the mountain! For the past six months he lived at the 'Korte Heuvel', now he has gotten himself a new room close to café Bolle and café Brandpunt. Yes, that sounds very good indeed. If Frank had only one day left to live, he would do all kinds of dangerous and

cool stuff at the same time. Like jumping out of a helicopter on a snowboard, to board down from a mountain. Maybe he has watched too much movies. Frank's favorite word is 'Koning' (English: King). Why, you ask? Nobody knows, not even Frank himself. But it is an awesome word, you have to agree.



Lauran van Hoof

Lauran is one of the three new Nekst committee members. He is 18 years old and a first year econometrician. Next academic year, he will be the successor of Anouk by being responsible for the lay-out of Nekst. Lauran likes playing soccer or refereeing at soccer matches. He is not just a referee, but a KNVB referee, which is quite an achievement. Besides soccer, he likes listening to music and playing videogames on his Xbox 360. Moreover, Lauran has a strong

sense of justice and describes himself as an evening person. The TV show in which he still wants to participate is Expedition Robinson. Moreover, the one thing Lauran has always wanted to do is to wake up in a bungalow at the beach with sea sight on a tropical island. When waking up, he will hop right out of bed and walk in a straight line into the ocean to take a dive. So, maybe participating in Expedition Robinson is not such a bad idea after all?



Ennia Suijkerbuijk

Ennia is an 18 year old first year student, who loves reading and playing the piano. However, she is not your classic nerdy girl, not at all! She also likes playing squash and badminton, but what she really gets excited about is rafting, zip lining, abseiling and all other sorts of adrenaline packed activities. Her childhood hero is Pippi Langkous, who also did a lot of adventurous things. Ennia describes herself as an ambitious, disciplined and helpful girl.

If you challenge her though, be prepared! She can get a bit (too) competitive sometimes, and she can be quite stubborn in her choices. If you ever feel the urge to wake her up in the middle of the night, be sure to bring a lot of chocolate ice cream with you, preferably with lots of chocolate sauce on top of it. Since she sometimes has trouble getting out of bed in the morning, perhaps the chocolate ice cream could also be used to get her out of bed?

Text by: Tim Gijsbers

A judgment of Solomon?

Investment is a lot less fun today than it used to be. I have been hearing this more and more over the last year. Where to put my money? This is a question that is popping up more and more in the minds of managers of companies, institutional investors and individuals. The economies of almost all countries in the world are struggling at the moment, making investments in stocks a leap of faith. Turn to bonds then? With interest rates falling, investments in bonds are not expected to give substantial returns either. Real estate? Why is everybody laughing...? Alright, let us follow the old-age adagio of traders then – ‘In a time of crisis, cash is king’, and put our money in a bank account? Not an attractive alternative either, as interest rates on savings accounts are low, and inflation may be eating the meager rates away, making you poorer in real terms.

If all of these classic investment vehicles do not work, maybe some more exotic investments, as for example private equity or hedge funds, might work. In January, the British weekly ‘The Economist’ published an

a lot of support today. The theory gives us a way to determine how much wealth to put in a number of asset classes. So, that is it then? We just have to follow Markowitz’ theory, plug in some numbers, and we are done. Well, in my classes I sometimes use a quote by Markowitz himself, who claimed “I should have computed the historic covariances of the asset classes and drawn an efficient frontier. Instead, ... I split my contributions fifty-fifty between bonds and equities”, when asked about how he actually constructed his own investment portfolios. Indeed, in a 2009 paper the Review of Financial Studies by Victor DeMiguel, Lorenzo Garlappi, and Raman Uppal, titled, ‘Optimal Versus Naive Diversification: How Inefficient is the 1/N Portfolio Strategy?’, these authors show empirically that the 1/N strategy is very hard to beat over a long horizon. So, why not make it easy for ourselves and follow this ‘naïve’ strategy? It has an interesting by-product as well. As investing becomes that easy, by following the 1/N rule, we would need a lot less highly paid investment analysts. Investment returns would then increase automatically, from the savings on the salaries of the analysts.



Name:
Ronald Mahieu

Position:
Associate professor
(TiSEM)

Professor
(TiasNimbas
Business
School)

‘Do not let your thoughts wander off to exotic investment opportunities too quickly’

article about the performance of hedge funds as a group. They returned 3% over the last year, and a cumulative 17% since 2003, even underperforming a simple savings account. The only people who got rich from investing in hedge funds are the managers of these funds, raking in hefty management and performance fees. Some individual hedge funds did show stellar performance over this period (ex post!), but this performance was not stable, and as an investor you must have had extreme luck to have the guts to invest a priori in those ex post star funds.

One of the mantras of modern portfolio theory is diversification. Harry Markowitz developed this idea way back in the 1950s and it still has

So what is a good investment for you? Well, do not let your thoughts wander off to exotic investment opportunities too quickly, but first take a look at yourself. Your wealth is not restricted to your wallet only. As an individual you have earning power or human wealth as economists call this. Every year that you are able to work, you can earn money. And, given the current developments in retirement finance arrangements (pensions), you get more and more years to do so. So think about smart ways to increase your earning power by choosing a smart career. But, who am I to say this? You have already made that choice and kick-started that stellar career, by becoming an econometrician!

The New Dutch Pension Contract

In 2010 the social partners agreed upon a pension reform. In the new contract nominal guarantees are replaced by 'soft real rights'. Financial market shocks are absorbed in the pension rights by means of a smoothing mechanism, which enhances the transparency regarding the risk exposure of pension rights. This article is based on Nijman et al. [1].



Name:
Maarten
Meeuwis

Position:
Research
Assistant



Name:
Joris van Toor

Position:
Research
Assistant

The new pension agreement that has been agreed upon in 2010 and formalized in 2011 focuses on 'soft real rights'. The term soft is used here to indicate that the rights are not guaranteed, but are adjusted on the basis of investment returns or adjustments in the life expectancy. During years of disappointing returns the pension rights are reduced in order to restore the funding ratio of the pension fund. The rights are, however, not adjusted instantly. By means of a smoothing mechanism, pension rights on longer horizons incorporate a bigger part of the shock than rights on shorter horizons. This implies that young participants are exposed to more risk than elderly, which is desirable since retired people have less human capital and less flexibility.

We will introduce return-dependent pension payments and derive a market-consistent valuation. For simplicity, we will consider a closed fund in which there is no accumulation of new pension rights. We focus on a very simplified description of the financial market, in which interest rates are constant and there is only a single risk factor. Interest rate risk, inflation risk and longevity risk are ignored. The risk factor that we have is equity risk. We assume an economy with a single stock with price S_t at time t , that behaves as in the Black-Scholes world:

$$dS_t = \mu S_t dt + \sigma S_t dW_t.$$

Returns on this stock over a one-year period are denoted by r_t . The market risk premium is defined by $\lambda = \mu - r^f$.

In the new Dutch pension contract, future pension payments depend on investment returns. Unexpected shocks in investment returns are smoothed by using a linear mechanism. This holds for both positive and negative shocks. Because of the customary practice in the Netherlands that pension rights are uniformly increased

or decreased for all age groups, the exposure to shocks only depends on the horizon of the pension payment. Since different age groups have different horizons on which they will receive their pension payments, age-dependent risk exposures are introduced. On horizon h , the exposure to unexpected shocks on the financial market is given by $w\alpha_h$, where w is the desired long-term exposure to shocks and α_h is the percentage of the shock at time t that is allocated to the pension payment at horizon $t + h$. Let $B_{a,t}$ be the accumulated pension benefits of an individual that is a years old at the current time t , and let $P_{a,t+h}$ be the pension payment of the individual that is retired at time $t + h$. Then we have in a closed fund:

$$P_{a,t+h} = B_{a,t} \left[1 + w \sum_{j=1}^h \alpha_j (r_{t+h-(j-1)} - r^f - \lambda) \right].$$

Since we have that $E_t(r_{t+j} - r^f - \lambda) = 0$ for $j = 1, \dots, h$, it follows that $E_t P_{a,t+h} = B_{a,t}$. This means that if there are no unexpected shocks in the period from t to $t+h$, the pension payments will be exactly equal to the current pension benefit level. However, since the pension money is invested partly in the risky asset, it is exposed to risks on the financial market. Therefore, the payment will not necessarily be equal to the current benefit. This is the nature of soft pension rights.

One possible way to smooth unexpected portfolio shocks over time is the so-called Policy Ladder or Autoregressive (AR) mechanism. In Dutch, this mechanism is called 'staffel'. Each year, a fixed fraction of the shock is absorbed by adjusting pension benefits. The remaining part of the shock (ρ) is shifted to the future. After h years, the total fraction of the current shock that is absorbed is given by

$$\alpha_h = 1 - \rho^h.$$

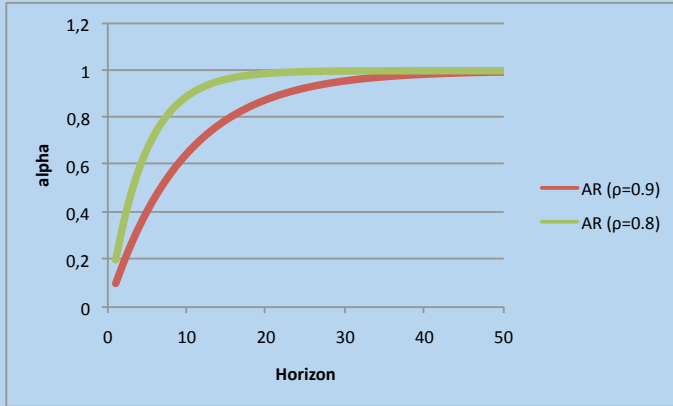


Figure 1: The behavior of the absorption coefficient α_h as a function of the horizon h .

Note that it holds that $\alpha_h \rightarrow 1$ for $h \rightarrow \infty$. Therefore, w has the interpretation that it is the exposure of the youngest participants in the fund to risk on the financial market.

Figure 1 illustrates the behavior of α_h for the AR mechanism as a function of the horizon h . Payments on a short horizon absorb only a small part of the shock, while payments on a long horizon absorb the shock almost completely. The smaller the value of ρ , the bigger α_h is on every horizon. Hence, a smaller value of ρ implies that there is less smoothing. For $\rho = 0$, there is no smoothing at all and the exposure to risk on the financial market is the same on every horizon.

Market-consistent valuation of pension benefits determines the sum of money that is required to be able to pay out the promised future pension payments. This plays an important role in the valuation of current liabilities and in the Solvency and FTK legislations. Together with the value of the asset portfolio it determines the market-consistent funding ratio of a collective pension fund. This funding ratio reflects the financial position of the fund, meaning that at 100% the fund has exactly enough assets to meet its promises. In case of overfunding or underfunding, benefits might be increased or rights might be cut.

By applying the risk-neutral valuation framework, we are able to determine the market-consistent value of the soft pension rights that we have described before. We can apply the framework to both nominal and real pension rights. When switching from a nominal to a real contract, the nominal interest rate must be corrected for inflation. This would mean that $r_{real}^f = r_{nominal}^f - \pi$, where π denotes the inflation. We ignore both interest rate risk and inflation risk here. Absence of arbitrage implies that the value is given by the risk-neutral ("under \mathbb{Q} ") expectation of the discounted payoffs. Consider an individual aged a who is entitled to receive a pension payment h years from now, at time $t + h$. Then the market-consistent

Joris van Toor and Maarten Meeuwis are research assistants for prof. dr. Lans Bovenberg, prof. dr. Theo Nijman and prof. dr. Bas Werker, funded by Netspar. Netspar is a network for research and knowledge exchange on pensions, aging and retirement in which many pension providers and government bodies participate. As research assistants, Joris and Maarten are directly involved in the ongoing policy discussions on pension reforms. This Triangle describes a pension contract in which soft real rights are introduced. One of the main tasks of Joris and Maarten has been to extend the analysis by including for instance interest rate risk, inflation risk and an open fund perspective.

value of his pension payment at horizon h is obtained by discounting the expected benefits against the risk-free rate plus a horizon-dependent risk premium:

$$\begin{aligned}
 V_{a,t}^{(h)} &= E_t^{\mathbb{Q}}(e^{-r^f h} P_{a,t+h}) \\
 &= e^{-r^f h} B_{a,t} E_t^{\mathbb{Q}}(1 + w \sum_{j=1}^h \alpha_j [r_{t+h-(j-1)} - r^f - \lambda]) \\
 &= e^{-r^f h} B_{a,t} (1 - w\lambda \sum_{j=1}^h \alpha_j) \\
 &\approx B_{a,t} [1 + r^f + w\lambda h^{-1} \sum_{j=1}^h \alpha_j]^{-h} \\
 &= \frac{B_{a,t}}{(1 + r^f + w\lambda \bar{\alpha}_h)^h},
 \end{aligned} \tag{1}$$

where we define $\bar{\alpha}_h = h^{-1} \sum_{j=1}^h \alpha_j$ to be the average exposure over the complete horizon h . We have used here that $E_t^{\mathbb{Q}} r_{t+h} = r^f$, which follows directly from the risk-neutral measure.

We are now able to determine the actual investment mix of pension funds. We start with two funds consisting of only one participant. This is then extended to pension funds with several participants, which differ in age composition. We assume that the funding ratio at $t = 0$ is equal to 100%.

The amount the fund should invest in the risky asset such that the promises made to its participants are honored is given by:

$$\omega_t = \frac{\sum_h \alpha_h V_t^{(h)}}{V_t}, \tag{2}$$

in which α_h is the exposure to equity risk on horizon h , $V_t^{(h)}$ the amount of liabilities at time t on horizon h , and V_t the total liabilities at time t . This equation states that the total risk exposure of the fund multiplied by the total liabilities, $\omega_t V_t$, is equal to the risk exposure per horizon multiplied by

A man in swim trunks and barefoot is talking on a mobile phone. Water is spraying over him, suggesting he has just come from a shower or pool. He is holding a briefcase. In the background, a woman in a pink dress is walking down a staircase. The setting is a modern office lobby with wood-paneled walls and a staircase.

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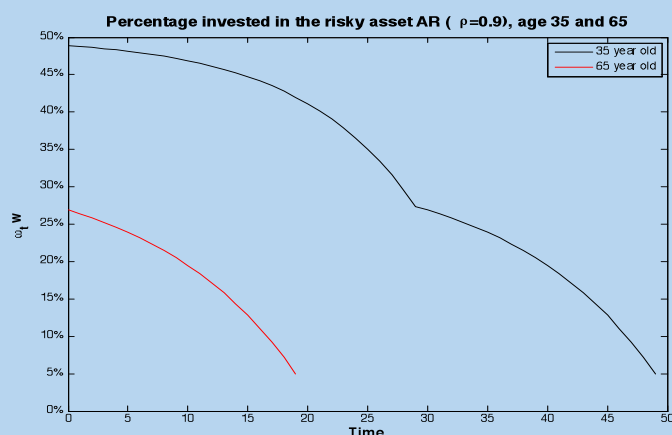


Figure 2: The figure describes the investment mix of the pension fund, $w\omega_t$, over time for the AR mechanism ($\rho = 0.9$) and $w = 50\%$ in case the fund only has a participant that is 35 or 65 years old.

the liabilities on the corresponding horizon, summed over the horizons, $\sum_h \alpha_h V_t^{(h)}$. So, ω_t should be interpreted as the risk absorption capacity of the fund. The amount actually invested in the risky asset is then equal to $w\omega_t$. In Figure 2 the development of this product is given for a fund consisting of just one individual (35 or 65). The mechanism to absorb shocks in the investment returns is the AR mechanism with $\rho = 0.9$ and $w = 50\%$. First of all note that the red line is embedded in the black one as the 35-year-old person has become 65 at $t = 30$, which is the starting situation of the red line at $t = 0$. Therefore, we only discuss the development of the black line. Since α_h is close to one on long horizons, ω_t is for small t approximately equal to one as well. Consequently, $w\omega_t$ is almost equal to 50%. As time proceeds, α_h declines as the horizons of the pension payments diminish as well. The minimum risk exposure of the fund is at horizon 49 and is equal to $w\omega_{49} = w\alpha_1 = 50\% \cdot 10\% = 5\%$.

