
Summaries from visited Businesses

MATHEMATICAL FINANCE IN BRUSSELS

SEPTEMBER 2015

DEPARTMENT OF MATHEMATICS

AARHUS UNIVERSITET

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1 Summaries

1.1 Summary: Bruegel

We visited Bruegel on Monday the 21st of September

Regarding Bruegel Bruegel, “BRUssels European and Global Economics Laboratory”, is a think tank, located in Brussels and is founded by private and by state. We were welcomed with a presentation about Bruegel by Secretary General Matt Dann. He told us about their general work and how they stay as one of the leading think tanks in the world.

Bruegel are founded by European governments and private companies, 18 European governments and 11 companies. They are a total of more than 30 employees in Bruxelles where 11 of them are Board members, 6 chosen by firm members and 5 are appointed.

The fact that they are located in Brussels, do that they deal with a lot of political problems. They are trying to be as unpolitical as possible, which is not easy as their recommendations depends on others interests. Bruegel supports EU and because of different policies and wishes from each country they are dealing with some very complex problems.

Less formal conversation After the presentation Grégory Claeys who works as a Research Fellow at Bruegel joined us for a small talk. He talked to us about the daily work in a think tank and what sort of methods he uses. The main work is getting knowledge about different macroeconomic problems and then write articles, make different analysis, or online blog posts.

He told us a bit about the models he uses, some micro-economical and macro economical models, but it is mainly the macro economical intuition that is favored in the daily work. If people feel like seeing what they do, they have 60-80 events which can be streamed on their webpage. They also have blog posts, where a problem and an answer from a Bruegel employe is given and people can join the discussion.

1.2 Referat: Nordea Private Banking Luxembourg

Vedr. Nordea

Peter Andersen, fra Management Teamet i Luxembourg, startede med at fortælle om Nordeas opbygning og de forgangne års resultater. Nordea har, i den seneste årrække, været og er stadig blandt de bedst tjenende banker i hele Europa. Han forklarede Nordeas vision som bl.a. omfatter, at det skal være nemt for kunderne, at de skal have relevante og kompetente medarbejdere, samt at de skal være hvor som helst på ethvert tidspunkt. Derudover nævnte han bankens største udfordringer, som bl.a. var digitalisering samt implementering af BASEL III, som ved fuld indfasning, efter Peters vurdering, giver et kapitalkrav for Nordea på ca. 20%. Efterfølgende fortalte han om graduate programmet, hvor Nordea årligt optager i omegnen af 40 graduates, der skal igennem et screenings program som strækker sig over et par måneder. Bliver man optaget følger et 2 årigt forløb, hvor der er mulighed for at komme rundt i de forskellige dele af banken. De fleste fra graduate programmet bliver ansat efter endt forløb.

Målsætning Direktøren for afdelingen i Luxembourg, Thorben Sander, kom forbi og fortalte om banken, samt om sin egen baggrund. Thorben fortalte bl.a. om afdelingens øgede fokus på målsætning om at have de mest tilfredse kunder. Dette er meget vigtigt for banken sammen med målsætningen om tilfredse medarbejdere og aktionærer.

Konkretisering Til sidst fortalte Jesper Dissing, der er investeringsekspert i Luxembourg, om hvad de helt konkret lavede indenfor International Private Banking. Her kom han med et eksempel på en kunde der boede i England, havde børn der studerede i København og Madrid, et sommerhus i Sydfrankrig samt en skilejlighed i Østrig. Dette eksempel illustrerede kompleksiteten af de opgaver som banken stilles over for. Der kræves viden om lovgivning i flere lande. Herefter rådgives kunden om investering samt placering af aktiver. På denne måde bliver kunderne dækket bedst muligt ind i forhold til beskatning, samt i tilfælde hvor arv skal fordeles.

