## Hofstede in Luxembourg:

# An Intercultural Comparison with France and Germany

# **Applying Geert Hofstede**

# In Collaboration with Lindab

A research thesis submitted in partial fulfilment of the requirements for the award of Doctorate in Business Administration Executive DBA

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Viva: 07/January/2013

#### Abstract

This research investigates the cultural pattern of Luxembourg. There being no previously published study on cultural dimensions in Luxembourg, this study addresses this issue in several ways: literature review, participant observation, questionnaires and interviews. 134 usable responses were collected from participants employed at Lindab Buildings Luxembourg, France and Germany and interviews were conducted. The Grand Duchy of Luxembourg and its specific place in Europe are detailed. Hofstede's dimensions of culture were calculated: 'Individualism/Collectivism', 'Power Distance', 'Masculinity/Femininity', 'Uncertainty Avoidance', 'Long-Term Orientation/Short-Term Orientation', 'Indulgence versus Restraint' and 'Monumentalism'. Data are analysed and discussed to determine, first, if Hofstede's estimates given for Luxembourg are accurate , second if the Luxembourgish language is used as an identifier and third, if Luxembourgers are happy because they are uncertainty avoidant. The results are shown in Hofstede's maps superimposing my results onto his original maps. Finally, the question of whether Luxembourgers are happy is discussed and a logistic regression is made in SPSS on happiness. Conclusion, references and appendixes follow.

## <u>Foreword by Eva Wüllner, Human Resources Director Europe, Russia & CIS,</u> <u>Lindab Buildings</u>

The Swedish Group Lindab with its three business lines of ventilation, building components and building systems is active in more than 40 countries worldwide.

The business line of building systems, headquartered in Luxembourg, employs almost 1000 people in 17 countries. Of particular interest in Luxembourg is the fact that there are 16 nationalities working for Lindab S.A. Given this, it is of utmost interest for the company and the research community to learn more about the impact of this particular phenomenon.

That is why the decision was taken by Lindab executive management to participate in the DBA research project of Ms Schinzel in order to get an academic underpinning as regards the specific behaviours related to this fascinating fact.

Lindab's force is its innovative and creative people collaborating for one aim: simplifying construction. For the entire group, we have three particular areas of values and visions: the "Lindab Spirit", "Lindab Life" and the "Lindab Way".

The "Lindab Spirit" is characterised by three core values: customer success, down to earth, neatness and order.

The "Lindab Life" concept is our way of doing business and focuses on social responsibility, on responsible actions, sustainable development, positive outcomes in business, for its employees, the environment, and the society where Lindab is present.

The "Lindab Way" is composed of first the 'Vision: to be the preferred partner for building professionals in our core products Europe wide', second the 'Business idea: Simplify construction', third 'Strategies and other activities to support our vision and to grow Lindab', fourth "Lindab Life" and fifth the "Lindab Spirit".

In January 2010, Lindab organised an "Intercultural Seminar in Russia", initiated by MBA students from the University of Emden, introducing research of culture and cultural dimensions to Lindab and now continued by Ursula Schinzel in the framework of her Doctorate in Business Administration at London Graduate School of Management, Millennium City Academy.

Lindab considered the added value high on the outcomes of this specific research on Geert Hofstede, initiator of cultural research in Europe and categorisation into cultural dimensions. His book "Culture's Consequences", his questionnaire, his interview questions were the basis for this research. The added value for Lindab was to be among the first to participate in an intercultural research replicating Hofstede's study about Lindab in the Grand-Duchy of Luxembourg in comparison with Lindab France and Lindab Germany.

The exceptionally high response rate of over 90% among Lindab employees showed the immense interest in this research conducted by Ursula Schinzel.

The results from the research comparison between Lindab Luxembourg, Germany and France revealed intriguing findings. Dividing Lindab Luxembourg by analysing the pattern of the Luxembourger with Luxembourgish nationality is original and new to the research area. Combining Hofstede's studies with Adam Smith's theory about the "pursuit of happiness" is also original and new. The data revealed on the state of happiness of Lindab employees show a positive picture of the company. We at Lindab are proud of this, not only in the state of happiness, but also in the state of health, the education levels of our employees, the job levels, and behaviour such as daring to contradict the boss. It was also interesting to see who our heroes are and how much they are esteemed: our directors at Lindab Luxembourg and at Lindab France.

The questionnaire and the interview questions did not reveal any surprises, but confirmed our core values: customer success, down to earth, neatness and order, corporate social responsibility and mutual trust. Given the cultural differences following Geert Hofstede between Luxembourg, France and Germany, these are our core values, not only in theory. Symbols, values, heroes, rituals might vary from country to country, but the core symbols, values, heroes, rituals remain the same for all of our employees.

The research by Ursula Schinzel revealed not only a positive general state of health, religion, happiness, but also the success of Lindab in its pursuit of being an attractive company and making a positive difference for its employees.

#### Eva Wüllner, Human Resources Director Europe, Russia & CIS, Lindab Buildings

### Foreword by Prof. Dr Donnel Briley, University of Sydney, Australia

PhD dissertations are born from the recognition of an important gap in our knowledge, and hard work to fill that void. On these grounds, Ursula Schinzel's thesis is indeed very promising. She has delved into the sometimes murky "culture research" domain – an area that I consider crucial to societal progress and development. Work in this area seeks to pull back the cover of cultural mystery, which breeds misunderstanding and confusion across borders, by advancing our knowledge of cultural patterns. Psychology, sociology and anthropology are all sciences dedicated to improving our understanding of humans. And cultural research – which operates at the intersection of these sciences – directs its efforts at mutual understanding across boundaries that separate us, whether national, ethnic, religious or other.

Ursula's work takes on the problem of identifying and interpreting the cultural inclinations of Luxembourg, a country rich with cultural complexity. And she addresses this project with a motivation and drive that gives her efforts special purpose.

I welcome her contributions, and hope that those interested in understanding Luxembourg do as well.

#### Prof. Dr Donnel Briley, Professor for Marketing at the University of Sydney, Australia

I hereby certify that the work embodied in this Thesis is the result of original research and has not been submitted for a higher degree to any other University or Institution.

.....

Signed by Ursula Schinzel

In Luxembourg

On date: .....

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#### List of Abbreviations

IDV: Individualism versus Collectivism Index PDI: Power Distance Index – PD: Power Distance UAI: Uncertainty Avoidance Index – UA: Uncertainty Avoidance MAS: Masculinity versus Femininity LTO: Long-Term Orientation versus Short-Term Orientation IVR: Indulgence versus Restraint MON: Monumentalism FEM: Femininity SWB: Subjective Well-Being

VSM: Values Survey Module (Hofstede) VSM2008: Values Survey Module 2008 GLOBE: Global Leadership and Organzational Behavior Effectiveness WVS: World Values Survey (Inglehart) EVS: European Values Survey (Inglehart) CVS: Chinese Values Survey (Bond)

HR: Human Resources HRM: Human Resources Management

p.: page
pp.: pages
appr.: approximately

QGRL: General Question QVAL: Question on Values QCPY: Question on Company p: probability e: exponential z: numbers

LU: Luxembourg FR: France GE: Germany Lux. Nat.: Luxembourger with Luxembourgish nationality SPSS: Statistical Package for the Social Sciences PASW: Predictive Anatytics Software Q1: First quartile Q3: Third quartile Std errors: standard errors

GDP: Gross Domestic Product CES: Conseil économique et social CSDD: Conseil supérieur pour un développement durable

#### Acknowledgements

I would like to thank the following people without whom this thesis would not have been possible.

Geert Hofstede for his exceptional help with the questionnaire and the evaluation of the research. He is apersonality with remarkable intelligence, energy and wisdom who casted doubt on the established theories in cultural research and continues his research of the world's cultural dimensions.

Lindab Buildings. Eva Wüllner, Director Human Resources at Lindab Buildings, for her support during the Case Study with face-to-face interviews, telephone interviews and questionnaires.

All the employees at Lindab Buildings Luxembourg, France and Germany, without whom this research would not have been possible.

My parents for their financial and moral support during my Doctorate in Business Administration Distance Learning studies. Unfortunately, my father fell very ill during this research and passed away on 27 June 2011.

My manager and colleagues from aims Luxembourg: Daniel Reinert, Nicolas J. Ries, Mireille Kessler, for their understanding patience and support.

Paris School of Business, and London Graduate School of Management - Millennium City Academy, which made this thesis possible. Especially Dr Kieran Webb for his talent to find the right analysis at the right moment, his ideas, reflections, his input and clear thoughts. Professor Ted Hastings for his valuable input and time, through the platform Moodle, who made it possible to complete a Doctorate in Business Administration, Distance Learning. Mira Brown, Peter Brown, Bartley Culverwell and Lavinia Shivdasani for their help and support. Dr Peter Sharp for his participation at our DBA student's meetings, workshops, seminars with presentations on "Research Questions" and "Structuring your Dissertation".

Prof. Dr Donnel Briley, professor of Marketing at the University of Sydney, for receiving me at University of Sydney, Australia.

Roberto Di Iacovo, Publications Office of the European Union, for his support with printing of articles, review and corrections of typing errors, APA style, and theoretical discussions on cross-cultural research.

Claire Kohl, for her moral support and strength.

Marc Auxenfants, journalist, for his valuable help in correcting the questionnaires' translations into French.

Eric Eggen, manager at EIB, European Investment Bank, for his support with finding ideas and discussion points, organising face-to-face interviews and discussing the questionnaires' questions, the usefulness of the study and the direction of the study in general.

Emanuela Bartolini at EIB, European Investment Bank, for good advices.

Rita Knott, of Rita Knott Consulting, for meetings and discussions about questions in the questionnaire, the outline of the study, the usefulness of the study, and the analyses of the questions.

Yvonne O'Reilly, avanteam Consult, for her comments, remarks and discussion about the study.

Thierry Ernst, from Thierry Ernst Consulting for his enthusiastic remarks and well-judged comments.

Dr Antoine Haag for his support with statistics, excel and SPSS.

Maurice Trapp for his English corrections.

All the people and companies that participated in the pre-study: Zitha-Klinik, Centre de Recherche Henri Tudor, Cactus, Luxlait, EIB (European Investment Bank), Soludec, Deloitte, Ketterthill, Université du Luxembourg, Commune de Sanem, fast, VdL (Ville de Luxembourg, Sports pour Tous), Publications Office of the European Union, paperJam, RTL (Radio Télévision Luxembourg), SES Astra (Société Européenne des Satellites Astra), John Zink, Ernst & Young, Delphi Automotive Systems, Lombard International Assurance, HSBC, Luxairport, Luxair, ehl (entente des hôpitaux luxembourgeois), euroscript, and aims Luxembourg.

Peter B. Smith, Harry Triandis, Marieke de Mooij, Brad Kirkman, Cheryl Nakata for valuable input via email conversation on intercultural comparison.

Vladimir Burčik for support with Hofstede's cultural dimensions calculations, email and skype contacts.

And many more. I am grateful for your help and I thank you.

### **Chapter 1: Introduction**

## **1.1 My Research Question**

My research question is: Where does Luxembourg fit in on Hofstede's cultural dimensions in comparison with France and Germany?

I would like to test the validity of Hofstede's work in 2010, being contested, adding entirely new data for Luxembourg, for which Hofstede has only provided estimates, comparing Luxembourg with France and Germany, which have been previously researched.

Additional formulations of my research question would be: What research question would Hofstede have on his mind looking at the Grand Duchy of Luxembourg in comparison with France and Germany? Based on Hofstede's model of cultural dimensions, what cultural profile would Luxembourg have in comparison with France and Germany? What would be the cultural dimensions in Luxembourg by replicating Hofstede's research?

My contribution to knowledge is adding the data that I collect about Luxembourg to Hofstede's data, as Hofstede bases his research on Luxembourg on estimates.

#### 1.2 Why Hofstede?

Why did I choose Hofstede?

There has been criticism of Hofstede from other researchers, some quite strongly, such as Søndergaard.

In my opinion, Hofstede is still the best in the field; his findings are still valid, even 50 years later. All the other authors are, in my opinion, only, more or less, extensive replications of Hofstede's study. Hofstede casted doubt on the established theories in research on culture, importing cultural research to Europe, developing the model of different cultural dimensions. All the other authors and researchers after him only add new dimensions, or re-name them, copying his method, his questionnaire and his questions.

#### **1.3 Literature Review**

I will search the literature: I will be investigating what the findings on Luxembourg, Germany and France are and write the literature review including the following eras:

#### **1.3.1** The era before Hofstede.

- Maslow, Abraham (1970): hierarchy of needs: physiological (food, sleep...), safety, love/belonging, esteem, self-actualization.
- McClelland, David (1961): achievement motivation, motivation theory.
- Herzberg, Frederick (1959, 1966): "Two Factor Theory": Motivator Factors: Achievement, Recognition, Work Itself. Responsibility, Promotion, Growth. Hygiene

Factors: Pay and Benefits, Company Policy and Administration, Relationships with coworkers, Supervision, Status, Job Security, Working Conditions, Personal life.

- Rockeach, Milton (1971): Rockeach Value Survey, the terminal values in RVS are: true friendship, mature love, self-respect, happiness, inner harmony, equality, freedom, pleasure, social recognition, wisdom, salvation, family security, national security, a sense of accomplishment, a world of beauty, a world at peace, a comfortable life, an exciting life.
- Kluckhohn, Florence and Strodtbeck, Fred (1961): Values Orientation Theory: universal problems in all human societies, limited numbers for value-based solutions, and different cultures have different preferences.
- Hall, Edward (1976): Anthropologist, lifelong research on culture, with descriptive, qualitative methods. Lived with Navajo and Hopi Native Americans. Studied France, Germany, compared with America, mostly descriptive research.

#### 1.3.2 The Geert Hofstede era.

Geert Hofstede casted doubt on the established theories in research on culture. Hofstede's landmark IBM study brought cultural research to Europe, away from the USA. He developed 4 dimensions of culture: Individualism versus Collectivism (IDV), Power Distance Index (PDI), Masculinity versus Femininity (MAS), Uncertainty Avoidance Index (UAI). He later added Long-Term versus Short Term Orientation (LTO), with Minkov he later added Indulgence versus Restraint (IVR) and Monumentalism (MON).

#### 1.3.3 The era after Hofstede: Hofstede's replications.

- Trompenaars, Fons and Hamden-Turner, Charles (1997): "Riding the wave of culture", interviewed 8800 companies in 43 countries, identified 5 dimensions of culture: Universalism versus particularism, communitarianism versus individualism, neutral versus emotional, diffuse versus specific, achievement versus ascription.
- De Mooij, Marieke (2000, 2002, 2003, 2004, 2010, 2011): She writes on "Global Marketing", "Consumer Behavior and Culture", co-wrote with Geert Hofstede "The Hofstede Model".
- Triandis, Harry (1995): Individualism/Collectivism research. Traditional collectivist Greece
- Schwartz, Shalom (1990, 1994, 2001, 2007): identified 7 country-level value orientations surveying 60,000 people in 63 countries: conservatism or embeddedness, intellectual autonomy, affective autonomy, hierarchy, egalitarianism, mastery, harmony. Summarised in 3 culture dimensions: embeddedness versus autonomy, hierarchy versus egalitarianism, mastery versus harmony.
- Smith, Peter (1995, 1996, 2002, 2006, 2008): identified 2 country-level dimensions: egalitarian commitment versus conservatism, utilitarian involvement versus loyal involvement by analysing the data from Trompenaars.
- Inglehart, Ronald (2000, 2008): World Values Survey: the world's most impressive database: questionnaire consisting of 360 questions in over 100 countries with over 420,000 respondents in several waves (wave 1, 2, 3, 4, 5, wave 6 being carried out 2010-2012). WVS is headquartered in Stockholm, Sweden, see

http://www.worldvaluessurvey.org/html . Hofstede has stated that today he would use data from the WVS and analyse it, instead of collecting new data.

- **Cameron, Kim and Quinn, Robert (2011)**: 4 forms of organisational culture profile: the clan culture, the adhocracy culture, the hierarchy culture, the market culture.
- Schein, Edgar (2009, 2010): "Corporate Culture Survival Guide", when cultures meet through acquisitions, mergers, joint ventures. Schein's 10 culture change mechanisms: incremental change through general and specific evolution, insight, promotion of hybrids within the culture, systematic promotion from selected subcultures, technological seduction, infusion of outsiders, scandal and explosion of myths, turnarounds, mergers and acquisitions, destructions and rebirth. 7 dimensions of culture, 3 levels of culture: artifacts, espoused beliefs and values, basic underlying assumptions. Schein is a psychologist.
- Minkov, Michael (2007, 2009, 2011): from Sofia, Bulgaria, co-writes with Geert Hofstede, analyses data from Inglehart's WVS, "Cultural Differences in a Globalizing World", adds a sixth cultural dimension to Hofstede: Indulgence versus Restraint (IVR).
   4 dimensions of culture: industry versus indulgence, monumentalism versus flexumility, hypometropia versus prudence, exclusionism versus universalism.
- Hofstede, Gert Jan (2002, 2009) (his son): concentrates on training and teaching culture,
   "Exploring Culture".
- Bond, Michael Harris (2004): Chinese Values Survey`.
- Mintzberg, Henry (1983, 1989, 1993, 2011): Organisational structure research. the typical 5 configurations of most organisations: operating core, strategic apex, middle line, techno-structure, support staff. 5 coordinating activities mechanisms in organisations:

mutual adjustment, direct supervision, standardisation of work processes, standardisation of outputs, standardisation of skills. 6 species of organisations: the entrepreneurial O., the machine O., the professional O., the project O., the missionary O., the political O.

House, Robert, Hanges, Paul, Javidan, Mansour, Dorfman, Peter, and Gupta, Vipin (2004): The GLOBE: involving 160 researchers worldwide in 62 cultures: nine dimensions of culture: Power Distance, Uncertainty avoidance, Humane Orientation, Collectivism I (Institutional Collectivism), Collectivism II (In-Group Collectivism), Assertiveness, Gender Egalitarianism, Future Orientation, Performance Orientation.

#### 1.3.4 The era beyond Hofstede.

Kirkman, Lowe, Gibson, Nakata, Briley, Hong, Benet-Martínez, Chiu, Morris, Wyer, Hermans, Kempen, Jenner, Mc Nab, Brisling, Worthly, Leung.

**Donnel Briley's (2000, 2001, 2002, 2005, 2006, 2007, 2009)** areas of expertise are consumer choice and international marketing, studying the influence of culture and ethnicity on consumers' judgments and decisions. Briley is Professor of Marketing at University of Sydney, Australia.

**Cheryl Nakata** (2009) focuses her research on culture on its theoretical explorations and managerial applications in international business, marketing, innovation and strategy. She is Associate Professor of Marketing and International Business at the University of Illinois at Chicago. At this same University of Illinois at Chicago, **Harry Triandis** (**1995**) was Professor and helped the group around **Leung, Chiu and Hong** (**2005**, **2011**) who base their research on Triandis's tradition of cultural research. All three of them are now in Singapore, researching dynamic cultural processes in intra- and intercultural contexts, the psychological implications for multicultural competence, creativity and intercultural communication, the role of embodiment in the acquisition and endorsement of cultural values, focused on social, cognitive and motivational processes, the dynamic interactions of cultural identification and cultural knowledge traditions. It is about culture and psychology.

The key insights for moving beyond Hofstede for them is, that Hofstede brought needed attention to culture, but that he has viewed it as something that is more fixed. Their main objectives are: enlarge the meaning of culture, identify the assumptions about culture, embrace more complex forms of culture, account for dynamism in culture, and take an interdisciplinary, multi-method and complementary philosophical approach.

#### 1.3.5 The era besides Hofstede.

 Scholz, Christian and Böhm, Hans (2008): a comparative analysis of human resource management (HRM) in Europe, impacts contexts and different approaches to HRM in Europe, researching in Austria, Czech Republic, Denmark, France, Germany, Hungary, Italy, Latvia, the Netherlands, Poland, Spain, Turkey, comparing the UK, North America and continental Europe. Professor Dr Christian Scholz holds the chair of Business Administration, Organisation, HRM at University of Saarland. His research in Europe is about cultural, political and economic differences with the aim of avoiding fatal and expensive mistakes in doing business in Europe.

• Lewis, Richard (2006): explores the relationship between language and thought, how the mind is conditioned culturally at an early age, he researches about the cultural capital in organisations, about meetings, space and time, status and leadership, communication style, listening habits, team-building mechanisms, negotiation and decision-making.

# 1.4 What Does my Research Add to the Literature? What is my

#### **Contribution to Knowledge?**

My contribution to knowledge is to add data to the data of Hofstede.

Luxembourg has not been researched by Hofstede who based his Luxembourg data on estimates.

Hofstede gave estimates only for PDI, UAI, IDV, MAS. Additionally, he did not estimate LTO, IVR, MON for Luxembourg in his book from 2010.

### 1.5 My Methodology

#### **1.5.1 Literature Review.**

I will search the literature: I will be investigating what the findings on Luxembourg, Germany and France are, see above and in Chapter 2.

## 1.5.2 Participant observation.

- Participation in seminars in Luxembourg.
- Participation in meetings in Luxembourg.

#### 1.5.3 The choice of ONE Company in Luxembourg: Lindab Buildings.

#### Why Lindab?

- Worldwide company.
- European Leader in steel construction.
- Headquartered in Luxembourg.
- A healthy company, prospering, despite the crises.
- Located Europe- and world-wide.
- Allows a comparison between Luxembourg, France and Germany.
- Willing to participate in my research, and, in the framework of LindabLife, interested in cultural studies.
- Open for students and academic research, whereas other companies in Luxembourg are not accessible for academic research, i.e. IBM was not willing to participate and ArcelorMittal and Villeroy & Boch underwent restructurings in 2009/2010.

## **1.5.4 Face-to-face and telephone interviews.**

- Elaboration of questions with Hofstede.
- Pre-study within the HR community in Luxembourg.
- Validation by the Director Human Resources Lindab.
- Face-to-Face interviewing of Lindab Luxembourg / France / Germany.
- Telephone interviewing of Lindab Luxembourg / France /Germany.
- Transcript writing.
- Comparison of the interviews in Luxembourg, France, Germany.

## 1.5.5 Paper-questionnaire.

- Questionnaire evaluation together with Hofstede: review and validation.
- Questionnaire translation: English, French, German and, much desired, Luxembourgish.
- Pre-study within the HR community in Luxembourg.
- Questionnaire review with HRD Lindab.
- Questionnaire distribution at Lindab Luxembourg, France, Germany.
- Collection of filled-in questionnaires.
- Excel sheet elaboration for questionnaires.
- Fill-in all questionnaires in Excel sheet.
- Clean-up database on Excel.

- Analyse database on Excel.
- Calculation of mean scores per question in Excel.
- Calculation of IDV, MAS, UAI, PDI, LTO, IVR, MON, in Excel.
- In SPSS: Logistic Regression on 'Happiness'.

### **1.6 Objectives and Aims**

The objectives of my research are:

- To come up with a pattern / profile for the Luxembourgish nationality following Hofstede, see the following table.
- Comparison of my data with Hofstede's estimates (data) for IDV, MAS, PDI, UAI, LTO, IVR, see the following table.
- To fill in the blanks in the following table concerning IDV, MAS, PDI, UAI, LTO, IVR, MON.
- To go beyond Hofstede and link several questions of my questionnaire and analyse the findings.
- To determine whether Luxembourgers are happy, using a Logistic Regression in SPSS on 'Happiness'.

	_	
	My Luxembourg	Hofstede's estimates on
		Luxembourg
PDI	?	40
UAI	?	70
IDV	?	60
MAS	?	50
LTO	?	64
IVR	?	56
MON	?	-

Table 1.1 Hofstede's estimates on Luxembourg

#### **Chapter 2: Literature Review**

#### **2.1 Introduction**

With Geert Hofstede, a new era in intercultural research began. His landmark 1980 study 'Culture's Consequences' was the beginning of cross-cultural research throughout the world that was followed by hundreds of bigger and smaller replicants. He started his cultural research in the 1960s at IBM, questioning IBM employees worldwide, bringing an end to the then American hegemony in the field of cultural research from Maslow, McClelland, Herzberg. Hofstede brought an end to the all American literature about culture, criticising and contradicting wellknown researchers with their equally well-known theories such as Kluckhohn and Strodtbeck (1961's Values Orientation Theory) McClelland (1961's motivation theory), Herzberg (1966's Two Factor Theory), Maslow (1970's hierarchy of needs), Rockeach (1971, 1979's Rockeach Value Survey), and Hall (1976's Anthropology). Hofstede's opinion was that their theories do not necessarily apply outside of the borders of the United States of America, which at that time was an unthinkable hypothesis.

Geert Hofstede found 4 dimensions of culture: Individualism versus Collectivism, Power Distance, Masculinity versus Femininity and Uncertainty Avoidance. He added a fifth dimension later, Long-term versus Short-term Orientation, is about to add a sixth: Indulgence versus Restraint and a seventh: Monumentalism, together with Minkov. His replicants found 2, 3, 7, and 9 dimensions of culture. Michael Bond with his Chinese Value Survey, Inglehart with first his European Value Survey, extended to his World Value Survey, the GLOBE, and thousands of small replicants.



Figure 2.1 The era before Hofstede

He provoked critic, discussion, academic publications of a never before seen number. Researchers who came after Geert Hofstede are in my opinion only replicants of his studies. He is the basis and originator of everything that followed in cultural research; he is the real founder of a rich research field: cross-cultural research.

This chapter will give an overview of the literature from and about Geert Hofstede, an exploration of different cultures and intercultural comparison, especially about Luxembourg in comparison with France and Germany. These countries were founding members of the European Union, a growing family with different people, cultures and values.

## **2.2 The Geert Hofstede Era: Cultures and Intercultural Comparison –** Lifelong Passion

Geert Hofstede was born in 1928 in Haarlem, the Netherlands. He has been married since 1955 to Maaike A. van den Hoek, they have four sons and ten grandchildren. From 1965 to 1971 Hofstede founded and managed the Personnel Research Department of IBM Europe. He became interested in cultural comparison somewhat by chance, as he was to produce a study on client satisfaction. The data produced by this study made him take notice of cultural specificities and differences and brought him access to a rich amount of data. He used this to initiate his first major study at IBM, which produced 116,000 filled-in questionnaires from IBM in 72 countries. In 1980, he published his first book 'Culture's Consequences – International Differences in Work-Related Values', written for a specific readership with technical terms, difficult wordings and academic style. He came up with four dimensions of culture. It was often criticised as being too academic and unreadable. He published a shortened paperback version in 1984, unfortunately without the questionnaire and without the important data to be found in the full version.

## Understand: who is Hofstede? What did he do?

- Born in 1928 in Holland.
- IBM research in the 1960s.
- 116,000 questionnaires
- Found 4 cultural dimensions, later added more.
- Dared to contradict Maslow, Herzberg, McClelland.
- Was Professor at Maastricht University.
- Brought cultural research from the USA to Europe and casted doubt on established theories in research on culture.
- Later was criticised quite strongly, e.g. by Sondergaard and Mc Sweeney.

Figure 2.2 Understand: who is Hofstede? What did he do?

From 1980 to 1993, he was co-founder and first Director of IRIC – Institute for Research

on Intercultural Cooperation, the Netherlands. From 1985 to 1993 he was Professor for

Organisational Anthropology and International Management at University of Maastricht, where

he has been professor emeritus since 1993. In his function as Director of IRIC and as professor at University of Maastricht, he continued his research on cross-cultural comparison worldwide. For his young readers at University he published in 1991 'Cultures and Organizations: Software of the Mind', including the findings from his first book and new findings, in a less academic language. This book has been translated into 18 languages.

In 2001, Geert Hofstede published a Second Edition of 'Cultures Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations'. In this Second Edition, he updated the data from 1980 and discussed the many replications made by a very large number of researchers since then.

In 2002, one of his four sons, Gert Jan, biologist and IT specialist, published his first book together with Paul B. Peterson and Geert Hofstede: 'Exploring Culture: Exercises, Stories and Synthetic Cultures'. The teaching activity of Gert Jan Hofstede can be noticed throughout this book and in his articles (Hofstede, G.J., 2009).

In 2005, Geert Hofstede and Gert Jan Hofstede published a revised version of 'Cultures and Organizations: Software of the Mind'.

In the meantime, other important researchers, replicants and others carried out related research, for example Fons Trompenaars, Peter Smith, Schwartz, Michael Bond with his Chinese Value Survey (CVS), House with his GLOBE and Inglehart with his World Value Survey (WVS) did a vast amount of research (Minkov & Hofstede, 2011). A young researcher from
Sofia, Bulgaria, was motivated to bring some order into the enormous amount of data collected by Inglehart: Michael Minkov. Geert Hofstede contacted Michael Minkov around the year 2000. Michael Minkov published in 2007 his book 'What Makes Us Different and Similar: A New Interpretation of the World Values Survey and Other Cross-Cultural Data'. He added important data about the until then missing Eastern European countries. There is a huge amount of articles, literature and discussion with, from, about each of these authors and Geert Hofstede. The discussion between Trompenaars and Hofstede is quite hostile. On the other hand, the GLOBE – Hofstede discussion is friendly and fruitful. About Inglehart and his WVS, Hofstede says, if he could restart his own research, he would use the data from Inglehart. That is a compliment.

In the meantime a fifth dimension of culture was added.

In 2010, Geert Hofstede together with his son Gert Jan Hofstede and Michael Minkov, called by Hofstede Misho, published the Third Edition of 'Cultures and Organizations: Software of the Mind', translated into 17 languages. In this Third Edition, Michael Minkov states that he is about to add a sixth dimension of culture.

Geert Hofstede learned to appreciate the work of Marieke de Mooij, a specialist in Global Marketing and Advertising in intercultural environments. She is a consultant in cross-cultural communications and visiting professor to several universities. She is a fervent adherent and defender of Hofstede's doctrine and validity of his research even in 2010 and after and against his critics and adherents of the era beyond Hofstede surrounding Nakata, Briley etc.



- In my opinion, Hofstede is still the best in the field.
- His findings are still valid, even 50 years later: culture has dimensions.
- All the other authors are, in my opinion, only, more or less, extensive replications of Hofstede's study.
- Hofstede casted doubt on established theories in research on culture.

Figure 2.3 Why Hofstede?

Geert Hofstede's research and work has changed the way we see and live cultures.. Today's key books are: "Culture's Consequences: Comparing Values, Behaviors, Institutions,

and Organizations across Nations" from 2001; "Exploring Culture: Exercises, Stories, and

Synthetic Cultures" from 2002; and "Cultures and Organisations: Software of the Mind" from

2010. All his findings and research are to be found on his website

http://www.geerthofstede.nl/html

### 2.2.1 Definition of culture.

Culture is measured in terms of all of the following: symbols, heroes, rituals, values, practices, norms, beliefs, self-perceptions, cognitive ability and behaviours. The 'Onion' manifestations of culture (Hofstede et al., 2010, p. 8) is the graphic representation, with the values in the centre of the onion, followed by rituals, then heroes and the external layer are symbols. *Symbols* are words, gestures, pictures or objects, i.e. jargon, dresses, hairstyle, flags or status symbols. *Heroes* are persons that serve as model, i.e. Batman, Snoopy, Barbie, Asterix.

*Rituals* are collective activities, i.e. ways of greeting, social and religious ceremonies. *Values* are broad tendencies, feelings that come in pairings like evil versus good, dirty versus clean, dangerous versus safe, forbidden versus permitted, decent versus indecent, moral versus immoral, ugly versus beautiful, unnatural versus natural, abnormal versus normal, paradoxical versus logical, irrational versus rational (Hofstede et al., 2010, pp. 8-9).



Figure 2.4 Definition of Culture (adapted from Hofstede et al., 2010)

Culture is part of the mental programming. The three levels of uniqueness in mental programming following Hofstede et al. (2010) are: the inherited and universal *Human Nature*, the specific to group or category and learned *Culture*, and the specific to individual and inherited and learned *Personality*. Following Minkov (2011, pp. 5-10) *Values* can be studied by asking

people what is important in to them in their own lives. Norms can be studied by asking people what they should do or should not do. *Beliefs* can be studied by asking people if they agree with certain ideas like "men are better leaders than women". *Attitudes* can be studied by asking people what or whom they like or dislike. *Self-Perceptions* can be studied by asking people to describe themselves with adjectives or verbs. *Cognitive Ability* can be studied with IQ or other tests in mathematics. Behaviours can be studied by analysing national statistics like murder rates, suicide rates, road death tolls, adolescent fertility, alcohol and tobacco consumption (Minkov, 2011, p. 8).

#### 2.2.2 Hofstede's dimensions of culture.

Initially Geert Hofstede (1980) came up with 4 dimensions of culture:

First: **Individualism versus Collectivism Index (IDV**), defined as "people looking after themselves and their immediate family only, versus people belonging to in-groups that look after them in exchange for loyalty" (Hofstede, 2001, pp. xix-xx).

Many authors have been only researching and writing about this cultural dimension (Schwartz, 1994; Smith, 1994; Triandis, 1995).

Second: **Power Distance Index (PDI)**, defined as "the extent to which less powerful members of a society accept and expect that power is distributed unequally" (Hofstede, 2001).

Third: **Uncertainty Avoidance Index (UAI)**, defined as "the extent to which people feel threatened by uncertainty and ambiguity and try to avoid these situations" (Hofstede, 2001).

Forth: **Masculinity versus Femininity** (**MAS**), defined as "the dominant values in a masculine society are achievement and success; the dominant values in a feminine society are caring for others and quality of life" (Hofstede, 2001).

In 1998, he published "Masculinity and Femininity: The Taboo Dimension of National Cultures".

Many years later he added the fifth dimension: Long-Term Orientation versus Short-Term Orientation (LTO), defined as "the extent to which a society exhibits a pragmatic futureorientated perspective rather than a conventional historic or short-term point of view" (Hofstede, 2001). Characteristics of long-term orientation are perseverance, ordering relationships by status, thrift, and having a sense of shame, investment in the future. Characteristics for short-term orientation are happiness, personal steadiness, stability and the respect of tradition.

Geert Hofstede added a sixth dimension of culture to the existing five: **'Indulgence versus Restraint' (IVR)**. This sixth dimension finds its origin in Minkov's 3 dimensions of culture: 'Exclusionism' versus 'Universalism'; 'Indulgence' versus 'Restraint'; 'Monumentalism' versus 'Flexhumility' (Hofstede et al., 2010, p. 45). Hofstede et al. (2010, p. 281) define 'Indulgence versus Restraint as follows: "Indulgence stands for a tendency to allow relatively free gratification for basic and natural human desires related to enjoying life and having fun. Its opposite pole, restraint, reflects a conviction that such gratification needs to be curbed and regulated by strict social norms."

He also is about to add a seventh dimension of culture: '**Monumentalism**', also originated in Minkov.



Figure 2.5 The era Hofstede: Hofstede's dimensions of culture (adapted from Hofstede et al., 2010)

The article of Kirkman, Lowe and Gibson (2006, p. 286) summarises well the work of Hofstede and gives a clear definition of the 5 dimensions.

Hofstede (1980, p. 25) defined culture as "the collective programming of the mind which distinguishes the members of one human group from another". His framework was developed using data from over 116,000 morale surveys from over 88,000 employees from 72 countries

(reduced to 40 countries that had more than 50 responses each) in 20 languages at IBM between 1967 and 1969 and again between 1971 and 1973. He later expanded the database with 10 additional countries and three regions (i.e., Arab countries and East and West Africa). Based on a country level factor analysis, he classified the original 40 countries along four dimensions. The first is IND-COL, with IND defined as 'a loosely knit social framework in which people are supposed to take care of themselves and of their immediate families only', while COL is 'characterized by a tight social framework in which people distinguish between ingroups and outgroups, they expect their ingroup to look after them, and in exchange for that they feel they owe absolute loyalty to it' (Hofstede, 1980, p. 45). The second dimension is power distance (PD), defined as 'the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally' (Hofstede, 1980, p. 45). Third, uncertainty avoidance (UA) is defined as 'the extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these situations by providing greater career stability, establishing more formal rules, not tolerating deviant ideas and behaviours, and believing in absolute truths and the attainment of expertise' (Hofstede, 1980, p. 45). The fourth dimension is masculinity (MAS)-femininity (FEM), with MAS defined as 'the extent to which the dominant values in society are "masculine" - that is, assertiveness, the acquisition of money and things, and not caring for others, the quality of life, or people' (Hofstede, 1980, p. 46) and FEM defined as the opposite of MAS. Michael Harris Bond (Chinese Culture Connection, 1987) and later Hofstede and Bond (1988) developed a fifth dimension, Confucian dynamism (or long-term versus shortterm orientation). "Long-term orientation refers to future-oriented values such as persistence and thrift, whereas short-term orientation refers to past- and present-oriented values such as respect for tradition and fulfilling social obligations" (Kirkman, Lowe, & Gibson, 2006, p. 286).

#### The era Hofstede: Hofstede's dimensions of culture: Definitions

**Individualism vs Collectivism Index (IDV),** defined as "people looking after themselves and their immediate family only, versus people belonging to in-groups that look after them in exchange for loyalty".

**Power Distance Index (PDI)**, which can be defined as "the extent to which less powerful members of a society accept and expect that power is distributed unequally" (Hofstede, 2001).

**Uncertainty Avoidance Index (UAI),** defined as "the extent to which people feel threatened by uncertainty and ambiguity and try to avoid these situations".

**Masculinity versus Femininity (MAS),** defined as "the dominant values in a masculine society are achievement and success; the dominant values in a feminine society are caring for others and quality of life".

**Long-Term Orientation versus Short-Term Orientation (LTO),** defined as "the extent to which a society exhibits a pragmatic future-orientated perspective rather than a conventional historic or short-term point of view". Characteristics of long-term orientation are perseverance, ordering relationships by status, thrift, and having a sense of shame, investment in the future. Characteristics for short-term orientation are happiness, personal steadiness, stability and the respect of tradition.

Indulgence versus Restraint (IVR), defined as happiness or subjective well-being. The determinants of subjective wellbeing are numerous and differ from country to country. Indulgence tends to say enjoy life and have fun, restraint tends to say regulation and strict social norms.

Monumentalism (MON), defined as cultures encouraging self-enhancement

Figure 2.6 The era Hofstede: Hofstede's dimensions of culture: Definitions (adapted from Hofstede et al., 2010)

Hofstede's main book 'Cultures Consequences – Second Edition' from 2001 has been translated into 18 languages, his book 'Cultures and Organizations – Software of the Mind' has been translated into 17 languages. I compared the English with the German, the French and the Italian translations. It must be said, that in these translations alone the cultural differences he is studying can be found. The translation in Italian is from 1989 and is not available on the market. The German translation is from 2005, with amendments from 2009, and it is missing Chapter 8 about the new sixth dimension of culture Indulgence versus Restraint, added by Minkov. And the preface is different from the newer 2010 English version. The French translation is from 2010, including a concise preface and the newly added Chapter 8 about Happiness or Subjective Well-Being, this Chapter is called 'Light or Dark'.

#### 2.2.3 Hofstede's questionnaires.

Hofstede elaborated several questionnaires. After many years of research, his opinion is that different questionnaires are needed to find out something about cultures in Organisations, about cultures in nations, about symbols, heroes, rituals and values. The questionnaire about Cultures in Nations is called 'Values Survey Module (VSM)'. It is reprinted in the appendix of his book 'Culture's Consequences' from 2001, page 467. It is also on his website http://www.geerthofstede.nl/html under VSM, translated in many different languages. Here the first questions of his 2008 Values Survey Module:

# Please think of an <u>ideal</u> job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

1 =of utmost importance; 2 =very important; 3 =of moderate importance; 4 =of little importance; 5 =of very little or no importance

Number	Question	Of utmost	Very	Of	Of little	Of very
		importance to me	important	importance	importance	little or no
1.	Have sufficient time for your personal or home life	1	2	3	4	5
2.	Have a boss (direct superior) you can respect		2	3	4	5
3.	Get recognition for good performance	1	2	3	4	5
4.	Have security of employment	1	2	3	4	5
5.	Have pleasant people to work with	1	2	3	4	5
6.	Do work that is interesting	1	2	3	4	5
7.	Be consulted by your boss in decisions involving your work	1	2	3	4	5
8.	Live in a desirable area	1	2	3	4	5
9.	Have a job respected by your family and friends	1	2	3	4	5
10.	Have chances for promotion	1	2	3	4	5

 Table 2.1 Hofstede's questionnaire about values VSM08

The questionnaire about Cultures in Organisations is called 'Organizations Cultures Questionnaire'. Geert Hofstede provided me with the English version. He didn't have a French or German version. I translated his English version into French and German for him and provided them to him. Below are some of the first questions. The full questions are to be found in the appendix.

### Where I work....

		-	-			
1. People are uncomfortable in unfamiliar situations; they try to avoid taking risks	1	2	3	4	5	People are comfortable in unfamiliar situations; they do not mind taking risks
2. People spend the least effort possible		2	3	4	5	Everybody always puts in a maximal effort
3. Each day brings new challenges	1	2	3	4	5	Each day is pretty much the same
4. There is a strong pressure for getting the job done; there is little concern for personal problems of employees	1	2	3	4	5	Personal problems of employees are always taken into account; getting the job done comes second
5. All important decisions are taken by individuals	1	2	3	4	5	All important decisions are taken by groups or committees
6. Our company/organization takes a major responsibility for the welfare of its employees and their families	1	2	3	4	5	Our company/organization is only interested in the work our employees do
7. We do not think more than a day ahead	1	2	3	4	5	We think three years ahead or more
8. People's private lives are considered their own business	1	2	3	4	5	The norms of our organization cover people's behaviour both on the job and at home

### Table 2.2 Hofstede's questionnaire about the company

The full versions of his questionnaires can be found in the appendix of my thesis. One questionnaire is about the company's values, one questionnaire is about people's values, and one questionnaire is about symbols, heroes, rituals and values. The questions to identify symbols, heroes, rituals and values are on page 395 (Hofstede, 2001).

Hofstede's Questions about Symbols, Heroes, Rituals, and Values, to be used in interviews, not in questionnaires.

- What terms are only used by insiders?
- What are famous words here? (to identify organisational symbols)
- What things are important here to get on?
- Are there, according to you, people who are of great importance to the organisation? (to identify organisational heroes)
- What events are celebrated in the organisation?
- What are some of the important rules written and unwritten that apply here?
- How are, according to you, important decisions made? (to identify organisational rituals)
- What do people especially like to see here?
- What are the greatest mistakes one can make here?
- What is the most negative / most positive image in the outside world about this organisation that you can think of? (to identify organisational values)

It is important to understand that there are cultures in nations and cultures in organisations. The two are very different. Over the many years of research Hofstede discovered that the both are so different, that they even cannot be measured with the same questions. Therefore he developed a different questionnaire for nations and for organisations (Hofstede et al., 2010, p. 43).

In his questionnaire about organisations, Hofstede includes the questions produced by the six orthogonal dimensions of organisational cultures, based on different practices, his six factors for individual values and his six factors for individual perceptions, and the 'big five' universal dimensions of individual personality (Hofstede, 1995).



Figure 2.7 Six orthogonal dimensions of organisational cultures, based on different practices (adapted from Hofstede, 1995)



Figure 2.8 Hofstede's six factors for individual values (adapted from Hofstede, 1995)



Figure 2.9 Hofstede's six factors for individual perceptions (adapted from Hofstede, 1995)

# Hofstedes' 'big five' universal dimensions of individual personality

Different individuals hold different values within the organisation because of the 'big five' universal dimensions of individual personality:

**O: Openness**, with the key words imaginative and original, opposed to conventional.

**E: Extraversion**, with the key words active and energetic, opposed to passive.

**C: Conscientiousness**, with the key words organised and efficient, opposed to messy.

**N: Neuroticism**, with the key words anxious and hostile, opposed to relaxed.

**A: Agreeableness**, with the key words altruistic and modest, opposed to cold (Hofstede, 1995, pp. 210-212).

Figure 2.10 Hofstede's 'big five' universal dimensions of individual personality (adapted from Hofstede, 1995, pp. 210-212)

About national culture, a true story illustrates this very well and cannot be better told than by Geert Hofstede et al. (2010, preface) himself: "On a trip around the world several years ago, Geert bought three world maps. All three are of the flat kind, projecting the surface of the globe on a plane. The first shows Europe and Africa in the middle, the Americas to the west and Asia to the east. The terms the West and the East were products of a Euro-centered worldview. The second map, bought in Hawaii, shows the Pacific Ocean in the center, Asia and Africa on the left (and Europe, tiny, in the far upper left-hand corner), and the Americas to the right. From Hawaii, the East lies west and the West lies east! The third map, bought in New Zealand, was like the second but upside down: south on top and north at the bottom. Now Europe is in the far lower right-hand corner. Which of these maps is right? All three, of course; each is round, and any place on the surface is as much the center as any other. All peoples have considered their country the center of the world; the Chinese call China the 'Middle Kingdom' (zhongguo) and the ancient Scandinavians called their country by a similar name (midgardr). We believe that even today most citizens, politicians and academics in any country feel in their hearts that their country is the middle one and they act correspondingly."

### 2.2.4 Replications of the IBM studies.

The IBM studies of Hofstede found many replications. Most replicators administered the original IBM questions in full or in part. The original IBM questionnaire was later improved and replaced by the VSM (Values Survey Modules). Many compared several countries, but some compared only two or three countries at a time. This was done by the smaller studies. **Mikael Søndergaard** for example confirmed the findings of Hofstede in his research. Other researchers were **Hoppe (2004)**, **Shane**, **Merrit**, **de Mooij**, **Mouritzen**, **van Nimwegen** (Hofstede et al., 2010, p. 35).

Bigger replications were the **GLOBE** (Global Leadership and Organizational Behavior Effectiveness), initiated in 1991 by **Robert J. House** in the U.S.A. His research was made from 1994 to 1997 by 170 collaborators getting data from 17,000 managers in 1,000 organisations in 61 countries around the world. He changed the 5 Hofstede dimensions to 9. GLOBE kept some of Hofstede's dimensions and modified others. They kept 'Power Distance' and 'Uncertainty Avoidance'. They split 'Collectivism' into 'Institutional Collectivism' and 'In-Group Collectivism'. They split 'Masculinity-Femininity' into 'Assertiveness' and 'Gender Egalitarianism', adding 'Humane orientation' and 'Performance Orientation'. They renamed 'Long-Term Orientation' into 'Future Orientation'. The GLOBE distinguished between 'AS IT IS' and 'AS IT SHOULD BE', but they didn't ask about the desirable. Being highly correlated with national wealth, the GLOBE identified strongly 'Individualism' and 'Power Distance' (Hofstede et al., 2010, pp. 41-43).

Another author to be cited is **Fons Trompenaars**, following Hofstede a Dutch management consultant who professes having researched dimensions of national culture (Hofstede et al., 2010, p. 43). Hofstede's critique goes to the fact that Trompenaars claims to hold data from 55,000 managers, but nobody has ever seen them and there are no Trompenaars peer-reviewed academic publications. In any case, Trompenaars came up with 7 cultural dimensions: universalism versus particularism, individualism versus collectivism, affectivity versus neutrality, specificity versus diffuseness, achievement versus ascription, time orientation and relation to nature. Hofstede further criticises Trompenaars, saying that all of his questions covered only the Individualism-Collectivism dimension and nothing else.

Initiated in the 1980 by the U.S. sociologist **Ronald Inglehart**, the research he does is very large. He started a 'European Values Survey', that fast expanded into a periodic 'World Values Survey' (WVS). Inglehart developed a questionnaire with 360 questions that are fully set out in his book 'Modernization and Postmodernization – Cultural, Economic, and Political Change in 43 Societies' from 1997. Today he covers not 43 societies, but 100 in the area of ecology, economy, education, emotions, family, gender and sexuality, government and politics, happiness, health, leisure and friends, morality, religion, society and nation, at work (Hofstede et al., 2010,

p. 44). Hofstede says that, if he had to re-start his IBM studies today, he would do it with the Inglehart World Values Survey. This is very positive. Inglehart's studies are based on 2 main factors: the 'Well-Being' versus 'Survival' and 'Secular-Rational' versus 'Traditional Authority'. The interested reader can consult the results freely on the internet. The website is: http://www.worldvaluessurvey.org/html .

Michael Minkov took the challenge to put some order into the huge amount of data collected by Inglehart, who continues collecting data. Minkov came up with 3 dimensions of culture: 'Exclusionism' versus 'Universalism'; 'Indulgence' versus 'Restraint'; 'Monumentalism' versus 'Flexhumility' (Hofstede et al., 2010, p. 45). Hofstede even adds a sixth dimension of culture to his existing 5: 'Indulgence versus Restraint (IVR).

Hofstede et al. (2010, p. 45) points out, that there are cultural differences according to region, ethnicity, religion, gender, generation, class.



Figure 2.11 Hofstede's cultural differences (adapted from Hofstede et al., 2010, p.45)

Additionally, there are cultures in nations and cultures in organisations, as stated above.

Luxembourg is included in Hofstede's research. As I contest the data found on Luxembourg, I communicated with Geert Hofstede, who confirmed with me, that in his IBM studies from the late 1960 and 1970s he did not include Luxembourg. IBM Luxembourg possibly did not provide any data or did not participate at all. In his IRIC study that led to his 2001 book, he included data on Luxembourg and also positioned Luxembourg on his diverse maps. I was to contest these data and these positions, and Geert Hofstede confirmed with me, that these are only estimates. This is reassuring, as the data seem so different from the lived reality. And this is also my contribution to knowledge: Geert Hofstede does not hold any data on Luxembourg. I contacted the other authors in the culture research domain and got confirmation that there is no research done in Luxembourg. This is my contribution to knowledge: research in Luxembourg. Obtaining data in Luxembourg is difficult, due to the cultural realities in Luxembourg. This will be elaborated in detail later.

The advice by Hofstede did not discourage me from doing my research: "A single researcher's attempts to measure culture are usually a waste of time, a source of confusion, and at best a reinvention of the wheel." He further advices that the Values Survey Module, that was a result from the IBM research, is to be used to compare at least ten countries, otherwise it is again a waste of time. He says it would be preferable to "familiarize yourself with the literature, select from the available databases, and apply them critically to your specific topic" (Hofstede et al., 2010, p. 49). For him research is about interpreting data, not necessarily about collecting them. He advises to search the literature and the internet, where enough databases are already available (Hofstede et al., 2010, pp. 48-49). The German translation 'Lokales Denken, globales Handeln' doesn't include this advice. By reading the two books in parallel I also noted that the German

translation is not as complete as the original, some parts, details, sentences, paragraphs are missing. I would like to contradict this advice, as from my research it is clear, that there are no data available about the Grand-Duchy of Luxembourg. Geert Hofstede himself confirmed with me, that he has no data available about the Grand-Duchy of Luxembourg, and that the data in his 2010 book 'Software of the Mind' are estimates. Kirkman also confirmed with me via email that there is no research done so far in the Grand-Duchy and that this therefore would be my contribution to knowledge. Others like de Mooij, Briley and Nakata confirmed this missing piece of data collection as well via email.

### 2.2.5 Luxembourg, France, Germany in Hofstede.

Luxembourg: Hofstede didn't include Luxembourg in his initial IBM studies, even if IBM has been in Luxembourg since 1936. Why? It is possible he did not get enough filled-in questionnaires back. It is possible that IBM Luxembourg was not interested in his research at all. Hofstede included Luxembourg in his IRIC studies that contributed to be the 2010 book 'Cultures and Organizations – Software of the Mind'. As I was to contest the data shown about Luxembourg, Hofstede emailed me, at my questioning email, that the data about Luxembourg in the IRIC study are estimates. In short: he holds no data about the Grand-Duchy of Luxembourg, neighbour to his own University of Maastricht. We will later study in detail Luxembourg and its cultural specificity in the chapter about Luxembourg.

Hofstede classifies France into the category of Europe South/South-East. The other countries – Luxembourg, Germany and Belgium are in the category Europe North/North-West/Anglo World.

Country	IDV	PDI	MAS	UAI	LTO	IVR
Luxembourg	60	40	50	70	64	56
France	71	68	43	86	63	48
Germany	67	35	66	65	83	40
Belgium FR	72	67	60	93	-	57
Belgium NL	78	61	43	97	-	57
Great Britain	89	35	66	35	51	69
USA	91	40	62	46	26	68
China	20	80	66	30	87	24

 Table 2.3 Hofstede's cultural dimensions

The huge differences in culture can be seen from the above table and the following figure.

### Hofstede's huge differences in culture: Comparison between France, Germany, Belgium FR and Belgium NL, Great Britain, USA, and China

**France** is a country with high IDV, high PDI, low MAS, high Uncertainty Avoidance, high LTO and low IVR.

**Germany** is a country with high IDV, low PDI, high MAS, high UAI, high LTO and low IVR.

**Belgium FR and NL** are nearly identical in high IDV, high PDI, high UAI, and medium IVR. The difference is in high MAS for Belgium FR and low MAS for Belgium NL.