In order to explain the kink in the black line, ω_t should be interpreted as a reweighted duration (ω_t is the duration if $\alpha_h = h$). The duration is the average horizon on which the pension payments are paid. For example for a 65-year-old that dies at 85, the duration is equal to 10. The duration of pension benefits declines with one year if a participant ages with one year before retirement. After retirement the decline is equal to half a year every year. A similar effect occurs in the graph and the kink in the graph shows that the decline before the kink is steeper than afterwards.

The case of one-person pension funds can be extended to funds in which several age categories are represented. In Fig-

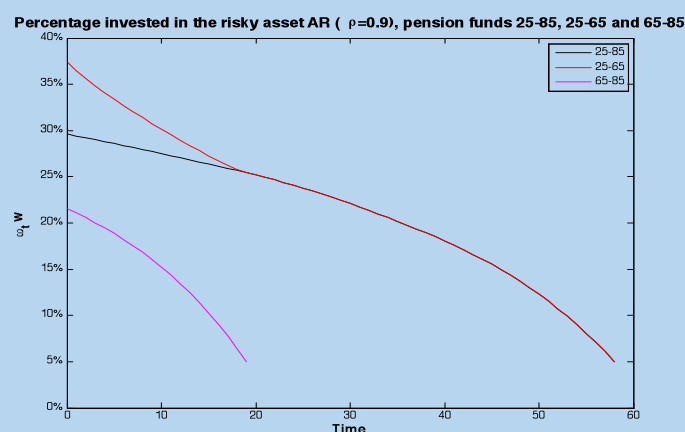


Figure 3: The figure describes the investment mix of the pension fund, $w\omega_t$, over time for the AR mechanism ($\rho = 0.9$) and $w = 50\%$ in case the fund consists of participants in the age of 25-85, 25-65 or 65-85.

ure 3 the risk exposure of three fund compositions is displayed. These pension funds consist of one person per age category. The absorption mechanism is again the AR mechanism with $\rho = 0.9$ and $w = 50\%$. The pattern of all graphs is decreasing, as the risk absorption capacity declines when the fund matures. The pink line is embedded in the red and black ones as the 25-65 and 25-85 funds coincide with the 65-85 fund at $t = 40$. The red line is located above the black one in the first 20 years, because the fund with only workers is 'younger' compared to the fund with workers and retirees. Consequently, the risk absorption capacity is bigger and correspondingly the amount invested in the risky asset is bigger. At $t = 20$, the fund compositions coincide as well as the amount invested in the risky asset.

Our main finding is that, in case of a closed fund perspective, the amount invested in the risky asset declines as pension funds mature. This is due to the fact that the risk absorption capacity of the fund declines as time proceeds, since the pension benefits have to be paid on shorter horizons. This simple model can be extended in several ways, among which the incorporation of interest rate risk, inflation risk, longevity risk, and an open fund perspective are candidates.

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Bringing Knowledge from Romania, Germany and the USA to the Netherlands



Name:
Otilia Boldea

Position:
Assistant
Professor

The first course in the econometrics bachelor program given by a woman is Econometrics 1, lectured by Otilia Boldea. She has already worked for five and a half years at Tilburg University, so it is about time for an interview. Together with my fellow committee member Ennia, I visited her room to get to know Otilia Boldea better.

Combining Two Study Programs and a Job

Otilia Boldea was born in Romania in 1979. She grew up in Timișoara, where in 1989 the revolution against dictator Nicolae Ceaușescu took place. Here she started her undergraduate in Economics & Business Administration. After two years she started studying in Germany, combined with another undergraduate program in Romania. Most of the time she lived in Germany. Every semester she had to convince her professors in Romania that she could not attend the classes. In order to keep up with the subject matter, friends helped her by sending their homework. It took her five and a half years to finish both undergraduates. Naturally, it was a very busy period for her, since besides the fact that she followed two study programs, she also had to work due to the fact that the scholarship in Germany was not very high. She started working as a bartender and waitress, but this turned out to not be for her. Working as a waitress means that you have to work very hard and you have to memorize a

lot since you cannot always write things down. Moreover, Boldea was always working until late, which is tiresome when combining it with two study programs. Therefore she changed job and started working in the library, which was less stressful. During that time she met a few German friends, with whom she had a lot of fun when going out or traveling.

Otilia was a member of her study association, which organized cultural events on a regular base. In Germany, it was also fun to live a student life and to go out often. Her student room was situated above the dormitory bar, where every week some parties took place. Once a month, she and her roommate had to serve at the party and they had to clean up. The parties were too loud to be able to sleep, which was the reason she had little choice but to visit these parties every Wednesday.

After having finished the undergraduate programs in Romania and Germany, Boldea started with her Ph.D. in economics in Raleigh (North-Carolina), which she finished in five years. The way of studying differs a lot between Romania and the USA. In Romania, detailed learning is important. Moreover, the study program in Romania contained more business related courses and less economics and was therefore less quantitative. In the USA, the study program was not focused on details, but more on understanding the key concepts. Another difference is that students from the USA are rather broadly educated, while the students from Europe are more specialized. Since studying in the USA and Europe differs quite a lot, Boldea has no clear preference for either one.

Working at Tilburg University

A British researcher and Otilia's main advisor, who met his wife in the Netherlands, advised Boldea to apply at Tilburg University. He was working at CentER and told Boldea positive





stories about working at the university. Besides that, Tilburg is well-known in econometrics. Hence, when she applied in the Netherlands, she could not wait to start working at Tilburg University. According to Boldea, living in the Netherlands has some advantages but also some disadvantages. Boldea is used to better weather, especially the weather in the USA is much better than in the Netherlands. Furthermore, Boldea states that in general things move slowly in Tilburg. Fortunately, there are also things Boldea likes about the Netherlands. For example, she likes the nature and to see everyone being outside. Moreover, on sunny days, everything is very beautiful in the Netherlands. People are very relaxed, friendly and in a good mood here. Besides that, most of them have a good knowledge of the English language. The directness of Dutch people is not a problem for Boldea. It gives her the feeling to be back in Romania, since most people there are also very direct.

Upon being asked what a typical day at the university looks like, she cannot give a specific answer, since a typical day does not exist in her view when you are working at the university. Forty percent of her work is spent on teaching and the remaining part is for research. When she has no deadlines, she can schedule her day the way she prefers. There are no strict time schedules or strict rules. Boldea likes to decide by herself when she works. It is certainly not an exception that she goes to the sports center during the day and continues working afterwards. She advises econometricians to consider an academic career, because of the big amount of freedom you have since you are not dependent on what others tell you to do. Currently, she is busy with a research in which she tries to detect when things are changing or about to change in the economy. An important question in her research is: "When did things have a big impact on the economy and will they happen again?"

Besides the research part, teaching is also an important task. As mentioned before, she teaches the first part of the course Econometrics 1 and a course in the first year of the Ph.D. program in Economics. According to Boldea, the students of the bachelor program EOR are very competent and work hard. They are well prepared and ask interesting questions during the lectures. Boldea considers the course in the research master rather challenging, as the contemporary topics that are discussed in class, are often also new to her. She advises bachelor EOR students to consider a research master in economics, since these students have an excellent quantitative background and also have knowledge of economics, the right combination for the research master program.

In her spare time, Boldea likes playing tennis, running or painting. Because playing tennis and painting both require a considerable amount of concentration, these activities are a nice way to forget about work. In the near future, Boldea would like to continue working in the Netherlands, since she loves her work, her colleagues, the department and the subjects she teaches. Apparently, Tilburg is 'not so bad' after all.

Text by: Chris Pustjens

Otilia Boldea's choices:

Education or research?
Research

Theory or practice?
Theory

Pancakes or fries?
Fries

Beach or mountains?
Beach

Word finder or Sudoku?
Word finder

Stress or boredom?
Stress

Default Correlation

When a bank provides credit, a chance that an obligor cannot meet its obligations and defaults always exists. By providing credit to multiple obligors, the chance of simultaneous default also arises. This so called default correlation risk has appeared to be a major risk for banks and has gained growing attention in the current economic situation.



Name:
Emy van der
Wielen

Age:
24

Begin Studies:
2007

Introduction

During my internship at Rabobank, I provided exemplifying insight into the impact of default correlation on Rabobank's portfolio. To be able to survive adverse economic situations, banks have to hold a certain amount of capital as a safety buffer. From the bank's perspective, it is important to determine this level of capital with care; holding capital is expensive, being solvent is crucial. Moreover, the capital level has to meet international regulatory standards that are described in the Basel Accords (Basel I (1988), Basel II (2004), Basel III (2010)).

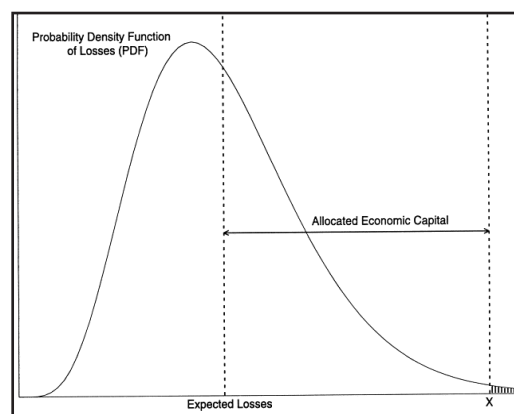
Being one of the input parameters for determining risk capital, default correlation has appeared to be an important issue to banks. Default correlation is the probability that, given one obligor defaults, another obligor will default at the same time. In case of high default correlation extreme losses become more likely to occur, resulting in an increased amount of risk capital. Low default correlation implies less extreme losses, because there is a higher dependency on random events. Since the impact of default correlation on the firm's portfolio loss might be significant, the size of default correlation should be determined accurately. However, due to low numbers of (simultaneous) default events, it is difficult to determine the default correlation between

obligors. They hardly ever default at the same time. In order to get improved insight into the default correlation risk, Rabobank is currently revising its correlation framework.

Rabobank is the market leader in the Dutch mortgage market and a large part of Rabobank's portfolio consists of mortgages. Therefore, evaluation of correlation with respect to the mortgage portfolio is an important part of the correlation framework revision. Next to the fact that the order of magnitude of the correlation between provided mortgages is of large interest, its influence on the diversification level on an overall portfolio level needs to be investigated. Therefore, I have conducted research on the impact of the mortgage correlation on the overall portfolio's diversification level.

Economic Capital

In order to calculate risk capital, Rabobank uses internal models for calculating Economic Capital (EC). In accordance with the model described in the Basel accords, Rabobank uses the Vasicek model [1] as a basis for computing the EC for the mortgage portfolio. Vasicek's model states that an obligor is in default if its asset value falls below a defined default threshold. The asset value is determined by a single factor model including a systematic factor and an idiosyncratic part. Every asset value is driven by a certain factor and has an idiosyncratic part representing the obligor's specific risk, like divorces, illness, or just bad luck. The obligor's exposure to the systematic factor can also be interpreted as the degree of dependence on the market represented by the factor. This factor dependence is also known as the R^2 of a factor model. Vasicek assumes that every obligor has the same amount of correlation with the systematic factor, implying that there is only one correlation factor. During the rest of this article, this single correlation factor will be called intra correlation.





Although Vasicek's model is widely used, the model has gained deserved criticism from both the scientific and practical point of view. An advantage of Vasicek's model is its allowance for analytical calculation and the fact that the results on an exposure basis are additive. Yet, its assumption about one single factor driving the entire portfolio appears to be too much of a simplification. Vasicek's assumption about one 'state of the economy' contradicts with practical situations, since apart from the financial situation

exceeding the chosen quantile are extreme losses and are not covered. These extreme losses simply result in a default for the bank itself. Therefore, the quantile has often a high value (e.g. 99.99% for an AAA-status).

Obligors Correlated

In most of the cases, a bank's portfolio does not only consist of mortgages, but also contains other sub-portfolios like corporate loans (large firms), loans to SMEs (small and medium enterprises), and consumer loans

between obligors of different sub-portfolios should also be taken into consideration. To be more precise, this is exactly the correlation that results in diversification effects on a portfolio level and is determined by the sub-portfolio's intra-correlation and the correlation between the sub-portfolio's fundamental factors (interfactor correlation). Being interested in the impact of the intra-correlation of the mortgage portfolio as well as in the inter factor correlation, the analyses are based on both types of correlation.

'It is important to determine the level of capital with care; holding capital is expensive, being solvent is crucial'

in the world, portfolios can have several different fundamental factors, like country or industry specific risk. For this reason, in the internal model, a multifactor model is introduced.

By using a (multi)factor model and a defined default threshold, a default state can be assigned to each obligor. Using the default states in combination with obligor specific risk parameters (Loss Given Default (LGD) and Exposure at Default (EaD)), the loss distribution and subsequently the EC of the entire portfolio can be derived. The EC is equal to the loss in case of a stressed scenario (e.g. the loss at a 99.99% quantile) minus the expected loss. The expected losses are covered by provisions et cetera, while losses

(credit cards, saving accounts, et cetera). Amongst these sub-portfolios, not only the amounts of exposure can differ enormously, but also the corresponding risk profiles can take different forms. For instance, the sub-portfolio consisting of consumer loans is characterized by a large number of exposures that are rather small and constant, while the corporate sub-portfolio consists of a small subset of obligors having very large exposures.

As already mentioned, the correlations between obligors inside a portfolio (intra-correlation) influence the bank's risk. However, not all correlation is covered by intra-correlation. Since a portfolio consists of several sub-portfolios, the correlation

Diversification

Using intra- and interfactor correlations for the asset valuation model results in a portfolio specific loss distribution as well as an EC level. Since diversification is the main topic in this research, the next step is the transfer from EC to EC diversification. Diversification effects arise if sub-portfolios are not fully correlated and complement each other in some way. In order to compute the level of diversification, first the required amount of EC for every sub-portfolio is determined on a stand-alone basis. This means that each of the sub-portfolios is not liable for the shortfall of the other one. By simply taking the sum of the stand-alone EC of all sub-portfolio's, the summed stand-alone portfolio EC is obtained. This is

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the total amount of EC needed in case sub-portfolios are assumed to be all individual. Being interested in the EC in case sub-portfolios are integrated in one large portfolio, the EC is also determined on an aggregated portfolio level. A diversification effect arises when the EC level for the aggregated portfolio deviates from the summed stand-alone EC and is formulated by:

Diversification effect = $1 - (\text{Aggregated portfolio EC}) / (\text{Summed stand-alone portfolio EC})$.

Since generally it is assumed that portfolio aggregation reduces EC and EC is always positive, the diversification effect is a number between zero and one and can be interpreted as the decrease in EC as a result of aggregating sub-portfolios in the total portfolio. In other words, the

The corporate portfolio, however, includes a small selection of obligors. Furthermore, the sub-portfolios are assumed to be dependent on just two factors, one representing the Dutch market and the other one representing the world economy. Obviously, the mortgage portfolio is (almost) completely dependent on the Dutch market, while the obligors in the corporate portfolio are likely to have (large) international exposure. In this portfolio, interfactor correlation is regarded as the correlation between the Dutch market and the world market, which is assumed to be quite high.

Results

Inserting the defined hypothetical portfolio parameters into the theoretical framework, gives the diversification effects for varying

grows to one, the diversification level declines to zero as a result of the convergence to a single factor model. Then, no benefit can be obtained by merging sub-portfolios as a result of dependency on the same market.

However, both types of correlation do not influence the level of diversification remarkably. The small shift in the level of diversification might be attributed to the composition of the hypothetical portfolio, which appeared to be skewed with respect to risk exposure. The risk exposure to the mortgage portfolio is large compared to the total portfolio, resulting in rather low sensitivity of the diversification level with respect to changing intra-correlation of the mortgage portfolio. Since the results seem to be highly portfolio-dependent, further portfolio sensitivity analysis is done. A change

'It can be concluded that correlations should be determined with great care'

larger the diversification effect, the larger the impact of aggregation on the portfolio's EC.