1.3 Referat: Europa Kommissionen

Kommisionen

Europa Kommissionen har hovedkvarter i ”The Berlaymont” bygningen i det centrale Brussel i Belgien. Kommisærer I Europa Kommissionen sidder der 28 EU kommisærer, en for hvert medlemsland. De 28 kommisærer har hver et politisk ansvarsomraade, som de bestridder efter europas interesser i perioder af fem aar. Danmark har i perioden 2009 til 2014 haft Konservative Connie Hedegaard, som klimakommisær. Nu er det den tidligere formand for Radikale venstre, Magrethe Vestager, som er Europas konkurrence kommisær.

Organisation EU er organisatorisk opbygget af flere dele. Oeverst sidder det Europæiske Raad, som definerer EU’s generelle politiske linjer og prioriteter. EU raadet bestaar af EU-landenes stats- eller regeringschefer. Formanden er Donald Tusk Europa Parlamentet har ansvaret for lovgivning, tilsyn og budget i EU. Parla- mentet bestaar af 751 medlemmer. Formanden er Martin Schultz Europa Kommissionen har til ansvar at fremme EU’s overordnede interesser ved at stille forslag om og haandhaeve lovgivning og gennemfoere politikker og EU’s budget. Kommissionen bestaar af 28 kommisærer, en for hvert EU land. Formanden er Jean-Claude Juncker Derudover bestaar EU af flere institutioner som ministerraadet, Den Europæ- siske Centralbank (ECB), Oekonomi og Socialudvalget, Den Europæiske In- vesteringsbank, Den Europæiske Domstol, Regionsraadet og flere mindre agen- turer.

Jean-Claude Juncker Formanden for kommissionen har oensket en mere politisk kommission. Han har fremlagt nogle konkrete politiske maalsætninger for EU

1. Oeget vækst og beskaeftigelse
2. En europæiske energi union
3. Frihandelsaftale med USA
4. Reform af den monetaere union med et stoerre socialt fokus
5. Et afbalanceret svar paa ”Det britiske spoergsmaal”

”Det britiske spoergsmaal” bestaar i, at Davide Cameron har lovet briterne en folkeafsteming vedroerende EU-medlemskabet. Dette er et nyt faenomen for EU, at nationalstater vil ud af EU. Dette spoergsmaal har foert til en reaktion fra Juncker til at reorganisere EU og slanke systemet, for at komme EU kritik- erne i moede.

Traktater EU har gennem tiden indgaaet flere grundlaeggende traktater, som har formet EU til det, som det er i dag.

1. Kul og staal traktaten 1952 (6 medlemslande)
2. Rom og euro traktaten 1958
3. Faelles akten 1987
4. Maastricht traktaten 1993
5. Amsterdam traktaten 1999
6. Nice traktaten 2003
7. Lissabon traktaten 2009

Stab i kommissionen Der er ca. 30.000-40.000 funktionærer i EU kommissionen. Dette tal forventes at falde efter de planlagte nedskæringer. Naar man starter i EU kommissionen mister man alt sin tidligere anciennitet (bonusser, fordele m.m.). Dette bevirker, at der er meget faa danskere, som arbejder som funktionærer i EU kommissionen, fordi det oekonomisk ikke kan betale sig. En anden aarsag er ogsaa at danskerne ikke kan bestaa optagelsesproeverne.

Opgaver i kommissionen Europa Kommissionen har fire grundlaeggende opgaver.

1. Foreslaa nye love til EU raadet og det Europaeiske parlament
2. Forvalte og gennemfoere EU's politikker og EU's budget
3. Haandhaeve EU's love i samarbejde med den europaeiske domstol
4. Repraesentere EU paa globalt niveau

Forvaltningen sker f.eks. i DG Trade, DG International Markets and services og DG Competition (hvor Margrethe Vestager sidder). DG Competition foerer f.eks. sager mod stater og virksomheder, hvis den frie konkurrence er truet eller bliver haemmet.

Haandhaevelse af lovene sker f.eks. ved anlaeg af sager ved domstolen om trak- tatbrud. EU soerger altsaa for at nationalstaterne overholder de faelles love. Kommissionens opgave om at repraesentere EU paa globalt niveau er i fuld ud- vikling. Det skyldtes at EU ikke har en egentlig faelles udenrigspolitik. Siden Lissabon traktaten har der vaeret en udenrigschef for EU, som koordinerer EU's udenrigspolitik, selvom det er svaert, naar der ikke er fastsat en egentlig faelles politik. Aftaler i proces er f.eks. en frihandelsaftale med USA, andre handelsaf- taler med Canada, Japan, Indien mv.