**Great Britain** and **USA** are similar in very high IDV, low PDI, high MAS, low UAI, and high IVR. The difference is the very low score in LTO for the USA compared to a medium LTO for Great Britain.

**China** is the country that stands out with a very low IDV and very low UAI, but very high PDI, high MAS, very high LTO and very low LVR, see Hofstede's figures in the appendix, one hereafter.

Figure 2.12 Hofstede's huge differences in culture: Comparison between France, Germany, Belgium FR and Belgium NL, Great Britain, USA, and China (Hofstede et al., 2010)

The next figure shows one of the maps that Hofstede et al. (2010) came up with comparing the world on Uncertainty Avoidance Versus Individualism. More maps are to be found in the appendix.



Figure 2.13 Hofstede's Figure 6.2 Uncertainty Avoidance Versus Individualism (Hofstede et al., 2010, p. 218)

### 2.2.6 France, Belgium and Germany in Hofstede.

In France and Belgium you can find medium power distance combined with strong individualism. In France it is about the principle of organizing as 'the rationale of honor' (la logique de l'honneur) (Hofstede et al., 2010, p. 104). Countries with high PDI often have a low IDV and vice versa. IDV rises with rising wealth of a country, allowing people to acquire things to do their own way. Geographical latitude has an influence; countries closer to the equator have a lower IDV.

Highly feminine countries are Sweden, Norway, the Netherlands, Belgium NL and France and Luxembourg are around 43, whereas Germany is more masculine.

In France, the King was long time the authority, the poor had to follow his orders (Hofstede et al., 2010, p. 104).

The development of economic and IT factors in a country determine the difference in power between genders. The differences between Germany and France can be interpreted as a consequence of this different development. The more feminine countries in North-western Europe (Sweden, Norway, the Netherlands) are based on historic factors. France is more known for its charming women, for the quality of the food, the good wines and champagne, for the French style of living. This French savoir vivre is opposed directly to the German rigour, strictness, punctuality, inflexibility and bad behaviour. The German punctuality is the extreme behaviour for Uncertainty Avoidance. If a train is late in Germany, it causes phobia, fear. Extreme uncertainty provokes extreme fear (Hofstede et al., 2010, p. 211). Rules are made to take this fear. Rules in German companies are strictly respected, whereas they are not respected that strictly in French companies. There is always room for interpretation. France has a higher UAI than Sweden. In the joint venture from the early 1990 between French Renault and Swedish Volvo exactly this UAI led to the break-up of the joint-venture some years later.

Uncertainty Avoidance and Religion is a big subject, in the mainly catholic France, and a Germany divided into the catholic South and the protestant North. UAI is high in catholic countries (Hofstede et al., 2010, p. 226).

In the area of philosophy, Germany and France have come up with great philosophers, like Goethe, Schiller, Descartes, Kant, Hegel, Marx, Nietzsche, and Sartre. Germans and French tend to reason by deduction, Albert Einstein, Sigmund Freud, Karl Popper, Kurt Lewin, Theodor Adorno and others fled Nazi-Germany to the US or to Britain (Hofstede et al., 2010, p. 229).

Short-Term Orientation is seen in the fact that people do not save money any more (Hofstede et al., 2010, p. 242).

France and Germany represent the highest percentage of MBA degrees, and of diplomas in higher education, much bigger than in Britain. France is known for its excellent private schools and the elite it is producing (Hofstede et al., 2010, p. 235).

An example is the printing company with one General Manager and three Department Managers. This printing company is having problems (Hofstede et al., 2010, p. 301). The case study performed at University among students from France, Germany and Britain provided the following outcome:

The French students were of the opinion that the problems came from the bad management of the General Manager (Hofstede et al., 2010, p. 304). In their system of "pyramid of people", the boss is the boss, he has to give orders that the other three Department Managers and all the others have to execute. French people have a culture that concentrates on authority. France has high Power Distance Index and low Uncertainty Avoidance Index.

The German students' opinion was that the problems came from the missing rules (Hofstede et al., 2010, p. 304). They claimed the introduction of new procedures to be the solution. Germans have a system of "well-oiled machine", Germans need structure, formal rules, order, they focus on formal systems, on the running of the machine, and the control of the formal rules. Germany has a high Power Distance Index and a high Uncertainty Avoidance Index.

The British students' diagnosed that the problems were human relations problems, and suggested the managers should be sent to a management course (Hofstede et al., 2010, p. 304). The British have a system of "village market", where problems are solved ad hoc. Britain has a low Power Distance Index and a low Uncertainty Avoidance Index.

Following Hofstede et al. (2010, p. 315) "planning and control processes in organizations are strongly influenced by culture. Planning and control go together: planning tries to reduce uncertainty, and control is a form of power."

## 2.3 The Era before Hofstede: Maslow – McClelland – Herzberg, Rokeach, Kluckhohn, Hall

Hofstede brought an end to the more narrative and folkloristic American literature about culture. "Motivation, Leadership, and Organization: Do American Theories Apply Abroad?" from 1980 was a bitter critique at the Americans analysing the cultures of the world from home. Hofstede analysed and criticised the generally accepted theories from such well-known people as McGregor (1960), McClelland (1961), Vroom (1964), Blake and Mouton (1964), Likert (1967), Herzberg (1966) and Maslow (1970), as well as those from Rokeach (1971, 1979) and Kluckhohn and Strodtbeck (1961). Abraham Maslow is known for his "hierarchy of needs", David McClelland for his "motivation theory", Frederick Herzberg for his "two factor theory", Milton Rockeach for his "Rockeach Value Survey", Florence Kluckhohn and Fred Strodtbeck for their "values orientation theory" and Edward Hall is known as anthropologist who sacrificed his life for lifelong research on culture with descriptive, qualitative methods living with Navajo and Hopi native Americans.

Hofstede's opinion was that their theories do not necessarily apply outside of the borders of the United States of America, which at that time was an unthinkable hypothesis.

### 2.3.1 Luxembourg, France, Germany in Maslow, McClelland, Herzberg, Rokeach, Kluckhohn, Hall.

There is very little, if nothing, about Luxembourg, France and Germany in their research.

### **2.3.2** Edward T. Hall (1978) and (1990) and the comparison America-Germany-France.

Within this American literature from McGregor, McClelland, Vroom, Blake and Mouton, Likert, Herzberg and Maslow, but on the timescale later than them, another American philosopher, Edward T. Hall (1978), became famous with his two books "Beyond Culture" from 1978 and "Understanding cultural differences" from 1990. "Beyond Culture" is a description of culture seen from the American standpoint, far away from Europe, comprising more general wisdom than real research. Hofstede stated that this literature was more descriptive, stereotypic and anecdotic. Citation: "From birth to death, life is punctuated by separations, many of them painful. "Paradoxically, each separation forms a foundation for new stages of integration, identity and psychic growth" (Hall, 1978, p. 223). As true and as remarkable this sentence is, it is a more narrative way of general wisdom. Hall writes about the paradox of culture, covert culture, culture as an irrational force, culture as identification, about hidden culture, about rhythm and body movement. "one cannot normally transcend one's culture without first exposing its major hidden axioms and unstated assumptions concerning what life is all about – how it is lived, viewed, analyzed, talked about, described and changed" (Hall, 1978, p. 222). "... Two other situations that expose culture's hidden structure are when one is raising the young and is forced to explain things, and when traditional cultural institutions begin to crumble as they are now doing. The task is far from simple, yet understanding ourselves and the world we have created – and which in turn creates us – is perhaps the single most important task facing mankind today" (Hall, 1978, p. 222).

### 2.3.3 Luxembourg, France and Germany in Hall.

After Hall's "Beyond Culture" from 1978 he published together with Mildred Reed Hall "Understanding cultural differences", a comparison between Germans and French and Americans (Hall & Hall, 1990). That this is a pure folkloristic comparison to America can be found in sentences like "The scale of everything is smaller in Germany than in the United States", (Hall & Hall, 1990, p. 38). Or: "Any invitation to visit a German home is an honor", p. 39. "Germans keep doors closed. When you encounter a closed door, knock and wait to be invited to enter" (p. 41). Hall and Hall (1990) further say a lot of truth about Germany, i.e., that Americans describe Germans "highly disciplined, well educated, neat and orderly.... perfectionists" (p. 76). They say, that Germans have a "preoccupation with historical context" (p. 36) and they are monochromic, they "plan ten and twenty years ahead" (p. 37). Decision making is slow in Germany, and "changing plans after things are in place may strike Germans as arbitrary and irresponsible"... "they become upset and sometimes enraged" (p. 35). Hall and Hall give a piece of useful advice: "If there is a chance you'll be late for an appointment, telephone ahead" (p. 35). They entitle it: "German time: precise scheduling, slow pace". They even give 12 suggestions to Americans doing business in Germany, among those are: "They (the Germans) want quality, performance, durability and, most of all, information, not hype" (p. 82) and to "learn the language, learn the language, learn the language" (p. 81).

France is a polychronic country, following Hall and Hall (1990). "France has absorbed ... people from North Africa .... (with) various subcultures, .... high on the polychronic scale" (p. 88). "They love to talk and communicate with their whole body".... "French don't always adhere to schedules or appointments, delivery dates, or deadlines", there might be "many interruptions and emergencies" (p. 89). "The French have elaborate information networks which include clients, friends, and family...", "change in plans to accommodate to changing conditions" are normal and "long-term planning is especially difficult for the French" (p. 89). Hall and Hall (1990) say the French are "quick and flexible" (p. 90), "moving with a rapid, staccato beat. They don't do things in a slow or measured way, as Germans do. They rush." And the French space is centralised: "the entire country is laid out around centers, with Paris as the most important hub" (p. 91). At work, in the office, "the person in the center of the space is the boss" (p. 91). "The boss is the boss" (p. 115). In general, "the French stand and sit closer to each other than do Germans and most Americans" (p. 92). France is known for art and literature. In communication, French are indirect and eloquent (p. 102). In business, command and control are key, the boss has the say and centralisation, networks among knowledge, continuous changes, sensitivity to hierarchy and status (p. 113) are facts of working life. The French "are primarily concerned with their own self-interest" (p. 113).

"For Americans, it's every man for himself" (Hall & Hall, 1990, p. 147). "Americans expect freedom of choice in virtually everything" (p. 147). "Most Americans admire hard work and success" (p. 149), and they have "everything except time for relaxation" (p. 145). "Americans have fewer holidays, ... take shorter vacations than do Europeans,... often work fifty-six hours a week... (they) are obsessed with work". "Americans are highly mobile, ... (they) learn to make new friends easily,... form superficial relationships more often than deeper... ". The surface friendliness of Americans often shocks other cultures. "Being a good neighbour means maintaining your property, lending tools, supplies and assistance, visiting across the fence, working together on projects".... Americans are a "society of ethnic diversity and high mobility, a nation of strangers"... who "find their identity in business or professions and in the civic organisations" like Rotary (pp. 144-145). In education, unfortunately, the quality of education has declined over the years, television is watched intensively and drugs are abused, illiteracy is high (pp. 142-144). "Americans tell jokes about their political leaders incessantly" (p. 148), they "prefer directness in communication, although they are not as frank or blunt as Germans are" (p. 146).

There is no mention of Luxembourg in Hall.

### 2.4 The Era after Hofstede: Hofstede's Replications

### 2.4.1 Fons Trompenaars and Charles Hampden-Turner.

Trompenaars and Hampden-Turner published in 1993 "Riding the waves of culture – understanding cultural diversity in business", a study that initiated a harsh discussion between Hofstede and Trompenaars. Some claim that Hofstede had to admit that this research was close to his and filling the gaps of his study. Trompenaars, Hampden-Turner and Hofstede often discussed the different points, questionnaires, questions and methods. Nevertheless, the international management world welcomed Fons Trompenaars and Charles Hampden-Turner, who completed good research with a well reflected questionnaire in cross-cultural training programs, founded their Intercultural Management Group and worked together with the KPMG network. Their book from 1993, the second edition from 1997 "Riding the waves of Culture" is one of their many books, among them "Maps of the Mind" and "The Seven Cultures of Capitalism". Their concepts are individualism and communitarianism, discussing how far we get involved, how we accord status, how we manage time, how we relate to nature, national culture and corporate culture and are conciliation of cultural dilemmas.



Figure 2.14 The era after Hofstede: Hofstede's replications

"Riding the waves of culture" is "about cultural differences and how they affect the process of doing business and managing. It is not about how to understand the French (a sheer impossibility) or the British (try, and you will soon give up). It is our belief that you can never understand other cultures" Trompenaars and Hampden-Turner (1997, p. 1). They say that "culture is the way in which a group of people solves problems and reconciles dilemmas" (p. 6). They try to "describe, why there is no one best way of managing, and how some of the difficult dilemmas of international management can be mediated" (p. 11). They also say that "Management gurus like Frederick Taylor, Henri Fayol, Peter Drucker, Mike Hammer, James Champy and Tom Peters ... gave the impression that there was one best way to manage and to organise" (pp. 13-14), contrary to what is the belief of Trompenaars and Hampden-Turner. Unfortunately "culture still seems like a luxury item to most managers, a dish on the side" (p. 16). Following Trompenaars and Hampden-Turner, the concept of culture is "social interaction, or meaningful communication, presupposes common ways of processing information among the people interacting" (p. 20). Culture is made of several layers: the outer layer are artefacts and products, the explicit products. The middle layer is composed of norms and values. The inner layer is the core layer; it is the assumptions about existence (pp. 20-23).

### 2.4.1.1 Trompenaars and Hampden-Turner: Five basic problems that mankind faces.

Trompenaars and Hampden-Turner cite Kluckhohn and Strodtbeck on pages 26-28. They identified five basic problems that mankind faces. Kluckhohn and Strodtbeck say that there are predominant value orientations in any culture.

# Trompenaars and Hampden-Turner: Five basic problems that mankind faces

- 1. What is the relationship of the individual to others (relational orientation).
- 2. What is the temporal focus of human life? (time orientation).
- 3. What is the modality of human activity (activity orientation).
- 4. What is a human beings relation to nature? (man-nature orientation).
- 5. What is the character of innate human nature? (human nature orientation).

Figure 2.15 Trompenaars and Hampden-Turner: Five basic problems that mankind faces (adapted from Trompenaars and Hampden-Turner, 1997)

### Trompenaars and Hampden-Turner: Five dimensions of culture

- 1. Universalism versus particularism (rules versus relationships).
- 2. Communitarianism versus individualism (the group versus the individual).
- 3. Neutral versus emotional (the range of feelings expressed).
- 4. Diffuse versus specific (the range of involvement).
- 5. Achievement versus ascription (how status is accorded).

Figure 2.16 Trompenaars and Hampden-Turner: Five dimensions of culture (adapted from Trompenaars and Hampden-Turner, 1997, p. 29)

Trompenaars and Hampden-Turner provide five dimensions of culture (1997, p. 29).

"These five value orientations greatly influence our ways of doing business and managing as

well as our responses in the face of moral dilemmas" (1997, p. 29).

"People everywhere are confronted with three sources of challenge. They have

relationships with other people, such as friends, employees, customers and bosses. They must

manage time and ageing. And they must somehow (manage) the external nature of the world"

(1997, p. 29).

Hofstede replied to Trompenaars and Hampden-Turner with the publication from 1996 "Riding the waves of commerce" in the International Journal of Intercultural Relations, which generated a response from Trompenaars and Hampden-Turner in 1997 "A response to Hofstede" in the same International Journal of Intercultural Relations.

#### 2.4.1.2 Trompenaars's and Hampden-Turner's questionnaire.

The database that Trompenaars and Hampden-Turner accumulated over the years is one of the biggest, together with Hofstede and GLOBE. Hofstede criticises the fact that no-one ever has seen the database, the data, or the questionnaires and therefore the findings remain obscure.

His questions are divided into his 5 dimensions of culture. It is important to understand the nature of their research and therefore add one question per chapter. Some other questions of Trompenaars's and Hampden-Turner's 1997 book 'Riding the wave of culture' are to be found in the following figure.

Questions in the domain of: Universalist versus particularist orientations.	Questions in the domain of: The group versus the individual.	Questions in the domain of: How we manage time: measuring cultural differences in relation to time –
The car and the pedestrian. You are riding in a car driven by a close friend. He hits a pedestrian. You know he was going at least 35 miles per hour in an area of the city where the maximum allowed speed is 20 miles per hour. There are no witnesses. His lawyer says that if you testify under oath that he was only driving 20 miles per hour it may save him from serious consequences. What right has your friend to expect you to protect him? a) My friend has a definite right as a friend to expect me to testify to the lower figure. b) He has some right as a friend to expect me to testify to the lower figure. c) He has no right as a friend to expect me to testify to the lower figure. What do you think you would do in view of the obligations of a sworm witness and the obligation to your friend? d) Testify that he was going 20 miles an hour.	<ul> <li>The quality of life.</li> <li>Two people were discussing ways in which individuals could improve the quality of life.</li> <li>A One said: "It is obvious that if individuals have as much freedom as possible and the maximum opportunity to develop themselves, the quality of their life will improve as a result."</li> <li>B The other said: "If individuals are continuously taking care of their fellow human beings the quality of life will improve for everyone, even if it obstructs individual freedom and individual development."</li> <li>Which of the two ways of reasoning do you think is usually best, A or B?</li> </ul>	Consider the relative significance of the past, present and future. You will be asked to indicate your relative time horizons for the past, present and future by giving a number: 7=years, 6=months, 5=weeks, 4=days, 3=hours, 2=minutes, 1=seconds My past started ago, and ended ago. My present started ago, and ended from non. My future started from now, and ended from now.
Questions in the domain of: Feelings and relationships.	Questions in the domain of: Specific versus diffuse: how far do we get involved?	Questions in the domain of: How we relate to nature. The captain of their fate.
<b>To show or not to show our emotions:</b> <b>Neutral versus affective.</b> Please indicate the degree to which you agree or disagree with the following statement (a=strongly agree, b=agree, c=undecided;	Paint the house. A boss asks a subordinate to help him paint his house. The subordinate, who does not feel like doing it, discusses the situation with a colleague.	<ul> <li>A What happens to me is my own doing.</li> <li>B Sometimes I feel that I do not have enough control over the directions my life is taking.</li> <li>Questions in the domain of: How we accord status.</li> <li>Acting as suits you even if nothing is achieved.</li> </ul>
d=disagree; e=strongly disagree): In retrospect I very often think I have given away too much in my enthusiasm.	A The colleague argues: "You don't have to paint if you don't feel like it. He is your boss at work. Outside he has little authority." B The subordinate argues: "Despite the fact that I don't feel like it, I will paint it. He is my boss and you can't ignore that outside work either "	On a five-point scale: The most important thing in life is to think and act in the ways that best suit the way you really are, even if you do no get things done. <b>Respect depends on family background.</b> On a five-point scale: The respect a person gets is highly dependent on their famil background.

Figure 2.17 Trompenaars's and Hampden-Turner's questionnaire (adapted from Trompenaars and Hampden-Turner, 1997)

It can be noted, that these questions are different from Hofstede's questions.

### 2.4.1.3 Luxembourg, France and Germany in Trompenaars and Hampden-Turner.

In their worldwide research about individualism, Trompenaars and Hampden-Turner found the lowest score in 'Individualism' in Europe is in France, with only 41%. They say that the French are the most collectivist in Europe, going on vacation all together on August 1<sup>st</sup>, to the Club Méditerranée, where they all meet again (Trompenaars & Hampden-Turner, 1997, p. 51). The French stay in France and in their family. They are mostly Roman Catholics, with the Catholic Church as the high authority. Authority in France is highly respected, with authority of religion, of economy and intellectual elitist education system. They state on page 53 that the eighteenth century brought them under the influence of the individualist pleasures by Voltaire and Rousseau. They were opposed to the Catholic Church. In the nineteenth century, the socialists praised the positive effects of individualism, but did not really succeed.

In the Chapter 'Which countries prefer which corporate cultures' they report from the outcome of their study, where they found about France that France scores highest for family companies and Germany for having "Eiffel Tower" structures.

The French are flexible on time scheduling, they have a big willingness to dedication to the work done and not to the time spent on the work, with a flexible program.

Germans would have agreed on a fixed schedule first and then would have seen the outcome.

Germany scores 53% in individualism. Belgium 57%.

Germany is known for its serious working style with lack of humour. In Britain and the USA workshops are often started with a cartoon (Trompenaars & Hampden-Turner, 1997, p. 73), as they tried to start the same workshop series in Germany with the same cartoon at the beginning, nobody laughed. In business circumstances, it is not foreseen in Germany, to laugh.

Unfortunately, they did not do research in Luxembourg either, despite their huge data base. So there is room for further research, i.e. applying Trompenaars's questions in Luxembourg.

#### 2.4.2 Marieke De Mooij.

### 2.4.2.1 Marketing and cultures.

Marieke de Mooij (2010) is co-writing with Geert Hofstede the publication "The Hofstede Model", applying his model to global branding and advertising strategy.

De Mooij is a cross cultural communications consultant and visiting professor to many universities. Her latest publications are "Consumer Behavior and Culture" from 2011 and "Global Marketing and Advertising: Understanding Cultural Paradoxes" from 2010.

Hofstede wrote together with Michael Hoppe, Marieke de Mooij and others "Masculinity and Femininity: The Taboo Dimension of National Cultures" in 1998.

In her third edition of 'Global Marketing and Advertising' from 2010, Geert Hofstede wrote the Foreword, praising her with the words: "Marieke de Mooij is a world pioneer in the field of culture and marketing". He says that "fundamentally there is not such a thing as a universal rationality" (Hofstede in de Mooij, 2010, xiii). She writes in her different chapters about 'culture and consumer behavior', 'culture and communication', 'culture and the media', 'culture and advertising appeals', 'culture and executional style' and about 'dimensions of culture'. She reviews the American anthropologists Kluckhohn and Strodtbeck, and Edward
Hall. She reviews Trompenaars and the Israeli psychologist Shalom Schwartz, Inglehart, and discusses the GLOBE model by Robert House, Michael Minkov. And she reviews Hofstede's five dimensions of culture.

#### 2.4.2.2 Luxembourg, France and Germany in de Mooij.

There are many examples from France and Germany in de Mooij (2010) and de Mooij (2011) throughout the books, like McDonalds, Coca Cola, Pepsi, L'Oréal, Dove, Volvic, Ferrero on Global Branding and different value systems. She also stresses the saying 'Think global, act local' and warns about stereotyping (2010, p. 51). Of course "the British are more reserved in the eyes of the French, the Italians generally more chaotic in the eyes of the Germans, and the Germans rigid as perceived by the British". The interested reader will have to read her books, it is impossible to repeat everything.

She didn't mention Luxembourg, even though Ferrero has its European headquarters in Luxembourg.

# 2.4.3 Harry C. Triandis.

# 2.4.3.1 Triandis's individualism/collectivism research.

Triandis says about himself: "I was raised in Greece, at a time when it was a traditional, collectivist culture. I came to North America to complete my undergraduate studies and did my Ph.D. at Cornell University. North America, north of the Rio Grande, contains largely

individualist cultures. I have been fascinated by the two kinds of cultures and wrote about their differences...between 1980 and 1994 I did a good deal of empirical work exploring these constructs...." (Triandis, 1995). This is the preface to Triandis book from 1995 'Individualism and Collectivism'. In 2011, the subject Greece is again at the top of the discussion in Europe. With Greece being unable to repay its debts, not to say being in position where it is impossible to reduce its deficit, the European Union is discussing methods to oblige Greece to control its budget, to reduce its budget. Angela Merkel even asked them, undergoing significant criticism, to work more and sleep less. The European Union decided to finance the deficit of Greece to keep Greece a member of the Euro, by forcing them to drastic reforms that initiated riots, demonstrations, brutal confrontations with police forces in 2011. Portugal is to follow, and Spain is suffering from a very high unemployment rate. "In individualistic cultures people are more detached from their collectives" (Triandis, 1995, xiii). Is this the cause of the issues in Greece nowadays? "In individualist cultures people deal with each other as individuals and pay little attention to the group memberships of others" (Triandis, 1995, xiv).

#### 2.4.3.2 Examples on individualism/collectivism.

In his introduction, Triandis gives interesting examples that are cited in the following figure.

# **Triandis's questions on individualism/collectivism** What do the following incidents have in common? 1. In Brazil, a waiter brings one menu for four people and gives it to the 'senior' member of the group, who orders the same food for all. 2. In France, each member of the group orders a different entrée at a restaurant. 3. In India, a senior engineer is asked to move to New York, at a salary that is twenty-five times his salary in New Delhi, but he declines the opportunity. 4. In California, a senior engineer is asked to move to New York, at a salary that is 50 percent higher than his salary in Los Angeles, and he accepts. 5. On a street in Moscow, an older woman scolds a mother she does not know because she thinks the mother has not wrapped her child warmly enough. 6. In New York, a woman asks for help from passers-by to escape from the beatings that her boyfriend is giving her, but no one helps. 7. In Japan, a supervisor knows a great deal about the personal life of each subordinate and arranges for one of his subordinates to meet a nice girl he can marry. 8. In England, a subordinate does not mention to his supervisor that his father has just died. 9. In Germany, a man walks on the grass in a public park and is reprimanded by several passers-by. 10. In Illinois, a man marries a woman his parents disapprove of (Triandis, 1995, p. 1).

Figure 2.18 Triandis's questions on individualism/collectivism (Triandis, 1995, p. 1)

Triandis (1995) enumerates all of these examples to make us understand the differences of

cultures concerning individualism and/or collectivism. The behaviour in individualistic cultures

differs essentially from those in collectivistic cultures.

Many other authors only concentrated on this one cultural dimension from Hofstede, leaving aside the other 4 dimensions. The cultural dimension individualism versus collectivism is indeed anchored in the culture of a country, the behaviour is distinguished easily; examples are manifold and typical in such a way that it is easily noticed.

Following Triandis (1995, p. 105), the cultural dimension of individualism and collectivism is influenced by family, by cultural complexity, by affluence, by situations and by demographic factors.

## 2.4.3.3 Horizontal and vertical individualism/collectivism in Triandis.

In the cultural dimension individualism versus collectivism, he distinguishes furthermore between horizontal and vertical, which makes 4 categories: horizontal individualism, horizontal collectivism, vertical individualism and vertical collectivism (Triandis, 1995, p. 44). He says that "the horizontals, in contrast, have fundamentally Confucian values of cohesion". He cites Daun's study from 1991 and 1992, saying that for example Sweden has a horizontal individualist culture. "Swedes are extremely self-reliant. … The elderly do not live with their children, and living by oneself is highly valued. If one is to stay overnight at a friend's house, one takes one's own sheets. And 87 percent of Swedes indicate that they would like to live 'as (they) please" (Triandis, 1995, p. 45). On the contrary to the Swedes, he cites the Israeli Kibbutz that he categorises into the category horizontal collectivism. "They neither want to stand out nor to dominate others in their group, and they value community needs more than individual desires." Triandis (1995) on page 47 comes up with 4 descriptions on individualism/collectivism, shown in the following figure.

# Triandis's descriptions on individualism/collectivism

- 1. Achievement oriented (vertical individualism).
- 2. Cooperative (horizontal collectivism).
- 3. Dutiful (vertical collectivism).
- 4. Unique (horizontal individualism).

Figure 2.19 Triandis's descriptions on individualism/collectivism (Triandis, 1995, p. 47)

In the animal world, Triandis says (1995, p. 81) concerning collectivism, there are certain advantages of living in groups for animals: "It raises the probability of finding food, lessens the probability that the animal will be victim of other animals, contributes to reproductive success and increases the enjoyment of mutual care. In the world of the humans, collectivism represents that people behave as the ingroup specifies, they reflect cultural homogeneity, high population density and isolation from other cultures or groups. When resources are scarce, collectivism has an advantage".

Individualism reflects "cultural complexity, affluence and modernity, as a function of high education, maleness, urbanism, high social class and social and geographic mobility. Mass media increase the individualistic behaviour, as they promote pleasure and not duty" (Triandis, 1995, p. 83).

# 2.4.3.4 Luxembourg, France, Germany in Triandis, and Italy, Greece and USA.

He categorises into the collectivist countries and gives a good description of each of the countries: Japan, China, South-eastern Europe where he describes in detail Italy and Greece. He also categorises the individual cultures: ancient Greece, Germany, France, United States and Scandinavia.

Southern Italy has only one ingroup, which is the narrow family whose rules are followed meticulously. Contacts are very close with the narrow family, and very loose with the outgroup. Tight links link the narrow family, their prime objective is to maximise profit and benefit for the narrow family, and other narrow families just do the same. There is no interest in the community or in bringing the community forward. Extended families or voluntary organisations are nonexistent. There is no interest in the community, just enough for hospitals and schools, but not much. Laws are broken. They are there to be broken. When punished, one does not feel being guilty but unlucky. Punishment is seen as good because it keeps people from sinning. Triandis (1995) says on page 93 that this sounds like a stereotype, but when you see that Northern Italy claims independence from Southern Italy and vote 'Lega Nord', maybe there is a bit of truth.

Greece: "the traditional Greek key values were success of the ingroup, concern for others and dependability" (Triandis, 1995, p. 94). "Greek virtues are: doing what the ingroup expects me to do".

Individualistic cultures are ancient Greece, Germany, France, United States, Scandinavia. Triandis (1995, p. 95) finds some collectivism in German culture, especially because of the Nazi and the neo-Nazi movements.

Germany is individualistic and rather vertical, just like France and the United States. He sees the Netherlands and the Scandinavian countries as horizontal individual. With the democratisation process in Germany, the ties with the church, the family, social groups and the community were cut, women individualised, as they put less importance into marriage and home.

France is a country of centuries of autocratic regimes, with centralisation in Paris, with good food and wine, monuments to death and fear of taxation. Feelings against the State are especially because of the fear of high taxation and the opposition against control. Triandis says, France has collectivist traits because of the centralisation in Paris and the low mobility of the people, and education. The boss is the boss, power distance is high, 'Monsieur le Directeur' is almighty and owes respect, he is only addressed by committees, not by individuals. Triandis says, he has the impression that French people live in one place and travel for short periods to many places, what he calls an eroding collectivism and increasing individualism (Triandis, 1995, p. 97).

The United States of America are the country par excellence of individualism. Individual freedom and choice are of extreme importance to Americans. This individualism is vertical, especially in business and politics. Triandis (1995, p. 98) cites Hofstede (1980), who found the United States of America being the most individualistic country in the world, and this due to the

British immigrants, and especially the immigrants who were individualists, and upper class, with social mobility and this huge land, without borders. The first immigrants were individualistic upper class.

This is the difference to the first immigrants of Australia, who were prisoners and lower class sent over from Britain to clear their overloaded prisons, which might be the reason for the horizontal individualism found in Australia.

The world was divided into cultural categories by anthropologists, using mainly language families as classification, as it was the only category. These stories were well researched. "They have identified the Circum Mediterraneum (the regions around the Mediterranean, including Europe and Africa north of the Sahara); Africa south of the Sahara; South Asia; East Asia; the Pacific; North American indigenous peoples; and South American indigenous peoples (Triandis, 1995, p. 103). In this context, Triandis cites Hofstede (1991) who designed the maps of all of his researched countries. He also cites Schwartz and criticises him for his contradicting findings.

There is no research on Luxembourg here.

#### 2.4.4 Shalom Schwartz.

Schwartz identified seven country level value orientations surveying 60,000 people in 63 countries, shown in the following figure.

# Schwartz's seven country level value orientations Conservatism or embeddedness means maintaining the status quo, property, the group and traditional order. Intellectual autonomy means that people pursue their own ideas and tendencies independently. Affective autonomy means that individuals desire pursuing affective positive experiences. *Hierarchy* means the unequal distribution of power, roles and resources. *Egalitarianism* means that the welfare of others is pursued instead of selfish interests. *Mastery* means self assertion. Harmony means harmony with the environment.

Figure 2.20 Schwartz's seven country level value orientations (adapted from Smith et al., 2002)

Schwartz used his seven country-level value orientations to summarise them in three culture dimensions, as shown in the next figure.

Shalom Schwartz did research about values. He did a factor analysis of his values inventory. Schwartz discovered two factors. His first factor is the factor that distinguishes individualism versus collectivism, like Hofstede and Triandis. The second factor distinguishes harmony versus hierarchy with mastery.



Figure 2.21 Schwartz's three culture dimensions (adapted from Smith et al., 2002)

Triandis (1995) says that for Schwartz horizontal collectivism implies collectivism and harmony. On the opposite side, vertical collectivism implies collectivism and hierarchy. Horizontal individualism is individualism and harmony. Vertical individualism is individualism and hierarchy. It looks as if Schwartz had given another name to horizontal and vertical by finding harmony and hierarchy. Following Triandis, the findings of Schwartz contradict the findings of Triandis. Schwartz found that horizontal individualism was in France, West Germany and Italy. Triandis disagrees (1995, p. 105). Following Triandis, Schwartz had found high vertical collectivism in Singapore, with Bulgarian Turks, and in Malaysia. He had found high horizontal collectivism in Slovakia. Vertical individualism was high in the former East Germany. Triandis says about Schwartz, that Schwartz only analysed values, which are one part of culture.

#### 2.4.5 Peter Smith.

Peter Smith is Emeritus Professor of Social Psychology at the University of Sussex. He specialised in cross-cultural research and has published seven books in the domain of crosscultural survey and 140 articles. He is the former editor of the *Journal of Cross-Cultural Psychology*. His assistant's name is Shaun Dugan. Smith and Dugan analysed the results of Fons Trompenaars and Charles Hampden-Turner. Fons Trompenaars had interviewed 8800 companies in 43 countries during the 1980s. Smith, Dugan and Trompenaars published 2 articles about the analysis of these 43 countries: "The Rotter Locus of Control Scale in 43 Countries: A Test of Cultural Relativity" from 1995, and: "National Culture and the Values of Organizational Employees: A Dimensional Analysis Across 43 Nations" from 1996.

By analysing the data from Trompenaars, Smith identified two country-level dimensions (Smith et al., 2002), shown in the figure below.



Figure 2.22 Smith's two country-level dimensions (adapted from Schmith et al., 2002)

In 2002, Peter Smith published alone an article about Hofstede's "Cultures Consequences", a critique of the 5 cultural dimensions: Power Distance, Uncertainty Avoidance, Individualism-Collectivism, Masculinity-Femininity, Long-term orientation, plus a critique of Hofstede's chapters "organization cultures" and "intercultural encounters". The title of the article is: "Culture's Consequences: Something Old and Something New" (Smith, 2002).

Also in 2002, Peter Smith co-wrote with Mark Peterson and Shalom Schwartz the article "Cultural Values, Sources of Guidance, and their Relevance to Managerial Behavior: A 47-Nation Study". Instead of 43 nations, he now compared 47 nations.

Smith came up with several dimensions of culture, shown in the next figure. By doing this, he copied a bit from each and everybody. From Schwartz he borrowed the dimension "Mastery over the environment versus harmony with the environment". From Hofstede he borrowed the dimension "individualism – collectivism" and called it "conservatism versus egalitarian commitment". He discovered the dimension "personal versus political" by studying Eastern Europe and East Asia.

<u>Ma</u> :	<u>stery over the environment</u> versus <u>harmony</u> <u>with the environment</u> .
<u>Co</u>	<u>nservatism</u> versus <u>egalitarian commitment</u> ( <u>from Hofstede's individualism versus</u> <u>collectivism)</u> .
	<u>Personal</u> versus <u>political</u> .
Eg	<mark>alitarian commitment </mark> versus <mark>conservatism</mark> .
<u>Utilii</u>	t <mark>arian involvement</mark> versus <mark>loyal involvement</mark>
	And several more

Figure 2.23 Smith's several dimensions of culture (adapted from Smith et al., 2002)

In 2006, Peter Smith published an article in which he discusses the GLOBE and Hofstede comparison. The title of the article is amusing: "When elephants fight, the grass gets trampled: the GLOBE and Hofstede projects" (Smith, 2006). He especially discusses the question: how many cultural dimensions do we need?, see the following figure. His critique goes to the fact that neither GLOBE nor Hofstede included "national wealth" in their research, a missing level of analysis that definitely needs to be filled by further research.



Figure 2.24 Smith's "When elephants fight, the grass gets trampled: the GLOBE and Hofstede projects" (Smith, 2006)

# 2.4.5.1 Luxembourg, France and Germany in Smith.

Smith did not mention Luxembourg in his research. But he analysed in detail France and Germany. He analysed who of Hofstede, Schwartz and Trompenaars included which samples, and the three of them included France and Germany, just like Smith.

#### 2.4.6 Ronald Inglehart.

# 2.4.6.1 Inglehart's World Values Survey.

Ronald Inglehart's "World Values Survey" is for the moment the most impressive and the most complete existing database, much more complete than the database of GLOBE or Hofstede. Hofstede praises the database and the research of Inglehart. Hofstede would use the database of Inglehart to perform his research, if he had to restart today (Hofstede et al., 2010, p. 49).

In 1997 Ronald Inglehart started with a "European Values Survey" (EVS) that quickly expanded to a "World Values Survey" (WVS). Both are large-scale, cross-national and longitudinal survey research programs. Since the early 1980s, a network of social researchers have been applying the standardised questionnaire consisting of about 360 questions in over 100 countries with over 420,000 respondents all together. The questionnaires are used in face-to-face interviews. In the majority of cases countries participated or in EVS or in WVS, seldom in both. The headquarters of the WVS is in Stockholm, Sweden.

The WVS and EVS show the changes in peoples' values, in what they want from life and what their beliefs are in the domain of religion, gender roles, work motivations, democracy, good governance, social capital, political participation, tolerance of other groups, environmental protection and subjective well-being (Inglehart, Foreword to the WVS brochure). He further states in the foreword, that "the WVS network is analysing the impact of global cultural change on economic development, creativity, quality of life and democracy". The WVS is a network of researchers in a non-profit association that is academically

driven, the World Values Survey Association. Since 1981 there have been 5 waves, a 6<sup>th</sup> wave is

ongoing (from 2010-2012), as shown in the figure below.

# Inglehart's waves of the WVS

# Wave 1

was in the years 1981 to 1984, covering 20 countries, a population of 4,700,000,000, with 25,000 respondents. This was the European Values Survey (EVS).

# Wave 2

was in the years 1989 to 1993, covering 42 countries, a population of 5,300,000,000, with 61,000 respondents. This wave was an EVS and WVS joint wave building on the 1981 European Values Survey.

# Wave 3

was in the years 1994 to 1998, covering 52 countries, a population of 5,700,000,000, with 75,000 respondents.

# Wave 4

was in the years 1999 to 2004, covering 67 countries, a population of 6,100,000,000, with 96,000 respondents.

# Wave 5

was in the years 2005 to 2008, covering 54 countries, a population of 6,700,000,000, with 77,000 respondents.

The four-wave aggregate data file covers 80 countries with 257,000 respondents.

# Wave 6

is being carried out from 2010 to 2012.

Figure 2.25 Inglehart's waves of the WVS (adapted from Inglehart, 2011)

A Wave 6 is being carried out from 2010 to 2012. The objective is to provide a 30-year time series allowing the analysis of social and political change. The questionnaire for this new wave was elaborated in March/April 2009 by a WVS working group. First, a core group drafted a core questionnaire that then was circulated to participants in the WVS network for input, comments and changes. The WVS executive committee met in Stockholm, the headquarters of the WVS in June 2009 to discuss the input received from all partners around the world and to agree on a draft questionnaire. This draft questionnaire was then forwarded once again to all of the participants in the network for final inputs. The final questionnaire was then adopted in September 2009, the fieldwork started in January 2010 and is supposed to end in 2012, see http://www.worldvaluessurvey.org/html.

The data from WVS Wave five are downloadable from http://www.worldvaluessurvey.org/html . It includes the surveys conducted from 1981 to 2008 in 87 countries with over 256,000 interviews.

Inglehart's studies are based on 2 main factors: the 'Well-Being' versus 'Survival' and 'Secular-Rational' versus 'Traditional Authority'.

The results are also published on the website under the table entitled: **Nation-level mean** scores on Traditional/Secular-rational and Survival/Self-expression values dimension 1981-2007 (wave 1=1981, wave 2=1990, wave 3=1995, wave 4=2000, wave 5=2006, wave 6=2010-2012)

Nation & wave	Traditional/Secular-rational	Survival/Self-expression
E Germany 2	1.06	.06
E Germany 3	1.74	.58
E Germany 5	1.46	.26
E Germany 4	1.44	.42
France 1	.54	.13
France 2	.38	.71
France 4	.52	.94
France 5	.63	1.13
Luxembourg 4	.42	1.13
W Germany 1	.83	07
W Germany 2	1.23	.69
W Germany 3	1.55	1.52
W Germany 5	1.31	.74
W Germany 4	1.17	.44

 Table 2.4 Inglehardt's Nation-level mean scores on Traditional/Secular-rational and

 Survival/Self-Expression

The questionnaire of 1997 is entirely published in the appendix of his book 'Modernization and Postmodernization – Cultural, Economic, and Political Change in 43 Societies' from 1997. The newer versions of different questionnaires are all published on the website http://www.worldvaluessurvey.org/html . The Questionnaire of the WVS 2005-2006 wave, in root version, is here to be found in the appendix.

This website covers the research work of the WVS. It is a rich mine of data, of information, in which Michael Minkov himself offered to bring some order. He did meticulous work with his 2010 publication 'Cultural Differences in a Globalizing World' with a foreword by Geert Hofstede. Nevertheless, a lot of data lies still unexplored. Further researchers are urgently needed to analyse all the available data in the WVS.

The data from the WVS are available from the ICPSR survey data archive at University of Michigan. Following Inglehart and Welzel (2005) values change over time. They see modernization, cultural change and democracy as reasons, or: cultural, economic and political change. Inglehart, Foa, Peterson and Welzel study the Rising Happiness in populations (2008) in their article "Development, Freedom, and Rising Happiness". They argue that because of the economic and political development since 1981, happiness levels are higher in 45 of the 52 surveyed countries.

Authors other than Inglehart specialised on Cultural Change research (Kegan & Laskow Lahey, 2002; Meyerson, 2002). Many authors besides Welzel, Inglehart, & Klingemann (2003) specialised in Happiness Studies (Myers & Diener, 1995; Diener & Lucas, 1999; Frey & Stutzer, 1999; Veenhoven & Hagerty, 2006; Hagerty & Veenhoven, 2003; Peterson, Park, & Seligman, 2005). 'Who is happy?' ask Myers & Diener (1995). The graphs showing the trend in happiness levels in 24 countries are to be found in the internet appendix to Inglehart, Foa and Welzel. The data are downloadable from http://worlddatabaseofhappiness.eur.nl/html and are from Ruut Veenhoven' World Database of Happiness, taken from the WVS 4-waves data. He shows maps of happiness in 24 countries, among them France, Germany and Luxembourg. In Luxembourg the happiness trend started at 3.15 in 1975 and reached 3.25 in 2010 on a scale 1 = not at all happy, 4 = very happy). In France it was 2.85 in 1945, 3.05 in 1975 and 3.3 in 2010. In West Germany (1975-2006) it went from 3.05 in 1975 and 3.1 or 2.95 to 3.15 in 1986 and 3.05 in 2006.



Figure 2.26 Inglehart's map of the world around 2000 (from Inglehart's http://www.worldvaluessurvey.org/html)

Inglehart (1997) publishes his value maps, just like Hofstede (1980, 2001), where he draws the societies in clouds or clusters that are presenting equivalent values in his 'World Values Survey'. "...all four of the Latin American societies included in the 1990 World Values Survey fall into one cluster, reflecting the fact that, in global perspective they have relatively similar value systems. The two African societies fall into another cluster, and the three Confucianinfluenced societies of East Asia fall into another cluster – which partly overlaps with another cluster containing the former communist societies. The historically Catholic societies of Western Europe fall into another compact cluster. Although church attendance in Western Europe has collapsed, the historically Protestant societies of Northern Europe fall into another cluster (with Eastern Germany located at the intersection of the Northern European cluster and the ex-communist cluster, as its historical experience might suggest). The United States and Canada constitute a North American cluster, which could be expanded to include the other English-speaking societies" (Inglehart, 1997, pp. 92-93).

He published his World Value Survey Cultural Map 1999-2004 on the ordinates Traditional Values versus Secular-Rational Values, and Survival Values versus Self Expression Values. Luxembourg is in the 'Catholic Europe' cloud next to France and Belgium in the right upper quadrant. Germany is divided in East and West Germany and is in the 'Protestant Europe' cloud above the 'Catholic Europe' cloud. The two Germanies are in the right upper quadrant, but showing more Secular-Rational values and less Self Expression Values than France, Belgium and Luxembourg. Italy and Spain are close as well as Great Britain, figuring in the 'English Speaking' cloud (Inglehart, http://www.worldvaluessurvey.org/html ).

The World Value Survey Cultural Map 2005-2008 has changed since the 1999-2004 Map. Germany is only one country, but still in the upper right quadrant in the 'Protestant Europe' cloud with Sweden being the most upper right country, then Norway, Denmark, Finland, the Netherlands, Iceland, Switzerland. The 'Catholic Europe' cloud is more centred, with Luxembourg, France, Belgium in the right corner, Italy, Spain and Croatia centred and Czech Republic, Slovenia and Slovakia in the upper half (Inglehart,

http://www.worldvaluessurvey.org/html ).

Hofstede values highly the questions, the questionnaire, and the research that Inglehart undertakes and goes as far as to say that, if he had to re-start his IBM studies today, he would do it with the Inglehart World Values Survey.

The findings of the World Values Survey can be found on the website http://www.worldvaluessurvey.org/html .

#### 2.4.6.2 Luxembourg, France, Germany in Inglehart.

Whilst there was no research about Luxembourg in Inglehart's 1997 publication, he included research about Luxembourg in his publication of 2005. In the chapter 'Cultural Change and its Institutional Manifestations', he discusses the disapproval of homosexuality in 77 societies, showing a table with the ten most permissive societies, featuring Luxembourg with 49% disapproval among these most permissive societies, with the Netherlands at the top with 22% of disapproval, followed by Sweden (26%), Iceland (32%), Denmark (41%), Switzerland (43%), Germany (45%), Spain (47%), Canada (49%), Luxembourg (49%), Czech Republic (51%) and Norway (52%). The USA had 60%. He pointed out that 95% of the population disapproved homosexuality in 24 societies (Inglehart & Welzel, 2005, p. 41).

Ingleharts data on Luxembourg are to be found in the next figure.

# **Inglehart's data on Luxembourg**

Prediction based on midpoint of each scale: Traditional/Secular-Rational Values: .46 Survival/Self-Expression Values: .30

<u>Prediction as Mean Factor Score:</u> Traditional/Secular-Rational Values: .37 Survival/Self-Expression Values: 1.18

Figure 2.27 Inglehart's data on Luxembourg (from Inglehart's http://www.worldvaluessurvey.org/html )

There is a lot of research and data about Germany and France in his publications. He divided Germany in West- and East-Germany.

In the chapter on intergenerational value change he discusses the point that West Germany shows some of the largest age-related differences, compared with France, Britain, Sweden and the United States and worldwide. He says that West-Germany is moving toward increasing emphasis on both secular and self-expression values (Inglehart & Welzel, 2005, p. 113). He explains the history of Germany, which came from the Weimar Republic, a so-called democracy without democrats, and suffering severely from the hyperinflation of the 1920s and the Great Depression of the 1930s, with a catastrophic unemployment rate. This economic disaster led to the collapse of the Weimar Republic and its democracy (Inglehart & Welzel, 2005, p. 161). Postwar Germany saw the democracy imposed by the foreign armies from the USA, from Britain and France, and communism from the Russians.

# 2.4.7 Kim S. Cameron and Robert E. Quinn.

# 2.4.7.1 Four forms of organisational culture profile in Cameron and Quinn.

Inglehart and Welzel (2005) see modernisation, cultural change and democracy as reasons, or: cultural, economic and political. The same point of view is held by Cameron and Quinn (2011), they even urge the need for cultural change, and also the need to manage cultural change. This cultural change has to be planned (Cameron & Quinn, 2011). They elaborate 4 forms of organisational culture profile: the clan culture, the adhocracy culture, the hierarchy culture, the market culture (Cameron & Quinn, 2011, p. 247), and that one has to "determine what the changes will and will not mean" (Cameron & Quinn, 2011, p. 105).

# 2.4.7.2 Luxembourg, France and Germany in Cameron and Quinn.

No specific data were found in their publication. Cameron and Quinn make more research on organisational culture than on national culture.

# **Cameron's and Quinn's Organisational Cultures**

"The Clan Culture: A very friendly place to work where people share a lot of themselves. It is like an extended family. The leaders, or head of the organization, are considered to be mentors and, maybe even, parent figures. The organization is held together by loyalty or tradition. Commitment high. is The organization emphasizes the long-term benefit of human resource development and attaches great importance to cohesion and morale. Success is defined in terms of sensitivity to customers and concern for people. The organization places a premium on teamwork, participation and consensus."

**"The Hierarchy Culture**: A very formalized and structured place to work. Procedures govern what people do. The leaders pride themselves on being good coordinators and organizers, who are efficiency-minded. Maintaining a smoothly running organization is most critical. Formal rules and policies hold the organization together. The long-term concern is on stability and performance with efficient, smooth operations. Success is defined in terms of dependable delivery, smooth scheduling, and low cost. The management of employees is concerned with secure employment and predictability."

"The Adhocracy Culture: A dynamic, entrepreneurial, and creative place to work. People stick their necks out and take risks. The leaders are considered to be innovators and risk takers. The glue that holds the organization together is commitment to experimentation and innovation. The emphasis is on being on the leading edge. The organization's long-term emphasis is on growth and acquiring new resources. Success means gaining unique and new products or services. Being a product or service leader is important. The organization encourages individual initiative and freedom."

"The Market Culture: A results-oriented organization. The major concern is getting the job done. People are competitive and goal oriented. The leaders are hard drivers, producers, and competitors. They are tough and demanding. The glue that holds the organization together is an emphasis on winning. Reputation and success are common concerns. The long-term focus is on competitive actions and achievement of measurable goals and targets. Success is defined in terms of market share and penetration. Competitive pricing and market leadership are important. The organizational style is hard-driving competitiveness."

Figure 2.28 Cameron's and Quinn's organisational cultures (from Cameron and Quinn, 2011, p. 247)

#### 2.4.8 Edgar Schein.

#### 2.4.8.1 Schein's corporate culture survival guide.

Edgar Schein's 2009 'Corporate Culture Survival Guide' is a must not only for every researcher, but for every Human Resources Manager and CEO. He provides us with 'questions' for the reader' throughout his book that can be useful for all of those. When cultures meet through acquisitions, mergers, joint ventures, he sees problems arising because of the multicultural environment. He sees a big challenge in making different cultures collaborate (Schein, 2010, p. 189). The missing training for cross-cultural collaboration doesn't improve this situation. "It is assumed that the cultural issues can be solved later once the new unit has been created" (Schein, 2010, pp. 190-191). He continues saying "the problems that arise in joint ventures become even more salient in the new forms of multicultural organisations that have been called 'collaborations' " (Schein, 2010, p. 189). He cites the issues that are facing Brazilians collaborating with Germans and vice versa while collaborating. For example, the head of the German unit carefully elaborated an agenda. But then, what happened: "The detailed written agenda was circulated and when the chair opened the meeting by going to the first item, the Brazilians in the group burst out in laughter. Not only did they regard this degree of organization ridiculous but they also demonstrated by their laughter a culturally different attitude toward authority. The German chair not only had to deal with his embarrassment at being laughed at but with his ignorance of the norms that evidently had developed in this multicultural board, which was based heavily on the Brazilian culture of informality" (Schein, 2009, p. 199).

He also says that typically the French and the Italian are not good regarding details. He cites Hofstede's IBM studies as a massive multicultural survey (Schein, 2009, p. 201). Schein criticises that many books have been written and many theories developed, but in reality, nobody adopts them, they are ignored, cultural issues are postponed. "Until there is a problem focus, the information about another culture is not only vast but lacks focus. Knowing that the Brazilians tend to be informal and more egalitarian would not have prevented the German manager from approaching the group the way he did. On the other hand, if the board had decided to examine its own working style, then it would have been revealed that the Brazilian managers had little patience for formality" (Schein, 2009, p. 202).

#### 2.4.8.2 Schein's ten culture change mechanisms.

In his book 'Organizational Culture and Leadership' from 2010, Schein enumerates and elaborates the reasons for culture change. His *ten culture change mechanisms* are shown in the figure below.





In his chapter entitled 'How leaders embed and transmit culture' (2010, pp. 235-236) he

enumerates primary and secondary embedding mechanisms, shown in the following two figures.

Schem's primary embedding mechanisms				
	What leaders pay attention to, measure, and control on a regular basis.			
	How leaders react to critical incidents and organizational crises.			
	How leaders allocate resources.			
	Deliberate role modelling, teaching and coaching.			
	How leaders allocate rewards and status.			
	How leaders recruit, select, promote and excommunicate.			