Portfolio Definition

By now, a theoretical framework is formulated. However, the 'ingredients', or input parameters, are still needed. These parameters are all based on a portfolio, which contains a set of obligors having their own risk profile. In order to meet Rabobank's need for relevance and desire for privacy, based on its portfolio, a hypothetical (simplified) portfolio is defined. Since its portfolio exposure consists mainly of corporate loans and mortgages, the hypothetical portfolio contains only these two sub-portfolios, which differ in their characterizations. The mortgage portfolio typically contains a large number of exposures, which are rather small compared to the large exposures in the corporates portfolio.

mortgage intra-correlation and inter factor correlation. The first result is that the sub-portfolios stand-alone EC is highly sensitive to the correlation between the contracts that are inside the sub-portfolio. An explanation for this is the increased probability for extreme losses in case obligors become more correlated. The increased chance on large losses results in a thinner tail of the loss distribution, thus a higher quantile's loss. This result implies that diversifying sub-portfolios carefully is worthwhile in order to decrease the amount of risk capital needed. However, the level of diversification intra-correlation does not have a significant impact and mostly stays within a range of only a few percents.

When investigating the impact of the interfactor correlation, it appears to have more effect on the diversification level. When the interfactor correlation

in portfolio composition appears to be accompanied by a change in the diversification level.

Conclusions

From the results obtained, it can be concluded that correlations should be determined with great care. Different correlation values can result in wide-ranging values for stand-alone EC for intra-portfolio correlation and varying diversification levels for different inter factor correlations. Furthermore, regarding the observation that the results are highly portfolio dependent, a review of the impact analysis is recommended in case of changing portfolio compositions.

References

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Working in the Centre of the World

Having arrived at Utrecht Central Station, it was certainly not a challenge to find the skyscraper in which SNS REAAL is located. Daniëlle and I were warmly welcomed by Remco van Amelsfoort, Asset Manager at SNS REAAL, in a pleasant coffee area provided with cake and Easter eggs.



Name:
Remco van
Amelsfoort

Position:
Portfolio
Manager Rates

The Employee

Remco, born and raised in Helmond, describes himself as 'een echte Brabander' (English: a real Brabander). After secondary school, Remco decided to study physics at Eindhoven University of Technology. Although he enjoyed this study program, especially developing the scientific models, he felt that he did not want to become a researcher in the field of physics. Therefore, after obtaining his bachelor's degree in physics, Remco made the decision to follow the master's program QFAS at Tilburg University. "When you are a physicist, it sometimes takes 30 years before your model is being implemented. The great thing about econometrics is that these models can be applied immediately." Fortunately, he just had to catch up a few courses from the bachelor's program EOR. "In fact, econometricians use a lot of models developed by physicists." Remco wrote his master thesis at REAAL, the insurance component of SNS REAAL. To be specific, he conducted a research on the correlation between mortality and marital status. "Some interesting findings popped up during this research, like the fact that divorced men have a five-year shorter life expectancy."

The Traineeship

Apparently, SNS REAAL appealed to Remco so much, that he decided to apply for a traineeship. SNS REAAL offers three different traineeships: Management Traineeship, Financial Traineeship and Quantitative Financial Traineeship. As a matter of course, with his quantitative background, Remco applied for the third one. All traineeships last two years, divided into four assignments at four different departments, of which one is free to choose. Remco notes that you are free to choose what kind of assignments you want to do and that SNS REAAL is a flat company, so you can always stop by and ask questions to your colleagues. Remco worked on assignments at Asset Management (the department where he is also working right now), Group Risk Management and Financial Markets. "At the Financial Markets department, the social side of trading gained much attention. It was quite interesting to see that 'alpha people' can also do a good job in trading, without using quantitative models." The fourth assignment Remco worked on was for campus recruitment at the HR department, which might not be his field of expertise, but still a great experience.





Maybe some of you readers have become interested in the traineeship opportunities SNS REAAL has to offer. Every year, SNS REAAL is looking for about twelve new trainees. If you are interested in a traineeship, you first have to send in your CV and a motivation letter. You then might be invited for an interview and to participate in some capacity tests. When you pass this part of the procedure, you will be invited for a selection day. During this day, the soft skill aspect of working at SNS REAAL gains much attention, by means of cases and role plays. Apart from getting familiar with all kinds of departments of SNS REAAL, the social aspect is also highly touted within the traineeship. "Quants are often good at mathematics and modeling. However, employees at SNS must also be assertive and socially competent, since they should be able to convince people who are not familiar with the subject about their ideas. If you want to establish something, you must be able to tell your story." Remco explains that during this selection day, it became clear that Remco is quite a chaotic worker, something he did not expect beforehand. During his traineeship, Remco learnt how to deal with this. Moreover, Remco confesses that during his career at SNS REAAL, he learned to be more diplomatic.

The Company

Let us face it: recently SNS REAAL has been taken over by the Dutch government. According to Remco, a part of the uncertainty for both employees, clients and counterparties has been removed by the state intervention.

Recently, after having completed his traineeship, Remco returned to the department where he started his career at SNS REAAL: Asset Management. He likes the fact that his job is very diversified, since he prefers doing a lot of different things at the same time. For his job as Asset Manager, in which he focuses on state bonds, Remco has to come up with trading strategies that provide extra yields for SNS REAAL without facing extra risk. In order to know what trading opportunities are profitable and which are not, it is important to keep up to date with current news facts. "As an Asset Manager, you are working in the centre of the world, since everything is relevant." Moreover, Remco has a lot of contact with investments banks (brokers), teaches other employees courses and develops models.

We were curious why Remco chose to start his career specifically at SNS REAAL. First of all, he likes the pleasant atmosphere within the company, in which there is a lot of room for new ideas. An atmosphere we encountered as during the interview colleagues stopped by, had a chat, grabbed an Easter egg and started joking about Remco. Later on we heard that these persons had in fact rather high positions within SNS REAAL. According to Remco there is also a lot of loyalty within SNS REAAL. Normally, everyone returns home before 18:00, but when the work pressure is high, all employees work together as a team to finish the work. This team spirit is being stimulated by drinks and trips on a regular basis.

For the young employees, there is an opportunity to get to know each other

better by means of activities organized by Jong! SNS REAAL (English: Young! SNS REAAL). Another aspect Remco likes about his work is 'Het Nieuwe Werken' (English: Alternative Working Practices). Once a week he works from the comforts of his home and his contract hours are very flexible. Furthermore, the building of SNS REAAL does not have fixed working places, but flexible ones instead. Moreover, there is the possibility for extra education within the company. For example, one can do a CFA (Chartered Financial Analyst) program, become an actuary AG, or just follows extra courses in for example ethics or accounting.

Inspiration and Advice

When asking what persons Remco admires, he answers that he considers people that have really made a change fascinating. As examples, he mentions John von Neumann, a special man who has played an important role in developing the study of econometrics. Upon being asked for advice, Remco recommends all econometricians to develop their soft skills. Therefore, he states that it is very important to do something besides your study program.

We would like to thank Remco for his openness of views and we wish him all the best with his further career at SNS REAAL.

Text by: Suzanne Vissers

A Board Year: a Once in a Lifetime Opportunity

Somewhere in January after another day at the office, another traffic jam due to the snow and rain and the fact that it was Thursday, I received an email in my inbox sent by Asset | Econometrics. A smile appeared on my face; that probably meant another Former Active Members' activity would be organized at short notice.



Name:
Linda Vos

Position:
Secretary
Board Asset |
Econometrics
2008-2009

I was wrong. It was a request from the Nekst committee to write an article about my board year. How could I refuse such a request? Let me go back to April 2008. After being an active member in several committees and almost finishing my bachelor's degree, I decided to apply for the board of Asset | Econometrics, or TEV as we were called those days. This decision was not really made in the spur of the moment. I remember lots of talks with (study) friends, with my fellow board member Marije, but also with former board members. I tried to consider all pros and cons of a board year and tried to find out which position within the board would suited me best. Would it not be a better experience to go on an exchange or would it not be better to do an internship at a company? In the end the challenge is to learn what it takes to be responsible for both the daily business and long term vision of an association in combination with the understanding that being part of a student association is – in contrast to get some abroad and work experience – a 'once in a lifetime' opportunity, was leading in the decision to apply. I wrote a short email to the board, saved it as a draft, and sent it just before the deadline. No way back!

Wednesday June 18, 2008 was an exciting day for me, since that night the next generation of TEV-board members, or say it otherwise, the first generation of board members of Asset | Econometrics would be announced. This turned out to be a great start of an unforgettable year. The second milestone took place on Tuesday September 9, the General Members' Meeting. After months of preparations we were itching to get down to work! However, when we arrived at our location 'Galaxy' it turned out that we immediately got challenged: our meeting room was booked twice. A lot of calls and visits to potential replacing locations later, we finally found our new location 't Pakhuys'. The second and

biggest challenge of my board year followed a few days later, due to medical reasons Sjoerd had unfortunately to decide to withdraw himself and Marije, Mathijs and I were left with the three of us. Luckily we found in Emile and Stefan two other dedicated and motivated board members who made 'team 2008/2009' complete.

The life of a board member is hard to describe and to understand if you have not experienced it yourself, since it is so diverse. During the weekly board meetings, which always last longer than the scheduled three hours, you are managing the daily businesses of the association. What is the progress of all committees and to what extent do we as a board have to make decisions or overrule earlier made decisions within a committee? You can imagine that the ideas of a committee are not necessarily always in line with the interest of the association, at least, through the eyes of the board.

Besides the committee related issues we discussed in our weekly meetings the future of the association and corresponding policy. One of the main questions related to this during our year was how to position within Asset. After years of discussion, 2008/2009 was the first academic year in which all economic related study associations were organized together within Faculty Association Asset. As far as I know, improving the way of working within Asset is still an important point of focus of the current board.

Not all discussions we had were that important. I remember a long and serious discussion about the question whether chocolate milk from the dispenser should be, just like coffee and tea, for free for active members and for ourselves. In the end we still did not agree on each other. Of course you always try to find a way or compromise in which everyone is



satisfied in the end. However, the fact that this was not always the case shows that everyone in our board was able to formulate his or her opinion and that in case we did not agree on the opinion of the majority, we feel free to say so. This is one of the most important conditions to run an association properly.

Every now and then we also organized board brainstorm sessions, of course accompanied by a nice dinner, some beers and guitar hero. One of the points we discussed as candidate board together with board 2007/2008 was how to avoid that students will continue calling our association 'TEV'. I mean, we all knew that 'Asset | Econometrics' is not an easy name to pronounce. In the end we agreed on 'Astrics'. As far as I know you all still use Astrics which is nice to see.

Not only those board meetings were an educational experience for me, also the daily tasks of being the secretary helped me in developing myself. As part of the external affairs, I had several meetings with companies in which we talked about the possibilities of cooperation. It was not only a good way to practice and improve your communication skills, it was a perfect way to have a look inside the company as well! I felt really lucky that I got the role of active member coordinator. As an active member coordinator you usually talk twice a year with all your active members in a one-to-one conversation. In September you try to find out which committee will be most appropriate for the active member and the next one-to-one conversation is more like a coaching conversation. What goals does he or she want to reach? What has he learnt and what does he want to do different next time? And not unimportant, we used those meetings to collect feedback from active members regarding the functioning of us as board. This brings me to another important skill which you will certainly develop: giving and receiving feedback.

The aforementioned points are only a few examples of the things I have learned during my year in the board of Astrics. As you might recognize you will not learn those skills typically from econometric classes. At that time I was not really aware of that, but during my job as a high school teacher and also at my current job as an actuarial junior consultant at PwC, I noticed that the skills I developed during the board year are really beneficial.

Of course, there was enough time to have fun in less serious settings than described before. Fun with members and active members in E108/E109/E123. Fun with other fellow board members of other associations. Fun on well visited formal and informal activities. And not unimportantly, fun with the five of us. During the year Emile, Marije, Mathijs, Stefan and I transformed into Swa, Allie, Mattie, Buddy and Fox, respectively. We worked hard but also took enough time to relax: played volleyball in the hall, watched Herman Finkers on YouTube, stole some flags and bowls from other associations and played another game of table football in E109. After one year of intensively working together, we know each other quite well. We still catch up a few times a year to keep memories alive and to have fun again. I am pretty sure we will stay friends for life.

It is hard to mention the most memorable activity of the year. The lustrum week will be definitely one of the likely candidates for this. After a great preparation of the committee it was a fantastic week with the gala as a highlight. I am already looking forward to the seventh lustrum next year. The 'AvdN' ('Avond van de Notulen') is another activity that I will not forget. A few months ago a picture taken at another edition of the 'AvdN' popped up on my Facebook wall. Great to see that what once started as a joke still is being organized.

A year in the board is a perfect way to develop yourself in all the things you do not learn in your study. It does not really matter if you are in the board of a study, sport or student association. Choose the association that feels most comfortable to you, which clearly was Asset | Econometrics for me. And of course it is commonly known that recruiters usually attach more value to experiences like a board year than to high grades. However, if building your curriculum vitae is an important motivation factor for you, please do not opt for a board year. Looking back to my study years, the board year was definitely the nicest but also most busiest year. When you do not have the intrinsic motivation it might be quite a tough job.

Nowadays, the choice for a board year might be an even more conscious choice due to the governmental change of the financial study support system. A board year will most likely cause a study delay, but see it as an investment. An investment in yourself and in your future. As an econometrician we are quite lucky that also in those times of financial crisis it is still relatively easy to find a job. So why not prolonging your study time and develop yourself in several other than technical skills? Looking back I have never regretted the choice I made to apply for the board and to quit my study for a year, it was really worth it!

One week after receiving the mail from the Nekst committee, I received an invitation for the next Former Activity Members activity. And of course I subscribed for another cozy evening in Tilburg to have fun with econometricians who all have at least one thing in common: a weak spot for Asset | Econometrics!

How to be a successful Ph.D. student



Name:
Martin Salm

Position:
Associate
Professor

Since the start of the fall semester, I am education coordinator for econometrics in the Graduate Program in Economics (GPE) at Tilburg University. In my last column I described the economics Ph.D. program in Tilburg and wrote about the admission process. Now, I would like to write about this program and about my experience as education coordinator.

Let me provide the current Ph.D. students with some advice in this column. Success must always be defined in relation to one's aims. Some students enter the economics Ph.D. program with the aim of working for the CPB, the DNB or for the private sector.

relevant research literature very well. Ph.D. students often have to learn new methods and techniques that cannot be learned in a course. It is also difficult to come up with an idea for an interesting project that nobody has done before. In my opinion, it is important that Ph.D. students talk a lot about their research projects. The most important contact is the dissertation advisor. However, Ph.D. students should also talk about their research with professors other than their advisor, with other Ph.D. students, with seminar speakers who come to Tilburg to give a presentation, at conferences, and maybe even with their grandmother. Students should also keep in mind that they will need reference letters not just from their main advisor, but from at least three professors.

‘Being able to examine questions of interest is a reward in itself for many people’

Other students aim for faculty positions. An important decision for Ph.D. students is whether to participate in the international ‘job market’. Ph.D. students should think about this decision early on. Participating in the international job market is necessary for students who aim for a faculty position or a position in an international organization outside the Netherlands.

Students who wish to participate in the international job market will need to send a research paper and three letters of recommendation with their applications. They also have to be ready to give a presentation about their research. Thus, Ph.D. students should have a finished and polished research paper by the time they participate in the job market. This will typically be in the fall of the third year of their Ph.D. contract. Ideally, the job-market paper should be single-authored. However, in past years students with co-authored job-market papers have also found good positions.

Writing a good research paper takes a very long time. It is important to know the

In my opinion, it is also very important for Ph.D. students to present their research as early and as often as possible. It is a good idea to present at conferences, but it may be even more important to present at seminars. At seminars, presenters will typically have to answer more questions, and they will receive more feedback than at conferences.

Finishing a Ph.D. program requires a lot of hard work. But it can also be very rewarding. Being able to examine questions of interest is a reward in itself for many people. But the job prospects for Ph.D.’s in economics are also quite good. Starting salaries for new assistant professors at top American and Asian business schools can be above the ‘Balkenende-norm’. Such positions are very difficult to get. However, most of our Ph.D. graduates find meaningful employment which they enjoy and where they can use their skills. This spring, six current Ph.D. students or recent Ph.D. graduates from the econometrics department obtained positions as tenure-track assistant professors.