DG ECFIN

Afdelingen DG ECFIN hjaelper politikkerne med at lave beregninger, analyser og forudsigelser. De benytter flere modeller, f.eks. Generel ligevaegtsmodel, DSGE modellen og Quest modellen. Afdelingen DG ECFIN bygger og loeser modeller. Til dette benytter de matematisk optimering, sandsynlighedsteori, Taylor approksimeringer, numeriske metoder, avanceret oekonometri, hvor der kun bruges lineare modeller og numeriske metoder ellers bliver problemerne for komplicerede til at loese.

Den generelle ligevaegtmodel model Den generelle ligevaegtmodel model er et analyse vaerktoej, som benyttes til at supportere politiske beslutninger og lave kvantitative analyser. Det kunne vaere analyse af makrooekonomiske shocks og spillover effekter af politiske tiltag. Den generelle ligevaegtmodel er dynamisk i den forstand at den loeser simultane ligninger fra mikroekonomi og den inkorporer stokastisk i form af stokastiske shocks.

DSGE modellen DSGE modellen kan simulere politiske tiltag, som giver anledning til scenarie analyser. Derudover indeholder den oekonometriske metoder, til at estimere parametre til at producere forudsigelser.

Quest modellen Quest modellen bruges i forbindelse med finanspolitik, finansiering isaer indenfor banksektoren, sektor specifikke reformer (f.eks. olie pris shocks), struk- turelle reformer, arbejds- markedsreformer osv. Modellen ser paa sammenhaen- gen mellem nationalstaternes pengepolitik, finanspolitik, finansielle struktur og deres privatsektor. Modellen illustrere, at effekten af en politik i en stat er meget afhaengig af politikken i en anden stat.

Summary: European Banking Federation

v. Susan Hvedegaard

17. december 2015

So she started with facts about EU:

- 28 countries
- 508 million people
- 13,5 billion euro in BNP

EU has three institutions: commission, council and the parliament. These are the ones who make the legislation with different decisions makers. Every legislative proposal shall be voted for three times each. In the EU parliament there are 751 members, where 13 are from Denmark.

In the commission there are Commissioners, where each country have one from their own country, even though they have to be completely neutral. They are all controlled of the president Jean-Claude Juncker.

In EU in Bruxelles there works 64,000 people in 24 different languages.

Robert Kristoff

- Deals with important files
- Lawyer

Talked about EBF: Is made of 32 national banking associations, which contains 4500 banks. They administer for 24 trillions euro-loans, and have 2.5 millions employees. EBF is cooperating in all countries to handle loan and deposits. The mission is to be the voice of EU's banks and the focus is on financing and consulting.

The key issues is:

- Banking supervisions
- Social affairs
- Taxing

The central bank helps the EU by buying/convert money/assets to get some flow in the system and get guidelines to make it more similarly.

1.4 Summary: The European Parliament

Introduction We visited the European Parliament on Monday the 21st of September. Our presentation were held by Jeppe Kofoed, he told us about his work in the European Parliament where he is a member of The Committee on Industry, Research And Energy, The Special Committee on Tax Rulings and Other Measures Similar in Nature of Effect, and a substitute in the Committee on Economics and Monetary Affairs.

Broad view During the presentation he mentioned some of the main focuses of the committees, in Econ e.g. the Juncker-plan, which hopefully will create more private investors in the EU. In the Special Committee in Tax Jeppe explained that multinational corporations pays 30% less taxes than national corporations based on research. He gave suggestions to ending this, like a minimum corporate tax percentage for the entire EU.