Figure 2.30 Schein's primary embedding mechanisms (Schein, 2010, p. 235)

# Schein's secondary articulation and reinforcement mechanisms

- Organizational design and structure.
- Organizational systems and procedures.
- Rites and rituals of the organization.
- Design of physical space, façades, and buildings.
- Stories about important events and people.
- Formal statements of organizational philosophy, creeds and charters.

Figure 2.31 Schein's secondary articulation and reinforcement mechanisms (adapted from Schein, 2010, p. 236)

# 2.4.8.3 Schein's three levels of culture.

In contrary to Geert Hofstede's (1980) five dimensions of culture and GLOBE's (2004)

seven dimensions of culture, Schein comes up with the following "three levels of culture"

(Schein, 2010, p. 24).

# Schein's three levels of culture *1. Artifacts* Visible and feelable structures and processes. Observed behaviour. *2. Espoused Beliefs and Values* Ideals, goals, values, aspirations. Ideologies. Rationalizations. *3. Basic Underlying Assumptions* Unconscious, taken-for-granted beliefs and values.

Figure 2.32 Schein's three levels of culture (adapted from Schein, 2010, p. 24)

From there he develops macro-cultures, subcultures and micro-cultures. His research is based on two case studies, one with Digital Equipment Corporation (DEC) and one with Ciba Geigy.

#### 2.4.8.4 Schein's questionnaire.

It is important to understand that Edgar Schein at base is a psychologist. He was educated at the University of Chicago, Stanford University. He obtained his master's degree in psychology in 1949 and continued his studies until 1952 when he got his PhD in social psychology from Harvard University. He was made professor of Organizational Psychology and Management at MIT's Sloan School of Management in 1964, where he has been since 1956, and from where he retired in 2006 and is now, just like Geert Hofstede, professor emeritus. Schein wrote 14 books, two of them are discussed here, 'Corporate Culture Survival Guide from 1999 and 2009, and 'Organizational Culture and Leadership' from 2010. He has received many honours for his work, concentrating on organisational culture and organisational development. In his foreword to his 2010 book he said that he is interested in knowing what an organisation is, what culture is and how does one do 'therapy' with an organisation. This shows that he is a psychologist, as well as the fact that he wants to integrate Jung, Freud, family systems theory and Lewin into his research and that he wrote a book in 2009, called 'Organizational Therapy'.

All of the questions of his book 'Corporate Culture Survival Guide' can be found in the appendix of his book. By reading the different authors' questions you will note, that all of them find their basis in Hofstede's questionnaires. Nothing really new has been invented. The questions are nearly the same, adding and deleting some, but mainly they remain unchanged, as

well as the objective of the questions. The reader will note that Edgar Schein is a psychologist,

the questions are mainly open, they are longer than Hofstede's short formulations and Edgar

Schein always has the intention of patient therapy. An extract of his "questions to the reader" is

given in the following figure (Schein, 2009, p. 20).

"As you begin to think about culture,	"So what should you do differently
<ul> <li>think about it first in your own personality: <ul> <li>Review your family, ethnic, national, and educational background to identify the major influences on your current values and ways of doing things.</li> <li>Review your current formal and informal group affiliations to identify what current norms and values matter to you.</li> <li>Think about your place of work, its history and traditions and see how that relates to your own values and ways of doing things".</li> </ul> </li> </ul>	<ul> <li>tomorrow?</li> <li>Take some time to reflect on your own concept of culture and to integrate into it some of the insights from this chapter.</li> <li>Think about the organisation in which your work, and see whether you can come up with some of its espoused values. Does the organisation live its espoused values? If not, what are the deeper, shared tacit assumptions that explain daily behaviour?</li> <li>Start by thinking about the artifacts around you and the behaviour you observe. Locate things that puzzle you; ask an old-timer why they are that way. Try to see the culture as an outsider might (but for now, try not to evaluate it or think about changing it)."</li> </ul>

Figure 2.33 Schein's questionnaire (Schein, 2010, p. 20)

# 2.4.8.5 Luxembourg, France and Germany in Schein.

Schein's research is on organisational culture and not on national culture. He gives many

examples of company mergers and their difficulties, e.g. the Daimler Benz-Chrysler merger, the

Sandoz/Ciba-Geigy merger. He specialises on cross-cultural mergers.

Schein did not include Luxembourg in his research.

# 2.4.9 Michael Minkov.

#### 2.4.9.1 Hofstede and Minkov.

Hofstede knew Michael Minkov from the International University College, Sofia, Bulgaria. Around 2000 they started an email contact that was extended to a good collaboration. The two wrote several articles and books together. One is from 2011, "The evolution of Hofstede's doctrine". The 2010 'Cultures and Organisations: Software of the Mind, Third Edition' was also co-written with Michael Minkov and his son Gert Jan Hofstede. Michael Minkov is called 'Misho' by Hofstede. Minkov's research consists in looking through existing databases and trying to find a structure in them. Minkov published 'What Makes Us Different and Similar: A New Interpretation of the World Values Survey and Other Cross-Cultural Data' in 2007. Michael Minkov was born in 1959 in Plovdiv, Bulgaria, meaning that he comes from an East European country, and by this enlarged the knowledge about this culture, which was missing until then in Hofstede's research. He widened the research and added useful data from the Eastern European countries. Minkov studied Old Germanic languages; he holds a Master's degree in linguistics and a PhD in Social Anthropology and Theory of Culture from University of Sofia, Bulgaria. He lived in several countries such as Norway, Faroe Islands, Iceland, UK and USA. He teaches PhD students in cross-cultural studies together with Geert Hofstede, Gert Jan Hofstede, Mark Peterson and Mikael Søndergaard. He became, in 2000, the Bulgarian editor of Geert Hofstede's 'Cultures and Organizations; Software of the Mind'. In 2010, he became co-auditor of the Third Edition.

# 2.4.9.2 Hofstede and Minkov's new cultural dimension on happiness.

The **Indulgence versus Restraint (IVR)** dimension is discussed in Hofstede et al. (2010) as the result of Michael Minkov's analysis through Inglehart's World Value Survey data. As a result of Inglehart's World Values Survey and its outcome, this sixth dimension was added in 2010. Inglehart's dimension 'Well-being versus Survival' led Michael Minkov, who studied Inglehart's result in detail, to putting some order in it and to coming up with a new dimension about 'Happiness', 'Life control' and 'Importance of leisure' (Hofstede et al., 2010, p. 280). Definition: "Indulgence stands for a tendency to allow relatively free gratification of basic and natural human desires related to enjoying life and having fun. Its opposite pole, restraint, reflects a conviction that such gratification needs to be curbed and regulated by strict social norms" (Hofstede et al., 2010, p. 281).

Following his profound research and analyses of the data in the World Values Survey, Michael Minkov published his own book with his results, his cultural dimensions. The 2011 publication 'Cultural Differences in a Globalizing World' is meticulous work with up-to-date analyses, and a foreword by Geert Hofstede. The book starts, after the list of contents, with the hard-hitting words of Geert Hofstede: "Studying culture is asking for trouble".

# 2.4.9.3 Minkov's Cultural Differences in a Globalising World.

Minkov (2011) gives a concise and clear overview of previous major cross-cultural studies and comes up with his own cultural dimensions shown in the following figure.

# **Minkov's cultural dimensions**

Industry versus Indulgence. Monumentalism versus Flexumility. Hypometropia versus Prudence. Exclusionism versus Universalism.

Figure 2.34 Minkov's cultural dimensions (adapted from Minkov, 2011)

#### 2.4.9.4 Luxembourg, France and Germany in Minkov.

Minkov included data from Luxembourg in his 2011 book 'Cultural Differences in a Globalizing World'. He published information about Luxembourg on pages 251 to 254, in his research notes: the Murder Index. This index is an important mean of measurement of behavior, just like suicide rates, death toll, car accidents, hold-ups etc.. The number of murders per 100,000 inhabitants annually in Luxembourg is 15, compared with 16 in France and Germany 10. This is relatively low compared to South Africa's 680.

Minkov did not publish the data on the Rape Index or the Suicide Rate of the different countries. Further research would be necessary.

Minkov also published data about Luxembourg in the relationship between national corruption and prevalence of extended families, see later under Exclusionism versus Universalism.

There is a lot of data about France and Germany throughout the book, in each of his

chapters on the four cultural dimensions, as to be seen in the following figure.

Industry versus IndulgenceIn his cultural dimension Industry versusIn his cultural dimension Industry versusIndulgence, Minkov compares the importance of thrift versus the importance of leisure. A high 'Indulgence' means that leisure is very important. On a scale from 0- 1000 (0 means high indulgence, 1000 means high industry), France has 455 points, Germany 395, situated between the extremes China with 1000 and Sweden with 0.Starting from Geert Hofstede's cultural dimension 'Individualism versus Collectivism', Minkov (2011, p. 179) developed his cultural dimension 'Exclusionism versus Universalism'.In his cultural dimension Hypometropia (2011, p. 179) developed his cultural dimension 'Exclusionism versus Universalism across nations along with the following linked three items:In his cultural dimension Hypometropia (2011, p. 179) developed his cultural dimension 'Exclusionism versus Universalism across nations along with the following linked three items:In his cultural dimension Hypometropia (2011, p. 138) compares the importance of poptiunities and interests associated with their parents. The prace has 455 points, Germany 395, situated between the extremes China with 1000 and Sweden with 0.In his cultural dimension Monumentalism the ir parents. The road death tolls: numbers of people per 100,000 inhabitants that die annually in a road accident.In his cultural dimension Hypometropia induses. The road leath tolls: numbers of people per 100,000 inhabitants that die annually in a road accident.A high hypometropia index country is characterised by: High adolescent fertility.In his cultural dimension Monumentalism importance of pride (national, parental pride and religiousness ar high in this country. The opposi	Minkov's four cultura	Hypometropia versus Prudence	
	Minkov's four cultura Industry versus Indulgence In his cultural dimension Industry versus Indulgence, Minkov compares the importance of thrift versus the importance of leisure. A high 'Industry' score means, that hard work and thrift are very important in this country. The opposite pole to 'Industry' is 'Indulgence'. High 'Indulgence' means that leisure is very important. On a scale from 0- 1000 (0 means high indulgence, 1000 means high industry), France has 455 points, Germany 395, situated between the extremes China with 1000 and Sweden with 0. Monumentalism versus Flexumility In his cultural dimension Monumentalism versus Flexumility, Minkov compares the importance of pride (national, parental and high religious faith) versus the importance of flexible identities, values, norms and beliefs, as well as weak religiousness. A high 'Monumentalism' score means, that national and parental pride and religiousness are high in this country. The opposite pole to 'Monumentalism' is 'Flexumility'. High 'Flexumility' means low pride, but flexible	Al dimensions in detail         Exclusionism versus Universalism         Starting from Geert Hofstede's cultural dimension 'Individualism versus Collectivism', Minkov (2011, p. 179) developed his cultural dimension 'Exclusionism versus Universalism'.         Minkov measures Exclusionism versus Universalism across nations along with the following linked three items:         The percentage of people who live still with their parents.         The Transparency-versus-corruption indices.         The road death tolls: numbers of people per 100,000 inhabitants that die annually in a road accident.         High Exclusionism means stronger ties between generations and within groups of relatives, together with stronger neglect of the interests of strangers.         The opposite pole of Exclusionism is Universalism Linversalism means weaker ties between generations and groups of relatives, together with stronger empathy for strangers and respect for their interests.	Hypometropia versus Prudence         In his cultural dimension Hypometropia         versus Prudence, Minkov (2011, p. 138)         compares the importance of the following:         Hypometropia means:         Reproductive instincts are followed         competitively, despite dangers to individuals.         Recourse to violence when reproductive         opportunities and interests associated with         them are threatened.         Short time horizons.         Risk-acceptance.         A high hypometropia index country is         characterised by:         High HIV rates.         Low average IQ.         Low education.         High adolescent fertility.         The contrary is Prudence:         Reproductive instincts are prudently managed         in order to minimize dangers to individuals.         Violence is not a vehicle for successful         reproduction or promotion of interests         associated with it.         Long time horizons.         Risk-avoidance.

Figure 2.35 Minkov's four cultural dimensions in detail (adapted from Minkov, 2011)

The dimension **Industry versus Indulgence** and the relationship between *economic growth per person* and the '*Industry versus Indulgence*' cultural dimension are discussed on page 66 (Minkov, 2011). Germany and France are close to each other with an economic growth speed between 1998 to 2008 from  $\pm$  1.5 for Germany and a slightly lower 1.45 for France, with France 455 Industry points and Germany with a lower 395 score. Germany and France are between Sweden on the extreme left side of the graph with an economic growth speed of 1.6 and Industry index of 0, and on the extreme right side of the graph China with an economic growth speed of 3.1 and an Industry Index of 1000. The relationship between happiness and the 'Industry versus Indulgence' cultural dimension is shown on page 83. Happiness scores from 0 to a maximum of 57. Ukraine and Romania and Russia score 5 or 6 on the Happiness scale, Germany 20, Italy 21, France 39, Sweden 40, Britain 41, the Netherlands 44, and the maximum scorer is Mexico with 57. It would have been interesting to show the data for Luxembourg. Further analysis is needed.



Figure 2.36 Minkov's cultural map of the world (from Minkov, 2011, p. 83)

The dimension **Monumentalism versus Flexumility** and the relationship between the importance of religious faith and the importance of parental pride are discussed on page 98 (Minkov, 2011). The question to the participants was, if one of their main goals in life was to
make their parents proud. Germany scores low with 15 on a scale from 0 to 100, with religious faith scoring 18 on a scale from 0 to 100.

The relationship between suicide rates and the *Monumentalism* cultural dimension is shown on page 109. The average number of suicides per 100,000 inhabitants is 22 in Germany (*Monumentalism* 99), 35 suicides in France (*Monumentalism* 165), and a maximum of 62 in Russia (*Monumentalism* 191), 50 in Japan (*Monumentalism* 40), and a minimum of 0 suicides in Egypt with a maximum of 100 of *Monumentalism*.

Minkov draws other **cultural maps of the world based, for example on his cultural dimensions 'Industry' and 'Monumentalism'**. France and Germany are in the middle left part, on a scale from 0 to 1000. France has an *Industry* Index of 455 and a *Monumentalism* Index of 165. Germany has an *Industry* Index of 395 and a *Monumentalism* Index of 99.

In the dimension **Hypometropia versus Prudence** Germany has 112 points, France 134, situated between the extremes South Africa with 1000 and Singapore with 0, on a scale from 0-1000 (0 means high *Prudence*, 1000 means high *Hypometropia*).

In the dimension **Exclusionism versus Universalism** he shows the relationship between national corruption and prevalence of extended families, including Luxembourg, Germany and France. Luxembourg has 19% of the children still living with parents, a higher score than France at 12% and Germany at 11%. Transparency is higher in Luxembourg at 84%, while Germany is at 80% and France at 75%. The three countries are in the very upper left part, together with New

Zealand, Denmark, Switzerland, Iceland, Australia, Britain, the Netherlands, Canada, Austria,

Belgium and the USA.

Based on the four cultural dimensions 'Industry versus Indulgence', 'Monumentalism versus Flexumility', 'Hypmetropia versus Prudence', and 'Exclusionism versus Universalism', Minkov draws a cultural map of the world, dividing the world into 7 regions, shown in the figure below, where Germany and France are in the middle left hand side of the map (Minkov, 2011, p. 227).

## Minkov's seven regions of the world

- 1. Sub-Saharan Africa.
- 2. The Arab World and the Middle East.
- 3. South Asia.
- 4. Eastern Europe.
- 5. East Asia.
- 6. Western Europe and the Anglo World.
- 7. Latin America.

Figure 2.37 Minkov's seven regions of the world (from Minkov, 2011, p. 227)

### 2.4.10 Gert Jan Hofstede.

### 2.4.10.1 Hofstede and Hofstede, father and son.

Geert Hofstede co-wrote in 2002 with his son Gert Jan and Paul B. Pedersen "Exploring Culture: Exercises, Stories and Synthetic Cultures". His son Gert Jan concentrates more on training and teaching culture. In 2007 Geert Hofstede, Bram Neuijen, Denise Daval Ohayv, Geert Sanders published: "Measuring Organizational Cultures: A Qualitative and Quantitative Study Across Twenty Cases". He also published academic articles on training in cultures (Hofstede, G.J., 2009).

The 2010 book 'Cultures and Organizations – Software of the Mind – Intercultural Cooperation and Its Importance for Survival' is co-written by Geert Hofstede, his son Gert Jan Hofstede and Michael Minkov. The German translation of 'Cultures and Organizations – Software of the Mind' is by Geert Hofstede and Gert Jan Hofstede and is called 'Lokales Denken, globales Handeln – Interkulturelle Zusammenarbeit und globales Management'. They point out that the world in the domains of politics, economics and thoughts has changed rapidly since 1991.

In individualistic countries, it is less probable that a son follows his father in his profession, it is even belittled and badly spoken of, as if the son did not have his own ideas and needed the father to make a career. In a collectivistic culture it is very positively seen. That is the difference. Besides, Gert Jan Hofstede was a specialist in Information Technologies. His specialisation was in the World Wide Web and in intercultural communication and came via this way to the research of different cultures. Gert Jan is more a trainer and an independent researcher. His eldest daughter Liesbeth is already helping with the research as well.

### 2.4.10.2 Gert Jan Hofstede, the cultural trainer.

As a trainer, Gert Jan Hofstede likes to work with practical examples. In fact, in his 2002 book 'Exploring Culture', co-written with his father Geert Hofstede and Paul B. Pedersen, he shows different pictures and asks the reader "What do you see?" on pages 7 to 11, giving at each

picture different interpretation possibilities. He, as a trainer, asks practical questions such as "How would you feel?" giving several examples like "The Shabby Guitar Player", "A Meeting in the Street", "A Welcome at the Airport", "The Intruder". He further asks: "What would you do?" giving the examples of "The Returning Athlete", "The Accident", "Train or Car?" and "A Virtual Contact".

He describes what culture shock is, describing a young man from the Netherlands coming to Liège, Belgium for studying. But it also could have been a young man from Germany. The situation describes (Hofstede, G. J. et al., 2002, p. 21) the "Kissing gets out of hand – When I first came to the Université de Liège in September, I saw two girls kissing. I wondered whether that was usual. A few minutes later some more people came into the building. At that moment the kissing seemed to get seriously out of hand. I saw something I had never seen in my life: all the boys kissing girls, girls kissing boys, girls kissing girls, and even boys kissing boys! My God, what was happening here? Just thirty kilometres from my home university, I saw something that I had not expected at all – two boys kissing...."

Gert Jan Hofstede, starting from the five culture dimensions from his father, develops 10 synthetic culture profiles (2002, p. 91). In the 'Identity' dimension, he looks at **Indiv** for extreme individualism and **Collec** for extreme collectivism. In the 'Hierarchy' dimension, he looks at **Hipow** for extremely large power distance, **Lopow** for extremely small power distance. In the 'Gender' dimension, he looks at **Mascu** for extreme masculinity and **Femi** for extreme femininity. In the 'Truth' dimension he looks at **Uncavo** for extremely strong uncertainty

avoidance and Unctol for extreme uncertainty tolerance. In the 'Virtue' dimension he looks at

Lotor for extremely high long-term orientation and Shotor for extremely short-term orientation.

Identity dimension	core value	core distinction	
with <b>Indiv</b> = extreme individualism	individual freedom	me/others	
And <u><b>Collec</b></u> = extreme collectivism	group harmony	ingroup/outgroup	
Hierarchy dimension	core value	core distinction	
with <b><u>Hipow</u></b> = extreme large power distance	respect for status	powerful/dependent	
and <u>Collec</u> = extreme small power distance	equality between people	responsible or not for task	
Gender dimension	core value	core distinction	
with Mascu = extreme masculinity	winning	man/woman	
and <b><u>Femi</u></b> = extreme femininity	caring for others, especially the weak	caring/needing care	
Truth dimension	core value	core distinction	
with <b><u>Uncavo</u></b> = extreme strong uncertainty avoidance	certainty	true/false	
and <u>Unctol</u> = extreme uncertainty tolerance	exploration	urgent/can wait	
Virtue Dimension	core value	core distinction	
with <b>Lotor</b> = extreme long-term orientation	long-term benefits	does or does not	
and <b>Shotor</b> – extreme short-term orientation	saving face	serve a purpose	

Figure 2.38 Gert Jan Hofstede's five culture dimensions with ten synthetic culture profiles (adapted from Gert Jan Hofstede, 2002, pp. 91-112)

Each of these 10 profiles consists of Core Value, Core Distinction, Seven Key Elements,

Words with a positive connotation, Words with a negative connotation, Gender Roles and The

Five cross-cultural Communication Barriers: Language, Nonverbal Behavior, Stereotypes,

Evaluation of the synthetic culture, behavior under stress (Hofstede, G. J. et al., 2002, pp. 92-93).

### 2.4.10.3 Luxembourg, France and Germany in Gert Jan Hofstede.

There are many examples given by Gert Jan Hofstede. As a trainer he lives by examples. 'The kissing gets out of hand' is one of those examples. Another one is 'In the Pub'. He describes the differences between German and Dutch students in a pub (Hofstede, G. J. et al., 2002, p. 63). He says that Germans are talking a lot about their ideals and opinions. Germans have the same personality everywhere, contrary to the Dutch who adapt to situations.

Luxembourg is included in the research of the 'Software of the Mind' book only, not in the 'Exploring Culture'. As I was about to contest the position of Luxembourg in the maps, Geert Hofstede confirmed to me that the data on Luxembourg's culture and the 5 culture dimensions are estimates.

#### 2.4.11 Michael Harris Bond.

### 2.4.11.1 Hofstede and Bond.

Geert Hofstede met Michael Harris Bond just after the publication of 'Culture's Consequences' in late 1980. Michael Bond, a Canadian, who was from the Chinese University of Hong Kong and who carried out research about values in the Asia-Pacific region using the Rokeach Value Survey (RVS) (Rokeach, 1979). The results were astonishingly similar to the results from Hofstede. Both, Hofstede and Bond were surprised. They elaborated another new questionnaire. Michael Bond asked several Chinese people to compose a list of basic Chinese values, and he elaborated a new questionnaire, that was called the Chinese Value Survey (CVS). He found three dimensions replicated from Hofstede's IBM studies. The forth dimension though was different, it was theLong-term versus Short-term Orientation. 20 years later, Michael Minkov found another new dimension, elaborating the data from Inglehart's World Value Survey (WVS): the Indulgence versus Restraint (IVR).

Geert Hofstede wrote many publications together with Michael Harris Bond, one of them is "The Confucius Connection: From Cultural Roots to Economic Growth" from 1988. "Individual Perceptions of Organizational Cultures: A Methodological Treatise on Levels of Analysis" from 1993 was co-written again with Michael Harris Bond and Chung-Ieung Luk.

#### 2.4.11.2 Luxembourg, France and Germany in Bond.

As Bond specialised on researching the Asian continent and developing the Chinese Value Survey, he did not emphasise findings on Luxembourg, France and Germany.

### 2.4.12 Henry Mintzberg.

#### 2.4.12.1 Mintzberg, specialist in organisational structure research.

In organisational structure research, Canadian Henry Mintzberg is one of the leading researchers for the moment.

Henry Mintzberg gives organisations a structure of five parts. Here is the parallel: Hofstede divides cultures in fives, Mintzberg divides organisations in fives (Hofstede et al., 2010, p. 312).



= people in staff roles supplying services.

Figure 2.39 Mintzberg's five structures of organisations (adapted from Hofstede et al., 2010, p. 312)

Henry Mintzberg also divides into fives the mechanisms for coordinating activities in organisations, see the following figure.

# Mintzberg's five mechanisms for coordinating activities in organisations

## **Mutual adjustment**

of people through informal communication.

## **Direct supervision**

by a hierarchical superior.

Standardization of work processes

specifying the contents of work.

## **Standardization of outputs**

specifying the desired results.

## Standardization of skills

specifying the training required to perform the work.

Figure 2.40 Mintzberg's five mechanisms for coordinating activities in organisations (adapted from Hofstede et al., 2010, p. 312)

There are five typical configurations of most organisations in Mintzberg, following

Hofstede et al. (2010, p. 313), see the following figure.

In Mintzberg (2011, pp. 106-107) there are, contrary to what Hofstede states, six, not five species of organisation.

#### Mintzberg's five typical configurations of most organisations

1. The simple structure. Key part: the strategic apex. Coordinating mechanism: direct supervision.

**2.** The machine bureaucracy. Key part: the technostructure. Coordinating mechanism: standardisation of work processes.

**3. The professional bureaucracy**. Key part: the operating core. Coordinating mechanism: standardisation of skills.

**4. The divisionalised form.** Key part: the middle line. Coordinating mechanism: standardisation of outputs.

5. The adhocracy. Key part: the support staff (sometimes with the operating core). Coordinating mechanism: mutual adjustment.

#### Mintzberg's six species of organisations

"The Entrepreneurial Organization: centralized around a single leader, who engages in considerable *doing* and *dealing* as well as strategic visioning.

*The Machine Organization:* formally structured, with simple repetitive operating tasks (classic bureaucracy), its managers functioning in clearly delineated hierarchies of authority and engaging in a considerable amount of *controlling*.

**The Professional Organization:** comprising professionals who do the operating work largely on their own, while their managers focus more externally, on *linking* and *dealing*, to support and protect the professionals.

The Project Organization (Adhocracy): built around project teams of experts that innovate, while the senior managers engage in *linking* and *dealing* to secure the projects, and the project managers concentrate on *leading* for teamwork, *doing* for execution, and *linking* to connect the different teams together.

The Missionary Organization: dominated by a strong culture, with the managers emphasizing *leading* to enhance and sustain that culture.

*The Political Organization*: dominated by conflict, with the managers sometimes having to emphasize *doing* and *dealing* in the form of fire fighting."

Figure 2.41 Mintzberg's five typical configurations of most organisations and five species of organisations (adapted from Mintzberg, 2011, p. 106-107 and Hofstede et al., 2010)

#### 2.4.12.2 Luxembourg, France and Germany in Mintzberg.

There is nothing mentioned about Luxembourg in Mintzberg's book from 2011

'Managing'. There is a very short citation about Germany (Mintzberg, 2011, pp. 102-103) that he cites from Stewart et al. (1994, p. 131), following whom "Communication of German middle managers with their subordinates is primarily task oriented, while that of their British counterparts concentrates on motivation". He then discusses different authors who discovered apparently that the behaviour of managers across cultures is mostly identical, saying that they are independent from their cultural background, contradicting with this Hofstede. Henry Mintzberg

is Canadian, he is Cleghorn Professor of Management Studies at McGill University in Montreal.

His website is http://www.mintzberg.org/html .

Following Hofstede et al. (2010, p. 314), the link between Mintzberg's five configurations and Power Distance – Uncertainty Avoidance is given and shown with a typical country for each configuration.

	Germany	France	Great Britain	China	USA
Uncertainty Avoidance:	High	Low	Low	High	Medium
Power Distance:	Low	High	Low	High	Medium
Preferred configuration:	Professional bureaucracy	Full bureaucracy	Adhocracy	Simple structure	Divisionalised form
mechanism:	Standardisation of skills	Standardisation of work processes	Mutual adjustment	Direct supervision	Standardisation of outputs
Key part of organisation:	Operating core	Technostructure	Support staff	Strategic apex	Middle line

Figure 2.42 Mintzberg's comparison Germany-France-Great Britain-China-USA (adapted from Hofstede et al., 2010, p. 314)

### 2.4.13 The GLOBE.

### 2.4.13.1 What is the GLOBE?

'Global Leadership and Organizational Behavior Effectiveness' is the full name of

GLOBE.

Robert House, the initiator of the GLOBE, says in his preface, that the idea to the GLOBE research came to him in the summer 1991. This study involved 160 researchers worldwide in 62 cultures, it was a huge enterprise, with a very adequate dataset to replicate Hofstede's (1980)

landmark study (House et al., 2004, preface xxv). It might be said that the GLOBE is a huge replication of Hofstede. House's questions were in a level of seven instead of Hofstede's level of five.

#### 2.4.13.2 GLOBE's nine dimensions of culture.

House et al. (2004) came up with nine dimensions of culture with the following definitions (2004, p. 30) that he calls 'Culture Construct Definitions':

The instruments used by GLOBE can be downloaded from its website http://www.thunderbird.edu/wwwfiles/ms/globe/html . Javidan, House, Dorfman, Hanges and Sully de Luque published an article "Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches" in 2006 in the Journal of International Business Studies. The reproach was that Hofstede's research was decentred but GLOBE was US centred.

The one really interesting question from Javidan et al. (2006, p. 898) asked about Hofstede's study is: "What other dimensions are missing because IBM was not interested in them?" What other information is missing, because IBM was not interested? There is no information about Luxembourg in the first studies of 1980, and the information about Luxembourg in the 2001 book are estimates, because IBM was not interested. IBM was not interested in my studies now either.

#### GLOBE's nine dimensions of culture

"Power Distance: The degree to which members of a collective expect power to be distributed equally.

*Uncertainty Avoidance*: The extent to which a society, organization, or group relies on social norms, rules, and procedures to alleviate unpredictability of future events.

*Humane Orientation:* The degree to which a collective encourages and rewards individuals for being fair, altruistic, generous, caring, and kind to others.

*Collectivism I (Institutional Collectivism)*: The degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action.

*Collectivism II (InGroup Collectivism)*: The degree to which individuals express pride, loyalty, and cohesiveness in their organisations or families.

Assertiveness: The degree to which individuals are assertive, confrontational, and aggressive in their relationships with others.

Gender Egalitarianism: The degree to which a collective minimizes gender inequality.

*Future Orientation*: The extent to which individuals engage in future-oriented behaviours such as delaying gratification, planning, and investing in the future.

*Performance Orientation:* The degree to which a collective encourages and rewards group members for performance improvement and excellence."

Figure 2.43 GLOBE's nine dimensions of culture (adapted from House et al., 2004)

#### 2.4.13.3 GLOBE's country clusters.

GLOBE (2004) develops country clusters. In Figure 10.1 on page 190 and 191 there are the clusters and samples to be found. In the **Anglo** cluster he puts: Australia, Canada, England,

Ireland, New Zealand, South Africa (White sample), and the United States. In the Latin Europe cluster he puts: France, Israel, Italy, Portugal, Spain, Switzerland (French speaking). The Nordic Europe cluster is composed of: Denmark, Finland, and Sweden. The Germanic Europe cluster is: Austria, Germany (Former East), Germany (Former West), the Netherlands, Switzerland. The Eastern Europe cluster is: Albania, Georgia, Greece, Hungary, Kazakhstan, Poland, Russia, and Slovenia. In the Latin American cluster he puts: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Venezuela. The Sub-Saharan Africa is

composed of Namibia, Nigeria, South Africa (Black sample), Zambia, and Zimbabwe. The **Middle East** is: Egypt, Kuwait, Morocco, Qatar, and Turkey. **Southern Asia** is composed of: India, Indonesia, Iran, Malaysia, Philippines, and Thailand. **Confucian Asia** is: China, Hong Kong, Japan, Singapore, South Korea, and Taiwan.

#### 2.4.13.4 GLOBE's societal clusters.

GLOBE classifies **Societal Culture Practices**, which GLOBE calls '**As Is** – Scores' (2004, p.193). They divide into their different cultural dimensions and give higher and lower scores per country and per cultural dimension. GLOBE also classifies Societal Culture Values, which GLOBE calls 'Should be – Scores' (2004, p. 194), again giving higher and lower scores per country and per cultural dimension.

GLOBE itself has some doubts however about the clusters and the scores, as they say (2004, p. 192): "However, the cultural separation of the Germanic Europe and the Nordic Europe clusters as well as the Sub-Saharan Africa and the Middle East clusters is not as great as the differences among the other clusters. Given that the prior empirical research has repeatedly found that the Germanic Europe and the Nordic Europe clusters could be separated, and because of considerable differences in the history of Sub-Saharan Africa and the Middle East, we decided to stay with our original ten societal clusters with the caveat that some of these clusters are not as differentiable as others. Future research will determine whether all ten of the GLOBE societal clusters are appropriate as distinct entities."

Tropical Humid: Costa Rica, Ecuador, Columbia, Philippines, Singapore, Indonesia, Malaysia, India.
Tropical Wet and Dry (Savanna): Guatemala, El Salvador, Venezuela, Thailand, Nigeria, Zambia, Zimbabwe.
Desert: Egypt, Israel, Kazakhstan, Kuwait, Namibia, Turkey, Qatar, South Africa (Black Sample), South Africa (White Sample), Mexico, Iran.
Subtropical Humid: Bolivia, Brazil, Argentina, Hong Kong, Taiwan.
Subtropical Wet and Dry (Mediterranean): Albania, Greece, Italy, Portugal, Slovenia, Spain, Morocco.
Marine West Coast (Maritime): Denmark, France, Germany (former East), Germany (former West), Ireland, New Zealand, Netherlands, Switzerland, Switzerland (French Speaking), United Kingdom.
Continental: Austria, Finland, Hungary, Japan, Korea, Sweden, Poland, Canada, Russia, China, Georgia, United States, Australia.

Figure 2.44 GLOBE's climatic classification (adapted from House et al., 2004)

There is a broad discussion about the climatic clustering of societies, starting on page 205.

GLOBE cites Hofstede who "identified physical climate as the primary force influencing societal

cultures". Unfortunately there is only little research about the link between physical climate and

societal cultures. GLOBE proposes a climatic classification of its 61 societies, shown in the

above figure.

### 2.4.13.5 Luxembourg, France and Germany in GLOBE.

There is no research on Luxembourg in the GLOBE. It classifies Germany into the Germanic Europe cluster, and France into the Latin Europe cluster. There is no research on Belgium either.

This climatic classification is interesting. There is no Belgium, and no Belgium German speaking, Belgium French speaking, Belgium Flemish speaking. There is Switzerland, and a Switzerland (French Speaking), but then what is this Switzerland, the German speaking or the Italian speaking or both? There is no research on Luxembourg. And it is interesting to put Germany and France into the same Marine West Coast (Maritime) cluster. The Continental cluster is even more interesting with Austria, Poland, the United States, Australia, and Korea in the same cluster.

#### 2.4.14 The GLOBE – Hofstede Debate.

Hofstede replied to the GLOBE findings. He published in 2006 in the Journal of International Business Studies his article "What did GLOBE really measure?" Researchers' minds versus respondents' minds. In this article, Hofstede points out, that Robert House started from his 5 dimensions of culture. He then elaborates the differences and similarities between Hofstede and GLOBE and concludes with the fact, that the GLOBE studies are a replication of the Hofstede studies. House also wrote this in his preface of 2004. The newer data are interesting. But for example the dimension Masculinity – Femininity is nearly completely missing in GLOBE (Hofstede, 2006, p. 893).

The GLOBE – Hofstede debate was initiated, providing many interesting articles and discussions about culture, and being the start for the era 'Beyond Hofstede', even 'Beyond GLOBE'.

## 2.5 The Era beyond Hofstede: Kirkman, Lowe, Gibson, Nakata, Briley, Hong, Benet-Martínez, Chiu, Morris, Wyer, Hermans, Kempen, Jenner, MacNab, Brislin, Worthley, Leung

### 2.5.1 Kirkman, Lowe, and Gibson.

"A quarter century of Culture's Consequences". There is a massive amount of literature from Hofstede himself, but there is even more literature about him, thousands being inspired by his research, out of which only some should be mentioned here. Kirkman, Lowe and Gibson (2006) came up with an empirical study that was lacking: a review of 180 studies published in 40 business and psychology journals applying Hofstede's studies. Articles on Hofstede are mostly published in the Journal of International Business Studies, Academy of Management Journal, Journal of Cross-Cultural Psychology, Journal of Personality and Social Psychology, Strategic Management Journal.

Kirkman et al. (2006) say, that Hofstede's cultural classifications is perhaps the most influential of all classifications. Hofstede's work is the most cited in the world. His work has been replicated thousands of times and criticised thousands of times as well. "Hofstede has been replicated by Punnett and Withane (1990), Schackleton and Ali (1990), Merritt (2000), Spector et al. (2001), Kirkman et al. (2006, p. 286). Hofstede was criticised by Schwartz (1994), Smith and Bond (1999), McSweeney (2002), Smith (2002)" (Kirkman et al., 2006, p. 285). "Some reviews focused only on the dimension individualism-collectivism, such as Triandis (1995), Earley and Gibson (1998), Oyserman et al. (2002)" (Kirkman et al., 2006, p. 286). Hofstede "has been criticized for: reducing culture to an overly simplistic four or five dimension conceptualisation; limiting the sample to a single multinational corporation; failing to capture the malleability of culture over time; and ignoring within-country cultural heterogeneity (Xivakumar & Nakata, 2001)" (Kirkman et al., 2006, p. 286).

Kirkman, Lowe and Gibson summarised the authors from 1980 to 2002. Since 2002 another ten years have gone by and many more studies have been made applying Hofstede's cultural classifications. In "A quarter century of Culture's Consequences: a review of empirical research incorporating Hofstede's cultural values framework" they give recommendations for future replicants.

Kirkman, Lowe and Gibson (2006) stated that most replicants lack research across levels and across countries. Kirkman, Lowe and Gibson recommended not to reproduce another study at the same level of analysis and with the same measures already well investigated. But they furthermore ask: What complementary cultural values exist beyond Hofstede's five dimensions? What cultural values might be unique to particular countries or regions? What individual attributes (cognitions) might be more proximate to employee feelings or actions than cultural values? They recommend breaking new ground.



Figure 2.45 The era beyond Hofstede

The main question is: Is it possible to replicate Hofstede's studies of 1960/70 in 2011?

Kirkman et al. (2006) say yes.

Their criticism to the 180 analysed studies is:

First: most studies miss a theoretical linkage to explain the connection between values and

organisational outcomes.

**Second:** Most studies miss the relationship between culture and entrepreneurship, the interaction effects of cultural values.

Third: most studies have a general trend of relatively low variance.

#### 2.5.2 Nakata, Briley, and other authors.

Cheryl Nakata published her book 'Beyond Hofstede – Culture Frameworks for Global Marketing and Management' in 2009. She is the editor of this work where Christopher Earley, Vas Taras, Piers Steel, Elif Izberg-Bilgin, Mayo Yoko Brannen, Soren Askegaard, Dannie Kjeldgaard, Eric J. Arnould, Wendi L. Adair, Nancy R. Buchan, Xiao-Ping Chen, Donnel A. Briley, Fiona Moore, Leigh Anne Liu and Claudia Dale collaborated. They try to find new paths of research in culture, new possibilities of approaching cultural study, beyond Geert Hofstede.

In their opinion, the time has come to go beyond Hofstede, to search for new ways of studying culture. They say, Hofstede did his research in the 1960s, this is 40-50 years ago, things have changed in the meantime. Nakata (2009, p. 5) says: "When Hofstede wrote his book in 1980, the world was a simpler place." She also says on page 4: "In this age of globalization, cultures are traversing national borders, co-mingling, hybridizing, morphing and clashing through media, migration, telecommunications, international trade, information technology, supranational organizations and unfortunately terrorism". Her point is that the Internet has changed the world. And also the political situation is no longer the same, with the fall of the Berlin wall, the fall of the Soviet Union, German re-unification, the expansion of Europe, the exposition to global brands, and also the increase in the number of studies on culture over the

years. She claims to look beyond Hofstede, to search alternative views, and frameworks (Nakata, 2009, p. 6).

Adair, Buchan and Chen (2009, pp. 146-180) analysed in the book of Cheryl Nakata (2009) Edward Hall's numerous studies on culture from 1959, 1966, 1976, 1983, and together with Mildred Reed Hall in 1987 and 1990 in comparison to Geert Hofstede (1980), Triandis (1994, 1995), Schwartz (1994), House (2004), Trompenaars and Hampden-Turner (1997).

Briley gives a dynamic view on cultural influence on consumer motivations in the book edited by Cheryl Nakata (2009, pp. 181-197). His opinion is also that our cultures today are more linked together than in the years of Hofstede. Not only individuals undergo changes in values, but also societies, especially with the new media and technologies. He also enumerates not only the extraordinary work of Hofstede at IBM across 56 countries and 116,000 questionnaires, but also the study of Bond (1987) in 22 countries, and the GLOBE research of House et al. (2004) in 62 countries, and the research of Shalom Schwartz (1994, 1999) in 38 countries.

Briley is Associate Professor of Marketing at the University of Sydney, Australia. He has published several academic articles on Marketing (Briley, 2005) on Consumer Motivations (Briley, 2006, 2009), on Media and Minority Groups (2007), on cultural differences in time orientation (2009) and Cultural Change and Marketing (2008), some together with Jennifer Aaker, Associate Professor of Marketing at the Graduate School of Business, Stanford University (Briley & Aaker, 2006). In 2000 Donnel Briley won the Robert Ferber award for the best interdisciplinary article published in the *Journal of Consumer Research*, based on his doctoral dissertation. The article is "Reasons as Carriers of Culture: Dynamic versus Dispositional Models of Cultural Influence on Decision Making", co-authored with Michael W. Morris and Itamar Simonson.

Donnel Briley and Robert Wyer (2001), at that time at the Hong Kong University of Science and Technology, made several series of experiments of situational primes to test the determinants of effects of cultural differences, especially in the domain of the individualismcollectivism cultural dimension and published their article in 2001.

In 2002 Robert Wyer and Donnel Briley published another article about different experiments researching the way cultural background is influencing people's judgements and decisions. This research is about the effect of group membership salience and the influence this has on the avoidance of negative outcomes. These experiments are priming experiments. The hypothesis is that calling people's attention to their cultural background influences their decisions. Several experiments supported this hypothesis.

Hong, Morris, Chiu and Benet-Martínez (2000) research bi-culturals and how they are switching frames. They use the same methods as Briley and Wyer with priming experiments which uncover content of cultural knowledge. In their opinion, language is a prime. For bilinguals the two languages are associated with two different cultures. Hong, Benet-Martínez, Chiu and Morris (2003) research the boundaries of cultural influence in two experiments where they prime the participants, or manipulate their group salience. Hermans and Kempen (1998) state that the increasing globalisation and the increasing connectivity between cultures change cultures. The impact of new technologies is to be felt by increasing worldwide interconnectedness, accelerated communication, new media usage and propagation of information worldwide.

Leung, Chiu and Hong published in 2011 their book on their research on "Cultural Processes". They are praised by Yoshi Kashima, as the "most productive and innovative research groups in culture and psychology". The innovation is treating culture as process. They take the cultural research question to the present, to contemporary questions, such as "cultural differences in self-enhancement, subjective well-being, work teams, and conflict resolution, as well as intercultural processes of negation and communication." It also points out that there is a dynamic in culture, cultural dynamics and that there is a perspective in culture. This allows thoughts about further research in culture and cultural dynamics in a globalised world.

"Beyond Hofstede and GLOBE: Improving the quality of cross-cultural research" is the article in the 'Journal of International Business Studies' by Rosalie Tung and Alain Verbeke from 2010. They review Hofstede, GLOBE and the Hofstede-GLOBE debate, the Schwartz paradigm (1994), the World Values Survey from Inglehart (1997), Trompenaars and Hampden-Turner (1997) and they come up with ten common assumptions and four masks for the future, for the improvement of cross cultural research in international business.

### 2.6 The Era besides Hofstede

#### 2.6.1 Christian Scholz and Hans Böhm.

#### 2.6.1.1 Cultural research in the domain of Human Resources.

The research around Scholz and Böhm is apart from Hofstede. This might be caused by the fact that Scholz and Böhm examined only Human Resources aspects in their cultural research.

Among the International Human Resource Management researchers, Christian Scholz and Hans Böhm from University of Saarland are the relevant people in the German literature. In their 2008 published book "Human Resource Management in Europe" they compare HR politics in Austria, Czech Republic, Denmark, France, Germany, Hungary, Italy, Latvia, the Netherlands, Poland, Spain, Turkey and the UK. A citation from their preface: "It is fact that the countries forming the European Union are so diverse that even European businesspeople suffer a lack of information on the cultural, political and economic differences.... Gathering good information on the most relevant facts and differences in the European countries is a precondition for avoiding fatal and expensive mistakes." Scholz and Böhm's intention is to "contribute to better and more detailed information relative to human resource management" (2008, preface). Their limitations are also the willingness of the HRM to participate in the study about HRM in Europe. Their study is useful for scientists and students, practitioners in HRM, HRM professionals, entrepreneurs and managers, HR consultants. Unfortunately Scholz and Böhm (2008) did not include Luxembourg, Belgium, Portugal and Switzerland in their study. They simply categorise Human Resource Management into clusters, UK being a separate cluster from the rest of Europe, "due to the cultural proximity between the UK and the USA." In Europe they distinguish three main clusters, the south, the north and the east of Europe. "As to the northern countries, Scandinavian countries have ... some characteristics in common that distinguish them from other northern countries, of which Germanic countries (Switzerland, Austria and Germany) as well as small countries (Belgium, the Netherlands, Luxembourg) form sub-clusters" (Scholz & Böhm, 2008, p. 3). France, Italy and Spain are Romanic countries (p. 21).

Scholz and Böhm cite Sparrow/Schuler/Jackson (2000, pp. 45-46), to whom "key HRM policies and practices in gaining competitive advantage are:

- Culture.
- Organisation structure.
- Performance management.
- Resourcing.
- Communication and corporate social responsibility" (p. 5).

Following Scholz (2000), strategic management has six dimensions: the mechanic dimension (workflow and control mechanisms), the strategic dimension (the alignment with the companies goals), the organic dimension (the internal dynamics of growth and development), the

cultural dimension, the intelligent dimension (the knowledge base shared by all employees), and the virtual dimension (like teleworking), see Scholz and Böhm (2008, p. 6).

"The cultural dimension affects the value system of a company and its environment. HR managers need to position their own corporate strategy within this more general cultural framework, to create a motivating and identity-supporting climate. In the cultural dimension, the focus lies on analysing (visible) artefacts, (more or less conscious) values and (unconscious) underlying assumptions of HR practices. These affect, for example, recruitment and dismissal practices, official commitments to employees' development and social relationships within organisations" (Scholz & Böhm, 2008, p. 7). The change is from personnel administration to strategic Human Resource Management, with "strategic-thinking HR managers", and "the need to develop country-specific approaches to challenges of HRM ... and the development of country-specific solutions" (Scholz & Böhm, 2008, p. 18).

### 2.6.1.2 Scholz's and Böhm's questionnaire.

Scholz and Böhm (2008) asked the following seven questions in each of these countries.

•	What is typical of your country in relation to the country itself (its culture, people etc) and its economy?
•	What is your advice for a foreign firm entering your country's market? What should managers especially care about and, and what is more, be aware of?
•	What would you like to teach foreign HR managers? What is important for them to know in your opinion
•	What are you and other people of your country extraordinarily proud of with respect to HRM?
•	What would you say one ought not to do? What are the don'ts in your country?
•	In a few words, what would you say is the one fundamental strategic competitive advantage your country offers compared to others?
•	Which people play key roles in your country? Which names should one know?

Figure 2.46 Scholz's and Böhm's questionnaire (adapted from Scholz and Böhm, 2008)

### 2.6.1.3 Luxembourg, France and Germany in Scholz and Böhm.

Unfortunately, Scholz and Böhm did not include Luxembourg, Belgium, Portugal and Switzerland in their study. They included France and Germany, the bigger countries.

Typical for France, following Scholz and Böhm (2008, pp. 115-148) are: the influence of the state, of tradition and of trade unions prevent innovation that innovatory multinationals would like to implement; an elitist education system with the "grandes écoles"; consultation with all key players is a must; the French like to be recognised for all work done; French cuisine and gastronomy; high standard of living, education system, infrastructure, qualified workforce, architecture and countryside.

Typical for Germany, following Scholz and Böhm (2008, pp. 155-190) are: "Germany is one of the world's leading countries with an open society, social stability and an excellent infrastructure, a country which is optimally prepared to regain its status as one of the most attractive countries for high-quality, knowledge-intensive and reasonably priced research, development and production" (Scholz & Böhm, 2008, p. 156). It is important to speak the German language. Germany is extremely bureaucratic, therefore German taxation laws, labour laws should be known. Germans are more formal and more distant. HR administration became strategic HRM, influenced by values, politics, technology and markets.

#### 2.6.2 Richard D. Lewis.

#### 2.6.2.1 Lewis: Cultural research in the domain of Human Resources.

Lewis (2006) explores the relationship between language and thought, how the mind is conditioned culturally at an early age, he researches about the cultural capital in organisations, about meetings, space and time, status and leadership, communication style, listening habits, team-building mechanisms, negotiation, and decision-making. His chapter on meetings is useful for the international business person.

Lewis divides people into cultural groups that cross or span nations or regions, but also religions, companies, families and individuals (Lewis, 2006, p. xviii).

#### 2.6.2.2 Luxembourg, France and Germany in Lewis.

In the third part of his book, Lewis (2006) attempts to describe nearly all the countries of the world. Unfortunately, like many of his predecessors, he does not include Luxembourg.

He has good descriptions and analyses about the Germans and the French. He praises the German sense of 'Ordnung' (Lewis, 2006, p. 224). "German companies are traditional, slowmoving entities, encumbered by manuals, systems and hierarchical paths regarded by many Europeans and Americans as overly rigid and outmoded. Hierarchy is mandatory, often resulting in exaggerated defence for one's immediate superior and CEO" (Lewis 2006, p. 223). Meeting times are respected with absolute punctuality, meetings are well prepared, seating order is hierarchical and explanations somewhat lengthy (Lewis, 2006, pp. 224-225).

#### Christian Scholz and Hans Böhm

A comparative analysis of human resource management (HRM) in Europe, impacts contexts and different approaches in HRM in Europe, researching in Austria, Czech Republic, Denmark, France, Germany, Hungary, Italy, Latvia, the Netherlands, Poland, Spain, Turkey, comparing the UK, North America and continental Europe. Professor Dr Christian Scholz holds the chair of Business Administration, Organisation, HRM at University of Saarland. His research in Europe is about cultural, political and economic differences with the aim of avoiding fatal and expensive mistakes in doing business in Europe.

## The era besides Hofstede

#### **Richard D. Lewis**

Explores the relationship between language and thought, how the mind is conditioned culturally at an early age, he researches about the cultural capital in organisations, about meetings, space and time, status and leadership, communication style, listening habits, team-building mechanisms, negotiation and decision-making.

Figure 2.47 The era besides Hofstede (adapted from Scholz and Böhm, 2008, Lewis, 2006)

Following Lewis (2006, p. 256) the French are characterised by their profound belief that the centre of the world is France. "They are immersed in their own history and tend to believe that France has set the norms for such things as democracy, justice, government and legal systems, military strategy, philosophy, science, agriculture, viniculture, haute cuisine and savoir vivre in general" (Lewis, 2006, p. 256). Meeting times are not as respected as for the Germans, but the meetings will be long and wordy. "British and Americans often complain that the French talk for hours, but make no decisions" (Lewis, 2006, p. 257).

## 2.7 Limitations of Geert Hofstede

Many studies have been made about cross-cultural differences (Smith et al., 1996; Bond et al., 2004; Schwartz & Bardi, 2001; Smith, Peterson, & Schwartz, 2002; Smith, Trompenaars, & Dugan, 1995; Smith, 2002; Singelis, Bond et al., 1999).

Some researchers concentrated on Hofstede's Individualism/Collectivism dimension of culture (Schwartz, 1990; Triandis, 1995; Venaik & Brewer, 2011).

The cultural dimension Masculinity/Femininity was discussed by Kanayama and Cooper-Chen (2005) at the occasion of the pregnancy of Princess Masako in Japan.

Others discussed Hofstede's Model direct and openly (McSweeney, 2002).

And others concentrated more on the organisational level of culture (Mintzberg, 1993), whereas others co-wrote with Hofstede (Minkov & Hofstede, 2011; de Mooij & Hofstede, 2010; Hofstede, Bond, & Luk, 1993; Hofstede, Neuijen, Ohayv, & Sanders, 1990; Hofstede & Bond, 1988).

Many have described Geert Hofstede's books (Clark 2003), examined his impact (Taras, Steel, & Kirkman, 2010; Taras & Kirkman, 2010), others have criticised Geert Hofstede (Signorini et al., 2009), and many have replicated his studies, came up with new dimensions of culture or similar dimensions of culture. With all respect for these critics, Geert Hofstede was the initiator of a new era in intercultural comparison. His meticulous work 'Culture's Consequences' (1980) was followed by several academic articles (1983). He set new measures for new thoughts, new reflections. Søndergaard's 1994 research was to study all the works that validated or criticised Hofstede's Culture's Consequences. He found many adherents and many critics. This was in 1994. Kirkman et al. re-did another similar study in 2006. Søndergaard found two main positive attributes for Hofstede in the enormous amount of literature on him: rigour and relevance. The criticism focuses on the following three attributes: time relevance, sample and survey instrument (Søndergaard, 1994). He said this in 1994; today it is 2011, while Hofstede started his research in 1966, over 45 years ago.