The OR Activity: the Shortest Path to Success!

COMMITTEE PROFILE

As a student, you are quite lucky: your study association organizes a lot of activities to help you decide on your future. Until now though, one link has been missing: an event specifically about Operations Research! However, with the first official Operations Research (OR) Activity on March 19, this problem is finally solved!

In the program of the OR Activity, there is a general part in which two speakers give a lecture about an OR-related project or research. Afterwards, there is a company part, during which students visit a presentation and a case. As the organizing committee, we already started the preparations in October. With the leadership of our competent chairman Janinke Tol and with the guidance of two experienced board members - Cas Luijten and Marleen Veldhuijzen - we started together on the task that would keep us busy for the upcoming months.

Things started off pretty smoothly. In fact, one company (Quintiq) had already agreed to participate even before our committee was set up! As the secretary, I was responsible for the speakers and here our luck continued: after approaching three potential candidates, we had already found our two speakers. The first was prof.dr. Leo Kroon from Erasmus University Rotterdam. He talked about his work at the Dutch Railways (NS) in developing models to deal with railway disruption management and ultra-short term planning. Our second speaker was prof.dr. Iris Vis from the University of Groningen. Her talk was about cross-chain order fulfillment for web Cross-chain order fulfillment for internet sales.

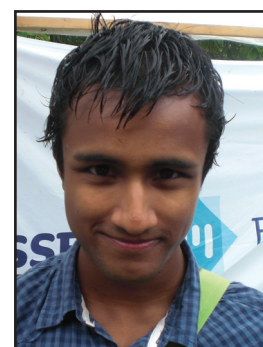
Unfortunately, this is where our luck ended. Finding companies this year turned out to be more challenging than usual for Lisanne den Hoed, who carried the responsibility for

external affairs. One main reason was the National Econometricians' Day (LED), which was scheduled only a few weeks before the OR Activity and was also organized by Asset | Econometrics. Despite her efforts, Lisanne had to hear the same answer over and over: sorry, we are not interested because we are already participating in the LED.

The list of 'usual' candidates was exhausted quickly, meaning we had to consider less familiar companies. We figured this is also a benefit: it gives students an opportunity to become acquainted with companies they usually do not see. After a long search, we found our second company: TBA, a rapidly growing consultancy company in the logistics sector. Although we did not find a third company in the end, with two companies we at least have an event! Working with only two companies meant we would be pretty tight on the money. Luckily Leon de Wit, our treasurer, managed to create a balanced budget and even find sufficient space to squeeze in a lunch as well.

As a member of this committee, I found it fascinating to see all the organizational work that takes place behind the curtains of an event like this. Also, I had a lot of fun during this whole experience: enjoying yet another treat by Leon and myself for consistently failing to come in time for the meetings; the victory feeling when Adobe Photoshop finally does that thing you wanted it to do for hours; and telling 'dark' jokes during a gourmet evening with the committee.

At the moment I am writing this article, the biggest task is still ahead: March 19, the day itself. However, with all the effort we put in it, I am confident it will work out great. I believe this will be the first of many more fruitful editions of the OR Activity – the shortest path to success!



Name:
Masum Rahman

Age:
21

Begin Studies:
2010



ASSET



Pension Symposium



Freshmen



Board Asset | E



Drinks & Activities



Econometric Business Dinner



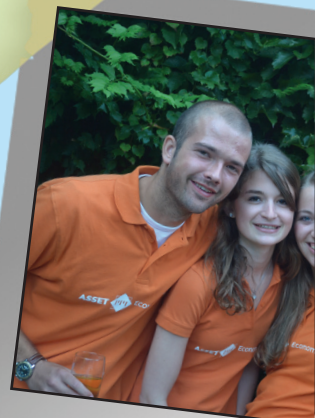
Promo



Finance Expedition



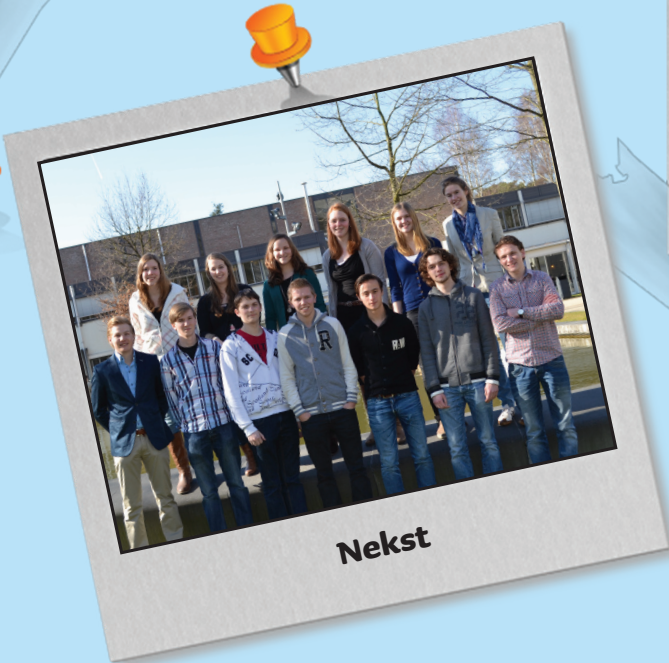
Education



Introduction A

Committees 2012-2013

Econometrics



LED it be your day!



Name:
Roland Daamen

Age:
21

Begin Studies:
2009

February 5, 2013: the day every econometrician from the Netherlands had been waiting for. At least, the third-year students and higher, since due to the rapid increase in the number of students, only they were able to subscribe themselves for the biggest career event for econometrics students in the Netherlands.

For me the day started early with a train trip to the Beatrix Theater in Utrecht. To get to the theater, there was in fact no need to go outside; you could walk directly from the station to the building via a tunnel! While enjoying a cup of tea with a nice piece of cake, I discussed with my friends which of the 30 participating companies they were assigned to by the magic optimization model used by the committee. Unfortunately, I was not assigned to all my first choices, but luckily my second choice was quite nice after all. For the morning case I was assigned to OM Partners, for the afternoon case to Pharmerit and for the dinner to Quintiq.

While some were still inspecting all the gifts in their goody bags, the committee asked everyone to go to the theater hall for the opening speech and debate about Basel III. Ad van Herpen, the chairman of the LED committee, opened the day and then gave the floor to Professor Arnoud Boot, who replaced Professor Arnold Heertje as debate leader. Together with Harold Naus from ING and Professor Schoenmaker from the Duisenberg School of Finance they held a lively and interesting debate on the implications of Basel III. Around 9:30 it was time for the first case round. Via a couple of escalators, I reached the room where the case of OM Partners would take place. OM Partners is a software and consultancy company in Supply Chain Planning Solutions, which has its headquarters in Belgium. The case was about Sales & Operations Planning systems. The idea was to determine what is given for this planning horizon and what needed to be optimized and to sketch a linear programming model. Each group had to present their results and then received some feedback from the consultants of OM Partners.

Around 13:00 it was time for lunch. For some this was the opportunity to eat as much as possible

for free, while for others (including myself) it was a perfect opportunity to talk to recruiters and employees of companies to discuss internship possibilities. Soon it was time for the second case round. I decided to take the elevator to go to the case of Pharmerit, since going seven floors up by escalators seemed a bit too much to me. Pharmerit is a consultancy firm specialized in performing health economic analyses for pharmaceutical companies that are bringing new medicines to the market. The case was about a new diabetes drug for which a price needed to be determined based on the decrease of the probability of getting a stroke and the increased life expectancy. Every group was also asked to come up with a name for the new drug and a company name, which led to hilarious presentations.

After the second case, a lecture was given by Wiebe Draijer, chairman of the SER, and a drink gave us another opportunity to talk to the recruiters. Around 19:00 the dinner started. Everyone had a seat at a table with recruiters and employees of a company. The food was quite exclusive, and although I cannot exactly recall what kind of dishes were served, it all tasted delicious! In the evening a party ended the long but interesting day. I can really recommend everyone to attend future LEDs!



Volunteering at the LED

NATIONAL
ECONOMETRICIANS'
DAY: VOLUNTEER

On Tuesday February 5, the National Econometricians Day took place, which is a day for econometricians and their possible future employers to get to know each other and to orientate on places to work after the completion of their studies. During this day I got the opportunity to deliver a contribution as a volunteer.

After waking up quite early to get to Utrecht in time, it turned out that the bus decided not to show up, resulting in seeing the train ride off just before I got to the station. On that moment, my hatred for public transportation reached an all-time-high. However, fortunately, my luck turned around soon; the next train to Utrecht arrived just ten minutes after the one I missed. Just in time, I joined my fellow volunteers.

After a short tour through the Beatrix building, the first participants arrived. We were supposed to give them a goodie bag and had to point them to the reception hall. After the students went to the debate, I had to welcome the representatives of Milliman and help them with setting up the room in which their case would take place. When the morning case was finished, it was time for lunch. After having accompanied the representatives from Milliman to their table, I had some time to eat and to chat with my fellow volunteers about their experiences with the morning program. When the lunch was over, it was time for the afternoon case. Again I had to accompany Milliman, meaning that I would hear everything for the second time. Thankfully, there was free accessible wifi, so I could kill the time surfing on my mobile phone. When the people from Milliman had finished their case, I gave them a bottle of wine for their efforts.

Now, it was time for the drink. The participants got some more time to get to know other companies and the volunteers could relax a bit in the Royal Bar. When it was finally time for dinner, I showed the representatives from Milliman to their tables and then found a table for myself to sit. Because of the fact that I was really hungry, I was very happy when dinner was served, which in fact tasted great as well.

Afterwards, we had to accompany all students who were assigned to the hostel in Bunnik to the bus that would take them there. Once

arrived, we had to tell everyone in which room they would stay during the night. As expected from people going to a party, this was not as easy as I hoped it would be.

When everyone had changed from their formal outfit into something more casual, we could go back to the bus and head back to Utrecht for the party at Filemon & Baucis in the centre of town. Because almost everyone had something to drink at the dinner, the mood was soon set. People were starting to dance more after every drink they consumed.

However, my job as a volunteer was not entirely finished. Everyone who stayed at Bunnik had to go back by bus. We had to get quite a lot of people in the bus, because this was the penultimate bus. Of course this was not achievable, but the driver was kind enough to drive an extra round to pick up the ones left behind. After such a long day, it was finally time for a well-deserved night of sleep.



Name:
Rutger Engbers

Age:
20

Begin Studies:
2011



A lot more than Bunny Birth Rates!

Being econometricians, we spend a lot of time indoors while doing all sorts of difficult mathematical calculations. Unfortunately, our obligations keep us from spending more time outside. For that reason, the Nekst committee decided to provide you with a good excuse to lay down your work and see some astonishing mathematical manifestations in the outside world.

First of all: Fibonacci

Whilst in high school, Dutch students learn to relate the mathematical row of Fibonacci with the speed at which rabbits reproduce. In contrary to what its name might imply, the row of Fibonacci is not of Fibonacci's own making. The origin of this intriguing sequence of numbers goes all the way back to 200 BC. Leonardo Bigollo came in contact with it around 1200 AD, and he was the first person to link this sequence of numbers to the birth rate of rabbits. The name given to the sequence is the product of combining the words 'filius Bonacci' which means 'son of Bonaccio' in Latin.

Rabbits

Fibonacci's rabbit reproducing problem takes place in an empty field and under ideal circumstances. This means that a pair of rabbits gives birth to exactly two little bunnies each month, of which one is a girl and one is a boy. Besides that, we assume that the rabbits never die. If we start counting after the first rabbit pair is placed in the field, counting the number of rabbit pairs gives us the following sequence:

1 2 3 5 8 13 21 34 55 89 144...

If we put the numbers 0 and 1 in front of this sequence, we get what we know as the row of Fibonacci. Every number being the sum of the two numbers preceding it. With the first two



numbers being 0 and 1 respectively. In more mathematical terms: $F_n = F_{n-1} + F_{n-2}$ with $F_0 = 0$ and $F_1 = 1$.

Of course this is not a very realistic example, since these ideal circumstances can never be met. That is the reason why the English mathematician Henry E. Dudeney adapted the problem to cows instead of rabbits. He changed months into years and rabbits into cows (female) and bulls (male). He argued that only the females are relevant for the problem, not the males. Now we assume that a cow produces its first she-calf at age two and after that produces another single she-calf every year. Assuming none of the calves dies, this model gives us the same sequence, but in a more realistic setting.

Honeybees

Rabbits and cows are not the only animals who have an interesting reproducing pattern following the row of Fibonacci. However, to be able to understand the story of the honeybees (who will be referred to as bees in the rest of the article), we will have to do some biology first. Honeybees live in a swarm in a home called a hive. The swarm is ruled by a queen bee who is the only one able to produce eggs and therefore the only one able to produce offspring. When a queen bee has not mated with a male bee, she produces eggs which will hatch, but can only give birth to male bees. When the queen does mate with a male bee, the baby bees will all be female. Of the females some will be born to become a queen themselves, but that is a different story. To make a long story short: female bees have two parents; male bees have only one parent. If we draw a family tree of a random bee it gives us the information provided in Table 1. This is again a perfect representation of the row of Fibonacci.

The Golden Mean, Number, Section or Ratio

Before we continue to see where the row of Fibonacci shows up in plants and such, we have to know something about the golden mean. The golden mean is found by dividing a number of the row of Fibonacci by the number

	Parents	Grandparents	Great-grandparents	Great, great - grandparents	Great, great, great grandparents
Female bee	2	3	5	8	13
Male bee	1	2	3	5	8

Table 1: Family Tree of a Random Bee



preceding it. If you do this for a great amount of numbers and you plot the answers, it can easily be seen that they approach a specific value. This value has been approximated to be 1.618034. The golden mean occurs in a lot of different situations, some of which will be mentioned later on.

the edge of the flower head. Now if you count the number of right spirals, this number will in every case be extremely close to a Fibonacci number. The same holds for the left spirals.

It is not a coincidence that the spirals are arranged like this; in fact, this is the

$1/3$, $1/4$, $3/4$, $2/5$ etc.) will always result in a series of straight lines. To get a different pattern, it is necessary to choose a portion of the circle which is an irrational number, also known as a non-simple fraction. In order to optimize the filling, the most irrational number existing has to be chosen, the one

‘The spirals of all flowers are arranged according to an accurate optimization process’

Plants, Flowers and Pine Cones

Animals are not the only ones with a connection to the row of Fibonacci. For starters, flowers often have a number of petals that is equal to a Fibonacci number. Lilies have three petals, buttercups have five and Michaelmas daisies even have 55. But it does not stop here; Fibonacci numbers can also be seen in the arrangement of seeds on flower heads. Take for example a sunflower. If you look at the flower head closely you can see that its seeds consist of two sets of spirals called ‘right spirals’ and ‘left spirals’, both starting in the middle and ending at

result of a very accurate optimization process. When a flower starts growing, seeds start to come out of the center of the flower head and then migrate towards the outside, to eventually fill all the space. A new seed appears at a certain angle compared to the previous one. Say it would be an angle of 90 degrees, then you would end up with four rows of seeds coming out of the center of the flower head, leaving the rest of the head uncovered. This would not be an efficient way of filling the space. In fact, choosing for the angle a value corresponding to a simple fraction (e.g. simple rational numbers

which is the least well approximated by a fraction. This number is exactly what we know as the golden mean. The corresponding angle, the golden angle, is 137.5 degrees. With this angle, one obtains the optimal filling, which in this case means the same spacing between all the seeds. If this angle is not handled with precision, it could ruin the optimality completely and the two sets of spirals, one in each direction, would not be visible.

Text by: Vera van der Lelij

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Cooking with Consultants

FORMER ACTIVE
MEMBERS'
ACTIVITY

Against all odds this article is not about a student activity in which you could and should have participated. On the contrary, this is a glimpse of what the future might have in store for you. If you have been a committee member of Asset | Econometrics, you will be invited to become a Former Active Member afterwards.

Being a Former Active Member allows you to keep in touch with your former fellow students and get acquainted with those that have left Tilburg University before you. For these former active members some nice activities are arranged. However, these activities take place only twice a year, so there is always a lot to talk about. This time the activity was an Indonesian cooking workshop and, as it was past dinner time, everyone was very motivated to get cooking.