Vision One of his main interest at the moment were to strengthen Danish interest, this is done e.g. through the Committee of Energy, where renewable energy and the green conversion is a field where Danish companies are very strong. Jeppe's vision was to have an electric network throughout the entire Europe. He finished his presentation, by telling us his hope for the future for Europe, which is a more integrated Europe and he asked an important question: "instead of saying what the cost of doing it is? say, what is the cost of NOT doing it?"when talking about making changes in the EU. After the presentation from Jeppe, we moved on to see the parliamentary hemicycle where all the members are seated. We were explained that all the members are seated in political groups, where e.g. Jeppe Kofoed, Morten Messerschmidt and Margrethe Vestager are seated, and also told about the sizes of the political groups and in general how a day in the parliament would be.

Summing up In total the visit was very interesting where we were given an insight to the everyday life of a member of the European Parliament, and we got answers to all of our questions.

On behalf of the participants we would like to thank the European Parliament for having us.

1.5 Summary: SimCorp

We visited SimCorp on Tuesday the 22th of September.

We were welcomed by Hans Otto Engkilde and Nick Nevens. The visit began with a brief introduction to SimCorp from Hans Otto Engkilde.

Regarding SimCorp SimCorp is a 1-product company. It based on the product SimCorp Dimension, which is a financial enterprise software. SimCorp is a worldwide Company with about 1200 employees, where 57 is working in Benelux. All the programming happens in Copenhagen and here they get, implements and maintain clients.

SimCorp have more than 200 SimCorp Dimension clients all over the world covering a total market share of roughly 14%. Furthermore have they never failed an implementation. SimCorp's values is mitigate risk, reduce cost and enable your business to grow.

SimCorp believe in the strong long-term relationship with the clients and to build this relationship they need local locations and spend 25% of profit on R&D (Research and development). After the introduction of the Company Nick Nevens to over and demonstrate the use of SimCorp Dimension.

Dimension SimCorp Dimension is a large modular system, where clients can tailor it to their requirement. The modules is classify in three groups: Front-, Middle- and Back office.

Some of the greatest thing about SimCorp Dimension is that it has an online view (refreshes automatically) which saves time and it stores everything so you can go back in time. Every six months they make a new relic with new updates e.g. new functions or changed functions. There are help functions for everything.

Furthermore can clients program in SimCorp Dimension themselves and create user-defined dashboards, which can be view on iPads, smartphones etc.

1.6 Summary: ICF

We visited ICF on Tuesday the 22nd of September.

ICF is a private consulting firm. The visit began with a presentation of the firm in general given by Máté Péter Vincze, Lead Managing Consultant.

Regarding ICF He told us that ICF was originally founded in 1969 as a Venture Capital Firm and later on became a consulting firm in 1972. It's a consulting firm that deals with areas as: Health and social programs, consumer financials, safety and security and energy and environment. They mostly have public clients (the Commission and some agencies). ICF has offices all over the world, which gives them access and the opportunity to help a lot of different people/firms and gives the employees the opportunity to get relocated to different countries.

Tasks Some of the tasks that ICF is dealing with are making economic analysis (supply and demand analysis), program design and evaluations, social research and comparative studies. Examples of types of tasks could be valuing the environmental costs of transmissions planning, utility low-income programs (Improve home conditions to provide better health, safety and comfort), forecasting coal markets (by looking at market trends and prices).

Core services Next up was Mads Jensen, Vice President. The division provides core services to international development agencies. Their purpose is to focus on their strengths where they can offer a unique service to the customers and bring value to them. As Mads Jensen said the focus strategy is to advise, execute and innovate. When it comes to poverty they are put in a difficult position, since they both want to help bring down poverty in the World but at the same time, they need to make money.

HR The last spokes person was from Human Resource and told about the different areas of the firm and which career path one might choose within the firm.

After that we heard 3 presentations of 3 employees who told about why they joined ICF, what their background was and what they were working on right now.

Theory vs. Practice Last but not least Máté Péter Vincze talked about the differences between textbook and real life and pinpointed how difficult it is to work with real data, since it is really messy, compared to what you learn about Econometrics at the University. He went through some examples from the real life which showed the difficulties.

This was a very interesting visit especially for people following Econometrics courses, since you could see how the theories are used in practice and the differences between textbooks and real life.