*The first critique* says, with some justification, that the data from 1966 might be outdated in 2011. The world has changed since 1966, cultures have changed. Many wrote about cultural changes (Inglehart, 1997; Inglehart & Baker, 2000; Cameron & Quinn, 2011) and about culture and international business (Leung et al., 2003). Others say, the data from 1966 are still valid (de Mooij, 2011).

*The second critique* points out that Hofstede used IBM employees as sample for his research in national culture. The issue is that he used only one company to determine the culture of many countries, mixing up company and country culture. As IBM employed mostly male employees, the outcome is skewed especially in respect to Masculinity versus Femininity.

*The third critique* focuses on the questions used in his questionnaire. The questions are self-perceptive questions. The person has to evaluate himself, assuming first that he is capable of doing this. But second that he is honest enough to admit certain things. Many questions are critical, who would admit that he prefers a male manager to a female manager? People would answer that they fear to be fired if they are honest here.

*A fourth critique* highlights the fact that Hofstede uses secondary data (the literature). He even recommends using the literature and not collecting new data. Hofstede advises the researcher that it is better to use the existing data, than collecting new data (Hofstede et al., 2010), as in his opinion the existing data is sufficient and still valid.

*A fifth critique* points out that Hofstede's study started not as an intercultural study purposely, but as a 'work satisfaction survey' within IBM, that Hofstede modified over time.



Figure 2.48 Limitations of Hofstede (adapted from Søndergaard, 1994)

Despite these critiques, many replications were made, first to confirm Hofstede's findings, second to contest Hofstede's findings. Innumerable smaller replications were made worldwide. One of the bigger replications was made by Fons Trompenaars (1993, 1997) initiating a harsh debate between Trompenaars and Hofstede, who still does not accept the validity of Trompenaars work. Initiated by Michael House, the GLOBE (2004) is the one big replication, producing a vivid debate not only between House et al. (2006) and Hofstede (2006, 2009), but between nearly all authors worldwide, discussing the GLOBE and Hofstede projects (Smith,

2006; Leung, 2006), discussing the GLOBE's and Hofstede's approaches (Javidan, House, Dorfman, Hanges, & de Luque, 2006), as well as their positive and negative correlations (Maseland & Hoorn, 2009), their advantages and disadvantages, their merits, and now starting the discussion 'Beyond GLOBE and Hofstede' (Tung & Verbeke, 2010). Others want to avoid uncertainty in Hofstede and GLOBE (Venaik & Brewer, 2010). The GLOBE caused also lessons to be learned in the academic world (Javidan, Dorfman, de Luque, & House, 2006). Some are only discussing 'Beyond Hofstede' (Nakata, 2009), others discussing 'Beyond Hofstede and GLOBE (Tung & Verbeke, 2010).

The discussion on values in general, universally and inclusively continues as well (Schwartz, 2007; Tang & Koveos, 2008; Orr & Hauser, 2008; Kim & Kim, 2010). Cross-cultural education is discussed by Eldridge & Cranston (2009) and Cronjé (2011).

One of Hofstede's merits is that discussion on culture and cross culture continues in a vibrant way.

Hofstede's culture dimensions in consumer behaviour are not only studies by de Mooij (2000, 2010, 2011) and Hofstede with de Mooij (2002), but also by Williams and Zinkin (2008) and is also tested on validity (Blodgett, Bakir, & Rose, 2008) on global branding by Hofstede and de Mooij (2010), and on advertising by de Mooij (2003, 2004).

In Management, Hofstede's dimensions on culture are discussed by Mintzberg (2011) and by Peterson (2007), including the Unions by Posthuma (2009), a specific bank by Avery et al. (2008). The cultural impact of Hofstede on IT is discussed by Jones & Alony (2007).

Despite the critiques, in my opinion Hofstede is and remains the reference in cross-cultural studies. He brought an end to the all American descriptive cultural studies. All researchers and authors after him are just replicants, in different variations.

The most important value that can be placed on Hofstede's work is the fact that crosscultural studies are vibrant, discussions in the field are rich in argument and interest is drawn to it worldwide. Thanks to Hofstede, cultural research has never been so vigorous, the critiques are not well founded. Of course there are weaker points and stronger points in his research, but his originality remains uncontested. He is the originator of a now rich and interesting field of crosscultural research that before him was in the hands of Americans, who thought the values, theories, needs of the USA apply worldwide. It was at the time (1960 and 1970's) unthinkable to contest these researchers, but Hofstede had the courage, and even more, he had the ability to defend his cultural dimensions, to add new dimensions and to evolve with the years and the discussions he has with the current researchers.

### 2.8 Recommendations by Geert Hofstede

Geert Hofstede gives some useful advice to the young and less young researcher, who might be less experienced than him. Following Geert Hofstede et al. (2010), there is enough data already collected, available and ready to be analysed. Research is about analysing data, not necessarily about collecting data. Data has been collected intensely.

These data are available for free on the Internet, by searching the different websites of for example http://www.geerthofstede.nl/html, www.worldvaluessurvey.org/html, and the GLOBE http://www.thunderbird.edu/wwwfiles/ms/globe/html.

These are professional databases that are available and still need to be interpreted, examined, and structured, just like Michael Minkov did with the data from the WVS. A single researcher might just simply waste time, effort, money in attempting to collect data by trying to measure culture (Hofstede et al., 2010, pp. 47-48). The single researcher might just reinvent the wheel, or get completely confused. This recommendation is especially valid for the single researcher who tries to replicate his studies using his Values Survey Module. This was a result of the IBM studies and should be used only if compared with at least ten countries.

Geert Hofstede himself, if he had to redo his studies, would use the data available from the World Values Survey by Inglehart. He recommends the single researcher a search of the literature, of the available databases and not to get confused by the attempt to reinvent the wheel (Hofstede et al., 2010, pp. 47-48).

In the next chapter we'll have a look at Luxembourg whose place is in the very heart of Europe.

## 2.9 Luxembourg

### 2.9.1 Economical, geographical, political, social context in Luxembourg.

Luxembourg is a parliamentary democracy with a constitutional monarch at its head. Along with Belgium, Germany, France, Italy and the Netherlands, the Grand Duchy was one of the signatories of the Treaty of Rome in 1957. The ensuing creation of the EEC (European Economic Community) and EURATOM (European Atomic Energy Community) formed the nucleus of the later EU. On 18 April 1951 it was a founding member of the CECA (Communauté Européenne du Charbon et de l'Acier = European coal and Steel Community), the Paris treaty, together with the Federal Republic of Germany, France, Italy, Netherlands and Belgium. In Luxembourg, European cultures meet on a small piece of earth, with the highest level of tolerance. The European Commission has its seat in Brussels and Luxembourg. On May 1<sup>st</sup>, 2004, ten new countries joined the European Union, including seven former Eastern Bloc countries. On January 1<sup>st</sup>, 2007 more such countries joined. The balance in Europe is tilting to the East. See figure 2.52 for historic steps in Europe.

Background Note: Luxembourg (2006) gives an overview of Luxembourg. The Grand Duchy of Luxembourg's motto is: "Mir wölle bleiwe wat mir sinn" "We want to remain what we are". The capital is Luxembourg, same name as the country. Official languages are German, French, and Luxembourgish. The Government is a Parliamentary Democracy and a Constitutional Grand Duchy. The Grand Duke's name is Henri; the Prime Minister is Jean-Claude Juncker. The population is growing fast, as in 2009, it was approximately 493,000, in
2010 it was appr. 502,000 and in 2011 it was appr. 511,000. It is the world's only remaining Grand Duchy. It has the highest Gross Domestic Product per capita in the world, as shown in table 2.12. It is a founding member of ECSC (European Coal and Steel Community), European Union, NATO, OECD; it is part of the euro area since 1999. This shows its high interest in favour of European integration. The small army often is the subject for a smile: it consists of around 800 people. There is no navy and no air force. Luxembourg is host to 17 NATO AWACS airplanes, one A400M military cargo plane together with Belgium and 3 NATO Boeing 707. Luxembourg is one of the smallest European countries, it measures 2586 km<sup>2</sup>, 82 km long and 57 km wide at its longest and widest points, (Columbia Electronic Encyclopedia, 2010). Until the 1960 the steel industry was the engine of Luxembourg's industry, after 1960, banks and the financial sector took over. The Luxembourgish language is a German dialect from the Mosel region, filled with French and Dutch words and expressions. Luxembourgish is one of the three national languages. In school, pupils speak and learn and study in German, French, Luxembourgish, later in English and some in Portuguese and Italian.

The capital of Luxembourg has approximately 94,000 inhabitants in 2011, 60% of whom are foreigners. During the day, this equation changes dramatically, as the work force is commuting into the town of Luxembourg from Germany, France and Belgium.

The TGV link to Paris makes Luxembourg only two hours apart from Paris. RTL (Radio Television Luxembourg) and SES ASTRA (Société Européenne des Satellites) are well known companies. Skype, ebay, Amazon ... and others were attracted. What the future will bring? Hopefully it will bring continuation of peace, freedom and wealth in Europe.

The Institutions of the European Union are five: European Parliament, Brussels and

Strasbourg meeting once a month; European Council, Brussels, three times per year meeting in

Luxembourg; European Commission, Brussels at 90%; European Court of Justice, Luxembourg;

European Court of Auditors, Luxembourg.

# The Grand Duchy of Luxembourg

- Unitary parliamentary democracy and constitutional monarchy.
- Grand Duke: Henri.
- Prime Minister: Jean-Claude Juncker.
- Official languages: Luxembourgish, French, German.
- Capital: Luxembourg (90,000 inhabitants).
- Size: 2,586 km2.
- Population total: 511,000
- Motto: "Mir wëlle bleiwe wat mir sinn" "We want to remain what we are"
- Anthem: "Ons Heemecht" "Our Homeland"

Figure 2.49 The Grand Duchy of Luxembourg

There are 45,000 European civil servants, out of this number 9,500 are present in Luxembourg; this means 5.5% of the Luxembourg active population. 42.3% of the Luxembourgers are civil servants (IPSE, 2010). They are: Secrétariat Général du Parlement Européen, European Commission, Cour de Justice et le Tribunal de première instance, Cour des Comptes Européenne: Banque Européenne d'Investissement (BEI) et le Fonds Européen d'investissement: Office des Publications Officielles de l'Union Européenne, Office Statistique des Communautés (Eurostat), Centre de traduction des organes de l'Union Européenne.

Neefs and Laures (2010) from KPMG Luxembourg write in their article, that Luxembourg

is adapting to international standards. They write about corporate tax and transfer pricing

systems and their audit of the country. The Big4 audit firms are all four in Luxembourg: KPMG, Ernst&Young, PWC, and Deloitte.

Lord and Gerber (2009) explore immigration and integration issues in Luxembourg, looking at differences in socio-demographical inequalities, in housing, living, residential mobility among foreign workers.

Sohn (2009) looks at the cultural trans-border relations in the greater region around Luxembourg. Luxembourg was European Capital of Culture in 1995 and 2007. He is researching the links between cooperation and competition between neighbouring towns Luxembourg, Trier, Saarbrücken, Metz, and Nancy.

Lunghi (2010) states in his article in the 'Luxembourg for Finance - Official Newsletter of the Luxembourg Financial Centre', that culture is a long term thing. Culture is not something short term, but a long term issue.

The 'paperjam' is a monthly publication from Mike Koedinger for the business world in Luxembourg, destined mainly for banks, financial services, but also the industry. 'paperjam' interviews specialists in Human Resources, Marketing, Information Technologies and publishes them first in special series, secondly in the monthly paper copies, thirdly in the online version and finally as video podcasts. See http://www.paperjam.lu/html. Another monthly publication in Luxembourg is the 'Business Review'; Mike Gordon is one of their journalists. In 2010, he looked at cultural issues in his article "Crossing cultural barriers: a hidden business issue". He (2010) also writes about famous and typical Luxembourgish companies, Ceratizit and its worldwide leader position in hard materials. Another Luxembourgish forerunner position is the implementation of data centres (2010). In the June edition, he also mentions the work of Geert Hofstede as influential and that his model is used by Berlitz for cross-cultural training.

Moraru published her book, on women in leadership positions in Luxembourg and the Greater Region in 2010. For the purpose of this book, she interviewed women leaders in the Greater Region about their success stories in business. The publication is a collection of these interviews. Moraru organises meetings and seminars on the subject of her collection of interviews from, for and with women leaders in the Greater Region with the objective to make their success stories public. See also: http://www.andyaluxembourg.com/html .

Dumont, Kies and Poirier (2008) have a political view on Luxembourg. Luxembourg being so small, politicians are close to the inhabitants. Elections are important and well prepared through private and personal contacts.

Research is one of the main activities in Luxembourg and supported by the State as one of the pillars of the future. There are several 'Centre de Recherche Public' = Public Research Centers, abbreviated CRP, for example: CRP Henri Tudor, CRP Gabriel Lippmann, CRP Santé = Health, with a big research ongoing in cancer studies. CRP Henri Tudor's 2008 publication gives an overview of 20 years research in Luxembourg.

IBM has been in Luxembourg since 1936. The company regularly holds public seminars. One of the marketing campaigns from 2010 was: "Conversations for a smarter planet", which is also accessible on the internet at http://www.ibm.com/smarterplanet/html

The Information and Press Service of the Luxembourg Government (2004, 2008) regularly publish brochures on the cultural situation in Luxembourg. They write about major cultural infrastructures and the multicultural faces of Luxembourg.

As Welter states in 2010, it is about "Doing Identity" in Luxembourg – an emotional topic!

Roberts (2011) tries to give an answer to the astonished stranger in his article "Understanding Luxembourg", asking: "Is THIS a country?" and "Is it true what they say...about Luxembourg? Furthermore he says "the Grand Duchy is a unique place and understanding its traditions, business culture, political system and the vagaries of its social mores can be perplexing, even for those foreigners who have made an effort to integrate. We struggle with references to laws, institutions and history that are obscure to anyone not born and raised here." Robert Schuman was born in Luxembourg in 1886: As a French citizen, he was an

influential figure in the foundation of the ECSC (High Authority of the European Coal and Steel

Community), signed in 1952 in the town hall of the city of Luxembourg.

#### The Grand Duchy of Luxembourg – some details

#### Geography.

The capital city of Luxembourg shares its name with the Grand Duchy itself, which covers 2,586 km2. The country is flanked by neighbouring Belgium, Germany and France. It measures 82 km in length and about 57 km in width. It lies in the heart of the Greater Region, which also comprises Rhineland Palatinate, Saarland, Wallonia and Lorraine.

#### State system.

Luxembourg is a constitutional hereditary monarchy with a parliamentary democracy. Grand Duke Henri from the Nassau-Weilburg dynasty has been the Head of State since 2000.

#### Economy.

In the middle of the  $19^{th}$  century, the discovery of iron ore led to the prosperous steel industry, which was responsible for the country's wealth. Since the 1960s, the Grand Duchy has become an international finance, business and media centre.

#### Countryside and climate.

The country enjoys a temperate Atlantic climate and is characterized by a surprising diversity of landscape, from the hills of the Ardennes in the northern Oesling through the sloping vineyards along the Moselle to the chasms marking the former iron ore territory.

#### Population.

In 2011 the Grand Duchy had a total population of 511,000 of which foreigners make up +-50%.

#### Language.

The national language is Luxembourgish (Lëtzebuergesch). French, German and Luxembourgish enjoy equal standing as administrative languages. Luxembourgish is a west-Germanic language, cognate to the Mosel-French language.

Figure 2.50 The Grand Duchy of Luxembourg – Luxembourgish as an identifyer (from the Luxembourg Tourist Office, 2011)

Since 1984 Luxembourgish is Luxembourg's National Language. French, German and

Luxembourgish are administrative languages. The national saying is: Mir wölle bleiwe wat mir

sinn (We want to remain what we are).

The Information and Press Service of the Luxembourg Government (2008) points out, that

several languages are spoken and written in Luxembourg. This multilingualism has been legally

anchored since 1984 and shapes the linguistic landscape. Most Luxembourgers live their trilingualism every day. Luxembourgish is mainly a spoken language.Moreover, Luxembourgish is mainly a language of identification. Luxembourgers like to identify themselves through their common language. This common language gives them an identity, independence (Onofhängigkeet). It is their mother tongue (Mammesprooch). More or less 300,000 people have Luxembourgish as Mammesprooch.

Kingsley (2009) examines in the publication "Language Problems & Language Planning" the linguistic situation in multilingual banks in Luxembourg. He looks at the pressures, top-down and bottom-up on language practices and illuminates related language problems and language planning issues. Luxembourgish is a spoken language and is used as an identifier as shown byDavis (2009) who writes about language identities, ideologies and the relevant policy that goes with it, as well as by Horner (2009), who published in the same publication "Language Problems & Language Planning" his 2009 article "Language policy mechanisms and social practices in multilingual Luxembourg."

The Information Press and Service of the Luxembourg government published in 2008 a brochure on languages in Luxembourg where the situation of the languages spoken in Luxembourg is explained in detail. This is a vivid testimony of the real situation of the languages in Luxembourg. Treece (2009) published in the before mentioned 'Business Review' his article on "Communication in a multi-cultural environment". The question is: Which language do you speak, when and with whom and why, what to say and express?

Roberts (2011) says about languages in Luxembourg: "Language provides another barrier to understanding. Even those of us who read the German and French language press or listen to Luxembourgish broadcast media may often find that detail and subtleties are lost in translation."

Luxembourgish is a spoken language and a language of identification and finally Welter (2010) concludes: It is all about "Doing Identity".

### 2.9.2 Luxembourg: applying Hofstede to Luxembourg's culture.

The study published by IPSE (2010) is a newly published research made in and about Luxembourg. The study "Doing Identity in Luxemburg" was published in German in July 2010, with an English version to follow. It is the research of identities in Luxembourg, social, cultural, multilingual, international, pluralistic and multitudinal identities and their ways of articulation.

Talking about cultures in the way Hofstede does, there are cultures in nations, and cultures in organisations. They differ. First, let us look at **the national culture**.

Luxembourg is a special terrain. Why didn't Geert Hofstede include Luxembourg in his IBM studies? The question is: Does IBM not exist in Luxembourg? Yes, IBM exists in Luxembourg. IBM has been in Luxembourg since 1936. It is possible that IBM Luxembourg was / is not interested in his research. It may also be because the accessibility of the data was not given. It is perhaps because the terrain is so difficult, because information is not accessible? I think it is indeed very difficult, but I will try to complete the required analysis and will add the missing data to Hofstede's data. This is my contribution to knowledge.

Hofstede's five dimensions of culture are Power Distance Index (PDI), Uncertainty Avoidance Index (UAI), Individualism Index (IDV), Masculinity Index (MAS), Long-Term Orientation Index (LTO). In 2001 he created a list of the index score estimates for countries not in the IBM set. Luxembourg was among these countries which also included: Bangladesh, Bulgaria, China, Czech Republic, Estonia, Hungary, Malta, Morocco, Poland, Romania, Russia, Slovakia, Suriname, Trinidad and Vietnam.

I would like to verify the numbers given for Luxembourg by Hofstede.

The following table is given by Hofstede, where Luxembourg is cited together with the following countries:

Country	PDI	UAI	IDV	MAS	LTO
Luxembourg	40	70	60	50	-
following					
Hofstede					
Bangladesh	80	60	20	55	40
Bulgaria	70	85	30	40	-
China	80	30	20	66	118
Czech Republic	57	74	58	57	13
Estonia	40	60	60	30	
Hungary	45	82	80	88	-
Malta	56	96	59	47	
Morocco	70	68	46	53	

 Table 2.5 Hofstede's estimates on Luxembourg and other countries

Poland	68	93	60	64	32
Romania	90	90	30	42	
Russia	93	95	39	36	
Slovakia	104	51	52	110	38
Surinam	85	92	47	37	
Trinidad	47	55	16	58	
Vietnam	70	30	20	40	80

Source: Hofstede (2001, p. 502)

Why would I like to verify Hofstede's scores for PDI: 40, UAI: 70, IDV: 60, MAS: 50? There are several reasons.

First, on the level of national culture, dividing Luxembourg into different cultural

identities would be the key. On the level of the nation, the different nationalities in

Luxembourg have already been analysed in detail by Geert Hofstede.

Luxembourg has about 511,800 (data from 2011) inhabitants in total, see

http://www.statec.lu/html.

#### First cultural identity: Men and women.

The 511,800 residents are composed of 254,600 men and 257,200 women. Hofstede wrote extensively about Masculinity versus Femininity in his 1998 edition on this 'taboo dimension'.

### Second cultural identity: Different nationalities.

This population of 511,800 is composed of (data from statec, 2011):

290,500 Luxembourgers (56.76%),

221,300 foreigners (43.24%)

81,300 Portuguese (15.89%),

31,000 French (6.05%),

17,700 Italian (3.45%),

17,000 Belgian (3.32%),

12,100 German (2.36%),

5,600 Britons (1.1%),

3,800 Dutch (0.74%),

21,700 (4.2%) from other EU countries,

31,100 (6.08%) from other countries of the world, see http://www.statec.lu/html from 2011.

My assumption is that the Portuguese living in Luxembourg, have the same cultural identity as the Portuguese living in Portugal, the French living in Luxembourg as the French living in France and so on. I will not investigate this deeper. Further research could address this.

#### Third cultural identity: Working and non-working population.

The total population is composed of working and non-working people. In 2010, 219,100 people in the total resident population were working. The unemployment rate in 2010 was 6.2%, as compared to 2.5% in 2000, due to the economic crisis.

#### Forth cultural identity: the cross-border workers.

During the day time, 138,700 **cross-border workers** come to Luxembourg to work: 74,100 French, 37,800 Belgian, 37,500 German. This means a total of 357,800 for domestic employment. 357,800 people were working in Luxembourg in 2010, out of them 219,100 were residents and 138,700 were **cross-border workers**. 39% of the domestic employment is **cross-border workers**.

Concerning Luxembourg's national culture, a comparison with the indexes from these countries is therefore necessary to understand the nature of Luxembourg's national culture:

Country PDI UAI IDV MAS LTO Luxembourg 40 70 60 50 following Hofstede Portugal 104 27 31 30 63 France 68 71 43 39 86 75 Belgium 65 94 54 38 30 Germany 35 65 67 66 Italy 50 75 70 34 76 The Netherlands 38 53 80 14 38

 Table 2.6 Hofstede's cultural dimensions, Luxembourg and other European countries

Second, let's look at the **organisational cultures.** The next division in different cultural identities should be made on the organisational level.

Concerning the culture of Luxembourg's organisations:

Companies from all over the world are located in Luxembourg. If you work in a German company in Luxembourg, you will find a German culture in this organisation. The same is true for a French organisation with its typically French culture throughout the organisation located in Luxembourg. The same comparison should be done for the organisations.

Country	PDI	UAI	IDV	MAS	LTO
Luxembourg	40	70	60	50	-
following					
Hofstede					
France	68	86	71	43	39
Belgium	65	94	75	54	38
Germany	35	65	67	66	30
Italy	50	75	76	70	34
USA	40	46	91	62	29
Great Britain	35	35	89	66	35
Japan	54	92	46	95	80
Israel	13	81	54	47	-
Switzerland	34	58	68	70	40
Austria	11	70	55	79	31
Portugal	63	104	27	31	30

Table 2.7 Hofstede's cultural dimensions, Luxembourg compared to other countries

The main private employment sectors are the banking and finance sector, the construction

sector and the industry sector.

What are the assumptions for Luxembourgish nationals and companies?

Table 2.8 Hofstede'	S	estimates	on	Luxembourg
---------------------	---	-----------	----	------------

Country	PDI	UAI	IDV	MAS	LTO
Luxembourg	40	70	60	50	-
following					
Hofstede					
Assumptions	?	?	?	?	?
on					
Luxembourg					

Second, on the level of national culture, dividing Luxembourg into: Civil Servants and non-Civil Servants is key: Another division in cultural identity is due to the great number of civil servants working and living in Luxembourg. First, Luxembourgish civil servants work for the State. Second, European civil servants work for the European Commission.

I would like to verify the numbers about Luxembourg from Geert Hofstede, because of the huge percentage of Luxembourgers working for the State. The civil servants should be part of a separate study. Hofstede didn't include civil servants in his IBM and IRIC study, therefore Luxembourgish civil servants and the European civil servants will not be included in my study. Knowing that approximately 50% of Luxembourgers work as civil servants is important to the analysis of their organisational culture, see http://www.statec.lu/html.

What are the assumptions on Luxembourgish civil servants?

Table 2.9 Hofstede's estimates on Luxembourg compared with Civil Servants

Country	PDI	UAI	IDV	MAS	LTO
Luxembourg	40	70	60	50	-
following					
Hofstede					
Assumptions	?	?	?	?	?
on Civil					
Servants					

There are 45,000 European civil servants in Europe, with 9,500 working in Luxembourg, which represents 5.5% of the Luxembourg active population.

My assumptions are that the **national culture** in Luxembourg depends on, see the next figure.

#### What determines Luxembourg's national culture?

The culture of its residents: Portuguese, French, German, Belgian, Italian and many others.
The daytime cross-border workers from France, Belgium, Germany.
The organisational culture from Germany, France, Belgium, Luxembourg, USA, UK, Japan, Switzerland,
Israel, Austria and many others.
Your work environment.
Your private environment: who is your partner, your husband/wife, your friends, what nationalities are they?
Where you live: in the City of Luxembourg, next to the border with France, with Germany, with Belgium?
In the countryside? In Luxembourg, in France, in Germany, in Belgium?
What languages do you speak, with whom?

Figure 2.51 What determines Luxembourg's national culture?

In this study, I will concentrate on ONE company in Luxembourg and compare it with its subsidiaries in France and Germany. Therefore there is room for further research.

Further research in Luxembourg is needed. With my research I would like to demonstrate, that it is impossible to come up with ONE number for PDI, UAI, IDV, MAS, LTO and IVR for Luxembourg, but that there are many numbers per cultural dimension, depending on the cultural context in which you are, your own nationality, your families and friends nationality/ies, your work and its organisational culture, your hobbies and their organisational culture, where you live, if you live in the city of Luxembourg, in the countryside, close to the border with France, Belgium or Germany.

Analysing values, heroes, symbols and rituals in the organisation will be analysing the organisational culture.

Civil servants were not included by Geert Hofstede. As more than 50% of Luxembourgers work as civil servants, they are an important factor of the cultural identity of the country.

While working for the European Commission, where all of the 27 European Countries are

represented, all of the 27 nations' employees co-work, they meet and work together. Another

example is the EIB European Investment Bank, where people from the 27 European Countries

also work together.

Foreigners in %

This specific cultural identity has an impact on everyday life and especially on the HR practices within Luxembourg.

Table 2.10 Popul	lation structur	re (x 1000)				
	1991	2001	2008	2009	2010	2011
Total Population	384.4	439.5	483.8	493.5	502.1	511.8
Of which: Women	196.1	223.0	244.2	248.7	252.7	257.2
Luxembourgers	271.4	277.2	277.9	278.0	285.7	290.5
Foreigners	113.0	162.3	205.9	215.5	216.4	221.3
Of which from:						
Portugal	39.1	58.7	76.6	80.0	79.8	81.3
Italy	19.5	19.0	19.1	19.4	29.7	31.0
France	13.0	20.0	26.6	28.5	18.2	17.7
Belgium	10.1	14.8	16.5	16.7	16.7	17.0
Germany	8.8	10.1	11.6	12.0	12.0	12.1
Britain	32.	4.3	5.0	5.3	5.5	5.6
The Netherlands	3.5	3.7	3.8	3.9	3.9	3.8
Other EU	6.6	9.2	17.9	19.5	20.5	21.7
countries						
Other	9.2	22.5	28.8	30.2	30.1	31.1

2.9.3 What are the Human Resources specificities in Luxembourg?

(Source: Statec 2010 and 2011: Luxembourg in figures)

29.4

36.9

Following Statec (2010; 2011) since the widening into EU-25 in 2004 and EU-27 in 2007, the percentage of other EU member countries in Luxembourg has risen sharply, as you can see from the figures in table 2.10.

42.6

43.7

43.1

31.1

43.2

It is also to be noted, that other member countries are streaming into Luxembourg, more than the traditional EU member countries. The population of Luxembourgers remains nearly

unchanged over the years, 290,500 Luxembourgers are living in Luxembourg, whereas the number of foreigners living in Luxembourg is steadily increasing. Even political methods like the allocation of the double nationality have not shown a lot of results for increasing the numbers of Luxembourgers with Luxembourgish nationality.

_	-					
	2000	2006	2007	2008	2009	2010
1. Domestic	263.8	319.0	333.2	348.7	352.1	357.8
employment						
2.a. Non-resident	87.7	126.3	136.3	146.3	147.3	150.1
cross-border						
workers						
Of which from:						
France	46.4	64.0	68.6	72.9	72.7	74.1
Belgium	24.2	33.0	35.1	37.3	37.4	37.8
Germany	16.4	28.6	31.8	35.4	36.5	37.5
2.b. Resident	8.8	10.4	10.7	10.9	11.2	11.4
cross-border						
workers						
Net cross-border	79.0	115.9	125.5	135.4	136.1	138.7
workers (a-b)						
Overall	3.3%	6.3%	6.1%	5.8%	7.1%	7.8%
unemployment rate						

 Table 2.11 Employment and unemployment table

(Source: Statec 2010 and 2011: Luxembourg in figures)

Commuting over the borders everyday for work from Belgium, France, and Germany is a specificity of Luxembourg, says Statec (2010; 2011). Studying table 2.11, you can see that in 2010 150,100 people commute daily for work from the three countries. In 2010 a total of 357,800 people are working in Luxembourg out of a total population of 511,800. This represents an astonishingly high ratio.

	In 2008
EU (27 countries)	100
Belgium	115
Bulgaria	40
Czech Republic	80
Denmark	118
Germany	116
Estonia	67
Ireland	139
Greece	95
Spain	104
France	104
Italy	100
Cyprus	95
Latvia	56
Lithuania	61
Luxembourg	253
Hungary	63
Malta	76
The Netherlands	135
Austria	123
Poland	57
Portugal	75
Romania	46
Slovenia	90
Slovakia	72
Finland	116
Sweden	121
United Kingdom	117
Iceland	119
Norway	190
Switzerland	141
USA	152
Japan	111

Table 2.12 GDP per inhabitant in EU-27 in Purchasing Power Standards

(Source: Statec 2010 Luxembourg in figures. Lecture note: Table 2.11 represents the GDP (Gross Domestic Product) in 2008 in PPS = Purchasing Power Standards with Index 100 in the EU-27. This data shows the Purchasing Power of the 27 EU countries, with base 100. Luxembourg has 253 Purchasing Power on a base 100; that means, that Luxembourg has a GDP 2.53 times bigger than the average of the 27 EU countries. The PPS allows direct comparison of the 27 countries.)

IPSE (2010, pp. 274-276) concentrates on one of Luxembourg's specificity: the crossborder workers. They point out the importance of these cross-border workers to the work environment of Luxembourg. They say that in 2009, the percentage of Luxembourgers in the labour market was 29%, foreign residents were 27% and the cross-border workers represented 44% of the Luxembourgish labour market. For IPSE (2010) the strong attractiveness of the Luxembourg labour market is a result of three criteria: first, the relatively high net wages, second, the availability of job openings, and third, the equality of jobs and career opportunities.

My critical view is that the IPSE study looks like Edward Halls anthropology about Germans, French and Americans. It is a narrative description of the Luxembourg culture, of its habits and a more folkloristic description. In general, there is very little research about Luxembourg. There is no academic study and there is no study that applied Hofstede or GLOBE to Luxembourg. This is missing. I will fill the gap. This will be my contribution to knowledge.

In the next chapter we'll have a look at Europe, with Luxembourg being geographically in the middle.

#### 2.10 Luxembourg in Europe

### 2.10.1 Europe – an introduction.

In this chapter I would like to look at Europe and the 20<sup>th</sup> century with an outlook into the 21<sup>st</sup> century. Konrad Adenauer, Willy Brandt, François Mitterrand, Helmut Kohl, Richard von Weizsäcker, Hans-Dietrich Genscher and others helped with the construction of our unified Europe. Pierre Verluise (2009) writes about the main experiences in 20 years after the fall of the wall. He looks into the years after the Second World War and shows important points for the reader's understanding of cultural differences in Europe and our way of living today. It seems normal to us to have peace, wealth, comfort, as Pierre Verluise says in his book, but we don't understand how much in danger our peace, wealth and comfort might be.

#### 2.10.2 Some characteristics.

The six founding members Belgium, Germany, France, Italy, Luxembourg and the Netherlands had the following objectives for the European Union (Office for Official Publications of the European Union, May 2007): first to be home to different peoples and cultures, second to see ethnic and cultural diversity as an asset, and third to promote tolerance, respect and mutual understanding.

Lopez-Menchero and Milano (2006) describe the diversity of the European Union. This is available at <u>http://europa.eu.int</u> .Each country of the European Union has its differences. These differences are huge in some cases. Nevertheless all these diversities, the member countries of the European Union follow the same objectives, like peace, prosperity and stability, enumerated by Fontaine (2006) and discussed in Chapter 2.10.4.

### 2.10.3 Historic steps in Europe.

Belgium, France, Germany, Italy, Luxembourg and the Netherlands were the founding members of the European Economic Community (EEC) in 1951. Their common interest was mainly economic integration.

The European Union is founded on four treaties. Fontaine (2006), former assistant to Jean Monnet and Professor at the Institut d'Études Politiques, Paris, enumerates these 4 important historic steps in Europe, shown in the figure below.

#### Europe – historic steps

First: The Treaty establishing the European Coal and Steel Community (ECSC), which was signed on 18 April 1951 in Paris, came into force on 23 July 1952 and expired on 23 July 2002.
On 9 May 1950, the Schumann Declaration proposed the establishment of a <b>European Coal and Steel Community (ECSC)</b> . On 18 April 1951, the European Coal and Steel Community was established with the Treaty of Paris by the six founding members: Germany, France, Italy, Luxembourg, Belgium, and the Netherlands. This put in place a common market in coal and steel between the six founding members. The aim, in the aftermath of World War II, was to secure peace between Europe's victorious and vanquished nations and bring them together as equals, cooperating within shared institutions.
Second: The Treaty signed by the six, establishing the European Economic Community (EEC), building a common market, enlarging from coal and steel to a wider range of goods and services. This was signed on 25 March 1957 in Rome and came into force on 1 January 1958. It is often referred to as "the Treaty of Rome".
Third: The Treaty establishing the European Atomic Energy Community (Euratom), which was signed in Rome along with the EEC Treaty.
Eorth: The Treaty on European Union (EU), which was signed in Maastricht on 7 February 1992, came into force on 1 November 1993. It is often referred to as "the Maastricht Treaty".
Other important steps were: on 1 July 1968 custom duties between the six founding countries were abolished.
1973: The Community of six was joined by Denmark, Ireland and the United Kingdom, expanding it to nine member states. They develop their common policies.
1975: The European Regional Development Fund (ERDF) was established to implement new social and environmental policies.
<b>1979</b> : The first direct elections to the European Parliament were held.
1981: The nine were joined by Greece. This is often called the first Mediterranean enlargement.
1986: The ten were joined by Spain and Portugal, often called the second Mediterranean enlargement.
1989: The fall of the Berlin Wall was unexpected and completely changed the situation of Germany and Europe, initiating the Unification of Germany in October 1990.
1991: December 1991: The Soviet Union collapsed.
1995: The EU of twelve expands to 15 members as Austria, Finland, and Sweden join.
2002: The single currency, called EURO, initiated in 1999, is introduced into 12 countries of the euro area, called the euro zone.
2004: 10 new countries join the EU, which until then had 15 members on 1 May 2004: The Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia, making it 25 member states.
2007: on 1 January 2007, 2 new countries join the EU of 25: Bulgaria and Romania making it a the present 27 member states.
The waiting list is: Croatia, Turkey, Macedonia (Former Yugoslav Republic of Macedonia)

Figure 2.52 Europe – historic steps (adapted from Fontaine, 2006)

## 2.10.4 Objectives of the European Union.

The objectives of the European Union are the following (Fontaine 2006):

"Provide peace, prosperity and stability for its people, overcome the divisions in the continent, ensure that its people can live in safety, promote balanced economic and social development, meet the challenges of globalisation and preserve the diversity of the peoples of Europe, uphold the values that Europeans share, such as sustainable development and a sound environment, respect of human rights and the social market economy."

The horrors of World War II were taken as example to establish peace forever in Europe. The idea of Jean Monnet was, to unite the countries that fought each other so fiercely that no stone stood upon the other. Robert Schumann realized the idea of Jean Monnet and proposed a European Coal and Steal Community (ECSC). Robert Schumann, Konrad Adenauer, Alcide de Gasperi, Winston Churchill tried to start a new era in Europe. Since then, Europe is experiencing a period of peace never seen before, allowing it peace, freedom, stability, richness and wellbeing. Tolerance and equality between the states is one of the objectives, free circulation of goods and people, free choice of residency, recognition of university / school diplomas, harmonization of education, free choice of the work place, and the home.

With all the cultural differences in mind, another objective of the EU is: bringing Europe together.

To ensure this bringing together, safety and security issues have to be faced and resolved. Fighting international terrorism has become a main issue, especially after the 11 September 2001 attacks to the World Trade Center. Combined forces have to be put in place to ensure freedom, security, safety and justice. Therefore all European Governments have to cooperate; specific institutions have been created, like Europol, the European Police Office, and Eurojust.

Economic and social solidarity: freedom, peace and security come also from stability in the economy. The European Union's objective is a stable economy. This happens with ups and downs. The economic "crisis" in the years 2007 to 2009 often was compared to the 1928 crisis, but has been resolved differently, thanks to the combined forces of European Governments. Transportation, highway construction, infrastructure, and railways are boosting trans-European trade and transport. The construction of highways and TGV, ICE, airports, is one example for trans-European getting together.

The European Union wishes to create its own specific identity, in its diversity. The EU wants to be distinguished in a globalised world as one entity. The EU aims to speak as one voice in the following matters: the Kyoto protocol on air pollution and climate change, environmental protection, renewable energy resources, food safety, ethical aspects of biotechnology, protection of biodiversity, endangered species etc.

The EU fights for its values. It stands up for its values. These are humanitarian and progressive values. For example, all EU countries have abolished the death penalty. The EU believes in human rights, social solidarity, free enterprise, and fair distribution of economic growth, protection of the environment, and respect for cultural, linguistic and religious diversity, tradition and progress.

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### **2.11 Conclusion**

Since the late 1960s over 50 years have gone by, producing as much intercultural research as never before. This tendency was initiated by Geert Hofstede with his meticulous research on culture at IBM worldwide and continued by thousands of replicants. Culture is found to have dimensions, the question is not if, but how many. Hofstede initially came up with four dimensions (Individualism versus Collectivism, Uncertainty Avoidance, Power Distance, Masculinity versus Femininity), added a fifth later (Long-term versus Short-term Orientation) and is about to add a sixth (Indulgence versus Restraint) and a seventh (Monumentalism). Hofstede brought an end to the era of such well-known researchers as Maslow, Herzberg, McClelland, Rockeach, Kluckhohn, Strodbeck, Hall, Americans all who believed that their values, culture, theories would apply to the whole world. After Hofstede many intercultural studies were started in North America (the GLOBE, Mintzberg, Smith, Schwartz, Triandis, Schein, Cameron and Quinn), just like before the era of Hofstede, but others started in Europe (Trompenaars and Hamden-Turner, De Mooij, Inglehart, Minkov, Gert Jan Hofstede, Scholz and Böhm) and in Asia (Bond). Geert Hofstede's study was carried out in Europe, from Europe, including the whole world. His study also produced a lot of critiques, contestation and controversy. The most famous replications are the Chinese Value Survey by Bond, the European Value Survey and the World Value Survey by Inglehart, and the GLOBE by House. My research question is: Where does Luxembourg fit in on Hofstede's cultural dimensions, compared with France and Germany? Hofstede's data from 2010 on Luxembourg are only estimates. I will add the data that I collected from Luxembourg, France and Germany to the data of Hofstede. This is my contribution to knowledge. I will be filling in these gaps. A look at the Grand Duchy and its

position in Europe in this chapter was necessary to understand the cultural specificity of this

small but great country.

# Table 2.13 Comparison of different authors in different eras researching Luxembourg/France/Germany

Author	Luxembourg	France	Germany				
The era before Hofstede							
Maslow	No	No	No				
McClelland	No	No	No				
Herzberg	No	No	No				
Rockeach	No	No	No				
Hall	No	Yes, descriptive	Yes, descriptive				
	The Geert I	Hofstede era					
Geert Hofstede	1980: No 2001: Yes, a few notes 2010: estimates in PDI, UAI, IDV, MAS 2011: estimates in LTO, IVR No estimates in MON	Yes, in detail	Yes, in detail				
	The era after (	Geert Hofstede					
Trompenaars, Hampden-Turner	No	Yes, in detail	Yes, in detail				
De Mooij	No	Yes	Yes				
Triandis	No	Yes	Yes				
Schwartz	No	Yes	Yes				
Smith	No	Yes	Yes				
Inglehart	1997: No 2005: Yes 2011: Yes	Yes, in detail	Yes, in detail				
Cameron and Quinn	No More organisational research than national	No More organisational research than national	No More organisational research than national				
Schein	No More organisational research than national	No More organisational research than national	No More organisational research than national				

MintzbergNoNoMore organisational research than national research than			
MintabergNoNoNoMore organisational research than national research than nationalMore organisational research than national research than nationalMore organisational research than national research than nationalMinkov2011: Yes, especially on murder ratesYesYesGert Jan HofstedeNoYesYesMore a cultural trainerMore a cultural trainerMore a cultural trainerMichael Harris BondNoNo, littleNo, littleChinese ValuesSurveySurveySurvey			
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Michael Harris BondNoNo, littleNo, littleChinese ValuesChinese ValuesChinese ValuesSurveySurveySurvey			
Chinese ValuesChinese ValuesChinese ValuesSurveySurveySurvey			
Survey Survey Survey			
GLOBE (House, No Yes Yes			
Hanges, Javidan,			
Dorfman, Gupta)			
The era beyond Hofstede			
Briley No No, little No, little			
Nakata No No, little No, little			
Kirkman No No, little No, little			
Lowe			
Gibson			
Hong			
Benet-Martínez			
Chiu			
Morris			
Wyer			
Hermans			
Kempen			
Jenner			
MacNab			
Brislin			
Worthley			
Leung			
The era besides Hofstede			
Scholz and BöhmNoYesYes			
LewisNoYes, good descriptionYes, good description			

## **Chapter 3: Research Methodology**

# 3.1 Research Design for my Study

I will be replicating the studies from Geert Hofstede in Luxembourg. The basis for my questionnaires, interviews, participant observation and document review will be Hofstede (1980; 2001) and Hofstede, Hofstede and Minkov (2010). The objective is to come up with one pattern for Luxembourg, to compare this pattern with France and Germany and to add the missing data to Hofstede's estimates on Luxembourg's cultural dimensions IDV (Individualism versus Collectivism), UAI (Uncertainty Avoidance Index), MAS (Masculinity versus Femininity), PDI (Power Distance Index), and the later-added LTO (Long-Term Orientation versus Short-Term Orientation), IVR (Indulgence versus Restraint) and MON (Monumentalism).

0		
	My Luxembourg	Hofstede's estimates on
		Luxembourg
PDI	?	40
UAI	?	70
IDV	?	60
MAS	?	50
LTO	?	64
IVR	?	56
MON	?	-

Table 3.1 Hofstede's estimates on Luxembourg

The following data collection instruments will be used to collect primary data: Participant observation, face-to-face interviews, telephone interviews, focus groups, paper questionnaires, and document reviews.

Following Creswell (2007), Wilson (2010), Pratt (2009), Taylor and Bogdan (1998), my methodology is qualitative research. I will be choosing one company in three countries, Luxembourg, France and Germany, in which I am conducting interviews and providing questionnaires to all of its employees.

The following authors are used for the review of research methods, introduction to qualitative research methods, phenomenological research methods, ethnomethodology, participant observation for fieldworkers, grounded theory (Glaser & Strauss, 1967) and case study: Taylor and Bogdan (1998), Wilson (2010), Strauss and Corbin (2008), Saunders, Lewis, & Thornhill (2009), Creswell (2007), Trochim and Donnelly (2010), Moustakas (1994), Lester (1999), ten Have (2004) De Walt & De Walt (2002), (Yin, 2003) for case methods, (Spradley, 1979) for ethnographic methods, (Creswell, 2007) for phenomenology, (Eisenhardt, 1989; Pratt, 2000) and for grounded theory (Bitektine, 2008).

Qualitative research method, following Creswell (2007) and Saunders, Lewis and Thornhill (2009) is a research method in which theory is developed directly from the data, generated by a series of observations or interviews involving an inductive approach rather than based on assumptions. With my research I wish to explore a situation (Hopp, 2008) – practices in Luxembourg – in great depth in order to understand it, to explain it, to try and describe, translate, explain and interpret events from the perspectives of the people who are the subject of the research.

Primary data will be collected through participant observation, interviews, questionnaires, my own professional experience and documents (Lester, 1999).

My research will be exploratory, not descriptive, analytical or predictive, because few or no previous studies exist. It is qualitative, not quantitative. It is an applied research, as it is the replication of Hofstede's studies and its aim is to add data to Hofstede's data and not to improve knowledge generally and without any particular applied purpose. It is inductive, not deductive; inductive research starts from a particular situation and comes up with broad general theories. The emphasis here is on understanding and trying to gather rich insights into the participants' world. It is theory-testing. Normally, it does not make any intervention, but allows people to reflect about their way of doing everyday business.

# **Research Methodology**

- My research question:
- Where does Luxembourg fit in on the 7 Hofstede cultural dimensions in comparison with France and Germany?
- I would like to test the validity of Hofstede's work in 2010, being contested, adding entirely new data for Luxembourg, for which Hofstede has only provided estimates, comparing Luxembourg with France and Germany, which have been previously researched.

(Additional formulations of my research question would be: What research question would Hofstede have on his mind looking at the Grand Duchy of

Luxembourg in comparison with France and Germany?)

# My methodology:

- Literature Review
- Participant Observation (Primary Data).
- Choice of ONE company.
- Face-to-face interviews.
- Telephone interviews (Primary Data).
- Paper questionnaires (Primary Data).

# My contribution to knowledge:

• Adding the data that I collected about Luxembourg to Hofstede's data, as Hofstede bases his research on Luxembourg on estimates.

# **Objectives:**

- Come up with one pattern for the Luxembourgish nationality.
- Compare my data with Hofstede's estimates and add data.
- Logistic Regression on 'Happiness'.

Figure 3.1 My research methodology

# 3.2 Sampling of my Study

I am choosing ONE company: Lindab Buildings, headquartered in Luxembourg with subsidiary companies in France and Germany, with the objective of the comparison between the three countries. The sample for this research is the whole population of Lindab Luxembourg, Lindab France and Lindab Germany. All of the employees are given the questionnaire. The interviews are done with the Human Resources Director Group. For the Participant Observation and the Documents, I rely on what Luxembourg offers in terms of seminars, meetings and literature (Braun, Wilcox, & Sparrow, 2007; Creswell, 2007; and Wilson, 2010).

# 3.3 Implementation of the Study

The study was implemented and varied only a little from its original design. My planned design was to undertake the research within my professional competences. In qualitative research, research is undertaken over a long period of time with an in-depth knowledge of the field by the researcher (Hopp, 2008). The divergence from the plan was that the review of the literature took longer than planned due to its extensiveness.

The study was performed in this order:

- 1. Participation at seminars.
- 2. Review of the Literature (books and journals).
- 3. Choice of ONE company.
- 4. Face-to-face interviews.

- 5. Telephone interviews.
- 6. Paper questionnaires.

Participant observation: My research ethnography was covert, not overt, because the subject I was observing was unaware of the observation. My identity and purpose was not revealed to the group. I was a fully covert member of the group. I chose the Complete Participant Research method (Bradford University) – as opposed to Complete Observer, Observer as Participant, Participant as Observer. I was choosing this method because Luxembourg offers a wide range of interesting seminars and events to which HR specialists are invited. I gained a close and intimate familiarity with the given group of individuals. However, in a country as small as Luxembourg keeping covert anonymity is a real challenge; although, I have succeeded until now. How? I participated in events, congresses, meetings, dinners, conferences, breakfasts in my name, without telling them that I was participating for my research. On the contrary, at the Students' Fair or the Company Contact Fair I participated as a student. Difficult indeed, as many of the Human Resource specialists know me.

The focus groups for the participant observation were business specialists in Luxembourg. There are several business associations in Luxembourg. "HRone", POG – Personnel Officer's Group, the American Chamber of Commerce, and the British Chamber of Commerce will be used for the sampling.

The literature was reviewed, including all literature from Hofstede, his textbooks and articles. The literature review was written including the following four eras, key academic

journals and specific literature from Luxembourg A) The era before Hofstede – Maslow, McClelland, Herzberg, Rockeach, Kluckhohn, Strodtbeck, Hall. B) The Hofstede era C) The era after Hofstede – Trompenaars, Hamden-Turner, De Mooij, Triandis, Schwartz, Smith, Inglehart: World Values Survey, Cameron, Quinn, Schein, Minkov, Gert Jan Hofstede, Bond: Chinese Values Survey, Mintzberg, House, Hanges, Javidan, Dorfman, Gupta: The GLOBE, Scholz, Böhm. D) The era beyond Hofstede – Kirkman, Lowe, Gibson, Nakata, Briley, Hong, Benet-Martínez, Chiu, Morris, Wyer, Hermans, Kempen, Jenner, Mc Nab, Brisling, Worthly, Leung. E) The era besides Hofstede – Scholz and Böhm, Lewis.

Journals from the media and press were used: I reviewed journals specialised in crosscultural studies, in international economy, marketing, sociology and psychology such as: Journal of Cross-Cultural Psychology, Journal of International Business Studies, Journal of Business & Economics Studies and many more.

Specific literature from Luxembourg was reviewed. These included the IPSE (2010), the American Chamber of Commerce (2010), Spizzo (1995) and the monthly issue of paperJam, with detailed articles about the business, human resources, marketing, communication, and IT communities.

Choice of ONE company. This company was chosen from the POG – Personnel Officer's Group, a human resources association in Luxembourg: Lindab Buildings - headquartered in Luxembourg with subsidiary companies in France and Germany, as well as in other locations in Europe and worldwide, and willing to participate in my research by conducting face-to-face and telephone interviews (using the original questions of Hofstede), creation of questionnaires (using the original questions of Hofstede). A pre-study was undertaken to train for the real study and to correct possible errors.

The face-to-face and telephone interviews were structured (Wilson, 2010). The reason for this is that I am replicating Hofstede's studies by using his original questions of his interviews from Culture's Consequences, 2001, chapter 8, p. 395. The first interview was conducted face-to-face with the DHR of Lindab Buildings Luxembourg. The second was a telephone interview with Lindab France and the third another telephone interview with Lindab Germany. The interviews were recorded and filmed. During the interview, notes were taken. The interviews were then transcribed, sent to the respective interviewee, reviewed by the interviewee, corrected and validated by the interviewee, rewritten, evaluated following Hofstede and published in this thesis.

The questionnaire was constructed with the help of Geert Hofstede. His original questionnaire was used, the VSM08 (Value Survey Module 2008), validated by Hofstede, translated from English into French and German, the translations were reviewed by native speakers and validated by Hofstede. These three questionnaires were reviewed by the Director of Human Resources (DHR) of Lindab Buildings, validated by the DHR and distributed to all of the employees of Lindab Buildings Luxembourg, France and Germany. The response rate was 90% for Luxembourg, 100% for France, and 90% for Germany. The response rate was high because of the techniques applied to improve the response rate (Bradford University): the respondents were pre-contacted through several emails by management, DHR and DHR Group and DHR Lindab, various distribution channels were chosen: email, paper, fax, normal mail via DHL. A good reward for a high response rate was promised: a donation of 10 Euros per questionnaire to SOS Children's Villages if the response rate was higher than 50%. Involvement of the general management and in addition an emphasis on the confidentiality (questionnaires were anonymous). The fun part of participating in the questionnaire was a further appeal to the respondents.



Figure 3.2 Implementation of my research

The research was conducted mainly in Luxembourg, with comparison with France and Germany. For the evaluation of the questionnaires filled in by Lindab Buildings Luxembourg, France and Germany, I was using Julie Pallant's (2010) book on SPSS and statistics from Tabachnick and Fidel (2010). The objectives of the evaluation are:

a) Per question per country (Lindab in Luxembourg, France, Germany): I calculated the mean score (average), the median, the minimum, the maximum, the spread, the standard error, the Q1 first quartile, and Q3 third quartile.

b) I performed Hofstede's cultural dimension calculations (the heart of my study)

These are the calculation formulas from the VSM08 manual (http://www.geerthofstede.nl/html).