After a short instruction we found an optimal match between people and recipes and everybody rushed to gather the ingredients. This was probably the most challenging part of the evening for two reasons. First of all the names of the required ingredients were very exotic. Some were kindly translated, like 'santen', which apparently is Indonesian for 'concentrated coconut milk', but we had no clue how to locate the sereh, djahe and laos. Secondly the metrics were a bit challenging, forty teaspoons of solid garlic are manageable, but we did not dare to guesstimate how many bouillon blocks equal a liter. Fortunately, the host came to the rescue and I would like to compliment Kookstudio Brabant on their excellent support throughout the evening.

After all ingredients were gathered, the chopping and cooking went like a breeze and in no time the soup and main dishes were prepared. Although everyone started out as a team, as time passed more and more people took a supervisory position near the bar,



mentally supporting the few individuals that were fiercely cooking.

Finally the time had come to eat and we enjoyed a nice noodle soup followed by drumsticks and sambal goreng with cabbage and shrimps. All of this was accompanied by nasi, perhaps the most famous Indonesian dish of all. The dishes tasted really well, but no dinner can be complete without a dessert and thus we finished with the special experience of eating fried ice cream.

It was nice to do the cooking and the food was definitely worth the effort, but of course I did not travel to Tilburg just for the food. In fact the unlimited drinks, however tempting, were not even the main reason for me to participate in the workshop. Above all it were the other participants that drew me south, from the outskirts of Amsterdam. It really was nice to hear how everyone's career was starting smoothly, and although several people chose to join a big company, the number of consultants was quite overwhelming. This startled me at first but my worries soon disappeared as, along with the suits, the sales pitches were left at home. Consequently, nobody got warned for letting business interfere with pleasure, and the atmosphere was very relaxing.

After the workshop we went to Kandinsky for a few drinks and some chatter. As mentioned before, there is always a lot to talk about but this time something drew everyone's attention. There were no less than two former board members who surprised us with the special announcement that they were expecting a little one. Very nice to hear that besides job prospects, econometricians have excellent family prospects as well. So, like movies from the west and massages from the east this story has a happy ending, and we expect to see some cute baby pictures appear in the Astrics room soon!



Name:
Dennis
Jaheuddin

Position:
Former Active
Member

An Eyewitness Account of the GMM and NYD

A great honor was invested in me: I was asked to write about the recent General Members' Meeting at 'De Heuvel Gallery' and the New Year's Drink at 'Café Van Horen Zeggen' afterwards. To me, this is a great opportunity to share some of my views and opinions on this evening with you.



Name:
Cleo Mauritsz

Age:
19

Begin Studies:
2011

The first General Members' Meeting of 2013 took place on January 22 and happened to be the first GMM I ever attended. Of course I did not know quite what to expect: would I hear a lot of new information, would it be boring, would there be a lot of hotties?

It is with pleasure that I can inform you all that the GMM was, in fact, quite the event. All board members got a chance to explain what they do, which turns out to be a lot more than just attend the weekly 'Koffieurtje' (English: Coffee Hour). Did you know that Cas is also the treasurer of Stichting LOES, in charge of organizing the LED, amongst others? Did you know that there are committees for supporting the board and checking the finances of Asset | Econometrics? Did you know that you get a cherry turnover just for sticking around until the break? I most certainly did not. Even though it took my bum quite a while to get over the shock of sitting in one position for several hours, I gained a lot of trust in and respect for our board and fellow members of Asset | Econometrics. Some points worth mentioning:

- We are still struggling to get international students to participate in our activities. If you are an international student reading this, please come to the next drink, activity, cycling dinner or whatever event tickles your fancy: we would love to get to know you!
- The merger with other Asset associations is a little scary to all of us, but worry not: Corné is on top of it. So far there have been no real issues between the associations, the communication between different associations and the university has even improved and, most importantly, money gained for econometricians will still go to Asset | Econometrics.
- By the time you read this, you are probably mentally preparing for the Active Members' Weekend or crying alone in your room because you missed the chance to sign up. Nonetheless,

let the record state that on January 30 I predicted that it is going to be legen-, wait for it, dary, which I am not saying because I happen to be in this committee.

After such a long, informative meeting it was time to fluff up our tushies and head to our favorite pub 'Van Horen Zeggen'. The Drinks & Activities committee had the most delightful idea of giving everyone a sparkler with a little note. The note would say that either A) you got a free drink, in which case, good for you or B) you got an assignment with which you could earn a free drink, in which case, good for everyone because these assignments really drew people together. An assignment would for instance be 'Take a picture with a freshman, a sophomore, a junior and a senior', 'Give Luran a snow ball' or 'Take a picture of yourself in the bathroom'. I must admit, the last one is rather freakish, but we had great fun nonetheless. The free barrels of beer offered to us by Sandra only added to the joy, which may be why most of us stuck around unusually long to party. On to the next great success!



Striving for Progress

ACTIVE MEMBERS' MEETING

Monday January 28 was the moment for active members to pull together and discuss some current topics concerning our association, Asset | Econometrics. During this Active Members' Meeting twenty diligent active members showed up, to spend a nice and lucrative evening together at De Heuvel Gallery.

To improve something, evaluation and anticipation is very important. Therefore the Active Members' Meeting, a recurrent phenomenon in the world of Asset | Econometrics, is essential. The voices of active members are heard, resulting in visible progress. That is something an association like Astrics (short for Asset | Econometrics) strives for.

During this year's meeting three different topics were planned to be discussed. Firstly, Nekst Online, the website of this magazine, afterwards, the structure of Asset and last but not least, next year's Lustrum and Almanac. The crowd was split up in four groups to put their heads together and present their findings on the topics aforementioned.

A few months ago, the online version of Nekst was launched. A neat, fancy website that makes it possible to read Nekst articles on any laptop, tablet or smartphone all over the world. Most of us are very content with the current appearance of the website. However, some among us plead to make the current minimalistic design a bit more colorful. The amount of website visitors is unfortunately not as high as we would have liked it to be. We agree that, to unravel this problem, Nekst Online should be updated more frequently, through activity reports, recent econometrics-related news articles and some extra mind-blowing columns of professors and companies. We should also consider exchanging articles with the magazines of other econometrics study associations. When these changes will be carried through to Nekst Online, a bright future is ahead.

Recently, a lot has changed in the structure of Asset. If this is new to you, do not worry, since many of us agree on the fact that the shift in structure went unnoticed, which is perceived as a good thing. One of the effects is

that the communication between the different associations has improved. Also, the current structure is a strong reflection of unity and cooperation. The appearance of Asset has never been as professional as it is now.

Everyone agreed that, inside the unity of the Asset associations, Astrics must keep its own distinct identity. The close relationship to the EOR students should be maintained, as well as the activities organized especially for Astrics members. A point to work on is a slogan for our association. After all, what is Astrics without a stunning slogan?

The last topic that was discussed during the meeting was the Lustrum and the Almanac. In 2014, Asset | Econometrics will celebrate its 35-year anniversary. This wonderful event will of course not pass by silently. A chance to throw a party is never missed by Astrics! The Lustrum will be celebrated during a whole week. A great amount of both formal and informal activities will be arranged. Sufficient ideas are given, ranging from baking cupcakes and salsa workshops, to symposia and guest lectures. Of course, a big party is inevitable.

Along with the Lustrum goes the Almanac, a book covering all the special, unforgettable, funny and sometimes embarrassing moments of the past five years. Never shown before images (hopefully not career-shattering for some among us) will probably also be in there, as well as the best of Quatsch.

All by all, the Lustrum, and all that goes along with it, will be something to look forward to!



Name:
Daniël
Schotanus

Age:
19

Begin Studies:
2011

A long trip to Groningen, but definitely worth it!

For this edition of 'The Father of', we had to travel a long way. This time we were heading towards Blijham, a small town 40 kilometers east of Groningen. The trip was definitely worth the while, since we got to meet and got to interview the nice family of Janinke Tol.



Name:
Anne Tol

Residence:
Blijham

A Road Trip to Blijham

Robbert and I had a long way to travel for this interview, about two and a half hours by car. Where my last interview for this rubric was with someone from Limburg, I was curious to interview someone from the north of the Netherlands. As Robbert parked the car on the ramp, the father of Janinke, Anne, came outside to welcome us and invited us into the house. As we were asked what we would like to drink, we were also offered a piece of pie, which we both gladly accepted. After all, we had just had a long trip in the car. A few minutes later the mother of Janinke, Tjitske, arrived from work. After a short introduction, we officially started the interview.

Fryslân Roots

First we asked Anne to tell something about himself. Anne said that both he and Tjitske come from the same village in Friesland, called Harkema. They knew each other by face, since they had volleyball training together, but they both went to different elementary schools. After finishing elementary school, Anne went to a havo/vwo school in Buitenpost, which was also situated in Friesland. After that he went to a pedagogic academy in Drachten, where he studied to become a teacher. After he had finished his study program, he started working at an elementary school in Bozum, near Sneek. The school where he worked was very small, since it had only about 30 children in total. At that time, he taught the classes 3, 4, 5, 6 and 8 in one classroom (there was no 7th class). The upside of this combined class was that the (older) children learned to be independent at a very young age, since the younger pupils would ask most of the teacher's attention. One of the children Anne taught at that time was Ids Postma, an old Olympic champion in ice skating.

The Shift to Groningen

At that time, Tjitske had found an education

for nursery in Stadskanaal, which is situated in Groningen, where she could study and work at the same time. Then, Anne was searching for another job in that area. This way they ended up in Blijham, the village they live in now. First they bought a semi-detached house, and in 1995 they moved to the house they live in at this moment. After some time, Anne switched to another elementary school nearby. Here, he got a temporary job as director. When the old director returned, Anne went back to his previous school, where he became director on a more permanent basis. At this moment, he is in his second year as a director of a school with 200 children. Anne still teaches them once a week, since he thinks it is very important to keep in touch with the children. His goal is to know them all by name.

The First Impression of Econometrics

Before Janinke wanted to study econometrics, both Anne and Tjitske had never heard of it before. Of course, when Janinke said she wanted to study it, they started to pay more attention to it. They saw a part on TV which was about the optimization of the 'klapschaats'. This was their first real impression of econometrics. This is still how Anne sees econometrics: optimizing problems.

Who is Janinke?

Although Janinke and her older sister Dianna are completely different, they always got on





very well with each other. They played a lot of games together when they were young. Janinke won most of these games, but she could not handle losing. Especially when she had some kind of strategy in her mind and this would be hindered just before the end by someone else.

When Janinke was younger she did not say that much. She only said something if she thought it was useful to say. Besides that, her older sister talked a lot, so she did not really feel the urge to say much. However, this did not mean that Janinke was shy. Janinke has always known what she wants, so if she did not agree with something, she would say it immediately. This is a character trait that she has from her mother, if they do not like something, they say it. Both Janinke and her mother are also quite stubborn in the choices they make. One of the things she has from her father is that they are both a bit reserved. Janinke has never had problems with making friends or with talking to people. She was just not the type for small-talk about the weather. This changed completely when Janinke went to Tilburg to study; she talks much more now.

In elementary school, Janinke was searching for an extra challenge. Completing the exercises without any errors was not difficult at all, so she and a classmate would compete with each other to see who finished them all the fastest. This way she tried to make school more challenging. Janinke did not really participate in trends during school. She mostly did her own thing. If she liked something she would participate in it, but not to be 'one of the group'. When she went to high school, it soon became clear that Janinke preferred the exact subjects. She was very interested in mathematics and science. Her sister is in that way the exact opposite, for she is a real alpha girl. At first Janinke wanted to study medicine and later she decided to do veterinary science.

She had already enlisted herself for the last one. However, one evening while they were sitting on the couch with the family, Janinke decided that she would miss the mathematical part too much. From that moment they started looking for mathematical related study programs. Together with her uncle, Janinke looked at the available possibilities. Besides Tilburg they also went to Wageningen and Utrecht, and eventually Janinke decided around March/April that econometrics was the best choice. And although it might have been a last minute choice, it certainly was a well-considered one.

Moving Out: a Big Step for the Family

Both Tjitske and Anne were very enthusiastic about Janinke moving out from the beginning. Not because they wanted her to leave, but since it is a whole new experience. You learn a lot about being independent and about yourself. It is completely different from when you come home and the dinner is being served as you walk in. They gave the same support to the sister of Janinke when she went to study in Groningen. Since Janinke had to have a room in Tilburg before the lectures started, she did not have much time to find a room.

The downside of moving out is that you have little time left together as a family. Now they only have the weekends together, but the time that they are together, they spend much better. For example, in the weekends they cook more special dishes so during dinner they have all the time to catch up with each other about the past week.

Heading back Home

After the interview we thank Anne and Tjitske for their time and for letting us take the interview. It is a Friday, and the family Tol is going to have a family dinner. Since we have a long trip ahead of us, it is time for us to leave.

Text by: Tim Gijsbers



Name:
Janinke Tol

Age:
20

Begin Studies:
2010

Tasting my Future



Name:
Myrthe Dekker

Age:
21

Begin Studies:
2010

On Wednesday March 6 the first edition of the Econometric Business Dinner took place at Villa de Vier Jaargetijden. This spacious villa located in the center of Tilburg has a perfect charisma for a pleasant evening with financial companies, namely Duisenberg School of Finance, Kempen & Co, KPMG and SNS REAAL.

All econometricians who subscribed had the opportunity to meet three of these financial companies during the starter, main dish and dessert. After each course the students changed tables to have a new conversation with another company. At each table two representatives of the participating companies were present, accompanied by eight students during every course.

At the start of the evening, the representatives of the companies gave a short introduction about themselves, their businesses and functions within the company. After this introduction everyone went to the preferred table to enjoy the starter. I took place at the table of KPMG. The two representatives of KPMG were a recruitment advisor and an employee. I sat next to the recruitment advisor and asked him several specific things about his daily life and the chances for me as an econometrics student within KPMG. During this conversation the starter was served. I had chosen for a salad with goat cheese, whereas most of my tablemates had chosen for a beef carpaccio. The starter was very tasteful and before we knew it, we already had to change tables.

During the main course, I was sitting with two employees from Kempen & Co. Both employees were recently graduated and now they are working for this bank with great pleasure. They told a lot about their work and experiences in the financial services. Moreover, they recommended the master class of Kempen & Co, which is especially for students who want to learn more about banking. In the meanwhile the main dish was served. I had chosen for a fish dish which includes poached salmon with vegetables. It was also possible to choose a vegetarian or meat dish. Again the food tasted delicious and after the main course was cleared away, we had to go to our last table to enjoy the last course.

For the dessert, I took place at the table of SNS REAAL. I sat next to a quantitative finance trainee with whom I spoke about his work and education. On the other side of the table there was also a recruitment advisor present. She told something more about the traineeships of SNS REAAL and gave everyone a booklet with information. The dessert consisted of vanilla ice and a kind of apple pie, which was delicious! After the dessert, it was also possible to have a cup of coffee or a cup of tea.

After finishing all courses, there was a closing drink to get in touch with the companies. I had not yet spoken with Duisenberg School of Finance, so this was a good way to gather some information about their master programs. Especially the Risk Management Master is interesting for econometricians.

The time flew by, meaning that the atmosphere during the whole evening was very good. It was interesting to see financial companies in this new way and that is why I feel very positive about this evening. I think it will be a good idea to organize a business dinner for econometricians in Tilburg every year. This year the dinner was well organized and I can confirm that I really tasted my future!



The Greedy Settlers of Tilburg

BACHELOR
INFORMATION
DAY

This academic year is already slowly coming to an end and as a freshman, I did not have a clue what to expect of the upcoming years. What are the possibilities after passing the first year? What is the practical use of the contents of the courses we have? To find out these answers, I visited the Bachelor Information Day.