# Hofstede's calculation formulas from the VSM08 PDI = 35(mQVAL7 - mQVAL2) + 25(mQVAL23 - mQVAL26) + C (pd) UAI = 40(m QVAL20 - mQVAL16) + 25(mQVAL24 - mQVAL27) + C (ua) IDV = 35(mQVAL4 - mQVAL1) + 35(mQVAL9 - mQVAL6) + C (ic) MAS = 35(mQVAL5 - mQVAL3) + 35(mQVAL08 - mQVAL10) + C (mf) LTO = 40(mQVAL18 - mQVAL15) + 25(mQVAL28 - mQVAL25) + C (ls)IVR = 35(mQVAL12 - mQVAL11) + 40(mQVAL19 - mQVAL17) + C (ir)

MON = 35(mQVAL14 - mQVAL13) + 25(mQVAL22 - mQVAL21) + C(mo)

Figure 3.3 Hofstede's calculation formulas (adapted from Hofstede's VSM08)

c) I used Excel and SPSS applying the statistical instrument, Logistic Regression (Logit), (Tabachnick & Fidell, 2007; Pallant, 2010) forming several research questions. Linking several questions together allowed analysing the company Lindab Buildings.
For the correlation of more questions, I followed Pallant (2010), Tabachnick and Fidell (2007), Pratt (2010) and the Cambridge Companion to Husserl (1995) for the analysing of data and Smith and Woodruff Smith (1995), as well as Husserl (1962) and Hopp (2008).

#### d) Logistic Regression - Logit

Logistic Regression is a statistical method used to model the relationship between a qualitative dependant variable – like for example 'happiness' – and a combination of independent variables – like for example 'taking risk', 'free time for life', 'level of education' 'job level manager or non-manager', 'state of health', 'religion'.

Logit analysis means Logistic Regression (Pallant, 2010, p. 168-180; Tabachnick & Fidell, 2007, pp. 23-24). "Logistic regression allows prediction of group membership when predictors are continuous, discrete or a combination of the two. For example, prediction of whether someone is a belly dancer may be based on gender, occupational category, preferred type of reading material, and age. Logistic regression allows to evaluate the odds (or probability) of membership in one of the groups (e.g., belly dancer) based on the combination of values of the predictor variables (e.g., 35-year-old female professors who read science fiction)" (Tabachnick & Fidell 2007, pp. 24-25). In the case of Lindab Buildings the focus was on the question if people are happy or not, depending on if they love taking risk or avoid taking risk, if they use free time for life or not, if they have a high or low level of education, if they are Manager or Non-Manager, if their state of health is good or not, if they give importance to religion or not.

#### **3.4 Limits, Issues and Analyses**

The limits of my study will be the honesty of the people, their willingness to accept the study and their honesty in filling in the questionnaire. My findings are objective. Another researcher would likely reproduce the same findings. The advantage is that my research is adding data to the data from Hofstede and comparing with Hofstede's estimates. Hofstede's estimates are from 2010, the comparison is still valid in time.

The issue with phenomenological research is that it is very time consuming, it generates a large quantity of notes, recordings and the data does not necessarily fall into well-defined categories. Hofstede's cultural dimensions are well defined, but there are more analyses possible.

There will be a summary of the findings, a discussion section and a conclusion or issues and implications section. Following Lester (1999), there may be issues related to the small number of participants and the depth of information gathered, as well as the evaluation of the data gathered.

My work engages in debates resulting from my review of practices currently in use, based on relevant literature, and theory in comparison to the practices in general. My work will show that Luxembourg is different from other markets, confirming Greenwald and Kahn's (2005) "All Strategy is Local". Luxembourg has a specific work environment that is not in-line with the theories of the globalised world (IPSE, 2010; AmCham, 2010) and especially Spizzo (1995).

#### **3.5 Ethics**

Ethical concerns may emerge at all stages of Management and Business (Elms, Brammer, Harris, Jared, & Phillips, 2010). There are risks regarding confidentiality. For example, participants in the face-to-face interviews need to provide consent for the information discussed to be published in this thesis. Their written consent is obtained via email. Questions in the questionnaires should be useful, but do not offend participants. Equity in treatment regardless of gender, race or nationality is to be always guaranteed (Robertson, 2008).

Explanations related to the questionnaires are provided via email. Participants' right of privacy are assured. The voluntary nature of their participation is assured through the ability to withdraw from the study at any time. After the participant's participation, he/she receives a thank you email for his/her assistance from Human Resources Department at Lindab Buildings.

I ensure that no harm will come to anybody. I limit personal risk by conducting face-toface interviews in the office during business hours using written invitations via email and written confirmations of these invitations. Questions for the questionnaires are from Hofstede and were reviewed by him, the Director Human Resources of Lindab Buildings and me for disturbing questions before being sent to participants. Together with a colleague, I attend only seminars from officially recognised institutions and I am as discreet as possible.

### **Chapter 4: Data Analysis**

### **4.1 Introduction**

In this Chapter 4 the primary data obtained from implementing my methodology will be described. Chapter 3 explained my methodology. Chapter 2 detailed the relevant literature. Literature and academic journals on cross-cultural research around Geert Hofstede, before and after and special literature and journals on Luxembourg have been reviewed in chapter 2.

The content of the 'Data Analysis' chapter will be as follows: First, the results from the participant observation will be described. Second, the face-to-face and telephone interviews will be analysed. Third, the results from the questionnaires will be discussed and the average score per question will be taken under review. Fourth, Hofstede's cultural dimensions will be calculated following his calculation formulas. The fifth section will be about statistics and the calculation of logistic regression (LOGIT).

### 4.2 Participant Observation

Luxembourg has a vigorous meeting culture. In Luxembourg, a variety of seminars, meetings, breakfasts, lectures, parties, dinners and fairs can be found. Luxembourg prefers direct and personnel contact. Luxembourg prefers people contact to the modern technologies of social media. Business is done in person, preferably over a good dinner or a glass of champagne. It is all about meeting and talking to people and building up personal relationships. Luxembourg is a small country. Nearly everybody knows everybody and almost everybody knows what others in the country are doing.

These seminars are organised by

- **HRone**, on different subjects such as 'How to optimise the performance in Human Resources?' or Gala HR.
- PaperJam Business Club e.g. IBM study 'Conversations for a smarter planet' or 'Afterwork talks' in different cycles, e.g. 'Human Resources Cycle' on the subject: 'Working in Luxembourg: important Human Resources issues and challenges'.
- American Chamber of Commerce e.g. 'Motivating high performers in times of downturn' or 'Firm Base, Global Connections', or 'Annual Networking Event' or 'Cloud Computing'.
- Chamber of Commerce and Sacred Heart University Luxembourg organise conferences such as 'Can individuals still make a difference?'
- European Commission, e.g. 'Human Resources at the Commission'.
- LPRA Luxembourg Professionals Recruiters Association, e.g. 'What does the work future in Luxembourg look like?'
- **Tempo-Team / Rowlands International and SHL**, e.g. 'Developing your talent to handle company engagement after a restructure'.
- 'Femmes Leaders Luxembourg', e.g. 'Open Leadership Forum', or 'Women Leadership in the Greater Region Success stories'.
- POG Personnel Officer's Group e.g. 'HR 2.0: Social Networks, a strategic stake for companies'.
- Libreria Italiana celebrated its 10 year anniversary.

- Brasserie Guillaume celebrated its 10 year anniversary.
- **BEE SECURE** organised a special Seminar on Information Safety, Security & Quality, entitled: 'Youth on the Net'.

These seminars typically are organised in banks, hotels or at the Chamber of Commerce and are followed by a champagne and cocktail reception or preceded by breakfast or lunch. This is also confirmed by IPSE (2010).

Many 'Fairs' - 'Foires' – 'Messe' – at 'Luxexpo' are organised over the year. Foire d'automne, Foire à la Brocante, Luxembourg Mineral Expo, Foire de l'Etudiant, Made in Spain, Expogast, Fête des vins et Crémant du Luxembourg, Salon du Mariage, Steffenspektakel, Bazar International, International Motor Show, Meet@Uni.lu, Vakanz, Salon des Vins de Bordeaux et d'Aquitaine, Art & Antiques Fair, Contact, Logistics Management Forum, Salon du Bien-Etre, Jardirêve, Autojumble 'Klassesch Technik', Festival des Migrations, des Cultures et de la Citoyenneté, International Dog Show – Exposition Canine Internationale, Med-E-Tel, Foire de Printemps, Oeko-Foire, Semaine Nationale du Logement, Italia Dimensione.

For this research I was especially interested in 'Foire de l'Etudiant – 'Students' Fair', Meet@Uni.lu, Bazar International, Festival des Migrations, des Cultures et de la Citoyenneté.

All year long, many sports events are organised where people meet and do business while exercising: Sport pour tous, City Jogging, Luxembourg Marathon, and various bicycle races are some examples. Besides sports, many cultural events take place such as art expositions, and inaugurations, where people meet and do business.

### **4.3 Interviews**

# **4.3.1 Interview analysis: comparison Lindab Luxembourg – France – Germany.**

The interviews were conducted in two different ways: face-to-face interview with Lindab Luxembourg Director Human Resources and telephone interviews with Lindab France and Lindab Germany. The questions in the interview were the original questions from Hofstede (2001, p. 395). He conducted many interviews with the objective to identify symbols, values, heroes, and rituals. I identified these in my interviews, comparing Lindab Luxembourg with Lindab France and Lindab Germany. In the following, there is always first the original Hofstede question, second the answers from Lindab Luxembourg, France and then Germany, allowing the direct comparison per question.



Figure 4.1 Hofstede's interview questions (Hofstede, 2001, p. 395)

The following pages represent the analysis of the interviews with Lindab Luxembourg, Lindab France and Lindab Germany. This chapter is designed to identify symbols, values, heroes, rituals in the company by using the original Hofstede interview questions shown in figure 4.3. The results, the identified symbols, values, heroes and rituals at Lindab Luxembourg, Lindab France and Lindab Germany, will be shown in table 4.1 and in figure 4.5.

#### **<u>OHRM-1:</u>** According to you, what is typical for your company? (to identify symbols, heroes, rituals)

#### LUXEMBOURG:

- Our core values are:
- Customer success.
- Down to earth.
- Neatness and order.

Typical at Lindab Luxembourg is that the door of the Manager is normally open. There is a big difference between Lindab Luxembourg and a bank in Luxembourg. PDI (Power Distance Index) and hierarchy are low. Hierarchy is low.

Luxembourg is a specific place:

- Its inhabitants are a big mixture.
- With higher tolerance.
- More open-minded.
- With many different languages.
- Once a year, a boat race is organised. This is done to increase our team building activities, with a low cost and maximum motivation factor, especially after the crisis. Employees are invited to the Schouberfouer (the annual and biggest Luxemburg city fair). Participation in the 24 hour cycle race in Wintger. Every second year, a sports weekend is organised. The ING Marathon is sponsored with Lindab T-shirts.

#### FRANCE:

• Lindab is the leader in building construction.

#### **GERMANY:**

- The power focus is on conquering new markets.
- The strive is to get new markets to have the opportunity for new business.
- Lindab Germany is an international company with diverse employees from diverse cultures, with diverse languages and diverse origins.
- But in this diversity all are collaborating together on one common objective: the success of the company.

#### **<u>QHRM-2:</u>** What terms are only used by insiders of your company?

#### LUXEMBOURG

- The core values: Customer success.
- Down to earth.

- Neatness and order.
- Corporate social responsibility.
- Mutual trust: Lindab is working with 400 building dealers. They have to be able to trust Lindab.

#### FRANCE:

- Simplify construction.
- LindabLife.
- Think less.
- Excellence in construction.

#### **GERMANY:**

- The astronisation (from the name Astron, Lindab's name before the name change) of each project.
- Each project is brought up to our standard.
- The internal documents represent these standards:
  - The code of ethics.
  - The cost analyses.
  - The quality handbooks.
  - The procedures.

#### **<u>OHRM-3:</u>** What are famous words here? (to identify organisational symbols)

#### LUXEMBOURG:

- **Trust**: our relationship is built on trust.
- Good quality: products are TÜV certified, there are TÜV audits and internal audits.
- Zero corruption: There is zero tolerance for corruption.

#### LindabLife:

LindabLife embraces guidelines, policies and activities within social responsibility, like business, society, environment and employees.

In the Management Meeting every second week one section is booked for LindabLife.

#### **Environment**:

- The objective is to reduce 20% of carbon dioxide emissions by the year 2020.
- Environment friendly paint.
- Research in solar panels.
- Innovation.
- Environment friendly products.
- Steel, for example, is stable in earthquake regions; it is concretely re-usable, compared to wood.

#### Training:

- Internships to students, BBA, MBA and PhD students, summer jobs.
- Recruitment from different universities.
- Collaboration with the Lycée classique Diekirch on a book project.

#### FRANCE:

- Simplify construction.
- LindabLife.
- Think less.
- Excellence in construction.

#### GERMANY:

- In the sales domain it is: work sheets, IWS.
- The astronisation.

• In the engineering domain these are technical documents such as TM, CPM, DM, EM.

These are internal company words that one cannot find in other companies.

#### **<u>OHRM-4: What things are important here to get on?</u>**

#### LUXEMBOURG:

The right personality, chosen in the recruitment interview. Every company has a special culture.

Lindab Luxembourg is looking for people who are:

- Open-minded.
- Adaptable.
- Flexible.
- Easy with communication.
- Willing to switch departments.

#### FRANCE:

Normally people enter Lindab France and make a career from their entry on. People stay in their job from their entry. Most jobs at Lindab France are without evolution. People join, stay within the same job and develop in this same job.

#### **GERMANY:**

- Determination, having an objective in front of one's eyes.
- Being reliable.
- Being long-sighted looking into the future.
- Respecting colleagues and self.

## <u>OHRM-5:</u> Are there, according to you, people who are of great importance to the organisation? (to identify <u>organisational heroes</u>)

#### LUXEMBOURG:

Everybody is important at Lindab Luxembourg. Everybody is part of the wheel.

Nevertheless, the big focus is on the sales people, because they bring the money, the needed profit.

The company is set up in a specific way, everybody is cooperating.

Seniority is long, of up and over 40 years. Many engineers started their career with Lindab Luxembourg right after University and stay their lifetime. The Managing Director, for example started 27 years ago.

#### FRANCE:

At Lindab France, our Director is of great importance. He transmits the decisions that are taken at Lindab Diekirch (Luxembourg) to Lindab Torcy (France).

#### **GERMANY:**

The important people are the Directors. They have the objectives in front of their eyes and they transmit the objectives and the vision to the employees at the next level.

#### **<u>QHRM-6:</u>** What events are celebrated in the organisation?

#### LUXEMBOURG:

- Seniority awards.
- Retirement.
- Employee meetings.
- Specific topic info session (for example: training).
- Invitation to the Schueberfouer fun fair for all.
- Open- house every second year: family and friends are invited to Lindab, with guided tours of the plant, with food and drinks and a children's castle, often with 700 people attending.
- Year-end sales meeting: in 2010 in Stettin, Poland, with 120 people attending.
- Sports event: in 2010 in Hungary: bringing together 200 people, for soccer and table tennis competitions. This is good for team building.

#### FRANCE:

- The Year End Celebration (La fête de fin d'année).
- Christmas, where all the employees are invited with their wives and their children.
- Sometimes there is a drink given in the evening, but that's quite rare.

#### **GERMANY:**

The employees celebrate their birthdays. Normally the birthday-person puts a birthday cake out for everybody and everybody can take a piece of cake.

At the end of the year Christmas is celebrated with a small Christmas Party.

In a meeting at the end of the month the results are published to all. If all have been collaborating well for the same objective, a meeting is organised. If the success was really high, the Directors invite for some snacks in the conference-room.

#### **<u>OHRM-7: What are some of the important rules – written and unwritten – that apply here?</u>**

#### LUXEMBOURG:

The rules that apply are the policies and procedures. The policies are approved by the Board:

- **Code of Ethics** (Ethical behaviour toward customers, suppliers, competitors, Transparent and correct accounting principles, Respect for human rights, Whistleblower function.).
- **Competition Law Handbook** (Principles of fair competition, Guidelines on how to act towards competitors, Rules for actions in a dominant position.).
- **IT Policy** (Maintained technical security by uniform IT infrastructure, Efficiency of business system support and development).
- **Insider Policy** (The treatment of sensitive information, Definition of who is an insider within Lindab Rules for when insiders can trade in Lindab shares).
- Information Policy (Definition of who can communicate on behalf of Lindab).
- Treasury Policy (Framework for management of Lindab Group's financial risks).
- **Environmental Policy** (Statement of the Group's environmental commitment, Products and production with a minimal environmental and health impact, Continuous improvement and benchmarking of key objectives).
- **Financial Manual** (Comprehensiveness and comparability, Relevance and reliability, Adherence to International Financial Reporting Standard, IFRS).
- Intellectual Property Rights (IPR) Policy (Guidelines on protecting our trademarks, New inventions and trade secrets).
- Anti-corruption Policy (No employee may demand or accept a bribe, No employee may offer or give a bribe, Payments/kickbacks to others than the contracting party are forbidden).
- Acquisition Handbook (Outlines the acquisition process within Lindab, Guidelines for due diligence and price calculation).
- Sponsorship/event Guidelines (Satisfy defined objectives).

#### The unwritten rules are:

- The way how you treat your colleague.
- Your working attitude.
- Your soft skills.
- Trust.

#### FRANCE:

The important rules are in the 'internal procedure'.

There are internal rules, which are normal, logical rules, as for example not to drink alcohol or not to steal.

#### **GERMANY:**

There are rules, they are not called laws. There is the Code of Ethics, which every new hire has to sign on the hiring day. Lindab Germany is ISO 9000 certified, and has the Quality Manual with its Procedures. Each Department has its own handbooks where the procedures and production phases are documented.

#### **<u>OHRM-8:</u>** How are, according to you, important decisions made? (to identify organisational rituals)

#### LUXEMBOURG:

Important decisions are made in a team. In 2010, the Lindab Gold Strategy 2010 to 2015 was elaborated: 8% growth per year.

Vision: to be the preferred partner for building professionals in the core products Europe wide, in: **Ventilation** (Aggressively grow fittings, Expand distribution in selected key markets).

The Vision is to be "The Number 1 Ventilation supplier and distributor in Europe and Russia" in **Building Components:** 

Vision: "The European Number 11 supplier in Rainline / steel residential roofing and market leader for non-residential steel roof and wall solutions in core markets" in **Building Systems: with the** Focus: 1<sup>st</sup> focus – larger buildings.

Vision: "The preferred supplier of sustainable solutions for industrial buildings in Europe, Russia and CIS". The new geographic growth focus is Russia and CIS. We are looking for acquisitions to strengthen core positions.

- Be Nr. 1.
- Optimise.
- Grow.
- Deliver.
- Lindab people & culture.

#### FRANCE:

For Torcy: the important decisions taken at Lindab Diekirch are transmitted by the Director.

#### **GERMANY:**

At Lindab Germany: When a question arises with an employee, he goes and discusses it with his boss. If necessary, a third person is involved, a specialist, if the task is difficult. It happens of course that the boss needs to decide alone, but in principle problems are solved together with the employee.

Concerning the parent company Lindab Luxembourg: there are employee meetings at least once a year with an official presentation and the possibility to asking questions.

During the year, there are several possibilities for decisions: they are published, via email.

#### **<u>QHRM-9: What do people especially like to see here?</u>**

#### LUXEMBOURG:

- Open-mindedness.
- Internationality.
- Tolerance.
- Respect of each other.
- Trust.
- Quality in work.
- Team work.

Lindab Luxembourg has a Timix clocking system. The core time is 8.30 to 11.45 and 14.00 to 16.15. Flexi-time is part of the concept and doctor's visits are of course permitted once approved by manager.

• Punctuality is very important at Lindab Luxembourg.

- Lindab Luxembourg insists on the balance between work and private life.
- Burn-out-syndrome has to be avoided.

#### FRANCE:

- Good relations among employees.
- Everybody is important.
- It is a little structure where everybody gets along well with everybody.

#### **GERMANY:**

- The good collaboration.
- The good team work.
- There is always an open ear, the employee can come and talk, he is never standing alone.

#### **<u>OHRM-10</u>**: What are the greatest mistakes one can make here? (What are the don'ts)

#### LUXEMBOURG:

- Being egocentric is the biggest mistake here.
- Being corrupt is the biggest mistake here.
- Robbery, stealing or any mistrustful behaviour is the biggest mistake here.

#### FRANCE:

- Take advantage of the system.
- Receive money.
- Corruption.

#### **GERMANY:**

• To commit a criminal act: corruption or theft.

### <u>OHRM-11:</u> What is the most a) positive b) negative image in the outside world about this organisation that you can think of? (to identify organisational values)

#### LUXEMBOURG:

#### The most positive image is:

- Lindab is a good employer.
- Lindab gives fair treatment.
- Lindab pays a fair salary.
- At Lindab there is time to talk about problems and to solve them.
- Lindab wishes to attract people.
- Lindab is the largest employer in Diekirch.
- Lindab has social responsibility.

#### The most negative image is:

- The eventuality of closing down the Lindab Diekirch manufacturing plant, because production is too expensive compared to Czech or Russia.
- The fear of losing jobs.
- Products with negative impact on the environment.

#### FRANCE:

#### The most positive:

Good relationships among employees.

• Lindab allows its employees to have private relationships.

#### The most negative:

• Less and less people work with Lindab and Lindab is being shut down.

#### **GERMANY:**

#### The most positive:

- Satisfied clients!
- When a project is handled successfully from the beginning to the end.
- When the client praises the complete handling of the project.
- This satisfaction will be made public by the satisfied client who will talk about it with other clients.

#### The most negative:

- Dissatisfied clients!
- If the material is incomplete.
- If there is a stop in the production time.
- If the waiting time gets prolonged.
- If the client calls the office and no-body picks up the phone.
- The delay in Montage.
- Dissatisfied clients will let the market feel that they are dissatisfied.

Figure 4.2 Data Analysis: Interviews

### 4.3.2 Interview analyses: Symbols – Values – Heroes – Rituals.

Following Hofstede's (2001) analysis of symbols, values, heroes, rituals, Lindab Luxembourg, Lindab France and Lindab Germany have been compared and their symbols, values, heroes and rituals will be shown in table 4.1 and in figure 4.5.

	Lindab Luxembourg	Lindab France	Lindab Germany
Symbols	LindabLife	Lindab is the leader in	Astronisation:
	Think Less	building construction	standardisation of each
	Simplify construction		project
	Excellence in construction		Conquering new
	Code of ethics		markets
	Policies and Procedures		Diversity in employees,
	The open door		in cultures, in
			languages, in origins
			Collaboration
			Code of ethics
			Cost Analyses
			Quality Handbook
			Procedures
	~		
Values	Customer success :	Team work	Team work
	Be Nr. 1	Good relations among	Good collaboration
	Down to earth	employees	The open ear
	Neatness and order		Satisfied clients
	Corporate social		Determination
	responsibility		Achieve the objective
	Mutual trust		Respect colleagues and
	Your personality		self
	Team work		Long-term orientation
	Open mindedness		Reliability
	Internationality		
	Respect of each other		
	Tolerance		
	Quality in work		
	Punctuality		
Heroes	The director	The director	The directors
1101005			Lindab Luxembourg

 Table 4.1 Data Analysis: Interviews: Symbols – Values – Heroes - Rituals

	Lindab Luxembourg	Lindab France	Lindab Germany
Rituals	Christmas Party	Christmas Party	Birthday cake
	Seniority awards		Christmas Party
	<b>Retirement Parties</b>		Meeting for success
	Open house event		
	Year-end sales meeting		
	Boat race		
	Schouberfouer		
	Sports events		
	24 hour bicycle race Wintger		
	ING Marathon		
Mistakes	Corruption	Corruption	Corruption
	Egocentric personality	Take advantage of the	Criminal act
	Robbery	system	Robbery
		Receive money	Dissatisfied clients

The following figure 4.5 represents the same results as table 4.1. The results are only shown in a slightly different more graphic way. Table 4.1 and figure 4.5 show the symbols, values, heroes and rituals found during the interviews at Lindab Luxembourg, Lindab France and Lindab Germany.



Figure 4.3 Data Analysis: Interviews - Results

### **4.4 Questionnaires**

#### 4.4.1 Questionnaires: cross statistics.

The following chapter will show the results from the paper questionnaires. The cross statistics will be taken from the Excel sheets. The following chapter will be divided into the following sub-chapters for which Lindab has been researched for in the part 'General Questions' in the questionnaire:

- Native language
- Native language and gender
- Age
- Age and gender
- Diploma
- Job type
- Nationality

Each sub-chapter consists of five graphs representing first Lindab Total, second Lindab Luxembourg, third Lindab France, forth Lindab Germany and the fifth graph will be Lux. Nat. These five graphs will be followed by a short description of the findings in these five graphs. The sub-chapters are: first: Lindab by native language, second: Lindab by native language and gender, third: Lindab by age, forth: Lindab by age and gender, fifth: Lindab by diploma, sixth: Lindab by job type, seventh: Lindab by nationality. After the description of the findings per subchapter, a general result from the paper-questionnaires will be given.

# 4.4.1.1 Lindab by <u>native language</u> Total / Luxembourg / France / Germany / Luxembourg nationality – graphs.



Total

Figure 4.4.1 Cross statistics of questionnaires – Lindab by native language - Total Luxembourg



Figure 4.4.2 Cross statistics of questionnaires – Lindab by native language - Luxembourg



#### France

Figure 4.4.3 Cross statistics of questionnaires - Lindab by native language - France

#### Germany



Figure 4.4.4 Cross statistics of questionnaires - Lindab by native language - Germany



#### Luxembourg with Luxembourgish Nationality

Figure 4.4.5 Cross statistics of questionnaires – Lindab by native language - Lux. Nat.

## 4.4.1.1.1 Description of primary data: distribution of questionnaires by <u>native</u> <u>language</u>.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by <u>native language</u>, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

The distribution of native languages in the three countries is very different. The diversity in native languages at Lindab in Luxembourg is remarkable. In France, most employees have French as native language, besides Arabic, Poular and Lari. In Germany, most employees have German as native language, besides one who is a Luxembourger and has Luxembourgish as native language. It can be noted, that most employees in Luxembourg have French as native language, followed by Luxembourgish and German, then by a variety of native languages Portuguese, Italian, English, Russian, Slovak, Polish. In France, the immigration is reflected by the native languages of the employees, mostly people from former colonies: Arabic, Poular, Lari. Poular or Peul (fulfude) is spoken in approximately 15 African countries, i.e. the Peul of Guinea, the Peul of Senegal, the Peul of Mauritania. Poular is nor a national nor an official language. Lari is an ethnic dialect of the Congo, especially spoken in Brazzaville. In Germany the immigration policy is shown by native language Turkish. Many Turks are working in Germany. At Lindab in Luxembourg a major part of the business is done with Poland, Slovakia, Russia, therefore the employees come from these countries. The Luxembourger with Luxembourger Nationality, abbreviated in the following by Lux. Nat., have a variety of native languages. At Lindab, 23 out of 33 have Luxembourgish as their native language, i.e. 70%. The other 30% have Portuguese (4), French (3), German (2) and Slovak (1) as native languages.

In the next paragraph we look at the distribution at Lindab by <u>native language and gender</u>, in Luxembourg, compared with France, Germany and Lux. Nat.

# 4.4.1.2 Lindab by <u>native language and gender</u> Total / Luxembourg / France / Germany / Luxembourg nationality – graphs

Total



Figure 4.5.1 Cross statistics of questionnaires - Lindab by native language and gender - Total

#### Luxembourg



Figure 4.5.2 Cross statistics of questionnaires – Lindab by native language and gender - Luxembourg



Figure 4.5.3 Cross statistics of questionnaires - Lindab by native language and gender - France

Germany



Figure 4.5.4 Cross statistics of questionnaires - Lindab by native language and gender - Germany

France



#### Luxembourg with Luxembourgish Nationality

Figure 4.5.5 Cross statistics of questionnaires - Lindab by native language and gender - Lux. Nat.

# 4.4.1.2.1 Description of primary data: distribution of questionnaires by <u>native</u> language and gender.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by <u>native language and gender</u>, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

The distribution of native languages in the three countries is very different. The diversity in native languages at Lindab in Luxembourg is remarkable. In France, most employees have French as native language, besides Arabic, Poular and Lari. In Germany, most employees have German as native language, besides one who is a Luxembourger and has Luxembourgish as native language. It can be noted, that most employees in Luxembourg have French as native language, followed by Luxembourgish and German, then by a variety of native languages Portuguese, Italian, English, Russian, Slovak, Polish. In France, the immigration is reflected by the native languages of the employees, mostly people from former colonies: Arabic, Poular, Lari. Poular or Peul (fulfude) is spoken in approximately 15 African countries, i.e. the Peul of Guinea, the Peul of Senegal, the Peul of Mauritania. Poular is nor a national nor an official language. Lari is an ethnic dialect of the Congo, especially spoken in Brazzaville. In Germany the immigration policy is shown by native language Turkish. Many Turks are working in Germany. At Lindab in Luxembourg a major part of the business is done with Poland, Slovakia, Russia, therefore the employees come from these countries. The Luxembourger with Luxembourger Nationality, abbreviated in the following by Lux. Nat., have a variety of native languages. At Lindab, 23 out of 33 have Luxembourgish as their native language, i.e. 70%. The other 30% have Portuguese (4), French (3), German (2) and Slovak (1) as native languages.

There are not enough women who are working at Lindab to give a significant comment on gender differences by native languages.

In the next paragraph we look at the distribution at Lindab by <u>age</u>, in Luxembourg, compared with France, Germany and Lux. Nat.

4.4.1.3 Lindab by <u>age</u> Total / Luxembourg / France / Germany / Luxembourg nationality - graphs.



Total

Figure 4.6.1 Cross statistics of questionnaires – Lindab by age - Total

#### Luxembourg



Figure 4.6.2 Cross statistics of questionnaires - Lindab by age - Luxembourg



France

Figure 4.6.3 Cross statistics of questionnaires – Lindab by age - France



### Germany

Figure 4.6.4 Cross statistics of questionnaires – Lindab by age - Germany



#### Luxembourg with Luxembourgish Nationality

Figure 4.6.5 Cross statistics of questionnaires – Lindab by age - Lux. Nat.

#### 4.4.1.3.1 Description of primary data: distribution of questionnaires by <u>age</u>.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by <u>age</u>, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

In general, we are looking at an aging population at Lindab Buildings. Indeed at Lindab, a high number of employees are in the 40-49 age category, followed by the 50-59 age group. This is valid for Lindab Luxembourg, Lindab France, Lindab Germany and Lux. Nat.. At Lindab Luxembourg there are 70 employees aged between 40 and 59. Only 16 employees are aged between 35 and 39. Looking at the younger category 20-29, there are only 9 employees in this age category. At Lindab France 8 employees are aged between 40 and 59. At Lindab Germany

11 employees are aged between 40 and 59. There are 3 employees aged between 20 and 29, making Lindab Germany as aged as Luxembourg and France. For the Lux. Nat., the same remarks apply. The population at Lindab is rising in age.

In the next paragraph we look at the distribution at Lindab by <u>age and gender</u>, in Luxembourg, compared with France, Germany and Lux. Nat.

# 4.4.1.4 Lindab number of employees by <u>age and gender</u> Total / Luxembourg / France / Germany / Luxembourg nationality - graphs.



Total

Figure 4.7.1 Cross statistics of questionnaires – Lindab by age and gender - Total

#### Luxembourg



Figure 4.7.2 Cross statistics of questionnaires – Lindab by age and gender - Luxembourg



France



Germany



Figure 4.7.4 Cross statistics of questionnaires - Lindab by age and gender - Germany



#### Luxembourg with Luxembourgish Nationality

Figure 4.7.5 Cross statistics of questionnaires - Lindab by age and gender - Lux. Nat.

# 4.4.1.4.1 Description of primary data: distribution of questionnaires by <u>age and</u> <u>gender</u>.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by <u>age and gender</u>, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

In general, we are looking at an aging population at Lindab Buildings. Indeed at Lindab, a high number of employees are in the 40-49 age category, followed by the 50-59 year old. This is valid for Lindab Luxembourg, Lindab France, Lindab Germany and Lux. Nat.. At Lindab Luxembourg there are 65 men and 5 women aged between 40 and 59. Only 11 male and 5 female employees are aged between 35 and 39. Looking at the younger category aged between 20 and 29, there are no female employees, and only 9 male employees. At Lindab France 8

employees are aged between 40 and 59, 1 of them being a woman. At Lindab Germany 10 male employees are aged between 40 and 59 and 1 woman. There are 2 males and 1 female employees aged between 20 and 29, making Lindab Germany as aged as Luxembourg and France. For the Lux. Nat., the same remarks apply. The population at Lindab is also aging.

In the next paragraph we look at the distribution at Lindab by <u>diploma</u>, in Luxembourg, compared with France, Germany and Lux. Nat.

# 4.4.1.5 Lindab by <u>diploma</u> Total / Luxembourg / France / Germany / Luxembourg nationality - graphs.



Total

Figure 4.8.1 Cross statistics of questionnaires – Lindab by diploma - Total

#### Luxembourg



Figure 4.8.2 Cross statistics of questionnaires - Lindab by diploma - Luxembourg



France

Figure 4.8.3 Cross statistics of questionnaires - Lindab by diploma - France



#### Germany

Figure 4.8.4 Cross statistics of questionnaires – Lindab by diploma - Germany


#### Luxembourg with Luxembourgish Nationality

Figure 4.8.5 Cross statistics of questionnaires – Lindab by diploma - Lux. Nat.

#### 4.4.1.5.1 Description of primary data: distribution of questionnaires by diploma.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by <u>diploma</u>, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

An equal distribution in the various diploma categories can be noticed in Lindab Luxembourg. From Abitur, Bac+2 – BTS, Bac+3 Diplom FH, Bac+4 Diplom Uni until Bac+5 MBA. There are only a few employees without a diploma, and only 2 with a PhD/Doctorate. In France most employees hold a Bac+2 – BTS. In Germany most of the employees hold a Bachelor (Bac+3, Diplom FH) or a Bac+4, Diplom Uni. The Lux.Nat. have a high distribution of all diplomas with a tendency to Bac – Abitur – A-level or Bac+2 - BTS.

In the next paragraph we look at the distribution at Lindab by job type, in Luxembourg, compared with France, Germany and Lux. Nat.

# 4.4.1.6 Lindab by <u>job type</u> Total / Luxembourg / France / Germany / Luxembourg nationality - graphs.



Total

#### Luxembourg



Figure 4.9.2 Cross statistics of questionnaires – Lindab by diploma - Luxembourg

Figure 4.9.1 Cross statistics of questionnaires - Lindab by job type - Total



France

Figure 4.9.3 Cross statistics of questionnaires - Lindab by diploma - France



Germany

Figure 4.9.4 Cross statistics of questionnaires - Lindab by diploma - Germany



#### Luxembourg with Luxembourgish Nationality

Figure 4.9.5 Cross statistics of questionnaires – Lindab by diploma - Lux. Nat.

#### 4.4.1.6.1 Description of primary data: distribution of questionnaires by job type.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by job type, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

Academic professionals are the most distributed job type in total, in Luxembourg, France and Germany. The three countries have the same high distribution in academic professionals. They are followed by the categories of technician, IT specialist and then by Manager 2. Manager 2 is the manager of one or more subordinates (non-managers), whereas Manager 1 is the manager of one or more managers. There are 13 Manager 1 in Lindab Luxembourg, 2 in France (1 Manager 1 and 1 District Manager) and 1 in Germany. The Lux. Nat. have a nearly equally distribution of Job Types, with 7 Lux. Nat. being Manager 1 and 10 being Manager 2.

In the next paragraph we look at the distribution at Lindab by <u>nationality</u>, in Luxembourg, compared with France, Germany and Lux. Nat.

# 4.4.1.7 Lindab by <u>nationality</u> Total / Luxembourg / France / Germany / Luxembourg nationality - graphs.



Total

#### Luxembourg



Figure 4.10.2 Cross statistics of questionnaires - Lindab by nationality - Luxembourg

Figure 4.10.1 Cross statistics of questionnaires – Lindab by nationality - Total



France

Figure 4.10.3 Cross statistics of questionnaires - Lindab by nationality - France

#### Germany



Figure 4.10.4 Cross statistics of questionnaires - Lindab by nationality - Germany



Luxembourg with Luxembourgish Nationality

Figure 4.10.5 Cross statistics of questionnaires – Lindab by nationality - Lux. Nat.

### 4.4.1.7.1 Description of primary data: distribution of questionnaires by <u>nationality</u>.

The five graphs above show the distribution of the filled-in questionnaires at Lindab Total, Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg with Luxembourgish nationality by <u>nationality</u>, where Lindab Total means: Lindab Luxembourg France and Germany together; the 33 questionnaires at Lindab Luxembourg with Luxembourgish Nationality are the Lux. Nat., who are of special interest to this research.

The distribution by nationality looks nearly like the distribution of native languages and the description will therefore be identical. In France, most employees are French, besides one Belgian. The French with immigration backgrounds from former colonies are not shown in this graph. In Germany, most employees are German, besides one Luxembourger. The Germans with immigration backgrounds from Turkey are not shown in this graph. In Luxembourg, the diversity

of the population is remarkable. Most employees are Belgians, followed by Luxembourgers, French and Germans, and then Italian, American, Polish, Russian, Canadian. In general, a high percentage of Portuguese workers can be found in Luxembourg but at Lindab Luxembourg this is not the case. The 5 employees with Portuguese mother tongue have Luxembourg nationality. It is not shown in the above graphs, but this can be found in the answer given to the following question of the questionnaire: how many people changed nationality in Luxembourg? (see the results section of the questionnaires, in the general questions' section. 4 out of 5 Portuguese, 1 Slovak, 1 Rwandan and 1 Belgian obtained Luxembourgish nationality. 1 Portuguese obtained French nationality. This is the Luxembourgish diversity. Of course, the Lux. Nat. are 100% of Luxembourgish Nationality.

This is the last paragraph on cross statistics. In the following there will be a conclusion on cross statistics and then the results from the paper questionnaire.

#### 4.4.2 Conclusion on Questionnaires: cross statistics.

The last chapter has shown and discussed cross statistics from the paper questionnaire's first part 'General Questions'. We looked at Lindab Luxembourg, compared with Germany, France and Lux. Nat. distinguished by native language, native language and gender, age, age and gender, diploma, job type, and nationality. Specificities have been shown, such as the diversity of native languages, the large number of languages spoken, the foremost male population at Lindab, the high seniority, the aging population, the high level of education and high level of diploma with high distribution in academic professionals and high job level Manager. The change of nationality is a characteristic of Luxembourg.

#### 4.5 Results from the Questionnaire

The following questionnaire has been distributed to all of the employees of Lindab Buildings Luxembourg, France and Germany. It has been filled in by over 90% of the employees. The response rate was very high indeed. The response rate was high because of the techniques applied to improve the response rate (Bradford University): the respondents were precontacted through several emails by management, DHR and DHR Group and DHR Lindab, various distribution channels were chosen: email, paper, fax, normal mail via DHL. A good reward for a high response rate was promised: a donation of 10 Euros per questionnaire to SOS Children's Villages if the response rate was higher than 50%. Involvement of the general management and in addition an emphasis on the confidentiality (questionnaires were anonymous). The fun part of participating in the questionnaire was a further appeal to the respondents. The results are written on the right side of the questionnaire, with first the general questions, followed by the questions about value and questions about the company. The average is written here. In the appendix, the other data are given, such as the median, the minimum, the maximum and the spread per question.

The comparison is between Luxembourg, France and Germany. For further understanding of the research, the division was further made within Luxembourg, detailing only the respondents with Luxembourgish nationality. To come up with one pattern for Luxembourg, it was important to filter for the respondents with Luxembourgish nationality and have a closer look at them. They are called "Luxembourgers with Luxembourger Nationality", abbreviated also Lux. Nat. for space reasons. The differences in the data can be seen in the following results. Luxembourg in general exceeds the other countries in diversity of nationalities, of languages spoken, of maternal and paternal languages, of changes in nationality, who was what at birth and gained what nationality later. There are significant differences in the answers to some of the questions, whereas other questions got consistent answers in all three countries.

### **Questionnaire - RESULTS**

Luxembourg: An intercultural comparison applying Geert Hofstede in the Grand Duchy of Luxembourg in comparison with France and Germany

# RESULTS

Following our *Intercultural Seminar in Russia* held from 13th to 14th January 2010, we at Lindab-Astron would like to further invest into the *research of culture and dimensions*, initiated by Master students from University Emden, and now continued in collaboration with **Ursula Schinzel** in the frame of her Doctorate Thesis in Business Administration at London Graduate School of Management, Millennium City Academy.

Please participate to our research by filling in our questionnaire (looks long, but takes only about 10 minutes), in a completely confidential and anonymous way.

Thanks to you:

If the response rate is higher than 50%, we will donate 10 euro per filled-in questionnaire to **SOS Villages** d'Enfants (SOS Kinderdorf).

Geert Hofstede is THE professor of culture and cultural comparison. His book 'Culture's Consequences' is a bestseller.

The added value for Lindab-Astron: we'll be among the first to participate in an intercultural research about the Grand-Duchy of Luxembourg in comparison with France and Germany.

The questionnaire has 3 parts:

• General questions (QGRL-1 - 7)	page 1 - 2
• Questions about values (QVAL-1 – 28)	page 3 - 6
• Questions about your company (QCPY-1 – 40)	page 7 - 9

Thank you for your participation, your time and your collaboration to this research.



### **GENERAL QUESTIONS (QGRL-1 – 7)**

Some information about yourself:

#### 1. Are you:

	Luxembourg	France	Germany	Lux. Nat.
1. male	93	9	16	30
2. female	13	1	2	3
Total respondents				
to the	106	10	18	33
questionnaire				

#### 2. How old are you?

	Luxembourg	France	Germany	Lux. Nat.
1. Under 20	0	0	0	0
2. 20-24	4	0	2	1
3. 25-29	5	0	1	0
4. 30-34	11	1	0	3
5.35-39	16	1	4	4
6. 40-49	45	5	9	11
7. 50-59	25	3	2	14
8. 60 or over	0	0	0	0

#### 3. What is your native language?

	Luxembourg	France	Germany	Lux. Nat.		
1. German	18	0	16	2		
2. French	49	7	0	3		
3. English	3	0	0	0		
4. Luxembourgish	4. Luxembourgish 22		1	23		
5. Italian	3	0	0	0		
6. Spanish	1	0	0	0		
7. Portuguese	6	0	0	4		
8. Turkish	0	0	1	0		
9. Other	her Polish: 1 Arabi		0	Slovak		
	Russian: 2	Poular: 1				
	Slovak: 1	Lari: 1				

#### 4. What other languages do you speak?

	Luxembourg	France	Germany	Lux. Nat.
1. German	60	1	2	30
2. French	49	2	8	28
3. English	101	9	18	33
4. Luxembourgish	39	0	1	33
5. Italian	4	0	1	5

6. Spanish	10	2	1	3
7. Portuguese	6	0	0	2
8. Turkish	0	0	0	0
9. Other	Russian: 3	0	0	Russian: 2
	Dutch: 6			Rwandan: 1
	Czech: 1			Czech: 1
	Hebrew: 1			
	Hungarian: 1			
	Rwandan: 1			
	Arabic: 1			

#### 5. What is your educational background?

	Luxembourg	France	Germany	Lux. Nat.
0. None	8	0	1	3
1. Bac - Abitur	18	1	2	9
2. Bac+2 – BTS -	18	8	1	8
Berufsausbildung				
3. Bac+3 – Bachelor	19	0	8	5
– Diplom FH				
4. Bac+4 – Maîtrise	19	0	6	2
– Diplom Uni				
5. Bac+5 – Master	22	1	0	5
6. PhD – Doctorate	2	0	0	1

#### 6. What is <u>your</u> job?

	Luxembourg	France	Germany	Lux. Nat.
1. Manager of one	13	2	1	7
or more Managers				
2. Manager of one	21	2	2	10
or more				
subordinates (non-				
managers)				
3. Academically	30	4	11	2
trained				
professional or				
equivalent (but not				
a manager of				
people)				
4. Craftsperson,	21	2	2	6
technician, IT-				
specialist, nurse,				
artist or equivalent				
5. Office worker or	15	0	0	5
secretary				

6. Unskilled or	0	0	0	0
semi-skilled				
manual worker				
7. Other	6	0	2	3

#### 7. What is your nationality?

	Luxembourg	France	Germany	Lux. Nat.		
1. French	14	9	0	0		
2. German	man 11		17	0		
3. Luxembourgish	33	0	1	33		
4. Belgian	40	1	0	0		
5. Italian	3	0	0	0		
6. Spanish	0	0	0	0		
7. Portuguese	7	0	0	0		
8. British	0	0	0	0		
9. American	2	0	0	0		
10. Turkish	0	0	0	0		
11. Other	Russian: 2	0	0	0		
	Polish: 1					
	Rwandan: 1					
	Austrian: 1					
	Canadian/Israeli: 1					
	Slovak: 1					
	Moroccan: 1					

If your nationality has been different at your birth from now, which was your nationality at birth?

Portuguese: 5 (4 Portuguese obtained Luxembourgish nationality, 1 French nationality) Slovak: 1 (obtained Luxembourgish nationality) Rwandan: 1 (obtained Luxembourgish nationality) Austrian: 1 (obtained German nationality) Moroccan: 1 (obtained Belgian nationality) Belgian: 1 (obtained Luxembourgish nationality) Canadian/Israeli: 1 (obtained Russian nationality) Polish: 1 (obtained German nationality)

### **QUESTIONS about VALUES (QVAL-1 - 28)**

VALUES SURVEY MODULE VSM 2008 - QUESTIONNAIRE English language version - *Release 08-01, January 2008* Copyright @ Geert Hofstede BV

# Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line

*across:* 1 = of utmost importance; 2 = very important; 3 = of moderate importance; 4 = of little importance; 5 = of very little or no importance)

Numb	Question	Of	Very	Of	Of	Of	Luxem-	France	Germany	Lux.
er		utmost	important	modera	little	very	bourg			Nat.
		import		te	impo	little or				
		ance to		import	rtanc	no				
		me		ance	e	import				
						ance				
1.	To have sufficient time for your personal or home life	1	2	3	4	5	2.0	1.6	2.0	2.2
2.	To have a boss (direct superior) you can respect	1	2	3	4	5	2.0	1.9	1.9	2.0
3.	To get recognition for good performance	1	2	3	4	5	1.8	1.6	1.8	1.7
4.	To have security of employment	1	2	3	4	5	1.8	1.3	1.9	1.6
5.	To have pleasant people to work with	1	2	3	4	5	1.9	1.6	2.2	1.9
6.	To do work that is interesting	1	2	3	4	5	1.8	1.5	1.8	1.8
7.	To be consulted by your boss in decisions involving your work	1	2	3	4	5	2.1	1.9	2.1	1.9
8.	To live in a desirable area	1	2	3	4	5	2.4	2.0	2.7	2.4
9.	To have a job respected by your family and friends	1	2	3	4	5	2.9	2.4	3.2	2.8
10.	To have chances for promotion	1	2	3	4	5	2.3	1.9	2.4	2.2

### In your private life, how important is each of the following to you: (please circle one answer in each line across):

Number	Question	Of utmost import ance to me	Very important	Of modera te import ance	Of little impo rtanc e	Of very little or no import ance	Luxem- bourg	France	Germany	Lux. Nat.
11.	Keeping time free for fun	1	2	3	4	5	2.1	1.9	1.8	2.1
12.	Moderation: having few desires	1	2	3	4	5	3.0	3.1	2.5	2.7
13.	Being generous to other people	1	2	3	4	5	2.3	2.0	2.4	2.2
14.	Modesty: looking small, not big	1	2	3	4	5	2.3	2.1	2.3	2.1

·	Luxembourg	France	Germany	Lux. Nat.
1. always save before buying	1.7	2.0	1.3	1.8
2. usually save first				
3. sometimes save, sometimes borrow to				
buy				
4. usually borrow and pay off later				
5. always buy now, pay off later				

15. If there is something expensive you really want to buy but you do not have enough money, what do you do?

#### 16. How often do you feel nervous or tense?

	Luxembourg	France	Germany	Lux. Nat.
1. always	2.8	3.6	2.6	3.0
2. usually				
3. sometimes				
4. seldom				
5. never				

#### 17. Are you a happy person?

	Luxembourg	France	Germany	Lux. Nat.
1. always	2.2	2.0	2.2	2.1
2. usually				
3. sometimes				
4. seldom				
5. never				

#### 18. Are you the same person at work and at home?

	Luxembourg	France	Germany	Lux. Nat.
1. quite the same	2.3	1.8	2.4	2.3
2. mostly the same				
3. don't know				
4. mostly different				
5. quite different				

#### 19. Do other people or circumstances ever prevent you from doing what you really want to?

1 1 1	~ ~		~ ~	
	Luxembourg	France	Germany	Lux. Nat.
1. yes, always	3.0	3.2	3.0	3.2
2. yes, usually				
3. sometimes				
4. no, seldom				
5. no, never				

#### 20. All in all, how would you describe your state of health these days?

	Luxembourg	France	Germany	Lux. Nat.
1. very good	2.1	2.0	2.1	2.0
2. good				
3. fair				
4. poor				
5. very poor				

	Luxembourg	France	Germany	Lux. Nat.
<ol> <li>of utmost importance</li> <li>very important</li> <li>of moderate importance</li> <li>of little importance</li> <li>of no importance</li> </ol>	3.7	3.9	3.9	3.4

#### 21. How important is religion in your life?

#### 22. How proud are you to be a citizen of your country?

	Luxembourg	France	Germany	Lux. Nat.
1. not proud at all	3.3	4.2	3.5	3.7
2. not very proud				
3. somewhat proud				
4. fairly proud				
5 very proud				

#### 23. How often, in your experience, are subordinates afraid to contradict their boss?

	Luxembourg	France	Germany	Lux. Nat.
1. never	3.5	3.3	3.4	3.5
2. seldom				
3. sometimes				
4. usually				
5. always				

### To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = strongly disagree

Number	Question	Stron gly agree	Agree	Undecid ed	Disagre e	Strongly disagree	Luxembourg	France	Germany	Lux. Nat.
24.	One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work	1	2	3	4	5	2.8	2.0	2.6	3.3
25.	Persistent efforts are the surest way to results	1	2	3	4	5	2.1	1.8	2.6	2.0
26.	An organization structure in which certain subordinates have two bosses should be avoided at all cost	1	2	3	4	5	1.8	1.6	1.8	1.8
27.	A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest	1	2	3	4	5	2.6	2.3	3.1	2.3
28.	We should honour our heroes from the past	1	2	3	4	5	2.7	2.4	2.9	2.6

### **QUESTIONS about your COMPANY (QCPY-1 - 40)**

<u>An inventory of questions regarding practices</u> (Copyright © Geert Hofstede, not to be cited and not to be distributed without the written permission of the copyright holder) If it is true that people are uncomfortable in unfamiliar situations, please circle 1.

If people are comfortable in unfamiliar situations, please circle 5.

If the truth is in between, choose 2, 4, or 3, depending on whether the truth is closer to 1, to 5, or just in between (please, always circle only one answer for each line across).

#### Where I work....

							Luxem -bourg	France	Germa -nv	Lux. Nat.
1. People are uncomfortable in unfamiliar situations; they try to avoid taking risks	1	2	3	4	5	People are comfortable in unfamiliar situations; they do not mind taking risks	2.2	2.7	1.9	2.6
2. Each day brings new challenges	1	2	3	4	5	Each day is pretty much the same	2.8	2.5	3.2	2.5
3. All important decisions are taken by individuals	1	2	3	4	5	All important decisions are taken by groups or committees	2.8	3.0	2.3	2.7
4. Our company/organization takes a major responsibility for the welfare of its employees and their families	1	2	3	4	5	Our company/organization is only interested in the work our employees do	3.7	2.7	3.6	3.5
5. We do not think more than a day ahead	1	2	3	4	5	We think three years ahead or more	2.8	3.3	2.6	2.9
6. People's private lives are considered their own business	1	2	3	4	5	The norms of our organization cover people's behaviour both on the job and at home	2.1	2.2	2.4	2.1
7. Everybody is highly conscious of the cost of time and/or materials	1	2	3	4	5	Nobody ever thinks of the cost of time and/or materials	2.8	2.2	2.8	2.8
8. Meeting times are kept very punctually	1	2	3	4	5	Meeting times are only kept approximately	3.5	3.2	3.4	3.0
9. The major emphasis is on meeting the needs of the customer	1	2	3	4	5	The major emphasis is on correctly following organizational procedures	2.6	3.3	3.3	2.5
10. Correct procedures are more important than results	1	2	3	4	5	Results are more important than following correct procedures	3.3	3.3	3.2	3.4
11. Subordinates have to work according to detailed instructions from their superiors	1	2	3	4	5	Subordinates organize their own work within broad standards set by superiors	3.0	3.2	3.3	3.2

12. We always supply the same well-tested products and services	1	2	3	4	5	We try to be pioneers in developing new products and services	2.8	2.9	2.8	3.1
13. Contacts are mostly verbal, few things are written down	1	2	3	4	5	Everything is put down in writing	3.5	3.3	3.6	3.4
14. Diplomas and academic titles are very important	1	2	3	4	5	Job competence is what counts, regardless of how it was acquired	3.4	4.4	3.6	3.4
15. Some mistakes are accepted as a normal consequence of initiative	1	2	3	4	5	Mistakes are severely punished	2.4	2.0	2.4	2.4
16. Managers resent being contradicted	1	2	3	4	5	Managers want to hear people's opinions, even if different from theirs	2.5	4.0	2.6	2.5
17. Newcomers are helped to adapt quickly to the job and to the group	1	2	3	4	5	Newcomers are left to find their own way	2.7	2.2	2.4	2.7
18. Our company/organization has no special ties with the local community	1	2	3	4	5	Our company/organization is an integrated part of the local community	2.4	2.1	1.7	2.6
19. In our technology and working methods, we are rather traditional	1	2	3	4	5	In our technology and working methods, we are ahead of others	2.5	3.0	2.1	2.7
20. We never talk about the history of our company/organization	1	2	3	4	5	People tell a lot of stories about the history of our company/organization	3.1	4.2	3.7	3.5
21. We let quality prevail over quantity	1	2	3	4	5	We let quantity prevail over quality	3.1	2.4	3.4	2.9
22. We are strongly aware of the competition of other organizations	1	2	3	4	5	We are not aware of any competition of other organizations	2.7	2.2	2.1	2.4
23. Much attention is paid to our physical work environment	1	2	3	4	5	Little attention is paid to our physical work environment	3.4	2.7	3.4	3.4
24. Changes are implemented in consultation with the people concerned	1	2	3	4	5	Changes are implemented by management decree	3.8	3.0	4.2	3.6
25. Ordinary members of the organization never meet their top managers	1	2	3	4	5	Ordinary members of the organization regularly meet their top managers	2.8	3.2	2.7	3.0
26. We always dress and behave formally and correctly	1	2	3	4	5	We often dress and behave informally and casually	3.3	3.5	3.7	3.2

#### 2. Semantic differentials

								Luxem- bourg	France	Ger- many	Lux. Nat.
27.	reserved	1	2	3	4	5	Initiating	2.8	3.9	2.9	3.1
28.	warm	1	2	3	4	5	cold	2.8	1.5	2.6	2.7
29.	direct	1	2	3	4	5	Indirect	3.0	2.3	2.8	2.9
30.	soft	1	2	3	4	5	Hard	3.0	2.8	3.3	3.1
31.	slow	1	2	3	4	5	Fast	3.2	3.2	3.3	3.2
32.	well-groomed	1	2	3	4	5	Sloopy	2.7	1.9	3.4	2.8
33.	pessimistic	1	2	3	4	5	Optimistic	2.8	3.6	2.6	2.7

# How would you describe the behaviour of a typical member of your organisation? (please circle one in each line across)

#### 3. <u>Reasons for promotion</u>

#### How important are each of the following in determining your opportunities for promotion

in this organization? Please, circle one in each line across (1 = of utmost importance; 2 = very important, 3 = of moderate importance; 4 = of little importance; 5 = of very little or no importance)

Number	Question	Of utmost import ance to me	Very impo rtant	Of modera te import ance	Of little import ance	Of very little or no import ance	Luxem -bourg	Fra nce	Ger- many	Lux. Nat.
34.	Seniority with the organization	1	2	3	4	5	3.2	3.0	3.3	2.8
35.	Proven performance	1	2	3	4	5	2.1	1.8	2.1	1.8
36.	Personality and self-presentation	1	2	3	4	5	2.3	2.5	1.9	2.3
37.	Diplomas and formal qualifications	1	2	3	4	5	3.3	3.1	3.2	3.1
38.	Commitment to the organization	1	2	3	4	5	2.2	1.7	3.2	2.2
39.	Being known as a good colleague	1	2	3	4	5	3.0	2.5	3.6	3.2
40.	Creativity and unconventional thinking	1	2	3	4	5	2.6	2.5	2.8	2.3

Thank you very much for your cooperation!



#### 4.5.1 Description of primary data: questionnaire.

In this chapter, a discussion of the results of each question is initiated. The focus in the questionnaire is to work out the comparison between Luxembourg, France and Germany, and especially the Luxembourgers with Luxembourgish nationality, abbreviated Lux. Nat. or L.N. for space reasons.

The diversity in nationalities and languages in Luxembourg is enormous. Whereas in Luxembourg, the employees have a variety of nationalities and may have also changed them, in France employees are French and in Germany employees are German, with just one exception. In Germany, the one exception is the Luxembourger, who is Luxembourger because of the Luxembourger headquarters. In Luxembourg, there are 40 Belgians, 33 Luxembourgers, 14 French, 11 German, 7 Portuguese, 3 Italian, 2 American, 2 Russian, 1 Polish, 1 Rwandan, 1 Austrian, 1 Canadian/Israeli, 1 Slovak and 1 Moroccan. 4 out of 5 Portuguese, 1 Slovak, 1 Rwandan and 1 Belgian obtained Luxembourgish nationality. 1 Portuguese obtained French nationality. 1 Austrian and 1 Pole obtained German nationality. 1 Canadian obtained Russian nationality. This illustrates the Luxembourgish diversity

There are 106 employees speaking 15 languages other than their mother tongue in Luxembourg, in France the 10 employees speak 4 other languages, all speak English, or at least say that they speak English, but prefer switching to French. In Germany, the 18 employees speak 6 other languages, all of the 18 speak English, and they really speak English well, there are 8 who speak French. Luxembourgish, Italian and Spanish are spoken by 1 employee each in Germany. The 33 Lux. Nat. speak 10 languages other than their mother tongue.

The educational background in Luxembourg is well distributed as all educational levels are nearly equally represented from Bac - Abitur 18 employees, Bac+2 BTS 18 employees, Bac+3 19 employees, Bac+4 Maîtrise 19 employees, Bac+5 – Master 22 employees and 2 with PhD. Whereas in France out of 10 employees, 8 have a Bac+2, the big majority, only 1 with Bac – Abitur and only 1 with Bac+5. In Germany, the majority have or Bac+3 Bachelor (8) or Bac+4 Maîtrise (6).

The jobs are mainly in the academically trained professional or equivalent (but not a manager of people) category, in all 3 countries: Luxembourg, France and Germany. In Luxembourg there are 13 Managers of one or more Managers, and 21 Managers of one or more subordinates (non-managers), there are also 21 craftspeople, technicians, and IT-specialists. In France and Germany, the academically trained professionals are the main category.

Concerning gender diversity, most employees at Lindab are male. There are few female employees in all 3 countries at Lindab. Out of 106 employees at Lindab Luxembourg, only 13 are female. Lindab France has 1 female employee out of 10 and Germany just 2 out of 18. This small representation makes it difficult or impossible to give any statistical results concerning gender variance. The description and analyses of the answers to the questions about values and the questions about the company show the differences in culture between Luxembourg, France, Germany and especially the Luxembourger with Luxembourger nationality at Lindab Luxembourg. The average of each question is written besides the question in the questionnaire. We will now have a closer look at some of the questions in particular, with the objective to working out the difference in culture, see the appendix for more discussions. The calculation of Hofstede's cultural dimension follows in the next paragraph. Let us now have a look at some of the questions and the differences in the answers, showing the differences in priorities.

A small discussion of all 75 questions of the questionnaire is done in detail in the following or in the appendix. The average per question is also in the above questionnaire.

Please think of an IDEAL job, how important would it be to you to . (on a Likert Scale from 1-5, 1 being of utmost importance, 2 very important, 3 of moderate importance, 4 of little importance, 5 of very little or no importance)

QVAL1	to have s	ufficient	time for	: your	personal	or	home	life.
-------	-----------	-----------	----------	--------	----------	----	------	-------

Luxembourg:	2.0	
France:	1.6	
Germany:	2.0	
Lux. Nat.:	2.2	
This shows, how	nuch importance French bring to private life and Lux. Nat. less, but s	still
private life is ver	important for all of the 4.	

#### QVAL2 to have a boss (direct superior) you can respect.

Luxembourg:	2.0
France:	1.9
Germany:	1.9
Lux. Nat.:	2.0
For all 4 it is ver	ry important to have a boss they can respect, there is no significant difference to
be seen.	

#### QVAL3 to get recognition for good performance.

-		-
Luxembo	urg:	1.8
France:		1.6
Germany:		1.8
Lux. Nat.	:	1.7

For all 4 it is very important to get recognition for good performance. Again the Lux. Nat. are between France and Germany.

#### QVAL4 to have security of employment.

Luxembourg:	1.8
France:	1.3
Germany:	1.9
Lux. Nat.:	1.6

Security of employment is of utmost importance in France, followed by Lux. Nat., Luxembourg and then only Germany.

#### QVAL5 to have pleasant people to work with.

Luxembourg:	1.9
France:	1.6
Germany:	2.2
Lux. Nat.:	1.9

The French (1.6) put high emphasis on the fact of working with pleasant people, higher than in Germany with only 2.2.

#### QVAL6 to do work that is interesting.

Luxembourg:	1.8	
France:	1.5	
Germany:	1.8	
Lux. Nat.:	1.8	
The French (1.5	emphasised interesting work, followed equally by Luxembourg, Germany	and /

Lux. Nat. at 1.8.

#### QVAL7 to be consulted by your boss in decisions involving your work.

Luxembourg:	2.1
France:	1.9
Germany:	2.1
Lux. Nat.:	1.9

For all 4 it is important to be consulted by their boss in decisions involving their work. Lux.Nat score 1.9, France 1.9 and Germany 2.1.

#### QVAL8 to live in a desirable area.

Luxembourg:	2.4
France:	2.0
Germany:	2.7
Lux. Nat.:	2.4

It is important to the French (2.0) to live in a desirable area, much more than to Luxembourgers and Luxembourg with Luxembourgish Nationality both 2.4, than Germany with 2.7.

#### QVAL9 to have a job respected by your family and friends.

Luxembourg:	2.9
France:	2.4
Germany:	3.2
Lux. Nat.:	2.8

There are quiet different scores here. For Germany (3.2), it is of moderate to little importance to have a job respected by the family and friends. In France (2.4), the importance is much higher, it is very important to French. Lux. Nat. scores 2.8 and shows again its position between France and Germany. Luxembourg scores 2.9, of moderate importance.

#### QVAL10 to have chances for promotion.

Luxembourg:	2.3
France:	1.9
Germany:	2.4
Lux. Nat.:	2.2

The difference between Germany (2.4) and France (1.9) is half a point. Lux. Nat. score again in between the two, with 2.2. Luxembourg scores 2.3. Interestingly the chances for promotion are not so important in Germany as they are in France, where they are very important.

#### In your private life, how important is each of the following to you?

#### QVAL11: keeping time free for fun.

Luxembourg:	2.1
France:	1.9
Germany:	1.8
Lux. Nat.:	2.1

For all 4 it is very important to keep time free for fun with scores from 1.8 (Germany) over 1.9 (France) to 2.1 for Luxembourg and Lux. Nat. Interestingly, this time. Lux. Nat. score lower than the others.

#### QVAL17: Are you a happy person?

Luxembourg:	2.2
France:	2.2
Germany:	2.2
Lux. Nat.:	2.1

Happiness is one of the cultural dimensions that Hofstede added to his dimensions. Happiness studies are of increasing interest to culture researchers. In my research, all in all, the 4 are happy.

#### QVAL20: How would you describe your state of health?

Luxembourg:	2.1		
France:	2.0		
Germany:	2.1		
Lux. Nat.:	2.0		
Besides being happy, all the 4 are healthy.			

#### QVAL21: How important is religion in your life?

Luxembourg:	3.7
France:	3.9
Germany:	3.9
Lux. Nat.:	3.4
Besides being ha	py and healthy, all the 4 attach moderate to little importance to religion.

#### Questions about your company

#### **QCPY1:** People are uncomfortable in unfamiliar situations.

2.2
2.7
1.9
2.6

There is a difference between high scorer Germany (1.9) and France (2.7). Luxembourg (2.2) is a typical mid-scorer, illustrating that Luxembourg is between Germany and France, geographically and culturally. Lux. Nat. (2.6) are much closer to France than to Germany, confirming the overall assumption that Luxembourgers are culturally French and linguistically German.

See the appendix for more discussions.

#### **4.5.2** Conclusion of the description of the results of the questionnaires.

The above discussion per question shows that often Luxembourg Nationality score in between France and Germany. Luxembourg and Luxembourg Nationality do not always score the same, as a result of the high percentage of foreigners among the Luxembourgers.

In Chapter 4.5.2 it was pointed out that at Lindab Luxembourg there are 106 questionnaires filled in. Out of them are 40 Belgians, 33 Luxembourg Nationality, 14 French, 11 German, 7 Portuguese, 3 Italian, 2 American, 2 Russian, 1 Polish, 1 Rwandan, 1 Austrian, 1 Canadian/Israeli, 1 Slovak, 1 Moroccan. The change in nationality is also a characteristic of Luxembourg. Another characteristic of Luxembourg is the language diversity and the impressive number of languages spoken per individual.

Gender diversity at Lindab doesn't play any importance, due to the small number of female employees and this is valid for Lindab Luxembourg, France and Germany. Lindab is a mostly male working environment.

#### 4.6 Hofstede's Cultural Dimension Calculations of the Paper Questionnaire

In the following chapter, Hofstede's cultural dimensions are calculated for Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Luxembourg Nationality. To be able to work out the pattern for the Luxembourger, it is not only important to analyse Luxembourg, but to extrapolate the people with Luxembourgish nationality in Luxembourg, excluding all the foreigners. At Lindab Luxembourg, 33 people of Luxembourg nationality replied to the questionnaire, out of a total of 106 filled-in questionnaires from Luxembourg. This is +- 30%.

Hofstede's formula for the calculation of his cultural dimensions are the following where PDI is Power Distance Index, UAI is Uncertainty Avoidance Index, IDV is Individualism versus Collectivism, MAS is Masculinity versus Femininity, LTO is Long-Term Orientation versus Short-Term Orientation, IVR is Indulgence versus Restraint (or Happiness Index), MON is Monumentalism:

$$\begin{split} \text{PDI} &= 35(\text{mQVAL7} - \text{mQVAL2}) + 25(\text{mQVAL23} - \text{mQVAL26}) + \text{C}(\text{pd}) \\ \text{UAI} &= 40(\text{m}(\text{QVAL20} - \text{mQVAL16}) + 25(\text{mQVAL24} - \text{mQVAL27}) + \text{C}(\text{ua}) \\ \text{IDV} &= 35(\text{mQVAL4} - \text{mQVAL1}) + 35(\text{mQVAL9} - \text{mQVAL6}) + \text{C}(\text{ic}) \\ \text{MAS} &= 35(\text{mQVAL5} - \text{mQVAL3}) + 35(\text{mQVAL08} - \text{mQVAL10}) + \text{C}(\text{mf}) \\ \text{LTO} &= 40(\text{mQVAL18} - \text{mQVAL15}) + 25(\text{mQVAL28} - \text{mQVAL25}) + \text{C}(\text{ls}) \\ \text{IVR} &= 35(\text{mQVAL12} - \text{mQVAL11}) + 40(\text{mQVAL19} - \text{mQVAL17}) + \text{C}(\text{ir}) \\ \text{MON} &= 35(\text{mQVAL14} - \text{mQVAL13}) + 25(\text{mQVAL22} - \text{mQVAL21}) + \text{C}(\text{mo}) \end{split}$$

#### 4.6.1 Lindab Luxembourg.

 $\begin{aligned} \textbf{PDI} &= \textbf{35}(\textbf{mQVAL7} - \textbf{mQVAL2}) + \textbf{25}(\textbf{mQVAL23} - \textbf{mQVAL26}) + \textbf{C} (\textbf{pd}) \\ \textbf{PDI} &= 35 \text{ x} (2.1 - 2.0) + 25 \text{ x} (3.5 - 1.8) - 10 \qquad (\textbf{C} = -10) \\ \textbf{PDI} &= 3.5 + 42.5 - 10 \\ \textbf{PDI} &= 46 - 10 \\ \textbf{PDI} &= \textbf{36} \end{aligned}$ 

UAI = 40(m QVAL20 - mQVAL16) + 25(mQVAL24 - mQVAL27) + C (ua)UAI = 40 x (2.1 - 2.8) + 25 x (2.8 - 2.6) + 100 (C = + 120) UAI = -28 + 5 + 120 UAI = -23 + 120 UAI = 97

IDV = 35(mQVAL4 - mQVAL1) + 35(mQVAL9 - mQVAL6) + C (ic)  $IDV = 35 \times (1.8 - 2.0) + 35 \times (2.9 - 1.8) + 20 \qquad (C = + 20)$  IDV = -7 + 38.5 + 20 IDV = 31.5 + 20IDV = 51.5

 $\begin{aligned} \mathbf{MAS} &= \mathbf{35}(\mathbf{mQVAL5} - \mathbf{mQVAL3}) + \mathbf{35}(\mathbf{mQVAL08} - \mathbf{mQVAL10}) + \mathbf{C} \ (\mathbf{mf}) \\ \mathbf{MAS} &= 35 \ \mathbf{x} \ (1.9 - 1.8) + 35 \ (2.4 - 2.3) + 40 \qquad (\mathbf{C} = + 40) \\ \mathbf{MAS} &= 3.5 + 3.5 + 40 \\ \mathbf{MAS} &= 7 + 40 \\ \mathbf{MAS} &= \mathbf{47} \end{aligned}$ 

LTO = 40(mQVAL18 - mQVAL15) + 25(mQVAL28 - mQVAL25) + C (ls)LTO = 40 x (2.3 - 1.7) + 25 (2.7 - 2.1) + 30 (C = + 30) LTO = 24 + 15 + 30 LTO = 39 + 30 LTO = 69

IVR = 35(mQVAL12 - mQVAL11) + 40(mQVAL19 - mQVAL17) + C (ir)IVR = 35 x (3.0 - 2.1) + 40 x (3.0 - 2.2) - 10 (C = -10) IVR = 31.5 + 32 - 10 IVR = 63.5 - 10 IVR = 53.5

 $\begin{aligned} \textbf{MON} &= \textbf{35}(\textbf{mQVAL14} - \textbf{mQVAL13}) + \textbf{25} (\textbf{mQVAL22} - \textbf{mQVAL21}) + \textbf{C} (\textbf{mo}) \\ \textbf{MON} &= 35 \text{ x} (2.3 - 2.3) + 25 (3.3 - 3.7) + 20 \qquad (\textbf{C} = + 20) \\ \textbf{MON} &= 0 - 10 + 20 \\ \textbf{MON} &= -10 + 20 \\ \textbf{MON} &= \textbf{10} \end{aligned}$ 

#### 4.6.2 Lindab France.

PDI = 35(mQVAL7 - mQVAL2) + 25(mQVAL23 - mQVAL26) + C (pd)  $PDI = 35 \times (1.9 - 1.9) + 25 (3.3 - 1.6) + C \qquad (C = -10)$  PDI = 0 + 42.5 - 10 PDI = 42.5 - 10PDI = 32.5

UAI = 40(m QVAL20 - m QVAL16) + 25(m QVAL24 - m QVAL27) + C (ua) UAI =  $40 \times (2.0 - 3.6) + 25 \times (2.0 - 2.3) + 100$  (C = + 120) UAI = -64 - 7.5 + 120UAI = -71.5 + 120UAI = 48.5

IDV = 35(mQVAL4 - mQVAL1) + 35(mQVAL9 - mQVAL6) + C (ic)  $IDV = 35 \times (1.3 - 1.6) + 35 \times (2.4 - 1.5) + 20 \qquad (C = + 20)$  IDV = -10.5 + 31.5 + 20 IDV = 21 + 20IDV = 41

 $\begin{aligned} \mathbf{MAS} &= \mathbf{35}(\mathbf{mQVAL5} - \mathbf{mQVAL3}) + \mathbf{35}(\mathbf{mQVAL08} - \mathbf{mQVAL10}) + \mathbf{C} \ (\mathbf{mf}) \\ \mathbf{MAS} &= 35 \ \mathbf{x} \ (1.6 - 1.6) + 35 \ (2.0 - 1.9) + 40 \qquad (\mathbf{C} = + 40) \\ \mathbf{MAS} &= 0 + 3.5 + 40 \\ \mathbf{MAS} &= \mathbf{3.5} + 40 \\ \mathbf{MAS} &= \mathbf{43.5} \end{aligned}$ 

LTO = 40(mQVAL18 - mQVAL15) + 25(mQVAL28 - mQVAL25) + C (ls)LTO = 40 x (1.8 - 2.0) + 25 (2.4 - 1.8) + 30 (C = + 30) LTO = -8 + 15 + 30 LTO = 7 + 30 LTO = 37

IVR = 35(mQVAL12 - mQVAL11) + 40(mQVAL19 - mQVAL17) + C (ir)  $IVR = 35 \times (3.1 - 1.9) + 40 \times (3.2 - 2.0) - 10 \quad (C = -10)$  IVR = 42 + 48 - 10 IVR = 90 - 10IVR = 80

 $\begin{aligned} \textbf{MON} &= \textbf{35}(\textbf{mQVAL14} - \textbf{mQVAL13}) + \textbf{25} (\textbf{mQVAL22} - \textbf{mQVAL21}) + \textbf{C} (\textbf{mo}) \\ \textbf{MON} &= \textbf{35} \times (2.1 - 2.0) + 25 (4.2 - 3.9) + 20 \quad (\textbf{C} = + 20) \\ \textbf{MON} &= \textbf{3.5} + 7.5 + 20 \\ \textbf{MON} &= \textbf{11} + 20 \\ \textbf{MON} &= \textbf{31} \end{aligned}$ 

#### 4.6.3 Lindab Germany.

PDI = 35(mQVAL7 - mQVAL2) + 25(mQVAL23 - mQVAL26) + C (pd)  $PDI = 35 \times (2.1 - 1.9) + 25 (3.4 - 1.8) + C \quad (C = -10)$  PDI = 7 + 40 - 10 PDI = 47 - 10PDI = 37

UAI = 40(m QVAL20 - m QVAL16) + 25(m QVAL24 - m QVAL27) + C (ua) UAI =  $40 \times (2.1 - 2.6) + 25 \times (2.6 - 3.1) + 100$  (C = + 120) UAI = -20 - 12.57.5 + 120UAI = -32.5 + 120UAI = 87.5

IDV = 35(mQVAL4 - mQVAL1) + 35(mQVAL9 - mQVAL6) + C (ic)  $IDV = 35 \times (1.9 - 2.0) + 35 \times (3.2 - 1.8) + 20 \qquad (C = + 20)$  IDV = -3.5 + 49 + 20 IDV = 45.5 + 20IDV = 65.5

 $\begin{aligned} \mathbf{MAS} &= \mathbf{35}(\mathbf{mQVAL5} - \mathbf{mQVAL3}) + \mathbf{35}(\mathbf{mQVAL08} - \mathbf{mQVAL10}) + \mathbf{C} \ (\mathbf{mf}) \\ \mathbf{MAS} &= 35 \ \mathbf{x} \ (2.2 - 1.8) + 35 \ (2.7 - 2.4) + 40 \qquad (\mathbf{C} = + 40) \\ \mathbf{MAS} &= 14 + 10.5 + 40 \\ \mathbf{MAS} &= 24.5 + 40 \\ \mathbf{MAS} &= \mathbf{64.5} \end{aligned}$ 

LTO = 40(mQVAL18 - mQVAL15) + 25(mQVAL28 - mQVAL25) + C (ls)LTO = 40 x (2.4 - 1.3) + 25 (2.9 - 2.6) + 30 (C = + 30) LTO = 44 + 7.5 + 30 LTO = 51.5 + 30 LTO = 81.5

IVR = 35(mQVAL12 - mQVAL11) + 40(mQVAL19 - mQVAL17) + C (ir)  $IVR = 35 \times (2.5 - 1.8) + 40 \times (3.0 - 2.2) - 10 \quad (C = -10)$  IVR = 24.5 + 32 - 10 IVR = 56.5 - 10IVR = 46.5

 $\begin{aligned} \textbf{MON} &= \textbf{35}(\textbf{mQVAL14} - \textbf{mQVAL13}) + \textbf{25} (\textbf{mQVAL22} - \textbf{mQVAL21}) + \textbf{C} (\textbf{mo}) \\ \textbf{MON} &= 35 \text{ x} (2.3 - 2.4) + 25 (3.5 - 3.9) + 20 \qquad (\textbf{C} = + 20) \\ \textbf{MON} &= -3.5 - 10 + 20 \\ \textbf{MON} &= -13.5 + 20 \\ \textbf{MON} &= \textbf{6.5} \end{aligned}$ 

#### 4.6.4 Lindab Luxembourg with Luxembourgish Nationality.

 $\begin{aligned} \textbf{PDI} &= \textbf{35}(\textbf{mQVAL7} - \textbf{mQVAL2}) + \textbf{25}(\textbf{mQVAL23} - \textbf{mQVAL26}) + \textbf{C} (\textbf{pd}) \\ \textbf{PDI} &= 35 \text{ x} (1.9 - 2.0) + 25 \text{ x} (3.5 - 1.8) - 10 \qquad (\textbf{C} = -10) \\ \textbf{PDI} &= -3.5 + 22.5 - 10 \\ \textbf{PDI} &= 39 - 10 \\ \textbf{PDI} &= \textbf{29} \end{aligned}$ 

UAI = 40(m QVAL20 - m QVAL16) + 25(m QVAL24 - m QVAL27) + C (ua) UAI =  $40 \times (2.0 - 3.0) + 25 \times (3.3 - 2.3) + 100$  (C = + 110) UAI = -40 + 25 + 110UAI = -15 + 110UAI = 95

IDV = 35(mQVAL4 - mQVAL1) + 35(mQVAL9 - mQVAL6) + C (ic)IDV = 35 x (1.6 - 2.2) + 35 x (2.8 - 1.8) + 20 (C = + 20) IDV = -21 + 35 + 20 IDV = 14 + 20 IDV = 34

 $\begin{aligned} \mathbf{MAS} &= \mathbf{35}(\mathbf{mQVAL5} - \mathbf{mQVAL3}) + \mathbf{35}(\mathbf{mQVAL08} - \mathbf{mQVAL10}) + \mathbf{C} \ (\mathbf{mf}) \\ \mathbf{MAS} &= 35 \ \mathbf{x} \ (1.9 - 1.7) + 35 \ (2.4 - 2.2) + 40 \qquad (\mathbf{C} = + 40) \\ \mathbf{MAS} &= 7 + 7 + 40 \\ \mathbf{MAS} &= 014 + 40 \\ \mathbf{MAS} &= \mathbf{54} \end{aligned}$ 

LTO = 40(mQVAL18 - mQVAL15) + 25(mQVAL28 - mQVAL25) + C (ls)LTO = 40 x (2.3 - 1.8) + 25 (2.6 - 2.0) + 30 (C = + 30) LTO = 20 + 15 + 30 LTO = 35 + 30 LTO = 65

IVR = 35(mQVAL12 - mQVAL11) + 40(mQVAL19 - mQVAL17) + C (ir)  $IVR = 35 \times (2.7 - 2.1) + 40 \times (3.2 - 2.1) - 10 \quad (C = -10)$  IVR = 21 + 44 - 10 IVR = 65 - 10IVR = 55

 $\begin{aligned} \textbf{MON} &= \textbf{35}(\textbf{mQVAL14} - \textbf{mQVAL13}) + \textbf{25} (\textbf{mQVAL22} - \textbf{mQVAL21}) + \textbf{C} (\textbf{mo}) \\ \textbf{MON} &= 35 \text{ x} (2.1 - 2.2) + 25 (3.7 - 3.4) + 20 \qquad (\textbf{C} = + 20) \\ \textbf{MON} &= -3.5 + 7.5 + 20 \\ \textbf{MON} &= 4 + 20 \\ \textbf{MON} &= \textbf{24} \end{aligned}$ 

#### 4.7 Results

The calculation of Hofstede's cultural dimensions in the last chapter gave the results shown

in the following table, where I compare Lindab Luxembourg and Lindab Lux. Nat. with

Hofstede's estimates on Luxembourg.

Table 4.2 Comparison Lindab Luxembourg – Lindab Luxembourg with Luxembourgish nationality – Hofstede's estimates on Luxembourg (on a scale from 1-100, 1 being the lowest and 100 the highest score)

	Lindab Luxembourg	Lindab	Hofstede's estimates on
		Luxembourg with	Luxembourg
		Luxembourgish	
		nationality	
PDI	36	29	40
UAI	97	95	70
IDV	51.5	34	60
MAS	47	54	50
LTO	69	65	64
IVR	53.5	55	56
MON	10	24	-

The following table shows a comparison of Lindab Luxembourg with Lindab Luxembourg with Luxembourgish nationality (Lux. Nat.) and Hofstede's estimates on Luxembourg and Lindab France and Hofstede's France and Lindab Germany and finally Hofstede's Germany.
Table 4.3 Comparison Lindab Luxembourg – Lindab Luxembourg with Luxembourgish nationality – Hofstede's estimates on Luxembourg – Lindab France – Hofstede's France – Lindab Germany – Hofstede's Germany

	Lindab	Lindab	Hofstede's	Lindab	Hofstede's	Lindab	Hofstede's
	Luxembourg	Luxembourg	estimates on	France	France	Germany	Germany
		with	Luxembourg				
		Luxembourgish					
		nationality					
PDI	36	29	40	32.5	68	37	35
UAI	97	95	70	28.8	86	67.5	65
IDV	51.5	34	60	41	71	65.5	67
MAS	47	54	50	43.5	43	64.5	66
LTO	69	65	64	37	63	84.5	83
IVR	53.5	55	56	80	48	46	40
MON	10	24	-	31	16.5	6.5	9.9

See these results from my research inserted into the figures from Hofstede et al. 2010 on the following pages.

Lindab France's divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, what could cause errors. Second, at Lindab France, we are looking at the company level, and not really the country or nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

The following table shows a comparison of Hofstede's cultural dimensions on Luxembourg with France, Germany, UK, Belgium FR, Belgium NL, Italy, the Netherlands NL, China, USA, and Japan.

	Luxem-	France	Germany	UK	Belgium	Belgium	Italy	NL	China	USA	Japan
	bourg				FR	NL					
PDI	40	68	35	35	68	61	50	38	80	40	54
UAI	70	86	65	35	93	97	75	53	30	46	92
IDV	60	71	67	89	71	78	76	80	20	91	46
MAS	50	43	66	66	60	43	70	14	66	62	95
LTO	64	63	83	51	82	82	61	67	87	26	88
IVR	56	48	40	69	57	57	30	68	24	68	42
MON	-	16.5	9.9	35.4	-	-	35.2	11.9	0	57.2	4.0

Table 4.4 Hofstede's cultural dimensions on Luxembourg – France – Germany – UK –Belgium FR – Belgium NL – Italy – the Netherlands NL – China – USA – Japan

**4.7.1 Description of primary data: calculation of Hofstede's cultural dimensions.** 

Hofstede's estimates of Luxembourg were correct taking Luxembourg as a whole and looking at PDI, MAS, LTO, IVR. They were not correct for UAI, IDV, and unexisting for MON. Hofstede took Luxembourg as a whole, without making a distinction between the different nationalities. He did not look at civil servants at all. In my research, given the specific population data from Luxembourg with its high percentage of foreigners, I was interested to firstly verify the estimates of Hofstede and secondly to come up with a pattern for the Luxembourger, not the foreigner living in Luxembourg. The calculation of Hofstede's cultural dimensions for the Luxembourger brought divergences from Hofstede's estimates. PDI for the Luxembourgers with Luxembourgish Nationality (Lux. Nat.) is 29, instead of Hofstede's 40, UAI is 95 instead of Hofstede's 70, IDV for the Lux. Nat. is 34, instead of Hofstede's 60, MAS for the Lux. Nat. is 54 more or less the same as Hofstede's 50. LTO for the Lux. Nat. is 65, quite close to Hofstede's 64. LVR for the Lux. Nat. is 55, more or less the same as Hofstede's 56. MON for the Lux. Nat. is 24, Hofstede did not estimate the Monumentalism for Luxembourg. Luxembourgers with Luxembourgish Nationality have less power distance than estimated. In fact, they have a quite low power distance index with 29. Luxembourgers with Luxembourgish Nationality have an

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extremely high uncertainty avoidance index with 95. Luxembourgers with Luxembourgish Nationality are afraid of any uncertainty, everything must be planned, organised, regulated, restricted and foreseen so that nothing is left to surprise. Luxembourgers with Luxembourgish Nationality hate surprises. They prefer that every day is the same, and every year brings the same events, with always the same people at the same place and the same procedure.

Luxembourgers with Luxembourgish Nationality are collective people, they have many friends, many occupations in clubs, in sports, in events in evenings, week-ends and vacation. They participate in many sports events and fairs, meetings, events, and seminars.

Luxembourgers with Luxembourgish Nationality have 65 points of 100 Long-term Orientation. They have also short term orientation, but more Long-Term Orientation. They plan for the future, plan in advance, their characteristic is: to watch what their neighbouring countries do, and observe their experiences, and only then implement new things, such as social media. Luxembourgers with Luxembourgish Nationality are traditional and cautious.

In Happiness or Indulgence versus Restraint, Luxembourgers with Luxembourgish Nationality are happy people, even if you cannot see it at first glance. Their faces often are dark, closed, but only in the beginning. They are mostly happy, despite having nearly everything, they are tempted to get even more and are not happy when not getting it.

The score on Monumentalism is high, much higher than in France and Germany. Luxembourg is proud and shows it. The national holiday and other national days are celebrated with big celebrations, only the best and biggest fireworks are good enough, the towns are full of attractions and people enjoying themselves. Famous celebrations are the Schouberfouer, National Holiday, Christmas, Maerktchen, and Octave.

The following table shows a comparison of Lindab Lux. Nat. and Hofstede's estimates on Luxembourg, where the differences in scores are shown.

 Table 4.5 Comparison Luxembourg with Luxembourgish nationality – Hofstede's estimates on Luxembourg

	Lindab	Hofstede's estimates
	Luxembourg	on Luxembourg
	with	
	Luxembourgish	
	nationality	
PDI	29	40
UAI	95	70
IDV	34	60
MAS	54	50
LTO	65	64
IVR	55	56
MON	24	-

Hofstede et al. (2010, p. 281) define 'Indulgence versus Restraint as follows: "Indulgence stands for a tendency to allow relatively free gratification for basic and natural human desires related to enjoying life and having fun. Its opposite pole, restraint, reflects a conviction that such gratification needs to be curbed and regulated by strict social norms." The score 55 in IVR means that Lux.Nat.'s tendency to Indulgence is higher than to Restraint. On the Indulgence side stands enjoying life and having fun (Hofstede et al., 2010, p. 281).

### 4.7.2 My results in Hofstede's maps.

After the calculation of the cultural dimensions for Lindab Luxembourg, Lindab France, Lindab Germany and Lindab Lux. Nat., the next objective of my research is to insert my results into Hofstede's et al. maps from 2010. This shows the overlapping, the similarities and differences in the findings of my study in Luxembourg compared to the many studies of Hofstede. The following seven maps are taken directly from Hofstede et al. (2010), where I have inserted my results collected from Lindab Luxembourg, Lindab Germany, Lindab France and Lindab Lux. Nat. My results are represented by four crosses superimposed on the maps.

Each map is followed by a short description of the findings. See table 4.2 and table 4.3 for PDI, UAI, IDV, MAS, LTO, LVR, MON. Culture is distinguished in four levels: nation level, company level, occupational level and gender level. See figure 2.5.1 for the characteristics of Luxembourg's national culture depending on the nation level on the culture of its residents with high level of foreigners (43% of the total population): Out of a total population of 511,800 in 2011, 290,500 are Luxembourgers (56.76%), and 221,300 are foreigners (43.24%), out of them: 81,300 Portuguese (16%), 31,000 French (6%), 17,700 Italian (3.5%), 17,000 Belgian (3.5%), 12,100 German (2.3%), 5,600 Britons, 3,800 Dutch, 21,700 other EU countries (4.2%), and 31,100 other countries of the world (6.08%) (Statec, 2011), see page 153, 154. The national culture in Luxembourg is influenced strongly by the daytime cross-border workers: Out of a total domestic employment of 357,800, cross-border workers represent a total of 149.400: 74,100 from France (21%), 37,500 from Germany (11%), 37,800 Belgium (11%) (Statec, 2011). With 11,400 resident borderers (Luxembourgers who cross the border), the national employment

(Luxembourgers who work (357,800 - 149.400 + 11,400) is 219.800. On the company level, it depends on the 'nationality of the company'. See table 2.10 for the population structure, table 2.11 for employment and unemployment (7.8% in 2010) (Statec, 2011) and table 2.12 for GDP figures. As can be seen in the maps, there are maps where there are significant differences between my and Hofstede's results, and conversely there are also maps where there is no significant difference.

For the purpose of my study, the descriptions of the maps focus on the differences between Lindab Lux. Nat., Lindab Luxembourg and Hofstede Luxembourg, see figures 4.10.1 - 5 for the distribution by nationality and figures 4.6.1 - 5 for the distribution by age. For the occupational level, see figures 4.9.1 - 5. For the gender level see figures 4.7.1 - 5.

We distinguish between four levels in cultural research: the company level, the nation level, the occupational level, the gender level. Hofstede has been criticised for using IBM, a company, to analyse national culture. The same criticism could be made regarding Lindab. Concerning occupational level, at Lindab I excluded blue collar workers. For the gender level, at Lindab we are looking at a 92% male population. This could be a point for criticism in this study.



4.7.2.1 My results in Hofstede's map Power Distance versus Individualism.

Figure 4.11.1 My results in Hofstede's maps, in Hofstede's figure 4.1 Power Distance versus Individualism (Hofstede et al., 2010, p. 103)

Lux. Nat. is found in the upper left quadrant, positioning it all alone with no other country around, showing the difference strongly between Hofstede's Luxembourg and my Lux. Nat. Lux. Nat. are positioned higher in the collectivist quadrant. They are high in Collectivism (100-34=66) and therefore low in Individualism (IDV=34), see table 4.3. An explanation for this is that Lux. Nat. are collective people, they have many friends and are active in sports, in clubs, in events, in outings in the evenings, week-ends and on vacation. Lux. Nat. score low on Power Distance (PDI=29). Considering these collective activities and the small size of the country, they encounter their boss at the same places, shopping centres, events, among the same friends, at the same outings. The Individualism/Collectivism dimension is Hofstede's most analysed dimension, especially by Triandis (1995), Venaik and Brewer (2011), Schwartz (1990), Briley (2001).

The Power Distance dimension has been analysed by Smith (2002, 2006 and 2008), among others.

**Lindab Luxembourg** finds its place near no other country, somewhat above Hofstede's Luxembourg, in the middle and left quadrant, showing a small Power Distance (PDI=36) and a mid-individualistic / mid-collective culture (IDV=51.5), standing for 48.5 Collectivism, see table 4.3. The reason for this is that Lindab Luxembourg includes all the foreigners and Lux. Nat.. The high percentage of foreigners changes the score for the pattern.

**Hofstede's Luxembourg** has low Power Distance (PDI=40), but mid-high Individualism (IDV=60) standing for a Collectivism of 40 (100-60=40), see table 4.3, and is positioned next to Estonia, Lithuania and Finland. Hofstede included the foreigners in his estimates, and he

excluded the civil servants. As 42% of the Luxembourgers work as civil servants, further research is needed in this domain. I had to exclude the civil servants also.

Lindab France is found next to Lindab Luxembourg. Lindab France scores low on Power Distance (PDI=32.5) and low on Individualism (IDV=41), representing a high Collectivism Index (100-41=69). Lindab France differs strongly from Hofstede's France which has high Power Distance (PDI=68) and high Individualism (IDV=71), standing for low Collectivism (100-71=29), see table 4.3. Hofstede's France is positioned in the lower right quadrant next to Belgium Fr, whereas Lindab France is positioned in the upper left quadrant. Lindab France's divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, which could cause errors. Second, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

**Lindab Germany** finds its position right next to Hofstede's Germany. Lindab Germany is low on Power Distance (PDI=37) and high on Individualism (IDV 65.5) standing for low Collectivism (100-65.5=34.5), see table 4.3. Hofstede's Germany is quite the same with low Power Distance (PDI=35) and high Individualism (IDV=67) standing for low Collectivism (100-67=33). Germany has a flat hierarchy and individualistic people.



4.7.2.2 My results in Hofstede's map Masculinity versus Individualism.

FIGURE 5.1 Masculinity Versus Individualism

Figure 4.11.2 My results in Hofstede's maps, in Hofstede's figure 5.1 Masculinity versus Individualism (Hofstede et al., 2010, p. 147)

Lux. Nat. is found in the upper middle, positioning it much higher on the collectivist side, showing the difference between Hofstede's Luxembourg and my Lux. Nat. Lux. Nat. are positioned higher in the collectivist quadrant. They are high in Collectivism (100-34=66) and therefore low in Individualism (IDV=34), see table 4.3. As pointed out for the preceding map, Lux. Nat. are collective people, they have many friends and are active in sports, in clubs, in events, in outings in the evenings, week-ends and on vacation. Lux. Nat. score middle on Masculinity (MAS=54), which would be mid-scorer on Feminism (45). Achievement and success are as dominant as caring for others and quality of life. The masculinity/femininity dimension has been analysed by Kanayama and Cooper-Chen (2005) at the occasion ot the pregnancy of Princess Masako in Japan, by Hofstede (1998) and Inglehart (2011) and Trompenaars et al. (1998). The Individualism/Collectivism dimension is Hofstede's most analysed dimension, especially by Triandis (1995), Venaik et al. (2011), Schwartz (1990), Briley (2001).

Lindab Luxembourg finds its place between Hofstede's Luxembourg and my Lux. Nat., somewhat above Hofstede's Luxembourg, in the middle of the map, showing a mid Masculinity Index (MAS=47), standing for a mid Femininity Index (FEM=53) and a mid-individualistic / mid-collective culture (IDV=51.5), standing for 48.5 Collectivism, see table 4.3. Lindab Luxembourg includes all the foreigners and the Lux. Nat.. The high percentage of foreigners changes the score for the pattern.

**Hofstede's Luxembourg** is mid scorer in Masculinity (MAS=50), and mid-high Individualism (IDV=60) standing for a Collectivism of 40 (100-60=40), see table 4.3, and is positioned next to Malta and Israel. Hofstede included the foreigners in his estimates, and he excluded the civil servants, as I did. Further research is needed in this domain as 42% of the Luxembourgers work as civil servants.

Lindab France is found next to Lindab Luxembourg and Brazil and Turkey. Lindab France scores mid on Masculinity (MAS=43.5) and low on Individualism (IDV=41), representing a high Collectivism Index (100-41=69). Lindab France corresponds to Hofstede's France with mid Masculinity (MAS=43) like Lindab France. Lindab France and Hofstede's France differ on Individualism/Collectivism. Lindab France has low Individualism (IDV=41) standing for high Collectivism (100-41=59) contrary to Hofstede's France with high Individualism (IDV=71), standing for low Collectivism (100-71=29). Hofstede's France is positioned on the map under Hofstede's Luxembourg. Lindab France's divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, which could cause errors. Second, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

**Lindab Germany** finds its position next to Hofstede's Germany. Lindab Germany is high on Masculinity (MAS=64.5) standing for Femininity (FEM=45.5) and high on Individualism (IDV 65.5) standing for low Collectivism (100-65.5=34.5). Hofstede's Germany is quite the same with high Masculinity (MAS=66) standing for low Femininity (FEM=44) and high Individualism (IDV=67) standing for low Collectivism (100-67=33). Germany has a masculine population where achievement and success are predominant with individualistic people, looking after themselves and their immediate family.



4.7.2.3 My results in Hofstede's map Power Distance versus Masculinity.

Figure 4.11.3 My results in Hofstede's maps, in Hofstede's figure 5.4 Power Distance versus Masculinity (Hofstede et al., 2010, p. 152)

Lux. Nat. is found in the middle left quadrant, positioning it next to Hofstede's Luxembourg, showing that Hofstede was more or less right with his estimates. The difference is that Lux. Nat. are a little lower scorer in Power Distance (PDI=29). Lux. Nat. score middle on Masculinity (MAS=54), which would be mid-scorer on Feminism (45), see table 4.3. Achievement and success are as dominant as caring for others and quality of life. The Power Distance dimension has been analysed by Smith (2002, 2006 and 2008), among others. The masculinity/femininity dimension has been analysed by Kanayama and Cooper-Chen (2005) at the occasion ot the pregnancy of Princess Masako in Japan, by Hofstede (1998) and Inglehart (2011) and Trompenaars et al. (1998).

**Lindab Luxembourg** is found in the middle left quadrant, positioning it next to Hofstede's Luxembourg and Lux. Nat., showing a small Power Distance (PDI=36) and a midmasculine / mid-feminine culture (MAS=47), standing for 53 Feminism, see table 4.3. Lindab Luxembourg includes all the foreigners and Lux. Nat..

**Hofstede's Luxembourg** has low Power Distance (PDI=40), but mid-high Masculinity (MAS=50) standing for a Feminism of 50 (100-50=50), see table 4.3, and is positioned next to the Canada score. Lux. Nat., Lindab Luxembourg and Hofstede's Luxembourg are all very close together, contrary to the preceding maps, where they are far apart.

What is interesting in this map is that I and Hofstede have more or less the same results, except for France.

**Lindab France** is found next to Lindab Luxembourg. Lindab France scores low on Power Distance (PDI=32.5) and lower on Masculinity (MAS=43.5), representing a higher Feminism Index (100-43.5=56.6). Lindab France differs from Hofstede's France in Power Distance which has high Power Distance (PDI=68) and high Individualism (IDV=71), standing for low Collectivism (100-71=29) see table 4.3. They do not differ in Masculinity/Femininity. Hofstede's France is positioned in the upper right quadrant next to Belgium NL, whereas Lindab France is positioned in the upper left quadrant. Lindab France's divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, which could cause errors. Second, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

Lindab Germany finds its position right next to Hofstede's Germany. Lindab Germany is low on Power Distance (PDI=37) and high on Masculinity (MAS 64.5) standing for low Femininity (100-64.5=35.5). Hofstede's Germany is quite the same with low Power Distance (PDI=35) and high Masculinity (MAS=66) standing for low Femininity (100-66=34), see table 4.3. Germany has a flat hierarchy and people who look more for achievement and success. They are less occupied with caring for others and quality of life is not so important.







Figure 4.11.4 My results in Hofstede's maps, in Hofstede's figure 6.1 Masculinity versus Uncertainty Avoidance (Hofstede et al., 2010, p. 214)

Lux. Nat. is found in the lower middle-right quadrant, positioning it next to Hofstede's Belgium Fr, Malta, Belgium NL and Lindab Luxembourg, showing the difference to Hofstede's Luxembourg. The difference is that Lux. Nat. are strong Uncertainty Avoidance scorer (UAI=95). Lux. Nat. are afraid of any uncertainty. For Lux. Nat. everything must be planned, organised, regulated, restricted and foreseen. Nothing has been left to surprise. Lux. Nat. hate surprises. They prefer that every day is the same and every year brings the same events with always the same people at the same place and the same procedure. They distinguish themselves from their mighty neighbours Germany/France/Belgium, and they created their own language (Briley, 2005; Hong, 2000), habits (Spizzo, 1995), peculiarities (IPSE, 2010; Haag, 2011), that they hold to strongly as if they were their identity savers (Hermans & Kempen, 1998) or their rescue plan. Concerning Masculinity/Femininity, Lux. Nat. score middle on Masculinity (MAS=54), which would be mid-scorer on Feminism (45), see table 4.3. Achievement and success are as dominant as caring for others and quality of life. The masculinity/femininity dimension has been analysed by Kanayama and Cooper-Chen (2005) at the occasion of the pregnancy of Princess Masako in Japan, by Hofstede (1998) and Inglehart (2011) and Trompenaars et al. (1998) in particular. The Uncertainty Avoidance dimension has been analysed by Hofstede (2001) and McClelland (1961), Bond (2004), de Mooij (2011), Venaik and Brewer (2010) and Inglehart (2000).

**Lindab Luxembourg** is found in the lower middle right quadrant, positioning it next to Lux. Nat., showing a high Uncertainty Avoidance Index (UAI=97) and a mid-masculine / midfeminine culture (MAS=47), standing for 53 Feminism, see table 4.3. The analysis for this is the same as for Lux. Nat., see above. **Hofstede's Luxembourg** has still a high Uncertainty Avoidance Index (UAI=70), but midhigh Masculinity (MAS=50) standing for a Feminism of 50 (100-50=50), see table 4.3, and is positioned next to Pakistan and Taiwan.

Lindab France is found in the upper left, middle quadrant, next to Hofstede's Vietnam. Lindab France scores low on Uncertainty Avoidance (UAI=28.8) and lower on Masculinity (MAS=43.5), representing a higher Feminism Index (100-43.5=56.5). Lindab France differs from Hofstede's France in Uncertainty Avoidance which has a higher Uncertainty Avoidance Index (UAI=86) and low Masculinity (MAS=43), standing for high Femininity (100-43=57), see table 4.3. They do not differ in Masculinity/Femininity, but in Uncertainty Avoidance. Hofstede's France is positioned in the lower left quadrant next to Panama, Peru, Spain, Turkey, Korea, Bulgaria, whereas Lindab France is positioned in the upper left quadrant. As mentioned previously, this divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, which could cause errors. Second, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

**Lindab Germany** finds its position right next to Hofstede's Germany. Lindab Germany is high on Uncertainty Avoidance (UAI=67.5) and high on Masculinity (MAS 64.5) standing for low Femininity (100-64.5=35.5). Hofstede's Germany is quite the same with high Uncertainty Avoidance (UAI=65) and high Masculinity (MAS=66) standing for low Femininity (100-66=34), see table 4.3. Germany is a country whose people feel threatened by uncertainty and ambiguity and try to avoid these situations and people who look more for achievement and success. They are less occupied with caring for others and quality of life is not so important.



# 4.7.2.5 My results in Hofstede's map Uncertainty Avoidance versus Individualism.

weakUncertainty Avoidance (UAI)strongFigure 4.11.5 My results in Hofstede's maps, in Hofstede's figure 6.2 Uncertainty Avoidance versus

Individualism (Hofstede et al., 2010, p. 218)

**Lux.** Nat. is found in the upper right quadrant, positioning it next to Hofstede's Greece, Turkey, Bulgaria, Portugal, showing the difference to Hofstede's Luxembourg. The difference is that Lux. Nat. are strong Uncertainty Avoidance scorer (UAI=95). Lux. Nat. are afraid of any uncertainty. For Lux. Nat. everything must be planned, organised, regulated, are restricted and foreseen. Nothing has been left to surprise. Lux. Nat. hate surprises. They prefer that every day is the same and every year brings the same events with always the same people at the same place and the same procedure. They distinguish themselves from their mighty neighbours Germany/France/Belgium, and they created their own language (Briley, 2005; Hong, 2000), habits (Spizzo, 1995), peculiarities (IPSE, 2010; Haag, 2011), that they hold to strongly as if they were their identity savers (Hermans & Kempen, 1998) or their rescue plan. Concerning Individualism/Collectivism, Lux. Nat. score high on Collectivism (100-34=66), scoring low on Individualism (IDV=34), see table 4.3. Lux. Nat. are collective people, they have many friends and are active in sports, in clubs, in events, in outings in the evenings, week-ends and on vacation. Uncertainty Avoidance dimension has been analysed by Hofstede (2001) and McClelland (1961), Bond (2004), de Mooij (2011), Venaik and Brewer (2010) and Inglehart (2000) in particular. The Individualism/Collectivism dimension is Hofstede's most analysed dimension, especially by Triandis (1995), Venaik and Brewer (2011), Schwartz (1990), and Briley (2001).

**Lindab Luxembourg** is found in the middle and to the right, positioned a bit below Lux. Nat., showing a high Uncertainty Avoidance Index (UAI=97) and a mid-individualist / midcollectivist culture (IDV=51.5), standing for 48.5 Collectivism, see table 4.3. The analysis is the same as for Lux. Nat., and Lindab Luxembourg includes all the foreigners and Lux. Nat.. The high percentage in foreigners changes the score for the pattern.

**Hofstede's Luxembourg** has a much lower, but still high Uncertainty Avoidance Index (UAI=70), and mid-high Individualism (IDV=60) standing for a Feminism of 40 (100-60=40), see table 4.3 and is positioned next to Lithuania and Czech Republic. Hofstede included the foreigners in his estimates, and he excluded the civil servants. As 42% of the Luxembourgers work as civil servants, further research is needed in this domain. I had to exclude the civil servants also.