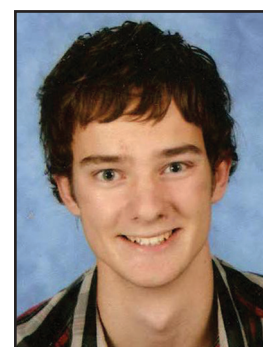
We all know that the first year econometricians have a lot of theoretical courses. And well, to be honest, most students will not directly realize that subjects as Linear Algebra and Mathematical Analysis 2 have a rather practical use. At least I did not. Therefore it was nice to see that two guest speakers had prepared an original game to show the practical use of Linear Optimization, called 'The Settlers of Tilburg'. The goal of the game was easy: maximize your amount of money, which you could interchange for Easter eggs in the end. The students were split up into several groups. Each group received an envelope containing a certain amount of money and 'resources'. There were five different resources and of course there was a way to earn money with those resources. With certain combinations of resources, it was possible to build a village, city or metropolis that all had a certain monetary value.

Then the first part of the game started: negotiations with other groups. After some calculations, every group had their own ideas on how they could maximize their money. Despite the fact that we did not have to compete with each other, we did not want other groups to know our strategy. And so all stubborn groups negotiated heavily. After a while we were interrupted by a presentation, which was about the theory behind the game and we were advised on how we should do our calculations. As we learned from Linear Optimization, we could consider our problem as a maximizing problem under certain constraints. Therefore, with the help of the simplex-algorithm, we could not only calculate how to maximize our profit, but also the shadow prices of our resources. Those shadow prices were useful during the negotiations, but if I am not wrong, none of the groups actually calculated them, since it would be too time-consuming. After some short period to negotiate once more, it was time for the auctions, which was a nice

and interesting subject to discuss about. First there were five bundles of resources sold with five different types of auctions. After the auctions we were explained a bit of auction theory. However this theory was quite basic, since we did not have any prior knowledge about auctions.

When the game ended, every group submitted their amount of cities and money and earned some Easter eggs. While enjoying our Easter eggs, the guest speakers explained that we should have teamed up and maximized our profit as a group, since every envelope was actually worth the same. Since we were a bit greedy, we did not team up and did not do the correct calculations, we lost one kilogram of Easter eggs as a group! So our guest speakers and the people who made this day possible had something to enjoy. After the game, prof.dr.ir. Van Dam told us something about what our next year, consisting of two semesters instead of four units, would be like. Afterwards, two students told something about their experiences of their first two years of econometrics. It was quite interesting to hear about the difficulties they had faced. Also the possibilities of what we can do beside our study program were discussed, like a board year, an exchange or the Honors Program.

After all, it was nice to realize the practical use of one of our (theoretical) courses and to gain some more knowledge about the next year. It surely was worth going!



Name:
Roel Nagy

Age:
19

Begin Studies:
2012



Peruvian Panflutes and a Llama

It has been more than a month already since I returned from my exchange semester in Latin America. After taking up the normal life in the Netherlands, I keep on staying in the exchange atmosphere with a part of my mind. Therefore, I am eager to share with you the adventures that I have experienced in Lima, Peru.



Name:
Joris Blonk

Age:
20

Begin Studies:
2009

On July 5 2012, the dream became reality, because this was the day I headed towards Amsterdam Airport Schiphol to leave the country. Not knowing what I should expect and whether the journey would pass by without any problems, right on the first day I had to face the first one! The flight was overbooked and the flight company selected me to be put through to another flight. As an econometrician with a basic understanding in yield management, I understood the situation. However due to this delay, I was starting to doubt the smoothness of the upcoming journey. It is said that South American countries have less structure in really everything, so the expectations were set if things already went wrong in the Netherlands!

On the Southern Hemisphere seasons are reversed, as well as the university breaks. This means that the university starts relatively early (my first obligatory day was August 6) and

ends earlier for their summer holiday as well (my last exam was on December 6). This gave me one month before I had to be in Lima, in which I took a Spanish course organized by the host university and got in touch with South America as the backpacker's heaven when I traveled to Bolivia. After this month I already got to know some of the other exchange students, however, the introduction days in Lima were my revelation that the exchange semester had started. With small groups of exchange students, we reunited in different student houses to experiment what partying in Lima was like and tried some different clubs in our first weeks to see what is going on in this metropolis. After the first bit of bad luck with my flight, everything went so quickly and I had already been away from home for nearly two months!

Lima & Peru

The city of Lima is said to be home to 9 million inhabitants and with that size considered to have a normal population for a South American capital. One third of the nation's population lives in Lima and it is estimated that this proportion will keep on growing. Lima is the heart of the country, Lima is where things are happening, Lima is where prosperity is flowing, at least to a certain extent. Peru can still be classified as a third world country because of the poverty that pops up outside of the heart of the bigger cities, e.g. most of the countryside is still being worked on barehanded and is being plowed by animals. Therefore, a lot of people from outside Lima are moving here hoping to increase their well-being by working as for example a bus or taxi driver (Lima counts 260,000 taxi drivers!). Besides the poverty, Peru has a large tourist industry and an overall strong economy, which can be shown in some districts of the capital: San Isidro is the city's business center, Lince and Surco containing some big-sized student houses, Miraflores is the modern center and Barranco has some of



the best clubs in town. The city itself can be classified as 'extremely hectic', because when walking in the streets, every 20 seconds a taxi starts driving slowly besides you, asking where you want to go to and the bus drivers shout out loud where they are driving to with the same reasoning, convincing you to take their bus.

Universidad del Pacífico

That is the name of the university I eventually had to go to, which I nearly forgot after the great time I had already

that will be marked. This might seem as a lot of work, but one has to take into account that the level is not equal to what we have in Tilburg and therefore also the team assignments do not consume all of your free time. The positive side of this is that final exams only count for 30% of your final grade, so that a few weeks before the end of the semester I already knew that I could not fail some courses anymore.

For econometricians it is still a difficult question whether an exchange

Four courses, all in Spanish, not too intensively, but there were different courses available requiring less effort. Somehow these were very popular amongst the exchange students...

The question 'Is it not very difficult to have all your classes in Spanish?' has been asked to me a million times. At first it was, but as you communicate nearly the entire day with the locals and with your roommates in Spanish, you get used to it and learn the language very quickly. It seems very

'Lima is the heart of the country, Lima is where things are happening, Lima is where prosperity is flowing, at least to a certain extent'

before the first lecture on August 20. I will never forget that I entered the classroom for the first time and noticed that there were only roughly 30 tables around. Later, after only 15 persons entered the classroom a heated debate started which lasted for quite a while. Actually, for the duration of the entire class there was an intense interaction with the professor and the students. Yes, the education system in Peru is very different. Classes are small, it is expected that every student participates intensively and nearly every week you will have a small test or you will need to hand in something

program would be of added value, because it has a huge drawback that there is no space available in the bachelor's program. However, I do think that it has a lot of added value, because you can fill in your 12 ECTS of free electives abroad, fill up the philosophy courses that you did not yet pass, gain additional knowledge in business that is not taught in our program and discover what you like besides econometrics. For me, it was mainly the last with taking the four courses (8 ECTS each): history & economy of Latin America; introduction to law; psychology and philosophy.

unrealistic that you will speak Spanish with your friends instead of English, but whenever a few French people enter the group, Spanish is assumed (as they do not (want to?) speak English). The first lectures were difficult to understand, but near the end the language barely formed a barrier for communication anymore.

The Exchange Student in Me

Nearly every exchange student in Lima planned their lectures in such a way that they did not have classes on Friday, for example my weekend started at 11:00 on Thursday and I only had to start at



A woman with dark hair, wearing a blue top and a necklace, is looking down at a tablet computer she is holding. The background is a soft, out-of-focus indoor setting.

In het
zenuwcentrum
van de economie
mag jij de rust
bewaren.

Begin je
carrière bij DNB.
Ontdek de
mogelijkheden op
werkenbijdnb.nl

Bij DNB werk je niet alleen in de economie, je maakt 'm ook. Iedere beslissing die we nemen, wordt dan ook kritisch besproken door de hele financiële wereld. Een wereld vol dynamiek die we steeds weer in balans moeten houden. Dat vraagt om aanpakken en volhouden. Want iedere dag krijg je te maken met een ander complex vraagstuk en moet je de actualiteit zien voor te blijven. Daarmee lever je een belangrijke bijdrage aan financiële stabiliteit en vertrouwen.

Kun jij die druk aan en zie je het als een uitdaging om onze economie vooruit te helpen? Denk dan eens aan een carrière bij DNB. Kijk voor meer informatie en de mogelijkheden op werkenbijdnb.nl.

Werken aan vertrouwen. De Nederlandsche Bank



15:30 each Monday. Luckily, most of the work for university could be planned around the lectures, so what to do with this large amount of free time in the weekends? There were two options, to stay in Lima for the weekend and party hard, or to see something of the Peruvian culture outside of Lima. In the end, Lima is a smoggy city which barely showed the sun and just has some small rocky beaches, while one night-bus further beautiful beaches and other magnificent pieces of nature and culture are situated. When we went away, everybody could join our group if they wanted to and for everyone there was something nice to do. In Peru I have hiked in the Andes, slept under just a mosquito net in the jungle, learned about the culture and history of Machu Picchu, sand boarded near a real oasis in the desert and rested at the sandy beaches of Huanchaco!

Whenever I stayed in Lima for the weekend, literally every day there was a party somewhere. During the week, it was more about drinking just a beer with some friends or learning to dance salsa in a salsa bar, which is definitely the most popular dance in Peru. It is really insane, everybody knows how to dance and whenever a salsa tune hits the speakers, everybody actually starts dancing it! Too bad as a clumsy, tall European, I still do not know how to dance the salsa as smoothly as they do, nevertheless it is fun to do. For parties in the weekend, we usually met up in one of the bigger student houses before going to a club. In the 'previos' (pre-drinks) we drank mixes of the Peruvian spirit 'pisco', its cocktail variant 'pisco sour' or the local rum 'Ron Cartavio': "Sin Carti, no hay party!" (Without Carti, there is no party!). At around 23:00, these pre-drinks ended because there is a zero tolerance policy in Lima towards superfluous noise, if you keep the party going on at home until deep in the night, the police will come and end it. Clubbing time! Again, in a city as big as Lima, there are clubs for everybody. My personal



favorites were Help!, a huge retro bar and Antiqua, a beach bar literally two meters away from the beach. The day after, there are plenty of opportunities to fill your day, one can go out for a good coffee with some friends, try surfing down at the 'Malecon' or even go paragliding in Miraflores! All in all, there are plenty of activities to fill up your free time!

Backpacker's Heaven

After my exchange semester I backpacked around South America for one month and a half. This is one of the many big advantages of taking an exchange semester in Peru: an extended Christmas holiday. Traveling for such a time is completely different compared to staying in a big city for a longer time. The rate at which you meet new people increases drastically and everyday gives you new experiences. Although I have been traveling on my own for most of this time, I never felt alone because everybody around me was very kind and willing to show a bit of the place around them. In my trip I visited parts of Chile, Argentina, Uruguay and Paraguay, with the highlights such as the gigantic cities of Santiago and Buenos Aires, the vineyards of Chile's and Argentina's best wines and the natural wonders

of the Atacama Desert and the Iguazú Waterfalls.

Which part of my adventure was the best, I still do not know. What I do know is that my time in Lima will be unforgettable for me, because of the wonderful, nice and friendly people I met over there, the easy lifestyle and the friends I made. My exchange semester was a wonderful experience. Everybody, go and do the same! 'Viva el Perú!'

Golf: Much More than a Game



Name:
Thom Hopmans

Age:
21

Begin Studies:
2009

We were welcomed at the Prof. Verbernelaan, while Thom Hopmans was preparing our dinner. He was able to combine cooking and giving a lecture about golf, since we did not know that much about golf and perhaps you, as a reader, know even less. He gave us a clear description with a lot of passion.

Golf is a popular sport among many people and is currently the third most popular sport in our country. Moreover, many informal business deals are made on the golf course, and therefore many of us econometricians will come into contact with the game of golf eventually. Thom told us that you have two kinds of people who play golf. First of all, there are golf players who are member of a nearby golf course and who pay a monthly or yearly fee to play frequently on that course. The other group consists of people that play golf over the whole country, while paying a fee for each round they play. Unfortunately, both groups are decreasing in number. A reason might be the economic recession that is currently going on, which could have made golf too expensive. One could also argue that there are more people that stop playing golf (for example due to their age) than young people who start playing golf. If you ask Thom or someone who used to play a lot of golf during their life what they are going to do if they are retired, they would probably answer that they would play even more golf.

Thom has been playing golf since he was seven years old. He got his GVB at the age of 11, when it was still obligatory to get it. His whole



family played golf, but he is the only one that still plays golf on a regular basis. Thom mostly trains with a group of six team members or individually, depending on the season. His handicap is 5, which means that if Thom is playing 18 holes and every hole is par 4 then Thom normally has 77 strikes instead of 72. Par is a measure to indicate the difficulty of a hole, based on the amount of strokes a professional needs for a certain hole, for example par 3, 4 or 5. In general, you have one, two or three strikes to go to the green (short grass where the hole is) and then you have two strikes to putt. A funny thing to mention is that you need on average two strikes to cross the first 400 meters and the other two strikes are needed for the remaining 10 meters, which is a huge difference. To come back on the handicap; if you have handicap 0 you are rather good, because you use the normal amount of strikes for 18 holes. The highest handicap is nowadays 54, but in the era of GVB it was in fact 36.

Training is very important, since you will lose the required skill very fast if you do not train for a while. Thom considers this as one of the attractive aspects of the game. You can practice one thing a lot and improve in that area, but then another aspect will get worse, and so the circle continues. It is all part of the challenge to keep improving. The normal training schedule can be divided into two parts: the winter part and the summer part. In the winter, you will most likely train in a group preparing for the upcoming team competition. On the contrary, in the summer golfers often train on an individual basis to prepare for the upcoming individual tournaments. Thom enjoys participating in the NGF (Nederlandse Golf Federatie) team competition a lot. Last year they even promoted to the second highest division. In general, he starts a match at 9:00 and returns home at 23:00, after having enjoyed a lot of drinks. Normally you are walking across the golf course for about



four hours, of which you are just 15/30 minutes actively playing golf, which is in fact relatively short. Thom states that because of this, your mind learns to focus when it is necessary, a property which comes to good use when studying econometrics. Thom explains that golf also has quite a lot to do with statistics, since one often calculates if the shot is going to be as expected. If, with a high probability, the shot goes into the wrong direction and you will need another strike to correct it, then it is sometimes better to play safe instead of taking a lot of risk.

There is a difference between being a professional and an amateur. In principle, everyone could be a professional, but as a consequence you will not be allowed to play at an amateur competition anymore. However, being a professional also has some advantages, for example being allowed to give training sessions and earn money with your passion. Moreover, as a professional you can qualify yourself for the major tournaments. You might think that having a handicap of 0 is exceptionally good when you are a professional. However, nothing is farther from the truth, since if you really want to belong to the top, you should have a negative handicap. A professional Thom admires is Tiger Woods. He brought golf itself, and thereby the commercial value, to a higher level. Nowadays there are more sponsors involved than before Tiger Woods. The current number one of the world, Rory McIlroy, actually started playing golf because he was inspired by Tiger Woods, who is now, ironically, on the second place of the world.

Thom likes watching the major tournaments, which are the four most prestigious annual tournaments in professional golf. The Open Championship, often referred to as British Open, is due to the heavy airstrikes always difficult for players like Tiger Woods, who are accustomed to 'optimal' conditions. That makes this major an interesting one to watch, because of the fact that the somewhat older professionals do often know how to handle those golf courses.

Thom is involved in his association Golfclub Grevelingenhout, located in Bruinisse, by controlling the website. He started doing this because he considered the website old-fashioned and it could use some improvement. Currently they are in the development of a new website, which will be launched next month. Because of the kind and open people in Zeeland (English: Sealand, province of The Netherlands), Thom really likes his association. Moreover, he is in a close team with which he trains every week. However, there is also room for relaxation, since a considerable part of his training sessions take place at the bar.

Upon being asked if something ever went wrong, he answers that his golf companion once hit a passer-by. Normally, you shout 'FORE!!!' (Flying Object Reaching Earth) when a ball is flying towards someone. However, non-golfers often do not know what this means. The passer-by was hit by the ball, but fortunately without any severe complications. So, next time you as a reader know what to do when you hear someone screaming 'FORE!' to

you; dive to the side and make yourself small.