Lindab France is found in the upper left quadrant. Lindab France scores low on Uncertainty Avoidance (UAI=28.8) and lower on Individualism (IDV=41), representing a higher Collectivism Index (100-41=59). Lindab France differs from Hofstede's France in Uncertainty Avoidance which has a higher Uncertainty Avoidance Index (UAI=86) and high Individualism (IDV=71), standing for low Collectivism (100-71=29), see table 4.3. They differ in Uncertainty Avoidance and Individualism Index. Hofstede's France is positioned in the lower right quadrant next to Belgium Fr, whereas Lindab France is positioned in the upper left quadrant. Lindab France's divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, which could cause errors. Second, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees. **Lindab Germany** finds its position right next to Hofstede's Germany. Lindab Germany is high on Uncertainty Avoidance (UAI=67.5) and high on Individualism (IDV=65.5) standing for low Collectivism (100-65.5=34.5). Hofstede's Germany is quite the same with high Uncertainty Avoidance (UAI=65) and high Individualism (IDV=67) standing for low Collectivism (100-67=33), see table 4.3. Germany is a country whose people feel threatened by uncertainty and ambiguity and try to avoid these situations and people who look more after themselves and their immediate family only instead of belonging to other in-groups that look after them in exchange for loyalty.

## 4.7.2.6 My results in Hofstede's map Indulgence versus Long-Term Orientation.

FIGURE 8.1 Indulgence Versus Long-Term Orientation (LTO-WVS)



Figure 4.11.6 My results in Hofstede's maps, in Hofstede's figure 8.1 Indulgence Versus Long-Term Orientation (Hofstede et al., 2010, p. 287)

Lux. Nat. is found in the upper right quadrant, next to Hofstede's Luxembourg and Lindab Luxembourg, showing that Hofstede was onlyright with his estimates taking Luxembourg as a whole and looking at PDI, MAS, LTO, IVR. He was not correct for UAI, IDV, and no data were given for MON.. Lux. Nat. are mid scorers in 'Indulgence Versus Restraint' (IVR=55) and midhigh scorer on Long-Term Orientation (LTO=65), see table 4.3. Lux. Nat are in general happy people, even if you cannot see it at a first glance. Their faces often are dark, closed, but only in the beginning. They are mostly happy, despite having nearly everything; they are tempted to get even more and are not happy when not getting it. Concerning Long-Term Orientation, they have 65 from 100 points, see table 4.3. They plan for the future and plan in advance, Typical for Lux. Nat. is to watch first what their neighbouring countries are doing, observe their experiences, and only then implement the positive things from them, such as social media. Lux. Nat. are traditional and cautious (Spizzo, 1995; Haag, 2011; IPSE, 2010). The Happiness dimension has been popular recently and has been analysed by Mogilner (2011), Inglehart (2008), Diener (2000) and Minkov (2011) in particular. Hofstede (2010) decided to add his new dimension on Happiness in his 2010 edition, naming it 'Indulgence Versus Restraint', The Long-term Orientation dimension has been analysed by Hofstede (2001), McClelland (1961), Bond (2004), and House (2004).

**Lindab Luxembourg** is found right next to Lux. Nat. and Hofstede's Luxembourg in the upper right quadrant, showing a mid-score for 'Indulgence Versus Restraint' (IVR=53.5) and a mid-high score for Long-Term Orientation (LTO=69), see table 4.3. The analysis is the same as for Lux. Nat..

**Hofstede's Luxembourg** is just next to Lux. Nat. and Lindab Luxembourg, showing midscore for 'Indulgence Versus Restraint' (IVR=56) and mid-high score for Long-Term Orientation (LTO=64), see table 4.3. In this map Hofstede's France and Hofstede's Luxembourg and Lux. Nat. and Lindab Luxembourg are close, a fact that could confirm that Luxembourg and France are similar in culture to some extent, here concerning 'Indulgence Versus Restraint' versus 'Long-Term Orientation'.

Lindab France is found in the upper left quadrant next to New Zealand. Lindab France scores high on 'Indulgence Versus Restraint' (IVR=80) and low on 'Long-Term Orientation (LTO=37). Lindab France differs from Hofstede's France in Uncertainty Avoidance which has a lower 'Indulgence Versus Restraint' (IVR=48) and a higher 'Long-Term Orientation' (LTO=63). Hofstede's France is positioned in the upper right quadrant next to Lindab Luxembourg, Lux. Nat., whereas Lindab France is positioned in the upper left quadrant. Lindab France's divergence from Hofstede's France is due to several facts. First, at Lindab France, we are looking at 10 people only, a sample reduced in numbers, which could cause errors. Second, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

**Lindab Germany** finds its position right next to Hofstede's Germany. Lindab Germany is mid-scorer on 'Indulgence Versus Restraint' (IVR=46) and high on 'Long-Term Orientation' (LTO=84.5). Hofstede's Germany is quite the same with mid-low 'Indulgence Versus Restraint' (IVR=40) and high 'Long-Term Orientation' (LTO=83). Germany is a country whose people allow relatively free gratification of basic and natural human drives related to enjoying life and having fun. It is not a society that suppresses gratification of needs and regulates it by means of strict social norms. In Germany the society exhibits a pragmatic future-oriented perspective.

From this figure you can see that Lindab Luxembourg and Hofstede's France are very close in the cultural dimensions 'Indulgence Versus Restraint' versus 'Long-Term Orientation'. This is not the case in figure 4.11.1 (Power Distance versus Individualism) and figure 4.11.7 (Power Distance versus Uncertainty Avoidance).



4.7.2.7 My results in Hofstede's map Power Distance versus Uncertainty Avoidance.

Figure 4.11.7 My results in Hofstede's maps, in Hofstede's figure 9.1 Power Distance Versus Uncertainty Avoidance (Hofstede et al., 2010, p. 303)

Lux. Nat. is found in the lower left quadrant, near none of the other countries, next to Lindab Luxembourg, showing the difference to Hofstede's Luxembourg. The difference is that Lux. Nat. are strong on Uncertainty Avoidance (UAI=95) and weak on Power Distance (PDI=29), like no other country in the world. This is what makes Lux. Nat. special. Lux. Nat. are afraid of any uncertainty. For Lux. Nat. everything must be planned, organised, regulated, restricted and foreseen. Nothing has been left to surprise. Lux. Nat. hate surprises. They prefer that every day is the same and every year brings the same events with always the same people at the same place and the same procedure. They distinguish themselves from their mighty neighbours Germany/France/Belgium, and they created their own language (Briley, 2005; Hong, 2000), habits (Spizzo, 1995), peculiarities (IPSE, 2010; Haag, 2011), that they hold to strongly as if they were their identity savers (Hermans & Kempen, 1998) or their rescue plan. Concerning Power Distance, Lux. Nat. are low scorers in Power Distance (PDI=29), see table 4.3. Considering the collective activities and the small size of the country, they encounter their boss at the same places, shopping centres, events, among the same friends, and at the same outings. Uncertainty Avoidance dimension has been analysed by Hofstede (2001) and McClelland (1961), Bond (2004), de Mooij (2011), Venaik and Brewer (2010), and Inglehart (2000) in particular. The Power Distance dimension has been analysed by Smith (2002, 2006 and 2008), among others.

**Lindab Luxembourg** is found right next to Lux. Nat. in the lower left quadrant, showing a high Uncertainty Avoidance Index (UAI=97) and a low Power Distance Index (PDI=36), see table 4.3. The analysis is the same as for Lux. Nat..

**Hofstede's Luxembourg** is also in the left quadrant, but above Lux. Nat. and Lindab Luxembourg, showing still high but much lower Uncertainty Avoidance Index (UAI=70) instead of 97 or 95 and mid-low Power Distance Index (PDI=40), see table 4.3, and is positioned next to Hofstede's Germany. Hofstede included the foreigners in his estimates, and he excluded the civil servants. As 42% of the Luxembourgers work as civil servants, further research is needed in this domain. I had to exclude the civil servants also. In this map Hofstede's Germany and Hofstede's Luxembourg are close, a fact that could confirm that Luxembourg and Germany are similar in culture to some extent, here in Power Distance Versus Uncertainty Avoidance.

Lindab France is found in the upper left quadrant next to Sweden and Denmark. Lindab France scores low on Uncertainty Avoidance (UAI=28.8) and low on Power Distance (PDI=32.5). Lindab France differs from Hofstede's France in Uncertainty Avoidance which has a higher Uncertainty Avoidance Index (UAI=86) and high Power Distance (PDI=68), see table 4.3. Hofstede's France is positioned in the lower right quadrant next to Bulgaria, Turkey, Chile, Peru, Slovenia, whereas Lindab France is positioned in the upper left quadrant. Lindab France's divergence from Hofstede's France is due to the low sample of only 10 people, and secondly, at Lindab France, we are looking at the company level, and not really at the nation level. Lindab France is influenced culturally by Lindab in general and by the migration background of its employees.

**Lindab Germany** finds its position right next to Hofstede's Germany. Lindab Germany is high on Uncertainty Avoidance (UAI=67.5) but not as high as 97 and middle on Power Distance (PDI=67.5). Hofstede's Germany is quite the same with mid-high Uncertainty Avoidance

### 4.7.3 Conclusion of my results in Hofstede's maps.

The previous chapter has shown the special place that Lux. Nat. and Lindab Luxembourg holds on Hofstede's maps, especially in two of his maps: 'Power Distance versus Individualism' and 'Power Distance versus Uncertainty Avoidance'.

Lux.Nat. and Lindab Luxembourg hold in these two cases a unique position on his maps, being surrounded by no other country of the world. On the map 'Power Distance versus Individualism', Lux. Nat. holds a unique position in the world of having strong Collectivism (100-34=66) standing for weak Individualism (IDV=34) and small Power Distance (PDI=29), like no other country in the world. On the map 'Power Distance versus Uncertainty Avoidance', Lux. Nat. and Lindab Luxembourg hold a unique position in the world of having small Power Distance (PDI=29 respectively 36) and strong Uncertainty Avoidance (UAI=95 respectively 97), see table 4.3.

This is where it is made clear that there is no other country in the world like Luxembourg with strong Collectivism (66) (weak Individualism (34)), small Power Distance (29) and strong Uncertainty Avoidance (95), see table 4.3. Contrary to the saying that Luxembourg is culturally close to France and linguistically to Germany, Hofstede's cultural dimension maps show the limitations of this. Concerning the cultural dimensions Indulgence versus Long-Term Orientation, Luxembourg is culturally close to France.

The specific position that Luxembourg holds on Hofstede's cultural maps is shown in figures 4.11.1 till 4.11.7. Especially in figure 4.11.1 (Power Distance versus Individualism) and 4.13.7 (Power Distance versus Uncertainty Avoidance) show the specific place that Luxembourg holds, being positioned in these figures in a quadrant without any other countries

around it. This shows Luxembourg's special cultural dimensions: strong Collectivism (weak Individualism), small Power Distance, strong Uncertainty Avoidance, like no other country in the world. Contrary to the belieif that Luxembourg is culturally close to France and linguistically to Germany, Hofstede's cultural dimensions show the specific cultural dimensions in Luxembourg, only concerning cultural dimensions Indulgence versus Long-Term Orientation, Luxembourg is culturally close to France.

Why is Luxembourg the way it is? Why are Luxembourgers with Luxembourgish Nationality the way they are? In the preceding chapters, the focus was on working out the pattern of the Luxembourger. Now it is about trying to explain the way they are. There is very little research in general about Luxembourg. The most recent research, in French, on history and politics in Luxembourg is from Haag (2011) with excellent photographs underlining his detailed historical overview. One recent piece of research is from IPSE (2010), in German, discussed in chapter 2, but it does not apply Hofstede. Other research, still without using Hofstede, in Luxembourg was done by Spizzo and published in 1995.

For Spizzo (1995), - contrary to Haag (2011) who describes Luxembourg's history in detail - the important question is the following: why is Luxembourg the way it is, i.e., without a defined language, without a common big history, without "people", without a "race", without identifiable characteristics, without cultural traditions, without long ago old stories, without any "Huguenots" or "Vikings", a country without any specific particularity.

History shapes the character of a nation. Haag (2011, p. 529) states, that Luxembourg developed from a provincial town to a European capital, an international financial centre, and a worldwide freight centre. In 2008 the Clausen zone was created for entertainment, in 2005 the Philharmony was inaugurated, the MUDAM in 2006 and the Congress Centre in 2012 (Haag,

2011, p. 539). The 2010 Mercier report puts Luxembourg in 20<sup>th</sup> position among 221 towns for its quality of life (Haag, 2011, p. 541), an example of femininity.

People as important for Europe as Robert Schumann, Jean-Claude Juncker, and Jacques Santer are from Luxembourg (Haag, 2011). RTL – Radio Television Luxembourg, SES Astra – Société Européenne des Satellites, and EIB – European Investment Bank are important Companies from Luxembourg (Haag, 2011, pp. 479-493), saying on page 464: "It is not easy to imagine how history would have evolved without Luxembourg" in Europe.

Luxembourg is squeezed between two mighty countries with a lot of power: France and Germany. There is also another neighbouring country: Belgium, in the North-West.

Luxembourgers are trilingual, sometimes quadrilingual or quintilingual or even more.

Luxembourg was founded by chance 200 years ago and has been a country of immigration ever since (Spizzo, 1995).

Why did Luxembourg become one of the 12 founding members of the European Union, asks Spizzo (1995)? Such a small country is among the other 11 big and powerful countries. What is Luxembourg's special state of mind?

That is where the words "State, Nation, Fatherland" get their importance, along with the native language, the mother tongue. Luxembourg is a small nation with around 500.000 inhabitants in 2,588 square kilometres.

The Luxembourgish dynasty is much loved by Luxembourgers (Spizzo, 1995). The Grand Duke is a much loved person as well as his family. He gives his people a good life. He benefits from the confidence and the consensus of his people. The Luxembourgish citizens benefit from a lot of privileges, such as low direct and indirect taxes, low or non-existent contributions, many activities are free of charge and many other items are cheap. For a long time unemployment was close to zero, although after the crisis of 2008 it is at a level of 5-6% in 2011.

It is important to point out that the Luxembourgish authorities are an example of long-term orientation; they were able to adapt and react to all the crises i.e. in steelmaking and in the banking system, always with the objective of guaranteeing stability and wealth for its people. It seems as if there was an invisible line of stability and wealth that is guaranteed throughout the centuries. Typical words for the national identity are wealth, privileges, stability through the conserving of the attractiveness of the country compared to neighbouring countries, because of its industry, its labour market, its fiscal benefits, the main key of success of the country.

Being part of this system and the feeling it gives, is the glue of the country, the sense of being part of it (Spizzo, 1995).

Despite all the wars, Luxembourg still survives. Despite all the requests from the European partners for fiscal homogeneity, despite the demands to abolish the borders and the ending of bank secrecy, and the exchange of information on bank accounts, Luxembourg still survives. Luxembourg is a small country, and it is strongly attached to the rock it is built on, like a medieval defensive city (Spizzo, 1995).

Luxembourg has always stayed 'neutral'. This 'neutrality' has often been compared to Switzerland's neutrality. Luxembourg was able to stay neutral between its neighbouring countries France and Germany. Therefore the 'privileges' are seen as a unifying identifier for the Luxembourgers.

After World War I the need was to assure the national identity, to make people understand why it was important to be "Luxembourgers", to give value to the concept of "citizenship", to give value and special rights to the fact of being a "Luxembourg citizen".

Only when Nazism engulfed this small country, because to the Germans this small piece of land seemed to be German, did the linguistic aspect attain its importance.

From that time the Luxembourgish language got its importance (Spizzo, 1995) and became the discriminating factor to distinguish between who was able to benefit from Luxembourgish citizenship, and who not. Luxembourgish is more a dialect, and has more the characteristics of a dialect, especially because there is no translation of the Bible into Luxembourgish. Luxembourgish does not have a long written tradition, but it is spoken by everybody (Spizzo, 1995). The language defines the in-group (Briley, 2005) and the out-group. Who speaks Luxembourgish is part of the in-group, the others not. Official documents are in French or in German. Mostly, French is for bureaucratic problems, and German is for the religious ceremonies. Now, this dialect, this language has become the discriminating element for citizenship. In order to benefit from all of the advantages of the Luxembourgish nationality, one has to be able to speak Luxembourgish. 53% of the working population are foreigners. The distinction of the "rescue" language is the citizenship that is only given to people who speak Luxembourgish (Spizzo, 1995). The language therefore gives access to the advantages of the rights of the citizenship.

The following chapter 4.8 will show if and why Luxembourgers are happy, given these cultural dimensions.
# **4.8 Hofstede's Cultural Dimension 'Indulgence Versus Restraint' or 'Subjective Well-Being' or 'Happiness'**

## 4.8.1 Introduction.

Of particular interest in regards to my research question – "Where does Luxembourg fit in on Hofstede's cultural dimensions?" – is Hofstede's recently added (in 2010) cultural dimension that he calls '**Indulgence Versus Restraint (IVR)**' or '**Subjective Well-Being**' and which is commonly called '**Happiness'** in the literature. Hofstede, together with Minkov and his son Gert Jan Hofstede, added this 'happiness' dimension to the other five earlier identified cultural dimensions in their 2010 book. 'Happiness' becomes his sixth cultural dimension after his initial four dimensions **Individualism/Collectivism (IDV)**, **Power Distance (PDI)**,

**Masculinity/Femininity (MAS) and Uncertainty Avoidance (UAI)** and his later added fifth dimension **Long-Term Orientation (LTO)/Short-Term Orientation**. Hofstede calls the 'happiness' cultural dimension 'Subjective Well-Being' or 'Indulgence Versus Restraint' (IVR), a denomination given by Minkov and will remain their/his official denomination. The definition by Hofstede et al. (2010, p. 281) is: 'Indulgence stands for a tendency to allow relatively free gratification of basic and natural desires related to enjoying life and having fun. Its opposite pole, restraint, reflects a conviction that such gratification needs to be curbed and regulated by strict social norms''.

The objective of this chapter is to find out, how happy people at Lindab Luxembourg, France, and Germany are, how high the probability is for people at Lindab of being happy by analysing different dependent variables. Following this trend of happiness studies, the objective of this chapter on 'happiness' is to predict the probability of being happy at Lindab Luxembourg, France, and Germany, depending on different variables such as '**taking risk**' or '**not taking**  **risk**', **'taking free time for life**', **'level of education**', **'daring to contradict the boss**', **'state of health**', and **'importance of religion'**. These are just some dependent variables, that I have choosen from the many variables available from the questionnaire, further research is needed to analyse others. The statistical method used is **'Logistical Regression'** or **'Logit'**, performed in **SPSS** from **IBM**.

#### 4.8.2 Happiness studies.

Happiness studies have been very popular for several years. In Hofstede's book from 2010 chapter 8 is about happiness studies, entitled 'Light or Dark'. In 2001, he did not study happiness in detail. Now he follows the stream of Minkov (2011, p. 51), Inglehart (1997, p. 83), Aaker (2011) and many other authors from Stanford Graduate School of Business (2010) who write about happiness. Hofstede calls the 'happiness' dimension 'Subjective Well-Being' or "Indulgence versus Restraint (IVR)".

**Inglehart** calls this dimension '**Well-being versus survival**' in his **WVS**. This dimension of Inglehart's WVS was following Hofstede et al. (2010, p. 279) "associated with the combination of high individualism (IDV) and low masculinity (MAS)... Other items that defined this dimension had to do with giving priority to economic and physical security over quality of life, being politically passive, rejecting homosexuality, and being very careful about trusting people. Further, the dimension was strongly correlated with a belief that men make better political leaders and that women need children to be fulfilled, an emphasis on technology, a rejection of out-group members (such as foreigners)....". Hofstede et al. (2010, pp. 280) state that **Minkov** analysed the data from Inglehart's WVS and his 'Well-Being versus Survival' dimension to discover a dimension that he called '**Universalism versus Exclusionism**'. Minkov considered that the three following items are core to the new happiness dimension: 1.

**Happiness, 2. Life control, 3. Importance of leisure**. Besides these three key items, the importance of having friends was positively associated with 'happiness' (Hofstede et al., 2010, p. 281). Indulgence would then mean "that one can act as one pleases, spend money, and indulge in leisurely and fun-related activities with friends or alone. All this predicts relatively high happiness. At the opposite pole we find a perception that one's actions are restrained by various social norms and prohibitions and a feeling that enjoyment of leisurely activities, spending, and other similar types of indulgence are somewhat wrong" (Hofstede et al., 2010, p. 281).

**Mogilner, Aaker and Kamvar's (2011) 'pursuit of happiness**' shows us how important happiness is in our lives. They found out that happiness changes with age. Younger people are happy whilst being excited, whereas older people are happy whilst being in peace. Companies have started researching happiness in association with their brands, e.g. Coca Cola. Happiness is also correlated with wealth and/or poverty (Hofstede et al., 2010, p. 280).



Figure 4.12 The Happiness Formula (adapted from Aaker, 2011)

The meaning(s) of happiness are multiple. The citation from Mogilner et al. (2011, p. 5) shows its diversity: Happiness is defined as "a state of well-being and contentment; a pleasurable

or satisfying experience" (Merriam-Webster's Collegiate Dictionary, 2009). Drawing on this definition, some researchers treat happiness as singular in nature, with happiness meaning the same thing to all individuals (Myers and Diener, 1995; Layard, 2005). Other researchers suggest that happiness is highly subjective, meaning distinct things to each individual (Gilbert, 2006). Yet a third stream of research suggests that there are multiple types of happiness, which shift in frequency across culture (Tsai, Knutson, and Fung, 2006) and age (Mogilner et al., 2011). This third line of work hones in on two types of positive emotion that when experienced are each subject to being identified as happiness. The first includes excitement, elation, and enthusiasm, and has been defined as a positive effect that is high in arousal. The second includes calm, peacefulness, and serenity and has been defined as a positive effect that is low in arousal" (Barrett, 1998; Bradley and Lang, 1999; Russell and Barrett, 1999). Mogilner et al. (2011, p. 6) state that happiness shifts "over the course of life from excited-happiness when one is young to peaceful-happiness as one gets older."

"There is no shortage of theories that explain the observed national differences in happiness. Many of them are based on relatively small country samples and are consequently unreliable as a general explanation. No one denies the evident fact that the determinants of happiness are numerous and that some of them may be more prominent in one society than in another. Nevertheless, that does not mean that universal trends are impossible to find." (Hofstede et al., 2010, p. 279).

In different areas, researchers try to find the best measures of happiness. These different areas are as varied as psychology, economics, political science and many more. The objective is to find ways to measure happiness, to increase happiness and to find out why happiness is important. Increasingly an employee's happiness is becoming the focus of interest. Mogilner et al. (2011, p. 4) concentrate on what companies do to increase happiness: "Nesquik claims, "You can't buy happiness, but you can drink it." Dunkin' Donuts promotes a breakfast sandwich as "The happiest sandwich on Earth." Nivea offers a body lotion, "Happy Sensation." Hugo Boss offers "Orange, the fragrance of happiness," and Clinique similarly offers a perfume named "Clinique Happy." Through interactive campaigns, marketers have also sought to cultivate happiness. Coca-Cola launched the "Open Happiness" campaign, which recognizes life's simple pleasures and encourages consumers to take a small break from the day to connect and share happiness with others. BMW developed a "Stories of Joy" global communication campaign that hosts consumer-created videos highlighting the joy of driving. Whiskas encourages consumers to share their "Happiness with Whiskas" cat moments and become a member of the "Happy Together" online community for feline lovers.... Yahoo! stared the "Purple Acts of Kindness."

The question is: Are you happy? Yes or no. If no: Do you want to be happy? Yes or no. If Yes: you have to do something to make yourself happy. That is the happiness formula.

Stanford Graduate School of Management (2010, p. 11) makes a suggestion: "Live life with a purpose." They say that volunteer work makes people feel good. This is one way of finding happiness. Others are the pursuit of wealth (p.3), the free choice (p.4), the reduction of unhappiness (p. 8), the national policy (p. 9) and the balance in meaningfulness in different domains (p. 11): "Work/Career/School, Home/Family, Community/Society, Self (Mind/Body/Spirit)."

Stanford Graduate School of Management (2010, p. 12) concludes with a citation from Blaise Pascal: "All men seek happiness. This is without exception. Whatever different means they employ, they all tend to this end."

In 2009 in Luxembourg, the 'Conseil économique et social' (CES) and the 'Conseil supérieur pour un développement durable' (CSDD) were mandated by the Government with the development of an indicator system for the measurement of happiness (Gantenbein, 2012). What makes people happy? is the question. As the gross domestic product (GDP) does not say enough about people's quality of life, new indicators for the measurement of well-being will be developed in Luxembourg. The OECD has defined eleven criteria that play an important role in connection with well-being: health, place of residence, income, work, environment, social relationships, involvement in social life, governmental guidance, life satisfaction, security and work-life balance (Gantenbein, 2012). Also in 2009 in Luxembourg, the 'PIBien-être' project started. This has the aim to find how the population was feeling. Following Statec-Director Serge Allegrezza, Luxembourg is missing indicators on social relationships, honorary engagement, governmental guidance, education and satisfaction. Martine Durand, director of the OECD statistics authority says that these indicators are difficult to measure, and that the growth of the GDP does not automatically lead to the growth of well-being (Gantenbein, 2012). More information is to be found under http://www.yourbetterlifeindex.org/html .

In my studies the correlation between happiness and uncertainty avoidance with Luxembourgers is tested. The Luxembourgish nationality is defined by high uncertainty avoidance. This high uncertainty avoidance defines the behaviour of Luxembourgers, and of them being happy. Luxembourgers are happy because they are uncertainty avoidant.

Three models have been chosen in the following logistic regression to intensify the level of prediction of happiness for Lindab.

## **4.8.3** Logistic regression – logit on 'happiness'.

Logistic Regression is a statistical method used to model the relationship between a qualitative dependent variable – for example 'happiness' – and a combination of independent variables – for example 'taking risk', 'free time for life', 'level of education', 'job level manager or non-manager', 'state of health', or 'religion'.



Figure 4.13 Logistic Regression – Definition (adapted from Pallant, 2010, and Tabachnick and Fidell, 2007)

Logistic Regression is clearly explained by Pallant (2010, pp. 168-180) and Tabachnick

and Fidell (2007, pp. 23-24). Tabachnick and Fidell (2007, pp. 24-25) explain it simply:

"Logistic regression allows prediction of group membership when predictors are continuous,

discrete or a combination of the two. For example, prediction of whether someone is a belly dancer may be based on gender, occupational category, preferred type of reading material, and age. Logistic regression allows to evaluate the odds (or probability) of membership in one of the groups (e.g., belly dancer) based on the combination of values of the predictor variables (e.g., 35-year-old female professors who read science fiction)".

Logistic Regression is calculated in SPSS. SPSS is a computer program from IBM. SPSS means 'Statistical Package for the Social Sciences'. Between 2009 and 2010 it was called PASW – 'Predictive Analytics SoftWare'.

In the case of Lindab Buildings the focus was on the question if people are happy or not, depending on if they love taking risk or avoid taking risk, if they use free time for life, personal or home life or not, if they have a high or low level of education, if they are a manager or nonmanager, if their state of health is good or not, and if they give importance to religion or not.

In my research, the following three models have been chosen. In Table 4.5.1 the qualitative dependent variable 'happiness' is combined with the independent variables 'taking risk', 'free time for life', 'level of education'. In Table 4.6.1 the qualitative dependent variable 'happiness' is combined with the independent variables 'taking risk', 'free time for life', 'level of education' and 'job level manager or non-manager'. In Table 4.7.1 the qualitative dependent variable 'happiness' is combined with the independent variables 'taking risk', 'free time for life', 'level of education' education', 'contradict the boss', 'state of health', and 'importance given to religion'.

In this research, binary logistic regression is used. Hence, the dependent variable y (the variable to be explained) has only two values 0 and 1, and the purpose is to examine the probability that y = 1. Among the different modalities of each independent variable, reference modalities are chosen. Then every other modality of an independent variable has to be compared with the reference modality.

# 4.8.3.1 First model: Logistic regression on 'happiness'.

In table 4.6.1 a first result with the help of a **first model** is presented. With the dependent variable 'Happiness', three explanatory variables are chosen as dependent variables, the 'Taking Risk', 'Free Time for Life' and the 'Level of Education'.

Table 4.6.1 Logistic regression – Being happy – Regression coefficient and Odds Ratio

	<b>Regression Coefficients</b>		Odds Ratios		
Taking Risk	1.291	**	3.638	***	
Free Time for Life	0.898	*	2.456	***	
Level of Education	-0.786	*	0.456	***	
Constant	1.027	**	2.793	***	
Significance le	vels: *** < 5%, ** < 10%, *	< 15%			
<ul> <li>'Taking Risk' corresponds to question QCPY1. 'Free Time for Life' corresponds to VAL1, 'Level of Education' corresponds to QGRL5.</li> <li>'Taking Risk' = 0 = avoid risk = in QCPY1 corresponds to reply 1, 2 = 1 = take risk = in QCPY1 corresponds to reply 3,4,5</li> </ul>					
<ul> <li>'Level of Education = 0 = lower than and equal to bac+3, in QGRL5 corresponds to 1,2,3 = 1 = higher than bac+3, in QGRL5 corresponds to 4,5,6</li> <li>'Free Time for Life' = 0 = in QVAL1 corresponds to reply 3, 4, 5</li> </ul>					
<ul> <li>Nagelkerke = R<sup>2</sup> (or Cragg-Uhler) = 0.105</li> <li>R<sup>2</sup> of logistic regressions is not quite akin to the R<sup>2</sup> of typical multiple linear regressions.</li> <li>It is not necessary that it is near to 1 to indicate that the introduced explanatory variables</li> </ul>					

It is not necessary that it is near to 1 to indicate that the introduced explanatory variables correctly explain the variance of the model. It is a quite rough estimation of the variance that can be forecast by the combination of the explanatory independent variables. In fact, it is a pseudo  $R^2$ . Here, 23% of the variance to know or not if the people are happy can be explained by the linear combination of the introduced independent variables, which is an acceptable result.

	Constant	Taking Risk	Free Time for Life	Level of Education
Constant	1.000	-0.354	-0.732	-0.291
Taking Risk		1.000	0.163	0.039
Free Time for Life			1.000	-0.221
Level of Education				1.000
All correlation co	efficients ar	e significant at 5	5% level.	
		-		

 Table 4.6.2 Logistic regression – Being happy – Correlation Matrix

#### Table 4.6.1 and 4.6.2 show the following:

#### The Odds Ratios show (Table 4.6.1):

1) The chances of being happy for people who take risks are 263% higher ((3.63-1) x 100%) than the chances of people who do not take risk, this is almost 4 times more. This is also shown in Aaker (2010, 2011) and Briley (2007). Liberty at the workplace is part of the liberty and freedom that makes up the happiness of people at work. Companies who understood this are able to motivate their employees more than companies who did not understand it.

2) The chances of being happy for people for whom free time for them is important are 145% higher ((2.45-1) x 100%) than the chances of people for whom free time for them is not important (This is 2.5 times more). Private life is an element of happiness. This is shown by Hofstede et al. (2010). Stanford Graduate School of Business (2010, p. 10) say that "very happy people spend the least time alone and the most time socializing". Unhappy people have few social relationships. Happy people socialise, have free time for themselves, and use it to keep friendships. Happy people relate to other people, they are happy because they have family, friends, romantic partners, and love, making their lives meaningful.

3) The chances of being happy for people whose education level is < bac+3 are 122% higher ( $(\frac{1}{0.45} - 1)x 100\%$ ) than the chances for those who have a level of education >bac+3. In general people with an education level < bac+3 do not complicate their lives with difficult thoughts and too much reflection. They are happy with simple things, whereas people with an education level > bac+3 might reflect too much, having complicated thoughts on their mind, complicating life and ruining their level of happiness with their reflections. Hofstede et al. (2010, p. 278) says happiness is called subjective well-being (SWB) in the academic world. Hofstede cites Inglehart's World Values Survey and Inglehart's opposite dimensions 'well-being' versus 'survival'. "It was associated with the combination of high individualism (IDV) and low masculinity (MAS)" (Hofstede et al., 2010, p. 279).

## The correlation matrix shows the following (Table 4.6.2):

There is a negative relationship (-0.221) between the 'free time for life' and 'level of education' variables. This shows that when people have higher education they tend to allocate less free time for their personal life.

There is a positive (0.163) relationship between the 'free time for life' and 'taking risk' variable. That shows that when people take free time for life they tend to take more risks.

The tendency of society is a search for happiness, but also crisis management and search for meaningfulness. Since Hofstede (1980) started his research in the 1960s many years have gone by, societies have changed and also the importance that societies attach to things. Europe has grown and come to a profound crisis. Globalisation is an issue that remains to be resolved. People try to find a sense of themselves in jobs, in education, in religion, in social work, in volunteer work. Stanford Graduate School of Business, with Jennifer Aaker as professor, proclaims the happiness that volunteer work provides. Others see love as bringer of happiness. This would be the "eternal search for love". Others see money as the bringer of happiness. But can you buy love with money? Can you buy friendships with money? The eternal search for wealth has its limitations. Hofstede and Inglehart find that relatively poor people are happier than rich people (Hofstede et al., 2010, p. 207).

# **Calculation of the probabilities (following the Regression Coefficients)**

It is now possible to comment on table 4.6.1 by using the regression coefficients - this

corresponds to reading the table by column, after having read it by line before.

The probability to be happy is calculated for a **first person** with the following characteristics: I consider a person **who takes risks**, has a high level of education and takes free time for himself/herself (3 explanatory variables).

Table 4.6.2.1 First person

Constant	1.027
For a person who takes risks	$+(1.29) \ge 1$
Who has a high level of education	+ (-0.786) x 1
And who takes free time for himself/herself	$+(0.89) \ge 1$
Z =	2.421
z = 2.421	
$e^{z} = 11.257$	
$e^{z}$ + 1 = 12.257	
$(y = 1) = \frac{e^z}{1 + e^z} = \frac{1}{1 + e^{-z}} = \frac{1}{1 + e^{-z}} = \frac{1}{1 + e^{-z}}$ logit = p with z = $\alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \alpha_3 x_3 + \dots + e^{-z}$	$\frac{1}{e^{-(\sum_{n=1}^{\infty}(\alpha_{i}x_{i})-\alpha_{0}+e_{\Box})}}$ $\alpha_{n}x_{n}+e$
with $\alpha_0$ the constant with $\alpha_1, \alpha_2, \alpha_3, \dots, \alpha_n$ the coefficients of t with $x_1, x_2, x_3, \dots, x_n$ the independent (o	he model r explanatory) variables
$p = \frac{e^z}{1 + e^z}$	
$p = \frac{11.257}{12.257}$	
p = 0.91	
The probability for this person to be happy	v is 0.91. This is a very high probability.

The probability to be happy is calculated for a **second person** with the following characteristics: I consider a person **who does not take risks**, has a high level of education and takes free time for himself/herself.

Table 4.6.2.2 Second person

Constant	1.027
For a person who does not take risks	$-(1.29) \ge 0$
Who has a high level of education	+ (-0.786) x 1
And who takes free time for himself/herself	$+(0.89) \ge 1$
Z =	1.131
$e^{z} = 3.0987$	
$e^{z}$ + 1 = 4.0987	
-	
<u>e²</u>	
p= 1 + e <sup>z</sup>	
0.0007	
3.0987	
<sup>P-</sup> 4.0987	
p = 0.756 (3 chances out of 4)	

The probability for this person to be happy is 0.756. This is a lower probability than 0.91. The probability for this person to be happy is lower than for the first person.

The result is: the probability to be happy for a person who takes risks and who takes free time for himself/herself and who has a high level of education is 0.91 and therefore higher than for the same person with all criteria equal but who does not take risks.

Hofstede et al. (2010) ask a question on page 278: "The countries with the highest percentages of very happy respondents are typically poor or not particularly wealthy. They are located in western Africa (Nigeria, Ghana) and in northern Latin America (Mexico, El Salvador, Colombia, Venezuela). What are we to make of this?"

We see at Lindab that people that Lindab generally are very happy and this is independent of their location (Luxembourg, France or Germany).

# 4.8.3.2 Second model: Logistic regression on 'happiness'.

In table 4.7.1 a second result with the help of a **second model** is presented. With the dependent variable 'Happiness', four explanatory variables are chosen as independent variables, the 'Taking Risk', 'Free Time for Life', 'Level of Education' and 'Manager or Non-Manager'.

Table 4.7.1 Logistic regression – Being happy – Regression coefficient and Odds Ratio

0 0	0 110 0				
	Regression Coefficient	Odds Ratios			
Taking Risk	1.261	3.528			
Free Time for Life	1.147	3.150			
Level of Education	-1.044	0.352			
Manager or Non-Manager	0.860	2.364			
Constant	0.726	2.067			
Significance levels: *** < 5%, ** < 10%, * < 15% 'Taking Risk' corresponds to question QCPY1. 'Free Time for Life' corresponds to QVAL1, 'Level of Education' corresponds to QGRL5, 'Manager or Non-Manager corresponds to QGRL6.					
'Taking Risk' = 0 = avoid risk = in QCPY1 corresponds to reply 1, 2 = 1 = take risk = in QCPY1 corresponds to reply 3,4,5					
'Level of Education = $0$ = lower than and equal to bac+3, in QGRL5 corresponds to 1,2,3 = 1 = higher than bac+3, in QGRL5 corresponds to 4,5,6					
'Free Time for Life' = $0 =$ in QVAL1 corresponds to reply 3, 4, 5 = $1 =$ in QVAL1 corresponds to reply 1 and 2					
Manager or Non-Manager = $0 =$ in QGRL6 corresponds to reply 3, 4, 5, 6, 7 = $1 =$ in QGRL6 corresponds to reply 1 and 2					
Nagelkerke = $R^2 = 0.130$	)				

	Constant	Taking Risk	Free Time for	Level of	Manager or
			Life	Education	Non-Manager
Constant	1.000	-0.349	-0.748	-0.126	-0.348
Taking Risk		1.000	0.159	0.059	-0.010
Free Time for Life			1.000	-0.334	0.307
Level of Education				1.000	-0.344
Manager or Non-					1.000
Manager					
All correlation	coefficient	s are significant	at 5% level.		

 Table 4.7.2 Logistic regression – Being happy – Correlation Matrix

#### Table 4.7.1 and 4.7.2 show the following:

#### The Odds Ratios show (Table 4.7.1):

1) The chances of being happy for people who take risks are 253% higher ((3.53 - 1) x

100%) than the chances of people who do not take risk. See results from previous case 4.6.1.

2) The chances of being happy for people for whom free time for them is important are 215% higher ((3.15 - 1) x 100%) than the chances of people for whom free time for them is not important. See results from previous case 4.6.1.

3) The chances of being happy for people whose education level is < bac+3 are 184% higher ( $(\frac{1}{0.352} - 1)x \ 100\%$ ) than the chances for those who have a level of education >bac+3. See results from previous case 4.6.1.

4) The chances of being happy for people whose job level is 'Manager' are 136.4% higher  $((2.364 - 1) \times 100\%)$  than the chances for those who have a job level of 'Non-Manager'. This is approximately 2.5 times higher. This is interesting. Managers at Lindab have more chances of

being happy than Non-Managers at Lindab. Further research would be necessary to determine the reasons for this. In general, employees at Lindab are happy, but the fact that Managers are even 2.5 times happier than Non-Managers is interesting.

#### The correlation matrix shows the following (Table 4.7.2):

There is a negative relationship (-0.334) between the 'free time for life' and 'level of education' variables. That shows that when people have higher education they tend to allocate less free time for their personal life.

There is positive relationship (0.307) between 'manager or non-manager' and 'free time for life' variable. That shows that people with job level 'manager' allocate more free time for life.

There is a negative relationship (-0.344) between 'manager or non-manager' and 'level of education' variable. That shows that people with job level 'manager' tend to have a lower level of education. This is an astonishing result. At Lindab, Managers tend to have a lower level of education than Non-Managers. This means, that at Lindab, people are given responsibility independently from their level of education, but more dependently on their level of knowledge and competence.

The other correlations are insignificant.

# **Calculation of the probabilities (following the Regression Coefficients)**

It is now possible to comment on table 4.7.1 by using the regression coefficients - this

corresponds to reading the table by column, after having read it by line before.

The probability to be happy is calculated for a **first person** with the following

characteristics: I consider a person who takes risks, takes free time for himself/herself, has a

high level of education, and has Manager job level.

#### Table 4.7.2.1 First person

Constant	0,726
For a person who takes risks	$+(1.261) \ge 1$
And who takes free time for himself/herself	$+(1.261) \ge 1$
Who has a high level of education	+ (-1.044) x 1
Who has Manager job level	$+(0.86) \ge 1$
z =	2.95
z = 2.95	
$e^{z} = 19.1059$ $e^{z} + 1 = 20.1059$	
$(y = 1) = \frac{e^z}{1 + e^z} = \frac{1}{1 + e^{-z}} = \frac{1}{1 + e^{-z}}$ logit = p with z = $\alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \alpha_3 x_3 + \dots + e^{-z}$ with $\alpha_0$ the constant with $\alpha_1, \alpha_2, \alpha_3, \dots, \alpha_n$ the coefficients of t with $x_1, x_2, x_3, \dots, x_n$ the independent (0)	$\frac{1}{x_n x_n + e}$ he model r explanatory) variables
$p = \frac{e^z}{1 + e^z}$	
$p = \frac{19.1059}{20.1059}$	
p = 0.95	
The probability for this person to be happy	v is 0.95. This is a very high probability, near 1.

The probability to be happy is calculated for a **second person** with the following characteristics: I consider a person **who does not take risks**, but all the other independent variables are equal, such as he/she takes free time for himself/herself, has a high level of education, and has Manager job level.

 Table 4.7.2.2 Second person

Constant	0,726
For a person who does not take risks	$+(1.261) \ge 0$
And who takes free time for himself/herself	$+(1.261) \ge 1$
Who has a high level of education	+ (-1.044) x 1
Who has Manager job level	$+(0.86) \ge 1$
Z=	1.689
z = 1.689	
$e^{z} = 5.414$	
$e^{z}$ + 1 = 6.414	
_	
e <sup>z</sup>	
p= 1 <b>+</b> <i>e</i> <sup>z</sup>	
5.414	
$p=\frac{1}{6.414}$	
p = 0.84	

The probability for this person to be happy is 0.84. This is a lower probability than 0.95. The probability for this person to be happy is lower than for the first person.

The result is the following: The probability to be happy for a person who takes risks, who takes free time for himself/herself and who has a high level of education and whose job level is Manager is higher than for the same person with all criteria equal but who does not take risks.

## 4.8.3.3 Third model: Logistic regression on 'happiness'.

In table 4.8.1 a third result with the help of a **third model** is presented. With the dependent variable 'Happiness', six explanatory variables are chosen as independent variables, the 'Taking Risk', 'Free Time for Life', 'Level of Education' and 'Contradict boss', 'State of Health' and 'Importance of Religion'.

	Regression Coefficients	Odds Ratios			
Taking Risk	0.931	2.538			
Free Time for Life	0.974	2.647			
Level of Education	-0.930	0.394			
Contradict boss	1.096	2.993			
State of health	1.485	4.416			
Importance of Religion	0.677	1.969			
Constant	-0.628	0.534			
Significance levels: *** < 5%, ** < 10%, * < 15%					

Table 4.8.1 Logistic regression – Being happy – Regression coefficient and Odds Ratio

'Taking Risk' corresponds to question QCPY1. 'Free Time for Life' corresponds to QVAL1, 'Level of Education' corresponds to QGRL5, 'Contradict boss' corresponds to QCPY16, 'State of health' corresponds to QVAL20, and 'Importance of Religion' corresponds to QVAL21.

'Taking Risk' = 0 = avoid risk = in QCPY1 corresponds to reply 1, 2 = 1 = take risk = in QCPY1 corresponds to reply 3,4,5

'Level of Education = 0 = lower than and equal to bac+3, in QGRL5 corresponds to 1,2,3 = 1 = higher than bac+3, in QGRL5 corresponds to 4,5,6

'Free Time for Life' = 0 = in QVAL1 corresponds to reply 3, 4, 5 = 1 = in QVAL1 corresponds to reply 1 and 2

'Contradict boss' = 0 = in QCPY16 corresponds to reply 3, 4, 5 = 1 = in QCPY16 corresponds to reply 1 and 2 'State of Health' = 0 = in QVAL20 corresponds to reply 3, 4, 5 = 1 = in QVAL20 corresponds to reply 1, 2 'Importance of Religion' = 0 = in QVAL21 corresponds to reply 5 = 1 = in QVAL21 corresponds to reply 1, 2, 3, 4 **Nagelkerke** =  $R^2$  = 0.287

	-	-		-			
	Constant	Taking	Free	Level of	Contradict	State of	Importance
		Risk	Time for	Education	boss	health	of Religion
			Life				
Constant	1.000	-0.260	-0.602	-0.135	-0.230	-0.310	-0.365
Taking		1.000	0.214	0.054	-0.149	0.105	-0.195
Risk							
Free Time			1.000	-0.213	0.126	0.006	-0.101
for Life							
Level of				1.000	0.182	-0.279	-0.122
Education							
Contradict					1.000	-0.233	-0.065
boss							
State of						1.000	0.086
health							
Importance							1.000
of Religion							

 Table 4.8.2 Logistic regression – Being happy – Correlation Matrix

All correlation coefficients are significant at 5% level.

## Table 4.8.1 and 4.8.2 show the following:

#### The Odds Ratios show (Table 4.8.1):

1) The chances of being happy for people who take risks are 153.8% higher ((2.538-1) x

100%) than the chances of people who do not take risk. See results from previous case 4.6.1 and

4.7.1.

2) The chances of being happy for people for whom free time is important are 164.7%

higher ((2.647-1) x 100%) than the chances of people for whom free time is not important. See results from previous case 4.6.1 and 4.7.1.

3) The chances of being happy for people whose education level is < bac+3 are 154% higher ( $(\frac{1}{0.394} - 1)x \ 100\%$ ) than the chances for those who have a level of education >bac+3. See results from previous case 4.6.1 and 4.7.1.

4) The chances for being happy for people who contradict their boss are 199.3% higher  $((2.993 - 1) \times 100\%)$  than the chances for those who do not contradict their boss. This is astonishing. This results at Lindab shows that employees who take the courage to contradict their superiors are happier than those who do not dare contradict him/her. Happiness depends on the fact that the boss does not resent being contradicted. This makes employees happy: Daring to contradict the boss and not being afraid of him/her resenting the contradiction.

5) The chances of being happy for people whose state of health is good are 341.6% higher  $((4.416 - 1) \times 100\%)$  than the chances for those whose state of health is not good. It seems logical that people who are in good health are happier than those who are in bad health. Stanford Graduate School of Business (2010) states this also. Minkov (2011, p. 79ff) writes about the correlation between happiness and health. He analyses also the correlation between happiness and wealth (p.55ff).

6) The chances for being happy for people who attach importance to religion are 96.9% higher chances ( $(1.969 - 1) \times 100\%$ ) than the chances for those who do not attach importance to religion.

This is twice the chances for people who attach importance to religion for being happy.

## The correlation matrix shows the following (Table 4.8.2):

There is a positive (0.214) relationship between 'taking risk' and 'free time for life' variables. That tends to imply that the more 'taking risk' is high the more free time for life is taken.

There is a negative relationship (-0.213) between the 'free time for life' and 'level of education' variables. That tends to imply that when people have higher education they tend to allocate less free time for their personal life.

There is a negative relationship (-0.195) between 'taking risk' and 'religion'. That tends to imply that when people for whom religion is important tend to take less risk.

There is a positive (0.182) relationship between 'level of education' and 'contradict boss' variables. That tends to imply that more the level of education is high, more people tend to contradict their boss.

There is a negative relationship (-0.279) between the 'level of education' and 'state of health' variables. That tends to imply that more the level of education is high, the less good the state of health of people tends to be.

There is a negative relationship (-0.233) between the 'contradict boss' and 'state of health' variables. That tends to imply that more people tend to contradict their boss, the less their state of health tends to be good.

The other correlations are insignificant.

# **Calculation of the probabilities (following the Regression Coefficients)**

It is now possible to comment on table 4.8.1 by using the regression coefficients - this

corresponds to reading the table by column, after having read it by line before.

The probability to be happy is calculated for a **first person** with the following characteristics: I consider a person **who takes risks**, who takes free time for himself/herself, has a high level of education, who dares to contradict the boss, whose state of health is good and for whom religion is important.

Table 4.8.2.1 First person

Constant	-0.628
For a person who takes risks	+(0.931)x1
And who takes free time for himself/herself	+(0.974)x1
Who has a high level of education	+(-0.930)x1
Who dares to contradict the boss	+(1.096)x1
Whose state of health is good	+(1.485)x1
For whom religion is important	+(0.677)x1
=	3.605
z = 3.605	
$e^{z} + 1 = 37.7817$ $(y = 1) = \frac{e^{z}}{1 + e^{z}} = \frac{1}{1 + e^{-z}} = \frac{1}{1 + e^{-z}}$ logit = p with z = $\alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \alpha_3 x_3 + \dots + \alpha_{n}$ with $\alpha_0$ the constant with $\alpha_1, \alpha_2, \alpha_3, \dots, \alpha_n$ the coefficients of t with $x_1, x_2, x_3, \dots, x_n$ the independent (or $p = \frac{e^{z}}{1 + e^{z}} \qquad p = \frac{36.7817}{37.7817}$ $p = 0.97$	$\frac{1}{x_n e^{-(\sum_{n=1}^{\infty} (\alpha_1 x_i) - \alpha_0 + e_n)}}$ $\alpha_n x_n + e$ he model r explanatory) variables
The probability for this person to be happy	is 0.97. This is a very high probability, near 1.

The probability to be happy is calculated for a **second person** with the following characteristics: I consider a person **who does not take risks**, but all the other independent variables are equal, such as he/she takes free time for himself/herself, has a high level of education, dares to contradict the boss, whose state of health is good and for whom religion is important.

<b>Table 4.8.2</b>	2.2 Second	person
--------------------	------------	--------

Constant	-0.628
For a person who does not take risks	+(0.931)x0=0
And who takes free time for himself/herself	+(0.974)x1
Who has a high level of education	+(-0.930)x1
Who dares to contradict the boss	+(1.096)x1
Whose state of health is good	+(1.485)x1
For whom religion is important	+(0.677)x1
=	2.674
z = 2.674	

*e<sup>z</sup>* + 1 = 15.4978

$$p = \frac{e^z}{1 + e^z}$$

p=15.4978

p = 0.94

The probability for this person to be happy is 0.94. This is a lower probability than 0.97. The probability for this person to be happy is lower than for the first person. But it is still a very high probability of 9.4 out of 10 of being happy.

The result is the following: The probability to be happy for a person who takes risks, who takes free time for himself/herself and who has a high level of education and dare to contradict the boss, and has a good state of health and for whom religion is important is 0.97 and therefore higher than for the same person with all criteria equal but who does not take risks (0.94). Both probabilities are still very high and the difference is not that big.

## Explanation of the calculation in general: The calculation is as follows:

Three cases have to be distinguished when commenting on Odds Ratios: Note that modality 0 represents the reference modality.

**First case: if the Odds Ratios are < 0.5** Example: 'Level of Education QGRL5' 'Level of Education QGRL5': 1 is > bac+3 'Level of Education QGRL5': 0 is < bac+3

The conclusion is that people who have the modality 0 have more chances to be happy than people with modality 1.

$$Calculation = \left(\frac{1}{Odds \ Ratios} - 1\right) x \ 100$$

Second case: if the Odds Ratios are > 1 Example: 'Taking Risk QCPY1' 'Taking Risk QCPY1': 1 is love taking risk 'Taking Risk QCPY1': 0 is avoid risk

The conclusion is that people who have the modality 1 have more chances to be happy than people with modality 0.

Calculation = (Odds Ratios -1) x 100

Third case: if 0.5 < Odds Ratios < 1 Example: 'Nationality' (not shown in the before 3 models) 'Nationality': 1 is Luxembourgish 'Nationality': 0 is Other nationality

The conclusion is that people who have the modality 1 have less (!) chances to be happy than those who have the modality 0.

$$Calculation = \left(\frac{1}{Odds \ Ratios} - 1\right) x \ 100$$

# Mathematical writing of the model:

$$\frac{p(y=1)}{p(y=0)} = \frac{p(y=1)}{1-p(y=1)}$$

$$\frac{p(y=1)}{1-p(y=1)} \quad \mathbf{x} = \mathbf{1}$$

$$\frac{p(y=1)}{p(y=1)} \quad \mathbf{x} = \mathbf{0}$$
Odds Ratio =  $\frac{p(y=1)}{1-p(y=1)} \quad \mathbf{x} = \mathbf{0}$ 

If Odds Ratio = 1, the variable x has no effect on variable y

#### 4.8.4 Conclusion: Logistic regression on 'happiness'.

Happiness is an independent variable that determines the behaviour of people (Hofstede et al., 2010). In many studies 'happiness' as dependent variable is correlated with several independent variables. In my research the dependent variables are 'taking risk', 'free time for life', 'level of education', 'contradicting the boss', 'state of health', 'importance of religion'. These independent variables have been chosen for the purpose of this research. Further research is needed to research all the other independent variables that are to be researched from the questionnaire. There were 75 questions in the questionnaire. I have chosen just some of them.