What Thom likes most about playing golf is the enormous feeling of accomplishment you get if you hit such a small ball to about 250 meter further exactly where you wanted it to land. Despite the fact that Thom is not a professional, we were curious whether he has any fans. Unfortunately, he has no groupies or girls screaming at him when they see him. Instead, he gets supports from his family and housemates.

Thom regrets the fact that golf is not yet a popular sport amongst young people. He states that one should not be repelled from playing golf because of the expensive image. The costs for playing golf are not that high compared with other sports; you invest in good clubs and they last forever. Also, most associations have reduced membership costs for young people. Therefore, despite everyone's expectations, golf is nearly as expensive as tennis or hockey. Over the years Thom invested in a really cool set of Nike clubs, of which he is really proud, since Tiger Woods also plays for Nike.

Maybe you as a reader have become interested in playing golf after having read this article. Therefore we would like to mention that there is an annual golf competition for students at which newbies can also participate. Apart from playing golf, partying is also of importance during this weekend! More information can be found at student-golf.nl.

Text by: Robbert van Gaal

International Students on Ice

After some attempts to get international students more involved within Asset | Econometrics, we as the Nekst committee decided to give it another try. We came up with the plan of trying to find two international students who were willing to spend some time with us during a typical Dutch activity: ice skating.



Name:
Michael Zheng

Age:
20

Begin Studies:
2011

On the way to the ice skating hall, I was wondering whether the stereotype thoughts I had about Chinese students would turn out to be true. Is there anything else they do besides studying? Do they spend hours in the kitchen every night? More of these questions were floating inside my head when I arrived.

After spending almost two hours on the ice with Michael and Joe, Michiel and I decided to go into the café for a quick drink and some time to talk. There, Michael and I talked about our views on choosing a study program here in the Netherlands. The biggest difference between our opinions had to do with the motivations of our choices. He could not grasp why economics has such a large number of students compared to econometrics. "Why would you choose studying economics over econometrics, when econometrics offers much better job opportunities!" After hearing him say that, I tried to explain that Dutch students mainly base their choices on what

they want and not on what it will get them. That was hard for him to believe, coming from a country where high school students get up at 6:00 every day to start with homework and do not stop studying until it is late at night.

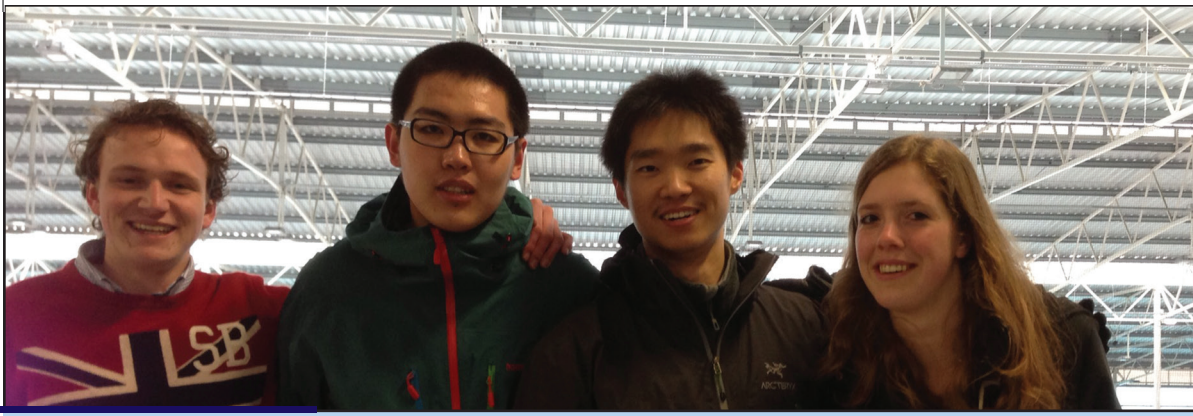
My stereotype of Chinese students spending a lot of time in the kitchen turned out to be not entirely true. Michael spends on average one hour in the kitchen and apparently Joe cannot cook at all. He gets most of his dinners in the mensa on campus. He told us he does not need to be able to cook, since he has a girlfriend who is willing to cook for him. Michael quickly explained us that it is no tradition at all in China that women have to cook; it is just an excuse of Joe for not having to make his own dinner.

Another thing I considered to be very interesting to hear about was the one child policy. I always thought that people in China could get only one child no matter what. So when I asked what would happen if you give birth to twins, Michael and Joe had to laugh. They assured me that you did not have to choose one child and 'throw the other one away'. It is even the case that when both parents are only children, they are allowed to have two children. Moreover, when a Chinese inhabitant marries a foreigner, they are allowed to have as many children as they want. Since China is also dealing with an aging population, the government is thinking about changing the rules to some extent.

My thoughts about Chinese students spending a lot of time studying turned out to be true, at least for Joe. Before coming to the ice skating hall, he was studying in the library and when we said our goodbyes, he told us he was heading for the library again (Even though this activity took place in the Carnival holiday).

Text by: Vera van der Lelij





Thanks to Vera and Michiel, Michael and I were invited to go ice skating. For me, this was the first time in my life that I went ice skating. All my experience of ice skating came from watching the Winter Olympic Games. It is amazing that the human body is able to move so fast by itself!

I never thought I would have a chance to actually go ice skating, although in the city I come from, ice skating rinks are often built in shopping malls. Therefore, we were really excited and could not wait to experience such a traditional Dutch sport ourselves. Being a beginner, I was quite apprehensive initially, but it turned out to be a wonderful experience. Actually standing on the ice is a totally different story than watching it on the

treat to watch them skate. Although skating is not as drastic as other sports like running, every single muscle of mine was exhausted. I did not expect myself to master the sport in one day. Still, I think it is an excellent sport and entertainment in winter, which I would come to enjoy more when I become a better skater.

Regardless of your skill level, it is a good idea to wear proper winter gear, since you will be

‘I was quite apprehensive initially, but it turned out to be a wonderful experience’

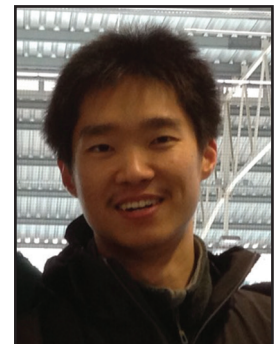
television. First of all, the ice is bumpier than I imagined, which makes it really hard to slide smoothly on the ice. But the good news is that, for a novice like me, an ice skating walker is very helpful to start with, as long as you do not feel embarrassed.

Michiel was the best skater among us, due to the fact that he brought his own skates. Vera and Michael had not skated for some time, but they habituated very soon. I set my mind to being able to skate without a walker, so that I could not be distinguished from them at first glance and I was prepared to fall as many times as it takes. What I soon learned and found pretty interesting, is that it is not hard to prevent falling as long as I clear my mind and do not think about anything. I always fell when I was thinking purposely not to, or talking to the others. After several hours of practice, finally, I could skate very slowly, without hurting myself, or someone else. The best sight I have come across was of little kids of 3 - 5 years old skating effortlessly, a visual

exposed to cold for quite some time skating on the ice rink. You really do not need to feel awkward that you do not know how to skate when doing it for the first time. You see a lot of people falling down on the rink in an attempt to skate and you will fall down as well. That adds to the fun part of the experience.

Be it a group of friends you go along with, your significant other or your family, ice skating also proved to be a social experience. You will get a feeling that you have spent quality time with your group. And, hell yeah, it is a great source of exercise. You will sweat a lot even though you skate in the freezing temperatures for hours.

So, hit the nearest ice skating rink and there is a good chance you will like the experience!



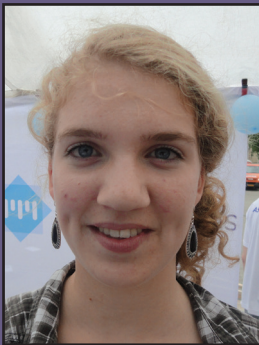
Name:
Joe Li

Age:
25

Begin Studies:
2011

Defeated with Volleybal, but still Smiling at the Pre-Carnaval Party

On February 7, the annual Carnaval Volleyball Tournament took place, organized by Pendragon. This year I participated for the first time with a team consisting of seven girls. Afterwards there was the infamous Pre-Carnaval Party at 'Café De Boekanier' organized by Asset, which we would undoubtedly attend.



Name:
Juul Kooijmans

Age:
19

Begin Studies:
2011

We decided that we would have dinner with our entire team in order to get our spirits up. This, unfortunately, did not turn out the way we hoped for, since our seventh member, which was in fact the only person who was good at playing volleyball, unexpectedly dropped out of the tournament. This left us without a spare player and of the six girls remaining there was only one who actually enjoyed playing volleyball. All of this did not stop us from going, because we cared more about the entire atmosphere of the tournament, than playing volleyball on itself.

Against all expectations we won our first match. It was a close call, since the final score was 22-21 for our team, but that did not matter since we still won. While waiting on the next game to play, there was enough time to cheer for the other teams of Asset | Econometrics. Luckily they were better than we were, so we really had reasons to cheer. Our second match was a total disaster. I believe we lost with a score of 41-17 or something like that, which was in fact quite depressing. While waiting for our third game, we went to the bar area of the sports building, because there was a DJ playing music. We spent our free time dancing and drinking a few beers with the other teams before going back to the fields for our third match. This match was really humiliating! We lost with a score of 30-3, and we only managed to get three points because their service hit the net three times. On a certain moment, one

of the girls of our opponents served and the other five players would dance around the field doing the 'polonaise'. At the end of the game the only achievement of our team was hitting the same random girl straight on the head twice.

After two disastrous games, nobody felt like playing anymore. So we asked the Asset | Econometrics team consisting of only boys to step in for us. Another team consisting of econometricians had asked them the same, so the boys' team ended up playing for three teams. We finished our last beers, took one last look at all the amazing looking teams (for example: teen moms, beers, kiss, glam rock, super heroes and ballerinas) and we left for the party.

We arrived there around 22:30 and there were not a lot of people yet, but still we had to wait a long time before we could get rid of our jackets. However, it did not take long before it was really crowded in the café and the party really started. The atmosphere was great, although I do not enjoy the kind of music that is played during carnaval parties; I still had a great time. Later on the evening we heard that the boys' team had managed to win our last game for us which we found pretty funny. When we got home at 6:30, I concluded that it was a great evening and next year I will definitely participate again!



Freshmen's Street Golf

FRESHMEN ACTIVITY

On February 19, the Freshmen committee organized another exciting trip for us first and second year students. This time, we were told we would go street golfing. Personally, I had never heard of this phenomenon and wondered what it would be like. We gathered at café Miller Time, where our adventure began.

I thought it would be rather risky to endanger the streets of Tilburg with real golf balls. Luckily, we were given harmless, soft, squishy ones. We took off in groups of six people, each consisting of three duos. We found our first hole located at the Piusplein, where we were supposed to hit a nearby garbage collector in, of course, as least strokes as possible. Our group mates Suzanne and Annick, who needed more than eight strokes, had quite a difficult job beating us, since Tom and I needed only three strokes to get the ball to the trash can. Sadly, soon the roles would be reversed.

As we walked towards the Stadhuisplein for the second hole, we met a somewhat peculiar man, who could not resist showing off his amazing golf skills and knowledge. After having studied one of our golf clubs, which had a giant number 2 on it, he came to the bright conclusion that its slang name would be 'een tweetje' (English: a small two). Then he mumbled something about beer and his car, greeted us and walked off, leaving us bewildered.

As mentioned before, during the next few holes, the skills of my golf buddy and me seemed to vanish. Maybe we got overconfident from our previous success. Suzanne, Annick, Thijs and Marleen, though, appeared only to get better and better. Between me and my group mate, discussions popped up constantly about what would be the best golf technique. Was it better to hit the ball as hard as possible, hoping for it to end up in a good spot, or to take it easy and move the ball carefully, bit by bit? We ended up randomly hitting the ball, which was not a great success.

The sixth hole was the most difficult one. Moreover, it was practically impossible to find this hole in the first place. We initially started playing in the middle of the streets, hitting cars and windows, until we realized we just reached the spot where we were supposed to

start off. As said, the hole itself was a disaster. None of us managed to make the squishy ball hit the little pole within eight strokes. Despite our lack of skills, we all had a great time bungling through the streets of Tilburg.

When we had finished the golf course, it was time for probably the most exciting part of the day: dinner at restaurant Troje. The major part of the golf participants joined in for this cozy meal. Although it took a while, eventually everyone was in possession of the pizza they had ordered. Corné gave a little speech and we all enjoyed our pizza.

All in all, I can conclude it was a successful day. The original idea of our Freshmen committee worked out pretty well, the weather was not as bad as forecasted and most importantly: we had a nice time getting to know our fellow freshmen. A big 'thank you' to the Freshmen committee!



Name:
Denise Ligthart

Age:
18

Begin Studies:
2012



More than a Hobby: Rowing, a Way of Life!

As Frank and I cycled into the Hesperenstraat, where our fellow econometrician Nanne van 't Klooster lives, we soon found out where we had to ring the bell since a large flag was waving in front of the house of these rowers. The person we were going to interview is one of these rowers.



Name:
Nanne van 't
Klooster

Age:
19

Begin Studies:
2012

Address:
Hesperenstraat
38

Room Surface:
10 m²

Monthly Rent:
€240

Light Men's Eight

Nanne is one of the rowers in the light men's eight at Vidar, and for those who think this is just a hobby which they spend some hours on in between the hanging at the bar, you are quite wrong. These guys are top athletes. When we were just a few minutes inside, we came to talk about the rowing. This is not surprising if you realize that almost all of Nanne's life is about this student's sport. From the beginning of their day, sometimes at 5:30 when they get up for the morning workout, until they are finished exercising because it gets dark at their training park, the light men's eight thinks about this one thing. In between Nanne has some hours to spend to study, but he admits he is mainly living for the regattas. "I think I spend about 26 hours a week rowing, and approximately 15 hours studying," he says. This, however, does not mean at all that his study results are bad: so far he has passed all of his courses in one try. Upon being asked how he manages to combine his heavy training schedule with all his courses, he says he can spend many hours during the exam period on studying, and up till now this has always been sufficient to pass his courses.

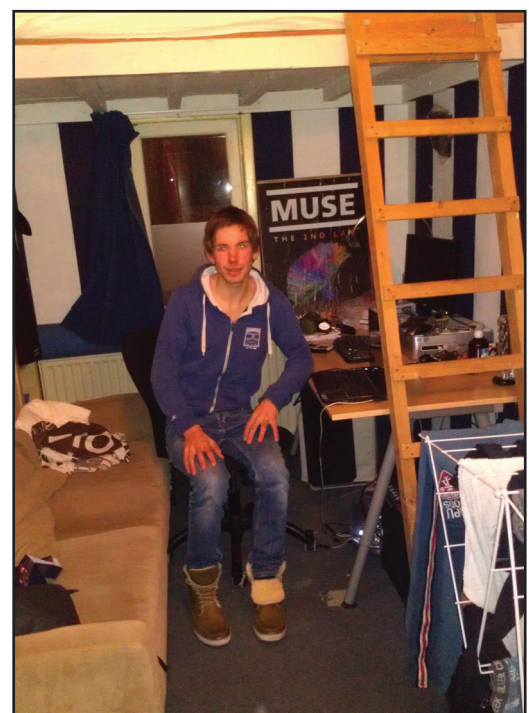
Back in the TOP-week

When Nanne came to Tilburg at the beginning of this academic year, he had not even thought about rowing once. He was already playing hockey and was part of a band where he played the bass guitar. However, when he came to Vidar in the TOP-week and felt the oars the first time, he realized that he was on the right place. Nanne started living in the Hesperenstraat in his 10 m² sized room and started with the selection program for the lightweight men's boat. After a heavy period in which many co-students dropped out, he and seven fellow guys remained to become part of the light men's eight lightweight. From that moment on they have seven or eight training sessions a week, and the only time Nanne can

go back to his old friends in Tiel, where he lived until last year, is when he is free of training some weekend, which happens about once every six weeks. This has forced him to make some hard decisions during the last period. For example, he had no choice but to leave the band in which he played already for four years and moreover he cannot see his girlfriend that often because of this heavy training schedule. Although all these things have to be missed, Nanne is convinced it is all worth it: "I am having a great time with the team and we have lots of fun with each other."

The Housemates

All of Nanne's housemates are currently in a rowing team or they have been rowing on a high level. Besides, most of them are still connected to the light men's eight since they are for example coach or planner of the team. For this reason all of the guys share the





same passion as Nanne for rowing, and they can quite often advise him about matters. Also, they share the same carbohydrate rich diet and strict eating times and in the house no beer is drunk until the end of the season. About this Nanne says it is sometimes hard to skip the snacks during lecture breaks or the beers after a heavy training, but eating is much more pleasant when you are hungry, and the party is much more fun after a full season of alcohol-free-living. The members of the light men's eight eat almost every day the same food: in the morning 400 grams yoghurt with some muesli, in the afternoon eight slices of bread and every evening two plates of pasta. The rowers have some very strict requirements to their weight as lightweight team: none of them may have a weight of more than 72,5 kilograms, and the average weight of the guys must be 70 kilograms. Nanne's target weight is 70,5 kilograms. One of the hard things about this weight policy is to determine where the optimum lies between muscle mass and a low weight, since both advance better rowing achievements. Also, it is of utter importance that he does not get ill, especially during the match season, so they eat lots of vegetables and when it is cold they do not get outside without a cap.

Besides all this tough training and disciplined lifestyle there is, luckily, also a lot of time left to spend with roommates, and since one of Nanne's roommates are first year econometricians as well, they can learn a lot from each other. "We support each other very much during the exam period since we study together and by discussing about the subjects we already learn a lot." When we ask whether Nanne has the same discipline for the cleaning shift in his house as he has for rowing, Nanne must admit he sometimes drops a stitch when it comes to this. But since they live up to a strict penalty policy, he is determined to spend a little more time on this thing too.

So much practicing?

Of course we became quite curious about why it actually takes so much time practicing an exercise like rowing, that looks, at least for us newbies, so simple. Nanne laughs and says: "Besides the strength training that is needed to take the maximum out of our muscle strength, rowing also is about a very refined movement that does not only require much practicing on your own, but it is also about the momentum." This means that all the guys in the boat need to row exactly at the same moment. This way, every

stroke is used as efficiently as possible. Within only a few weeks the competition season will start, and the team is convinced to win a 'blik', which is how the first prize in a match is called. Especially the first match of the season, the Varsity (a bastardization of the word 'university'), is a very great honor to win, since at this match all the student teams of the competition participate.

When we have posed all the questions we had and even heard lots more about Nanne and his rowing experiences, Frank and I left the room, for which Nanne pays 240 euro. We thank him for his frank view into his interesting life and we hope that the Varsity will be won this year by the light men's eight from Tilburg, so good luck!

Text by: Michiel van Erp

Das war die Anton aus Tirol



Name:
Robbert van
Oosten

Age:
22

Begin Studies:
2008

For many years, the Asset | Econometrics Après Ski Drink has proven to be the party among parties. So without the slightest doubt I pressed the, so called, present button when the Facebook invitation reached my computer screen. This, just like previous years, without any regret. At least, until the next morning.

Celebration of this special Wednesday evening already started a few hours before the actual party, at dinner. Accompanied by the punishment man (for more information see Nekst 1, 2010) and my housemates, I had the pleasure to welcome not only the committee organizing this one and only Après Ski Drink in our house, but also the board of the greatest association ever known to econometricians in Tilburg honored us with their visit. To get into the right mood for the evening, my housemate Remco created a nice German playlist. The Après Ski beer mugs of last year were filled with the first warm-up beers, and the menu? Berliner Schnitzel mit Pommes, na klar, super toll!

With our throats buttered and our bellies filled we were thrilled to start the party, so off we went to the Boekanier. This big pub which name is in the language of students often shortened to Boeka, is the best pub of Tilburg when you are up for a little tanking and was therefore selected as the party location for the night. When we saw Erwin in a Heidi dress, our minds got split up between our instincts to run away as fast as our feet would carry us and the urge to get in. However, our love for the sweet view on our curly friend prevailed and while entering, we accepted the poison that would run through our veins soon, in the form of gold liquid. Now there was only one final task to perform before we would get a smile on our face that would not disappear for the rest of the night: get the newest Après Ski beer mug and get it filled. The committee had decorated the beer mugs with a Tiroller hat and the wise words: Ein Prosit! And so we did what anyone would do in the good company of a pub full of fellow econometricians: ein Prosit, zwei Prosit, drei Prosit...

But Erwin was not the only person with an Après Ski outfit, everywhere people walked around wearing ski glasses, lederhosen, caps

and even moustaches. Luckily I had brought my everlasting après ski mood, else I would have felt underdressed. Next to that, I noticed a lot of fresh and young econometricians. A sight that satisfies an old goat like myself with the knowledge that the association has fresh blood to maintain its good spirit and work in future years.

As the time of 0:00 approached, the birthday of Özgür Abaci came to an end. But this made room for another birthday celebration. The one and only German playlist maker and my housemate Remco Oudshorn would celebrate his 21st year on this earth at 0:00 precisely. Although some party animals were not yet aware of this special moment in human history, soon they would be relieved from their ignorance by the sound of his birthday song 'long shall he live'. If Remco had plans to perform one final act for which his parents would be responsible, then he had spoiled his chance.

From 0:00 on my memories lost detail, logic and suitability for this article. Therefore this looks like a natural ending of this story. However, let me conclude with the notion that it became much later than originally planned, as always on those too 'gezellige' econometrics parties, and of course by thanking the D&A committee with the sincere words: it has been a worthy pleasure.



So you think you know your teachers?

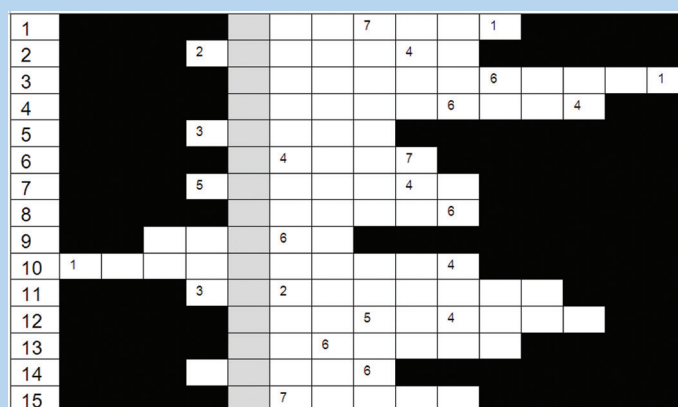
PUZZLE

After some mathematical brainteasers about coconuts and banknotes, it is now time for something different. This new puzzle, which is provided to you by Arthur van Soest, tests your knowledge about your teachers and other important faculty members. Hence, visiting lectures might have an extra bonus, for maybe you will win a pie or a crate of beer!

If your solutions are correct, the grey column gives an econometric term. To help you a bit, some squares have numbers. Different squares with numbers have the same number if and only if they have the same letter. Please send your solution to Nekst@Asset-Econometrics.nl before June 7, 2013. A crate of beer or a delicious pie, whichever the winner prefers, will be waiting for whoever has the best (partial) solution! Good luck!

1. Faculty member of a famous Dutch free style swimmer?
2. Faculty member named after a big brown French animal?
3. If you take his name literally he must have moved recently.
4. He has visionary ideas on economic policy although his name sounds as if something is troubling his vision.
5. In French he is not so colorful.
6. Dutch chocolate producer who lost his final letter.
7. If you drop the same letter from this name, the name of a mathematician remains.
8. His length is indeed what it sounds like.
9. The incomplete start of a James Bond film?
10. Relative of a fast former world champion?
11. Likes cycling to the top of the Dutch mountains (or even higher).

12. Dutchman between prince and count.
13. Not more than once in a different language.
14. His length is not what it sounds like (in the same language).
15. Small town guy.



Caspar Croonen was the winner of the previous puzzle. The optimal way of valuing the six bank notes is as follows: 1, 5, 25, 125, 625 and 3125. As a reward, he can come and pick up a crate of beer or a pie at room E1.10.

Are you app-to-date?

NEKST APP

The app market continues to grow explosively, also among students. Therefore Asset | Econometrics decided to develop an app for Nekst. By means of this app, you can read Nekst on your tablet with only the swipe of a finger. The magazine is adjusted to the size of the tablet and has an interactive aspect, since some pages are linked to the corresponding website or to social media. The app can be downloaded in the App Store or Play Store, by searching for 'Asset Econometrics'. Note that each edition of Nekst has a separate app. So if you want to stay up-to-date, download this app and discover all applications it has to offer!



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... on obtaining their Master's degree.

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 well-filled page with some striking and funny quotes! Please mail all remarkable quotes you have heard to **Nekst@Asset-Econometrics.nl!**

English Quotes

Dolf Talman: "Uhm there is a y missing... I do not know why!!"

Dutch Quotes

Esmee Lucassen tijdens een AMW vergadering: "Zijn de minuten approved?"

Myrthe Dekker na de vergadering van de IBT: "Het was me weer een zwaar genoeg!"

Daniëlle van Dalen: "Ik ga wel mee, maar dan moet ik wel even een adtje thee doen!"

Er wordt een gesprek gevoerd over pandapunten. Willem Jongen: "Kun je die ook ergens inwisselen?"

Fang Qi Wu heeft het over een insect: "Het heeft 12 poten." Janinke Tol: "Is het een spin?"

Janneke van Schijndel vertelt tijdens het werken aan een opdracht voor Quantitative Finance over iets wat haar boos had gemaakt. Janinke Tol: "Ik zou echt in alle staten geweest zijn, in all states of the world!"

Janinke Tol tijdens de vergadering van de OR Activity: "Dat eleventh... ik vroeg me af of dat 11 tot de macht th is?"

Cas Luijten aan Daniëlle van Dalen: "Op welke plaats zijn wij geëindigd met de HvB?" Daniëlle: "Ehm, ik was er niet bij, maar volgens mij in Tilburg..."

Whitney Pattinaja: "Ik wil graag slapen, want het is al bijna 5 uur 's nachts." Emile van Elen: "Het is al half 6, hoor!"

Suzanne Vissers vraagt welke wijn iemand wil: "Wil je witte zoete of droge zoete?"

Daniëlle van Dalen: "Cas, hoe vond je de quiche?" Cas Luijten: "Ja lekker, hij zit al achter mijn kies."

Pieter-Jan van Kessel: "Als scholen aan- en uitgaan..."

Laura Verloop terwijl ze een site voor bijles geven bekijkt: "Ik lees hier dat je overgewicht nodig hebt. Sinds wanneer heb je overgewicht nodig om bijles te geven?!" Daniëlle van Dalen: "Bedoel je overwicht?" Laura: "Oh ja, inderdaad."

Een gesprek over Fang Qi Wu's carnavalsoutfit als panda. Suzanne Vissers: "Dus je hebt ook zo'n lange staart?" Fang Qi: "Panda's hebben geen staart."

Cas Luijten: "Eindigt het nummer op 9111? Senna Jansing: "Nee, op honderdelf."

Daniëlle van Dalen: "Babykin, wie noemt zijn kind nou zo?" Marlies Veenes: "Dat is zijn achternaam..."

Robbert van Oosten komt langs op de kamer en zegt dat hij een Asset | Econometrics muts komt halen. Cas Luijten wijst naar Daniëlle van Dalen en zegt: "Daar zit ze!"

Daniëlle van Dalen: "Foxy, dat is toch dat blaadje van PSV?"

Willem Jongen terwijl hij naar rechts in een spiegel kijkt: "Wow, een spiegel! Ik denk al, wie staat daar toch al de hele tijd?"

Mitchell Dingemans: "Ik, als vrouwelijk lid, kan ook geen argument bedenken."

Janinke Tol tegen Marleen Veldhuijzen: "Marleen, je telefoon belt..."

Corné Ruwaard tegen Cas Luijten: "Heb je het nu alweer over Diessen? Het komt me de spuitgaten uit."

Janinke Tol tijdens een vergadering met de Lustrum en Almanac commissie: "Hoe vertaal je Public Relations naar het Nederlands?" Cas Luijten: "External Affairs". Iedereen: "Oh ja."

Tijdens de OAL activiteit vraagt de mevrouw van de kookworkshop wat voor soort groep het is. Daniëlle legt uit dat het oud-actief leden van een studievereniging zijn die elkaar dan weer zien. Mevrouw: "Oh, een ruïne dus?"

Lauran van Hoof: "Niemand ziet er goed uit van onderen."

Suzanne Vissers: "Zullen we de vensterbank even aanschuiven?"

Ernst Roos: "Ik was me aan het verdiepen in de Value-at-Risk, maar vond het zo saai dat ik maar filosofie ging lezen."

Upcoming Events

Active Members' Weekend

Friday April 5 – Sunday April 7

During this weekend, our annual Active Members' Weekend will take place. Although the location and activity will be kept secret until the last moment, we can assure you that the weekend will be a lot of fun!

Economic Business weeks Tilburg (EBT)

Monday April 8 – Thursday April 18

The EBT is a project of Faculty Association Asset and this year the fifteenth edition will take place. During the period, ranging from April 8 until April 18, we will be offering you the possibility to participate in the largest career event of Tilburg. If you are orientating yourself on the labor market or if you are looking for a traineeship or starter's position, the EBT can help you to accomplish your goals. More information about the activities stated above can be found on their website www.ebtilburg.nl.

Activity & Lecture Drink

Tuesday April 23

On Tuesday April 23, the Drinks & Activities committee will organize their second activity of this academic year. The committee is busy brainstorming about a nice activity, which will be announced soon. After the activity, we will have a lecture drink at our favorite pub Café van Horen Zeggen.

Batavierenrace

Saturday April 27 – Sunday April 28

In the weekend of April 27 and April 28, the 41st edition of the Batavierenrace will take place. 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). Every year about 8.500 students participate in this event. Asset | Econometrics will participate with one team consisting of 25 persons. During this weekend, the participants will have the possibility to sleep in a sport's center and there will be a nice party on Saturday.

Brothers & Sisters Evening

Friday May 3

The brothers and sisters of our active members will be invited for a nice activity. During this informal activity, we will show the brothers and sisters what it is like to be a student and they will gain some information about Asset | Econometrics. Furthermore, they have the opportunity to get to know the other active members and their brothers and sisters.

Freshmen Activity

Thursday May 16

The third and last freshmen activity of this academic year will take place on Thursday May 16. During this unknown activity you can get to know some new fellow freshmen once again, so make sure to be there!

Announcement board Asset

Monday June 3

On Monday June 3, the board of Asset for the academic year 2013-2014 will be announced. During this evening, you will also discover who will be the chairman of Asset | Econometrics.

Asset Champion's League

Thursday June 13

This sportive end of the academic year will be organized by the Events committee of Asset. We hope to participate with a lot of motivated teams, to beat the teams of the other associations. Enthusiastic supporters are welcome as well!

Football Tournament & Announcement Drink

Wednesday June 19

On this day our annual football tournament will take place, where our members can show their excellent talents for this sport. The tournament is organized by the Drinks & Activities and is the perfect way to get rid of the stress of your exam period. Afterwards, the candidate board for the academic year 2013-2014 will be announced.

Secret Activity

Wednesday June 26

The secret activity will be organized by the board. The activity will remain secret until the day itself.

Villa Pardoes

Daar vergeet
je álles!

Villa Pardoes laat kinderen met een ernstige, mogelijk levensbedreigende ziekte, genieten van een heerlijk onbezorgde gratis week vakantie in het Noord-Brabantse Kaatsheuvel. Samen met hun familie. Met alles erop en eraan. Van activiteiten in en rond de Villa tot het bezoeken van attractieparken. Om helemaal uit de ziekenhuis- en in vakantiesfeer te komen, is er geen verplegend of medisch personeel aanwezig in Villa Pardoes. Weer eens écht genieten van het leven! Daar gaat het om.

Word donateur - 55.90.90.900
of kijk voor meer info op www.villapardoes.nl





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