Minkov (2011, p. 78) states that the "WVS presents another four choices: 1. a stable economy; 2. progress toward a less impersonal and more humane society; 3. ideas count more than money and 4. the fight against crime."

Logistic Regression in SPSS needs a minimum of 100 questionnaires, therefore Lindab Luxembourg, Germany and France as a whole have been taken with a total of 134 questionnaires filled-in. More questionnaires are better for SPSS and logistic regression to avoid mistakes, errors and wrong conclusions. Many theories on 'happiness' "are based on relatively small country samples and are consequently unreliable as a general explanation", critisize Hofstede et al. (2010, p. 279).

In this research the focus was on happiness and uncertainty avoidance.

In the three cases examined in this research it has been shown that the probability of being happy is high, when many independent variables are given, even if the person takes risks or not (0.97 and 0.94). It is therefore understandable that people tend not to take risks. See the results of the three models in the following figure.

Luxembourgers are characterised for being uncertainty avoidant and therefore happy.

The following figure will close this chapter on data analysis. The next chapter is the concluding chapter.



Figure 4.14 Logistic Regression - The probability of being happy - Results

## **Chapter 5: Conclusion**

## **5.1 Overall Conclusion**

The objective of my research was to find where Luxembourg fits in on Hofstede's cultural dimensions, compared with France and Germany, by replicating Hofstede's (2001, 2010) studies, using the VSM08 (Value Survey Module 2008) (http://www.geerthofstede.nl/html) in Luxembourg, France and Germany and to verify if the estimates from Hofstede et al. (2010) on Luxembourg on PDI, UAI, MAS, IDV, LTO were correct. The objective was also to come up with one pattern for the Luxembourger. The result of my research is that Hofstede's estimates on Luxembourg were correct taking Luxembourg as a whole and looking at PDI, MAS, LTO, IVR. They were not correct for UAI, IDV, and unexisting for MON.. But Luxembourg has a population of foreigners of over 50%. Making abstraction of the foreigners, the results for Luxembourgers with Luxembourgish Nationality (abbreviated Lux. Nat.) are different. This is shown in chapter 4. In chapter 4.7 we see the difference between Hofstede's estimates and my real data from my research at Lindab and the calculation of the cultural dimensions. Hofstede excluded civil servants. Therefore, this research excludes civil servants as well. However it was shown in chapter 2.9.2 that 50% of the Lux. Nat. are civil servants. Further research could investigate their cultural dimensions.

In Chapter 4.5.2 we have seen that for Luxembourgers with Luxembourgish Nationality, the average score per question lies often in between France and Germany. Luxembourg and Lux. Nat. do not always score the same because of the high percentage of foreigners at Lindab Luxembourg. There are 33 Lux. Nat. out of a total of 106 filled-in questionnaires, representing only 30%. Lindab Luxembourg is characterised by its high percentage of foreigners and its wide diversity in foreigners. One of the characteristics of Luxembourg is that people change their nationality. Another characteristic in Luxembourg is the diversity in spoken languages. The number of languages spoken per individual is impressive. Most people speak 3, 4, or 5 languages fluently.

My studies showed the correlation between the Luxembourgish nationality and 'uncertainty avoidance'. Luxembourgish nationals are driven by high uncertainty avoidance. This high uncertainty avoidance defines the behaviour of the Luxembourgers, and of them being happy. Luxembourgers are happy because they are uncertainty avoidant. Hermans and Kempen (1998, p. 1118) describe the "experience of uncertainty", explaining it with Hofstede, asking the following questions: "Under what circumstances do people experience uncertainty, and how do they respond to it? Do they respond with forms of certainty reduction or uncertainty avoidance? What strategies are available to people relativising strategies or absolutising ones? Or, do they simply avoid uncertainty as part of a zapping lifestyle and prefer to travel through an endless series of fragmented cultural pieces?" Hermans and Kempen (1998) see uncertainty avoidance as "a dynamic and contextualized way of interpreting one's place in the world." They say that the people studied in their research who are in different global landscapes and participate simultaneously in different networks, being confronted extensively with uncertainties, contradictions, ambiguities and contrasting interests (financial, ideological, religious, technological), these people will take a standpoint to be able to find their way and organise their lives intelligently. Hermans & Kempen (1998) ask: "How do they respond to these? Do they construct an individualized combination of some of the landscapes, do they superspecialize in one of them, or do they recombine elements from different landscapes into new pictures?" "Uncertainty is not primarily in a culture's core but in its contact zones" (Hermans & Kempen, 1998, p. 1119).

## 5.2 Evaluation whether my Research Question and my Objectives are Met

My research question was: Where does Luxembourg fit in on Hofstede's cultural dimensions? I used Hofstede's (2001, 2010) studies in Luxembourg, replicating his questionnaire with his original questions from the VSM08 (Value Survey Module 2008), see http://www.geerthofstede.nl/html , and replicating his interviews by using his original interview questions in my interviews. Therefore, yes, my research question and my objectives are met. With the direct collaboration of Geert Hofstede, I was indeed able to replicate his studies and I was able to position Luxembourg in Hofstede's cultural dimensions, using his maps. My gratitude goes to Geert Hofstede and to the people of Lindab who allowed this replication thanks to their contribution and support.

Again with the direct help of Geert Hofstede, I was able to calculate his cultural dimensions PDI, IDV, UAI, MAS, LTO, LVR, and MON.

## 5.3 Did my Research Add to the Thinking in the Literature?

Geert Hofstede's figures of PDI, UAI, IDV, MAS, and LTO on Luxembourg from 2010 were only estimates. Hofstede did not include LVR, MON in his 2010 edition. My objective was to replicate his studies with the objective to verify or contradict his numbers on cultural dimensions. Taking Luxembourg as a whole, without extrapolation of foreigners and civil servants would be the issue. I succeeded in verifying his numbers, as his estimates correspond to reality, taking Luxembourg as a whole and looking at PDI, MAS, LTO, IVR. They were not correct for UAI, IDV, and unexisting for MON.. Therefore, my research added to the thinking in the literature, verifying and adding the data from my research to Hofstede's estimates. Hofstede et al. (2010) had no estimates on LTO, LVR and MON. In the meantime Hofstede has added the estimates for LTO and LVR to his website, but not yet estimates for MON. Minkov (2011) calculated figures on Monumentalism for Luxembourg, France, and Germany, but Hofstede did not do so. When it is about Monumentalism Hofstede refers to Minkov's data. I succeeded in adding the number for the cultural dimension 'Monumentalism'. I confirmed Hofstede's estimates, taking Luxembourg as a whole. Thereafter I extrapolated Lux. Nat., people of Luxembourgish Nationality, who have a different culture to the Luxembourg culture. This thought contradicts Hofstede (2001, 2010) who thought culture was homogeneous, whereas Hong, Morris, Chiu and Benet-Martínez (2000) see culture as dynamic, an opinion that I tend to share.

# 5.4 Recommendations for the Business World from my Research

Since Hofstede attracted attention in general on cultural research in the 1960s, casting doubt on the established theories on cultural research around Maslow, Herzberg, McClelland, Rockeach, Hall, and others, the domain of cultural research in general has been given ever more attention. The Hofstede era and the era after Hofstede with Bond, Inglehart, the GLOBE, de Mooij, Trompenaars, Minkov and others, as well as the era beyond Hofstede with Briley, Nakata, Kirkman, Hong, Chiu, Leung, Benez-Martínez, Hermans, Kempen, Schein, and besides Hofstede with Scholz, Böhm and Lewis, have since 1960 influenced our thinking in terms of cultural research. This stream has to continue and should bring new streams, even new streams beyond Hofstede. Geert Hofstede remains THE researcher in the field, the father of the cultural research and his studies still remain valid. His questions, questionnaires and interviews are still valid, even if since 1960 many things have changed the world. Geert Hofstede continues his research and added, in collaboration with Minkov, two new cultural dimensions: IVR (Indulgence versus Restraint) and MON (Monumentalism). Prior to this he had already added Long-Term versus Short-Term Orientation. This shows that he evolves with time and continues to improve upon his research. Minkov is investigating in the Globalising World (2011) and Mogilner, Aaker and Kamvar (2011) and Aaker and Smith (2010) research in Social Media. Inglehart and Welzel (2005) are researching into Cultural Change. Culture and change is also the subject of the Harvard Business Review (2002) with several authors writing about culture and change in culture.

Hong, Morris, Chiu and Benet-Martínez (2000) carry out experiments with 'frame switching' among bicultural individuals, seeing culture as dynamic. Participants are primed culturally, via priming methods and priming material. Biculturals are studied, i.e. Chinese Americans, Chinese students in Hong Kong, Mexican Americans in USA. Bilingual individuals often associate each language with a different cultural system (Hong, Morris, Chiu and Benez-Martínez, 2000, p. 717). At Lindab, Luxembourg employees asked me for the questionnaire in Luxembourgish and not in English, French or German.

Linking cultural research with new media, new technologies, and the globalising world may be the new stream in cultural research. Linking cultural research with other subjects such as marketing (De Mooij, 2010, 2011), with psychology (Leung, Chiu, Hong, 2011), with human resources (Scholz & Böhm, 2008) and with language research (Lewis, 2006). The recommendation could be to continue adopting cultural studies with the changes in the world, and linking it with the other domains in Economy: marketing, communication, human resources, information technologies, social media, psychology, philosophy, globalisation and even sports management.

Another recommendation is to investigate into the domain 'company culture' versus 'country culture'. Hofstede has initiated this discussion on his website http://geerthofstede.nl/html .

Technology plays a major role in our days (Hermans & Kempen, 1998, p. 1111). In our society, communication means using media different from previous societies where face-to-face communication was often the only option. We use "writing, print, radio, telephones, telegraph, photography, film, disk and tape recording, television, video, and computers (Hermans & Kempen, 1998, p. 1115). They see culture as moving and mixing (p. 1117).

The recommendation is to investigate into this culture change and this mixing of cultures, that is contrary to Hofstede's fixed model of 'collective programming of the mind', where culture is fixed and doesn't change over time. Culture could be researched in following migration, globalisation, mixing of cultures, immigration, economy and changes in political power on the example of Slovakia (DeLorenzo et al., 2009).

Another recommendation is, following Aaker and Smith (2010), to apply the Dragonfly Model (Aaker & Smith, 2010, p. 9): First: 'Focus': identify a single concrete and measurable goal. Second: 'grab attention': make someone look. Third: 'Engage': create a personal connection. Forth: 'Take Action': enable and empower others to take action.
#### 5.5 What are the Limitations of my Research?

As a single researcher there are limitations to my research, in size, in time, and in the number of companies researched. One company was researched: Lindab Buildings. The difficulty to find a company willing to participate could represent a limitation of my research. Lindab France is a small entity of 12 people and this small size represents a limitation to my research. Lindab is a mostly male population; out of 134 respondents, 118 were male and 16 female. At Lindab Luxembourg, there were 93 male and 13 female respondents. This is a limitation to my research in a country where there are more women than men. Time limitation is given because of the requirements of a doctoral thesis. A possible research limitation could be the strong management involvement in this research by applying a 'top down' decision on all employees to participate in this research. Please see my recommendations for further research.

#### 5.6 Suggestions for Further Research in the Field

Given that there is very little research on Luxembourg in general, my suggestion is that I continue my research in this field. There is so little done in this specific domain that it is worth continuing. The replication of Hofstede at Lindab was a starting point. Replicating Hofstede's studies in many other companies could be a suggestion for further research. Replicating his studies with civil servants in Luxembourg would be another suggestion for further research. This would be the collection of new primary data. Hofstede suggested investigating the primary data collected by Inglehart's World Values Survey WVS. Analysing the data collected by the WVS on Luxembourg would be another suggestion for further research there is a lot of research about "happiness" (Aaker, 2010; Hofstede et al., 2010; Mogilner, Aaker, & Kamvar, 2011). It could be worth investigating more into "Happiness" studies in Luxembourg.

Another research topic could be "Language as identifier". Language is an identifier for in-group or out-group attendance (Briley, 2005). More research on language could be done in Luxembourg.

Further research could link culture in Luxembourg and Social Media, as Aaker and Smith write in their book from 2010.

# **5.7** What Have I Learnt from the Research Project in Terms of Knowledge and my Personal Experience?

This research has given me access to people as renowned as Geert Hofstede. The domain of culture research is highly interesting and the literature on cross-cultural research is so rich and lively, it took me into a whole new world. Discussions with my tutors Dr Kieran Webb, Bartley Culverwell, Ted Hastings and Peter Brown, and especially with Geert Hofstede, as well as with Peter B. Smith, Harry Triandis, Marieke de Mooij, Donnel Briley, Cheryl Nakata, Brad Kirkman, Vladimir Burčik and Antoine Haag on the subject were enriching not only for my studies but my life as a whole.

My research at Lindab revealed some surprising results about Luxembourgish society that I personally found intriguing. I wish to extend this research and continue my research in the domain.

Luxembourg has lived, since the end of World War II, with growth, wealth and stability. There was no major crisis, besides the economic crisis unfolding since 2008, but in general, it has seen only steady growth and stability. This is the contrary to Eastern European countries, such as the former East Germany, Latvia, Lithuania, the Czech Republic and Slovakia (DeLorenzo, Kohun, Burčik, & Skovira, 2009). The fall of the Berlin wall in 1989 brought tremendous change to these countries (Verluise, 2009, p. 46), not only political change, but also cultural change. The young generation, born after 1989, has never lived through communism; they only know capitalism (DeLorenzo, Kohun, Burčik, & Skovira, 2009). Therefore the numbers of Hofstede in Slovakia and all the other Eastern European countries have significantly changed since 1989, which does not seem to be the case in Luxembourg. The estimates of Hofstede on Luxembourg are still valid, because Luxembourg has not had a similar crisis as the one hitting Slovakia (DeLorenzo, Kohun, Burčik, & Skovira, 2009).

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## **Appendixes: Graphs, Tables, Data Collection Sheets**

### Hofstede's Map: Power Distance Versus Individualism (Hofstede et al. 2010, p. 103)





## Hofstede's Map: Masculinity Versus Individualism (Hofstede et al. 2010, p. 147)



### Hofstede's Map: Power Distance Versus Masculinity (Hofstede et al. 2010, p. 152)



FIGURE 5.4 Power Distance Versus Masculinity

### Hofstede's Map: Masculinity Versus Uncertainty Avoidance (Hofstede et al. 2010, p. 214)



FIGURE 6.1 Masculinity Versus Uncertainty Avoidance

# Hofstede's Map: Uncertainty Avoidance Versus Individualism (Hofstede et al. 2010, p. 218)



FIGURE 6.2 Uncertainty Avoidance Versus Individualism





FIGURE 8.1 Indulgence Versus Long-Term Orientation (LTO-WVS)

### Hofstede's Map: Power Distance Versus Uncertainty Avoidance (Hofstede et al. 2010, p. 303)



FIGURE 9.1 Power Distance Versus Uncertainty Avoidance

## **Questionnaire English Version**
# Questionnaire

Luxembourg: An intercultural comparison applying Geert Hofstede in the Grand Duchy of Luxembourg in comparison with France and Germany



Following our *Intercultural Seminar in Russia* held from 13th to 14th January 2010, we at Lindab-Astron would like to further invest into the *research of culture and dimensions*, initiated by Master students from University Emden, and now continued in collaboration with **Ursula Schinzel** in the frame of her Doctorate Thesis in Business Administration at London Graduate School of Management, Millennium City Academy.

Please participate to our research by filling in our questionnaire (looks long, but takes only about 10 minutes), in a completely confidential and anonymous way.

Thanks to you:

If the response rate is higher than 50%, we will donate 10 euro per filled-in questionnaire to **SOS Villages** d'Enfants (SOS Kinderdorf).

Geert Hofstede is THE professor of culture and cultural comparison. His book 'Culture's Consequences' is a bestseller.

The added value for Lindab-Astron: we'll be among the first to participate in an intercultural research about the Grand-Duchy of Luxembourg in comparison with France and Germany.

The questionnaire has 3 parts:

• General questions (QGRL-1 - 7)	page 1 - 2
• Questions about values (QVAL-1 – 28)	page 3 - 6
• Questions about your company (QCPY-1 – 40)	page 7 - 9

Thank you for your participation, your time and your collaboration to this research.

## **GENERAL QUESTIONS (QGRL-1 – 7)**

Some information about yourself:

#### 1. Are you:

- 1. male
- 2. female

#### 2. How old are you?

- 1. Under 20
- 2.20-24
- 3.25-29
- 4.30-34
- 5.35-39
- 6.40-49
- 7.50-59
- 8. 60 or over

#### 3. What is your native language?

- 1. German
- 2. French
- 3. English
- 4. Luxembourgish
- 5. Italian
- 6. Spanish
- 7. Portuguese
- 8. Turkish
- 9. Other:\_\_\_\_\_

#### 4. What other languages do you speak?

- 1. German
- 2. French
- 3. English
- 4. Luxembourgish
- 5. Italian
- 6. Spanish
- 7. Portuguese
- 8. Turkish
- 9. Other:\_\_\_\_\_

#### 5. What is your educational background?

- 1. Bac Abitur
- 2. Bac+2 BTS Berufsausbildung
- 3. Bac+3 Bachelor Diplom FH
- 4. Bac+4 Maîtrise Diplom Uni
- 5. Bac+5 Master
- 6. PhD Doctorate

#### 6. What is your job?

- 1. Manager of one or more Managers
- 2. Manager of one or more subordinates (non-managers)
- 3. Academically trained professional or equivalent (but not a manager of people)
- 4. Craftsperson, technician, IT-specialist, nurse, artist or equivalent
- 5. Office worker or secretary
- 6. Unskilled or semi-skilled manual worker
- 7. Other \_\_\_\_\_

#### 7. What is your nationality?

- 1. French
- 2. German
- 3. Luxembourgish
- 4. Belgian
- 5. Italian
- 6. Spanish
- 7. Portuguese
- 8. British
- 9. American
- 10. Turkish
- 11. Other:\_\_\_\_\_

If your nationality has been different at your birth from now, which was your nationality at birth?

## **QUESTIONS about VALUES (QVAL-1 - 28)**

VALUES SURVEY MODULE VSM 2008 - QUESTIONNAIRE English language version - *Release 08-01, January 2008* Copyright @ Geert Hofstede BV

# Please think of **an ideal job**, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line

*across:* 1 = of utmost importance; 2 = very important; 3 = of moderate importance; 4 = of little importance; 5 = of very little or no importance)

Number	Question	Of utmost	Very	Of	Of little	Of very
		importance	important	moderate	importance	little or no
		to me		importance		importance
1.	To have sufficient time for your	1	2	3	4	5
	personal or home life					
2.	To have a boss (direct superior) you	1	2	3	4	5
	can respect					
3.	To get recognition for good	1	2	3	4	5
	performance					
4.	To have security of employment	1	2	3	4	5
5.	To have pleasant people to work	1	2	3	4	5
	with					
6.	To do work that is interesting	1	2	3	4	5
7.	To be consulted by your boss in	1	2	3	4	5
	decisions involving your work					
8.	To live in a desirable area	1	2	3	4	5
9.	To have a job respected by your	1	2	3	4	5
	family and friends					
10.	To have chances for promotion	1	2	3	4	5

In your private life, how important is each of the following to you: (please circle one answer in each line across):

Number	Question	Of utmost	Very	Of	Of little	Of very
		importance	important	moderate	importance	little or no
		to me		importance		importance
11.	Keeping time free for fun	1	2	3	4	5
12.	Moderation: having few desires	1	2	3	4	5
13.	Being generous to other people	1	2	3	4	5
14.	Modesty: looking small, not big	1	2	3	4	5

# 15. If there is something expensive you really want to buy but you do not have enough money, what do you do?

- 1. always save before buying
- 2. usually save first
- 3. sometimes save, sometimes borrow to buy
- 4. usually borrow and pay off later
- 5. always buy now, pay off later

#### 16. How often do you feel nervous or tense?

- 1. always
- 2. usually
- 3. sometimes
- 4. seldom
- 5. never

#### 17. Are you a happy person?

- 1. always
- 2. usually
- 3. sometimes
- 4. seldom
- 5. never

#### 18. Are you the same person at work and at home?

- 1. quite the same
- 2. mostly the same
- 3. don't know
- 4. mostly different
- 5. quite different

#### 19. Do other people or circumstances ever prevent you from doing what you really want to?

- 1. yes, always
- 2. yes, usually
- 3. sometimes
- 4. no, seldom
- 5. no, never

#### 20. All in all, how would you describe your state of health these days?

- 1. very good
- 2. good
- 3. fair
- 4. poor
- 5. very poor

- 1. of utmost importance
- 2. very important
- 3. of moderate importance
- 4. of little importance
- 5. of no importance

#### 22. How proud are you to be a citizen of your country?

- 1. not proud at all
- 2. not very proud
- 3. somewhat proud
- 4. fairly proud
- 5 very proud

#### 23. How often, in your experience, are subordinates afraid to contradict their boss?

- 1. never
- 2. seldom
- 3. sometimes
- 4. usually
- 5. always

# To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across): 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = strongly disagree

Number	Question	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
24.	One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work	1	2	3	4	5
25.	Persistent efforts are the surest way to results	1	2	3	4	5
26.	An organization structure in which certain subordinates have two bosses should be avoided at all cost	1	2	3	4	5
27.	A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest	1	2	3	4	5
28.	We should honour our heroes from the past	1	2	3	4	5

## **QUESTIONS about your COMPANY (QCPY-1 - 40)**

<u>An inventory of questions regarding practices</u> (Copyright © Geert Hofstede, not to be cited and not to be distributed without the written permission of the copyright holder)

If it is true that people are uncomfortable in unfamiliar situations, please circle 1.

If people are comfortable in unfamiliar situations, please circle 5.

If the truth is in between, choose 2, 4, or 3, depending on whether the truth is closer to 1, to 5, or just in between (please, always circle only one answer for each line across).

#### Where I work....

1. People are uncomfortable in unfamiliar situations; they try to avoid taking risks	1	2	3	4	5	People are comfortable in unfamiliar situations; they do not mind taking risks
2. Each day brings new challenges	1	2	3	4	5	Each day is pretty much the same
3. All important decisions are taken by individuals	1	2	3	4	5	All important decisions are taken by groups or committees
4. Our company/organization takes a major responsibility for the welfare of its employees and their families	1	2	3	4	5	Our company/organization is only interested in the work our employees do
5. We do not think more than a day ahead	1	2	3	4	5	We think three years ahead or more
6. People's private lives are considered their own business	1	2	3	4	5	The norms of our organization cover people's behaviour both on the job and at home
7. Everybody is highly conscious of the cost of time and/or materials	1	2	3	4	5	Nobody ever thinks of the cost of time and/or materials
8. Meeting times are kept very punctually	1	2	3	4	5	Meeting times are only kept approximately
9. The major emphasis is on meeting the needs of the customer	1	2	3	4	5	The major emphasis is on correctly following organizational procedures

10. Correct procedures are more important than results	1	2	3	4	5	Results are more important than following correct procedures
11. Subordinates have to work according to detailed instructions from their superiors	1	2	3	4	5	Subordinates organize their own work within broad standards set by superiors
12. We always supply the same well-tested products and services	1	2	3	4	5	We try to be pioneers in developing new products and services
13. Contacts are mostly verbal, few things are written down	1	2	3	4	5	Everything is put down in writing
14. Diplomas and academic titles are very important	1	2	3	4	5	Job competence is what counts, regardless of how it was acquired
15. Some mistakes are accepted as a normal consequence of initiative	1	2	3	4	5	Mistakes are severely punished
16. Managers resent being contradicted	1	2	3	4	5	Managers want to hear people's opinions, even if different from theirs
17. Newcomers are helped to adapt quickly to the job and to the group	1	2	3	4	5	Newcomers are left to find their own way
18. Our company/organization has no special ties with the local community	1	2	3	4	5	Our company/organization is an integrated part of the local community
19. In our technology and working methods, we are rather traditional	1	2	3	4	5	In our technology and working methods, we are ahead of others
20. We never talk about the history of our company/organization	1	2	3	4	5	People tell a lot of stories about the history of our company/organization
21. We let quality prevail over quantity	1	2	3	4	5	We let quantity prevail over quality
22. We are strongly aware of the competition of other organizations	1	2	3	4	5	We are not aware of any competition of other organizations
23. Much attention is paid to our physical work environment	1	2	3	4	5	Little attention is paid to our physical work environment

24. Changes are implemented in consultation with the people concerned	1	2	3	4	5	Changes are implemented by management decree
25. Ordinary members of the organization never meet their top managers	1	2	3	4	5	Ordinary members of the organization regularly meet their top managers
26. We always dress and behave formally and correctly	1	2	3	4	5	We often dress and behave informally and casually

#### 2. <u>Semantic differentials</u>

# How would you describe the behaviour of a typical member of your organisation? (please circle one in each line across)

27.	reserved	1	2	3	4	5	Initiating
28.	warm	1	2	3	4	5	cold
29.	direct	1	2	3	4	5	Indirect
30.	soft	1	2	3	4	5	Hard
31.	slow	1	2	3	4	5	Fast
32.	well-groomed	1	2	3	4	5	Sloopy
33.	pessimistic	1	2	3	4	5	Optimistic

#### 3. Reasons for promotion

#### How important are each of the following in determining your opportunities for promotion

in this organization? Please, circle one in each line across (1 = of utmost importance; 2 = very important, 3 = of moderate importance; 4 = of little importance; 5 = of very little or no importance)

Number	Question	Of utmost importance	Very important	Of moderate	Of little importance	Of very little or no
34.	Seniority with the organization	1	2	3	4	5
35.	Proven performance	1	2	3	4	5
36.	Personality and self-presentation	1	2	3	4	5
37.	Diplomas and formal qualifications	1	2	3	4	5
38.	Commitment to the organization	1	2	3	4	5
39.	Being known as a good colleague	1	2	3	4	5
40.	Creativity and unconventional	1	2	3	4	5
	thinking					

#### Thank you very much for your cooperation!



### **Questionnaire French Version**

# Questionnaire

Luxembourg: An intercultural comparison applying Geert Hofstede in the Grand Duchy of Luxembourg in comparison with France and Germany



Suite au *Séminaire Interculturel en Russie* qui s'est tenu les 13 et 14 janvier 2010, Lindab-Astron souhaite continuer sa *recherche sur la thématique de la culture et de ses dimensions*. Initiée par les étudiants du programme Master de l'Université Emden, cette recherche se poursuit désormais en collaboration avec **Ursula Schinzel** dans le cadre de sa thèse de Doctorat en Business Administration à London Graduate School of Management, Millennium City Academy.

Nous vous prions de participer à notre recherche. Il s'agit de remplir notre questionnaire (durée estimée: 10 minutes). Les réponses seront traitées de façon confidentielle et anonyme.

Grâce à vous:

Si le taux de réponse dépasse 50%, nous effectuerons un don de 10 euros par questionnaire rempli, à SOS Villages d'Enfants (SOS Kinderdorf).

Geert Hofstede est LE professeur de la recherche interculturelle. Son livre 'Culture's Consequences' est un bestseller.

Avec cette étude, Lindab-Astron sera parmi les premiers à participer à une recherche interculturelle au Grand-Duché du Luxembourg en comparaison avec la France et l'Allemagne.

Le questionnaire a 3 parts:

• Questions générales (QGRL-1 - 7)	page 1 - 2
• Questions concernant valeurs (QVAL-1 – 28)	page 3 – 6
• Questions concernant votre entreprise (QCPY-1 – 40)	page 7 - 9

Merci beaucoup pour votre coopération, votre temps et votre collaboration à cette recherche !

### **QUESTIONS GENERALES (QGRL-1 – 7)**

Quelques informations personnelles :

#### 1. Sexe (cocher svp)





#### 2. Age (cocher la tranche d'âge correspondante)

- 1. Moins de 20
- 2.20-24
- 3. 25-29
- 4.30-34
- 5.35-39
- 6.40-49
- 7.50-59
- 8. 60 ou plus

#### 3. Langue maternelle

- 1. Allemand
- 2. Français
- 3. Anglais
- 4. Luxembourgeois
- 5. Italien
- 6. Espagnol
- 7. Portugais
- 8. Turque
- 9. Autres:\_\_\_\_\_

#### 4. Autres langues parlées

- 1. Allemand
- 2. Français
- 3. Anglais
- 4. Luxembourgeois
- 5. Italien
- 6. Espagnol
- 7. Portugais
- 8. Turque
- 9. Autres:

- 1. Bac Abitur
- 2. Bac+2 BTS Berufsausbildung
- 3. Bac+3 Bachelor Diplom FH
- 4. Bac+4 Maîtrise Diplom Uni
- 5. Bac+5 Master
- 6. PhD Doctorat

#### 6. Activité rémunérée actuellement exercée

- 1. Manager encadrant un ou plusieurs subordonnés, eux-mêmes managers
- 2. Manager encadrant un ou plusieurs subordonnés non-managers
- 3. Professionnel avec une formation supérieure ou équivalent (mais sans fonction

d'encadrement)

4. Travail nécessitant une formation professionnelle spécialisée (artisan, technicien, informaticien, infirmière, artiste ou équivalent)

5. Employé de bureau, ou secrétaire avec une formation générale

- 6. Travail manuel ou semi qualifié
- 7. Autre \_\_\_\_\_

#### 7. Nationalité

- 1. Français
- 2. Allemand
- 3. Luxembourgeois
- 4. Belge
- 5. Italien
- 6. Espagnol
- 7. Portugais
- 8. Anglais
- 9. Américain
- 10. Turque
- 11. Autre:\_\_\_\_\_

Nationalité de naissance (si différente)

### **QUESTIONS concernant VALEURS (QVAL-1 - 28)**

Module d'Enquête sur les Valeurs, V S M 08 - Questionnaire Version en langue française

Publication 08-01, janvier 2008 Copyright @ Geert Hofstede BV

Veuillez imaginer *un travail idéal*, en faisant abstraction de votre emploi actuel, si vous en avez un. En définissant ce travail idéal, quelle importance accorderiez vous à... (Veuillez encercler une seule réponse par ligne) : 1 = de la plus haute importance ; 2 = très important ; 3 = assez important ; 4 = peu important ; 5 = très peu d'importance ou sans importance

Numéro	Question	De la plus haute	Très important	Assez important	Peu important	Très peu ou sans
1.	Avoir suffisamment de temps pour	1	2	3	4	5
2.	Avoir un supérieur direct que vous pouvez respecter	1	2	3	4	5
3.	Voir de bonnes performances reconnues	1	2	3	4	5
4.	Avoir une situation stable	1	2	3	4	5
5.	Travailler avec des personnes agréables	1	2	3	4	5
6.	Effectuer des tâches intéressantes	1	2	3	4	5
7.	Etre consulté par votre supérieur à propos de décisions impliquant votre travail	1	2	3	4	5
8.	Vivre dans une zone désirable	1	2	3	4	5
9.	Avoir un travail respecté par votre famille	1	2	3	4	5
10.	Avoir des possibilités de promotion	1	2	3	4	5

Dans votre vie privée, quelle importance accordez-vous à... (Veuillez encercler une seule réponse par ligne) :

Numéro	Question	De la plus	Très	Assez	Peu	Très peu
		haute	important	important	important	ou sans
		importance				importance
11.	Réserver du temps pour les loisirs	1	2	3	4	5
12.	La modération; ayant peu de désirs	1	2	3	4	5
13.	Etre généreux envers les autres	1	2	3	4	5
14.	La modestie; paraître humble et non	1	2	3	4	5
	imposant					

#### 15. Si vous voulez acheter quelque chose de cher, mais n'avez pas assez d'argent, que faites-vous ?

- 1. épargnez toujours avant d'acheter
- 2. habituellement épargnez d'abord
- 3. épargnez parfois, parfois empruntez pour acheter
- 4. habituellement empruntez et remboursez plus tard
- 5. achetez toujours maintenant, remboursez plus tard

#### 16. Vous sentez-vous nerveux ou tendu...?

- 1. tout le temps
- 2. habituellement
- 3. de temps en temps
- 4. parfois
- 5. jamais

#### 17. Êtes-vous heureux ?

- 1. tout le temps
- 2. habituellement
- 3. de temps en temps
- 4. parfois
- 5. jamais

#### 18. Êtes-vous la même personne à votre travail et à votre domicile ?

- 1. presque la même
- 2. plutôt la même
- 3. ne savez pas
- 4. plutôt différente
- 5. assez différente

# 19. Est-ce que les autres ou les circonstances vous empêchent de faire ce que vous voulez réellement faire ?

- 1. oui, toujours
- 2. oui, habituellement
- 3. de temps en temps
- 4. non, rarement
- 5. non, jamais

#### 20. Globalement, comment décririez-vous votre état de santé ces jours-ci ?

- 1. très bon
- 2. bon
- 3. correct
- 4. mauvais
- 5. très mauvais

- 1. de la plus grande importance
- 2. très importante
- 3. importance modérée
- 4. faible importance
- 5. aucune importance

#### 22. Êtes-vous fier d'être un citoyen de votre pays ?

- 1. pas fier du tout
- 2. pas vraiment fier
- 3. relativement fier
- 4. assez fier
- 5. très fier

# 23. D'après votre expérience, avec quelle fréquence les subordonnés sont-ils effrayés de contredire leurs supérieurs?

- 1. jamais
- 2. parfois
- 3. de temps en temps
- 4. habituellement
- 5. tout le temps

# Dans quelle mesure êtes-vous en accord ou désaccord avec chacune des propositions suivantes ? (Veuillez encercler une seule réponse par ligne) :

#### 1 =fort accord 2 =accord 3 =indécis 4 =désaccord 5 =fort désaccord

Numéro	Question	Fort accord	Accord	Indécis	Désaccord	Fort désaccord
24.	On peut être un bon manager sans avoir une réponse précise à toutes les questions qu'un subordonné peut avoir à propos de son travail.	1	2	3	4	5
25.	Persister dans l'effort est la plus sûre façon d'obtenir des résultats.	1	2	3	4	5
26.	Une structure organisationnelle dans laquelle des subordonnés ont deux supérieurs directs est à éviter à tout prix.	1	2	3	4	5
27.	Les règles d'une compagnie ou organisation ne doivent pas être violées – même lorsque l'employé pense que cela serait dans l'intérêt de l'organisation.	1	2	3	4	5
28.	Nous devrions honorer nos héros du passé.	1	2	3	4	5

## **QUESTIONS concernant votre ENTREPRISE (QCPY-1 -**<u>40)</u>

<u>Un inventaire de questions concernant les pratiques (Copyright © Geert Hofstede, à ne pas citer ou distribuer sans permission écrite du détenteur de copyright)</u>

S'il est vrai que les employés sont mal à l'aise dans des situations non familières, veuillez alors entourer d'un cercle la réponse 1.

Si les employés sont à l'aise dans des situations inhabituelles, veuillez entourer d'un cercle la réponse 5.

Si la vérité se trouve entre, veuillez choisir la réponses 2,4, ou 3, dépendant de ce que la vérité se trouve plus près de 1 ou de 5, ou juste au milieu. (Veuillez toujours donner une réponse pour chaque ligne).

1. Les employés sont mal à l'aise dans des situations non familières. Ils essaient d'éviter de prendre des risques	1	2	3	4	5	Les employés sont à l'aise dans des situations inhabituelles. Cela ne les dérange pas de prendre des risques
2. Chaque jour apporte de nouveaux défis.	1	2	3	4	5	Chaque jour est presque identique
3. Toute décision importante est prise par des individus	1	2	3	4	5	Toute décision importante est prise par des groupes ou des comités
4. Notre société attache une grande importance au bien-être de ses employés et de leurs familles	1	2	3	4	5	Notre société est seulement intéressée à ce que le travail soit effectué par nos employés
5. Nous ne pensons pas au-delà du jour suivant	1	2	3	4	5	Nous nous projetons dans l'avenir à au moins 3 ans, voire plus
6. La vie privée des employés est considérée comme leur propre affaire	1	2	3	4	5	Les règles de notre société couvrent autant la vie privée que professionnelle
7. Tout le monde est très conscient du coût du temps et/ou du matériel	1	2	3	4	5	Personne ne pense jamais aux coûts du temps et/ou du matériel
8. Les heures des réunions sont respectées à la minute	1	2	3	4	5	Les heures des réunions sont respectées seulement approximativement
9. Le client est roi. Toute l'importance est donnée aux besoins des clients	1	2	3	4	5	Toute l'importance est donnée au respect des procédures

#### Où je travaille....

10. Le respect des procédures est plus important que les résultats	1	2	3	4	5	Les résultats sont plus importants que le respect des procédures
11. Les employés doivent travailler suivant les instructions de leurs supérieurs hiérarchiques	1	2	3	4	5	Les employés organisent leur propre travail suivant des règles standard larges fixés par leurs supérieurs
12. Nous offrons toujours les mêmes produits et services bien rodés	1	2	3	4	5	Nous essayons d'être des précurseurs en développant de nouveaux produits ou services
13. Les contacts sont habituellement verbaux, peu se fait par écrit	1	2	3	4	5	Tout est fait par écrit
14. Les diplômes et titres académiques sont très importants	1	2	3	4	5	La compétence dans le travail compte avant tout et non comment elle a été acquise
15. Quelques erreurs sont acceptées comme conséquence normale de la prise d'initiative	1	2	3	4	5	Les erreurs sont punies sévèrement
16. Le management n'aime pas être contredit	1	2	3	4	5	Le management veut entendre l'opinion des employés même si elle diffère de la leur
17. Les nouveaux arrivés sont intégrés rapidement dans le travail et dans le groupe	1	2	3	4	5	Les nouveaux arrivés sont laissés à leur propre sort. Ils doivent eux- mêmes trouver leur chemin
18. Notre organisation n'a pas de liens avec la communauté locale	1	2	3	4	5	Notre organisation fait partie intégrante de la communauté locale
19. Dans notre méthode de travail et technologie nous sommes assez traditionnels	1	2	3	4	5	Dans notre méthode de travail et technologie nous devançons les autres
20. Nous ne parlons jamais de l'histoire de notre société	1	2	3	4	5	Les employés racontent beaucoup d'anecdotes sur notre société
21. La qualité prime sur la quantité	1	2	3	4	5	La quantité prime sur la qualité
22. Nous sommes très attentifs à la compétition que nous font les autres entreprises	1	2	3	4	5	La compétition des autres entreprises ne nous intéresse pas

23. Beaucoup d'attention est consacrée à notre environnement de travail	1	2	3	4	5	Peu d'attention est consacrée à notre environnement de travail
24. Les changements sont mis en place en consultant les personnes concernées	1	2	3	4	5	Les changements sont mis en place par décision du management
25. Les employés normaux ne rencontrent jamais leur top managers	1	2	3	4	5	Les employés normaux rencontrent régulièrement leur top managers
26. La tenue vestimentaire et notre comportement sont toujours très formels	1	2	3	4	5	Nous nous habillons et comportons souvent de façon informelle

#### 2. Différentiels sémantiques

# Comment décririez-vous le comportement de l'employé-type de votre entreprise (encercler une seule réponse par ligne)

27.	réservé	1	2	3	4	5	prenant l'initiative
28.	chaleureux	1	2	3	4	5	froid
29.	direct	1	2	3	4	5	Indirect
30.	doux	1	2	3	4	5	Dur
31.	lent	1	2	3	4	5	Rapide
32.	soigné	1	2	3	4	5	peu soigné
33.	pessimiste	1	2	3	4	5	Optimiste

#### 3. Raisons d'une promotion

A votre avis, quels facteurs déterminent (et selon quel degré d'importance) la promotion au sein de votre entreprise? 1 = de la plus haute importance ; 2 = très important ; 3 = assez important ; 4 = peu important ; 5 = très peu d'importance ou sans importance

Numéro	Question	De la plus	Très	Assez	Peu	Très peu
		haute	important	important	important	ou sans
		importance				importance
34.	Ancienneté dans la société	1	2	3	4	5
35.	Performance confirmée	1	2	3	4	5
36.	Personnalité et présentation	1	2	3	4	5
37.	Diplômes et qualifications	1	2	3	4	5
38.	Engagement envers la société	1	2	3	4	5
39.	Etre reconnu comme un bon	1	2	3	4	5
	collègue					
40.	Créativité et idées nouvelles	1	2	3	4	5

#### Merci beaucoup pour votre coopération !



### **Questionnaire German Version**

## Fragebogen

Luxembourg: An intercultural comparison applying Geert Hofstede in the Grand Duchy of Luxembourg in comparison with France and Germany



Als Folge unseres *Interkulturellen Seminars in Russland* vom 13.-14. Januar 2010, möchten wir von Lindab-Astron weiter in die *Kultur-Forschung und ihre Dimensionen* investieren. Diese wurde von Master Studenten der Universität Emden begonnen und jetzt in Zusammenarbeit mit **Ursula Schinzel** im Rahmen ihrer Doktorarbeit in Business Administration mit London Graduate School of Management, Millennium City Academy fortgesetzt.

Bitte nehmen Sie an dieser Forschung teil, indem Sie den Fragebogen vertraulich und anonym ausfüllen (sieht lange aus, dauert aber nur circa 10 Minuten).

Dank Ihnen:

Falls die Antwort-Rate mehr als 50% beträgt, spenden wir 10 Euro pro ausgefüllten Fragebogen an SOS Villages d'Enfants (SOS Kinderdorf).

Geert Hofstede ist DER Professor der interkulturellen Forschung. Sein Buch 'Culture's Consequences' ist ein Bestseller.

Vorteil für uns von Lindab-Astron: wir sind Vorreiter auf dem Markt, wir sind mit bei den ersten, die an einer interkulturellen Forschung über das Grossherzogtum Luxemburg im Vergleich mit Frankreich und Deutschland teilnehmen.

Der Fragebogen hat 3 Teile:

• Allgemeine Fragen (QGRL-1 - 7)	Seite 1 - 2
• Fragen über Werte (QVAL-1 – 28)	Seite 3 – 6
• Fragen über Ihre Firma (QCPY-1 – 40)	Seite 7 – 9

Vielen Dank für Ihre Teilnahme, Ihre Zeit und Mitarbeit an dieser Forschungsarbeit.

## ALLGEMEINE FRAGEN (QGRL-1-7)

Ein paar Informationen über Sie selbst

1. Sind Sie:

- 1. männlich
- 2. weiblich

#### 2. Wie alt sind Sie?

- 1. Unter 20
- 2.20-24
- 3.25-29
- 4.30-34
- 5.35-39
- 6.40-49
- 7.50-59
- 8. 60 oder älter

#### 3. Was ist Ihre Muttersprache?

- 1. Deutsch
- 2. Französisch
- 3. Englisch
- 4. Luxemburgisch
- 5. Italienisch
- 6. Spanisch
- 7. Portugiesisch
- 8. Türkisch
- 9. Andere:\_\_\_\_\_

#### 4. Welche anderen Sprachen sprechen Sie?

- 1. Deutsch
- 2. Französisch
- 3. Englisch
- 4. Luxemburgisch
- 5. Italienisch
- 6. Spanisch
- 7. Portugiesisch
- 8. Türkisch
- 9. Andere:

#### 5. Welches ist Ihr höchstes Diplom?

- 1. Bac Abitur
- 2. Bac+2 BTS Berufsausbildung
- 3. Bac+3 Bachelor Diplom FH
- 4. Bac+4 Maîtrise Diplom Uni
- 5. Bac+5 Master
- 6. PhD Doktortitel

#### 6. Was ist Ihr Beruf?

1. Führungskraft, die Vorgesetzte einer oder mehrerer Führungskräfte ist

2. Führungskraft mit einem oder mehreren Mitarbeitern/innen (die aber selbst keine Führungskräfte sind)

3. Akademische Ausbildung oder etwas Gleichwertiges (ohne Führungsaufgaben)

4. Handwerker/in mit Berufsausbildung (z.B. Techniker, IT-Spezialisten, Krankenpflegeberufe, Künstler oder etwas Gleichwertiges)

5. Bürokraft oder Sekretär/in mit allgemeiner Ausbildung

6. Eine ungelernte oder angelernte Tätigkeit

#### 7. Welche Nationalität haben Sie?

- 1. Französisch
- 2. Deutsch
- 3. Luxemburgisch
- 4. Belgisch
- 5. Italienisch
- 6. Spanisch
- 7. Portugiesisch
- 8. Britisch
- 9. Amerikanisch
- 10. Türkisch
- 11. Andere:

#### Falls Ihre Nationalität bei Geburt eine andere war, welche war es?

### FRAGEN über WERTE (QVAL-1 - 28)

VALUES SURVEY MODULE VSM 2008 – FRAGEBOGEN - Deutsche Version Ausgabe 08-01, Januar 2008 - Copyright @ Geert Hofstede BV

# Stellen Sie sich bitte eine für Sie **ideale** berufliche Tätigkeit vor. Sollten Sie zurzeit einen Job haben, lassen Sie diesen bitte dabei außer Acht.

Wie wichtig ist für Sie bei der Auswahl dieser idealen beruflichen Tätigkeit, dass ...

*(bitte umkreisen Sie die Antwort, die Ihrer Einschätzung am ehesten entspricht);* 1 = von grösster Wichtigkeit; 2 = sehr wichtig; 3 = von mittelmässiger Wichtigkeit; 4 = eher unwichtig; 5 = unwichtig

Nummer	Frage	Von grösster	Sehr	Von mittelmässiger	Eher	Unwichtig
		Wichtigkeit	wiening	Wichtigkeit	unwichug	
1.	Sie genügend Zeit für sich	1	2	3	4	5
	persönlich oder für Ihr Privatleben					
	haben.					
2.	Sie einen Vorgesetzten haben, den	1	2	3	4	5
	Sie respektieren können.					
3.	Sie Anerkennung für Ihre	1	2	3	4	5
	Leistungen bekommen.					
4.	Sie einen sicheren Arbeitsplatz	1	2	3	4	5
	haben.					
5.	Sie mit angenehmen Menschen	1	2	3	4	5
	zusammenarbeiten.					
6.	Sie einen interessanten Job	1	2	3	4	5
	machen.					
7.	Sie von Ihrem Vorgesetzten bei	1	2	3	4	5
	Entscheidungen konsultiert					
	werden, die Ihre Arbeit betreffen.					
8.	In einer schönen Gegend leben.	1	2	3	4	5
9.	Sie eine Arbeit haben, die von	1	2	3	4	5
	Ihrer Familie und von Ihren					
	Freunden geachtet wird.					
10.	Ihre Arbeit Ihnen	1	2	3	4	5
	Aufstiegschancen bietet.					

# *Wie wichtig sind Ihnen in ihrem Privatleben die folgenden Aspekte:* (*bitte umkreisen Sie die Antwort, die Ihrer Einschätzung am ehesten entspricht*).

Nummer	Frage	Von grösster Wichtigkeit	Sehr wichtig	Von mittelmässiger Wichtigkeit	Eher unwichtig	Unwichtig
11.	Freie Zeit für Dinge zu haben, die	1	2	3	4	5
	Spaß und Freude bereiten.					
12.	dass man mit Wünschen maßvoll	1	2	3	4	5
	umgeht.					
13.	Großzügigkeit im Umgang mit	1	2	3	4	5
	anderen Menschen.					
14.	Bescheidenheit im Auftreten.	1	2	3	4	5

# 15. Wenn Sie sich durch den Kauf eines teuren Produkts einen Wunsch erfüllen können, aber nicht genug Geld haben, was tun Sie gewöhnlich?

- 1. Ich spare immer zuerst das Geld an, bevor ich etwas kaufe
- 2. Ich spare meistens das Geld
- 3. Manchmal spare ich, manchmal leihe ich mir das Geld
- 4. Ich leihe mir meistens das Geld und zahle es später zurück
- 5. Ich kaufe sofort und zahle später

#### 16. Wie oft fühlen Sie sich nervös und angespannt?

- 1. immer
- 2. meistens
- 3. manchmal
- 4. selten
- 5. nie

#### 17. Sind Sie ein glücklicher Mensch?

- 1. immer
- 2. meistens
- 6. manchmal
- 7. selten
- 3. nie

#### 18. Sind Sie im Beruf dieselbe Person wie privat?

- 1. immer
- 2. meistens
- 3. manchmal
- 4. selten
- 5. nie

# 19. Halten andere Personen oder Umstände Sie davon ab, Dinge zu tun, die Sie eigentlich tun möchten?

- 1. ja, immer
- 2. ja, meistens
- 3. manchmal
- 4. nein, selten
- 5. nein, nie

#### 20. Wie würden Sie insgesamt Ihren Gesundheitszustand beschreiben?

- 1. sehr gut
- 2. gut
- 3. mittelmäßig
- 4. eher schlecht
- 5. sehr schlecht

#### 21. Wie wichtig ist Ihnen in Ihrem Leben die Religion?

- 1. von größter Wichtigkeit
- 2. sehr wichtig
- 3. von mittelmäßiger Wichtigkeit
- 4. eher unwichtig
- 5. absolut unwichtig

#### 22. Wie stolz sind Sie darauf, Bürger Ihres Landes zu sein?

- 1. überhaupt nicht stolz
- 2. nicht sehr stolz
- 3. etwas stolz
- 4. eher stolz
- 5. sehr stolz

# 23. Wie oft haben nach Ihrer Erfahrung Beschäftigte Angst davor, ihrem/r Vorgesetzten zu widersprechen?

- 1. nie
- 2. selten
- 3. manchmal
- 4. meistens
- 5. immer

#### In welchem Ausmaß stimmen Sie folgenden Aussagen zu bzw. nicht zu?

(*bitte umkreisen Sie die Aussage, die Ihre Einschätzung am ehesten trifft*) 1 = stimme vollkommen zu ,2 = stimme eher zu, 3 = ich bin unentschieden, 4 = stimme eher nicht zu, 5 = stimme gar nicht zu

Nummer	Frage	Stimme vollkomme n zu	Stimme eher zu	Ich bin unentschied en	Stimme eher nicht zu	Stimme gar nicht zu
24.	Man kann eine gute Führungskraft sein, ohne jede Frage des Mitarbeiters beantworten zu können.	1	2	3	4	5
25.	Eine beständige Leistung ist der beste Weg zu guten Ergebnissen.	1	2	3	4	5
26.	Eine Firmenstruktur, in der einzelne Beschäftigte zwei Vorgesetzte haben, ist mit allen Mitteln zu vermeiden.	1	2	3	4	5
27.	Die Regeln einer Firma dürfen nie gebrochen werden, auch wenn man als Beschäftigte/r der Meinung ist, dass ein Regelverstoß der Firma dienen würde.	1	2	3	4	5
28.	Wir sollten unsere Helden aus der Vergangenheit ehren.	1	2	3	4	5

### Fragen über Ihre FIRMA (QCPY-1 - 40)

<u>Eine Zusammenfassung von Fragen über Praktiken (Copyright © Geert Hofstede, nicht zu zitieren und nicht zu vervielfältigen ohne die schriftliche Erlaubnis des Copyright-Halters)</u>

Wenn es wahr ist, dass sich die Leute unwohl in unbekannten Situationen fühlen, wo ich arbeite, bitte umkreisen Sie 1.

Wenn sich die Leute in unbekannten Situationen wohl fühlen, wo Sie arbeiten, umkreisen Sie bitte 5.

Wenn die Wahrheit dazwischen liegt, wählen Sie 2,4, oder 3, abhängig davon, ob die Wahrheit näher bei 1 oder bei 5 oder dazwischen liegt (bitte nur eine Antwort pro Zeile).

#### Wo ich arbeite....

1 Leute fühlen sich unwohl in	1	2	3	1	5	Leute fühlen sich in unbekannten
1. Lette fumen sien unwohn m	1	2	5	-	5	Situationan webl as macht ihnen
undekannten Situationen, sie						nights and Disilio singuashan
versuchen es zu vermenden, Risiko						nichts aus, Kisiko einzugenen
einzugenen						
			-			
2. Jeder Tag bringt neue	1	2	3	4	5	Jeder Tag ist ziemlich gleich
Herausforderungen						
3. Alle wichtigen Entscheidungen	1	2	3	4	5	Alle wichtigen Entscheidungen
werden von Einzelpersonen						werden von Gruppen oder
getroffen						Kommittees getroffen
			-			
4. Unsere Firma übernimmt eine	1	2	3	4	5	Unsere Firma interessiert sich nur
grosse Verantwortung für das						für die Arbeit, die unsere
Wohlergehen ihrer Angestellten						Angestellten erledigen
und deren Familien						
5. Wir denken nicht weiter als	1	2	3	4	5	Wir denken 3 Jahre oder mehr in die
einen Tag in die Zukunft						Zukunft voraus
6. Das Privatleben der Leute wird	1	2	3	4	5	Die Firmen-Normen beinhalten
als deren eigene Angelegenheit						sowohl das berufliche als auch das
angesehen						Privatleben unsere Leute
7. Jedem sind Zeit- und Material-	1	2	3	4	5	Niemand denkt jemals über Zeit-
Kosten bewusst						und Material-Kosten nach

8. Meeting-Zeiten werden immer pünktlich eingehalten	1	2	3	4	5	Meeting-Zeiten werden in etwa eingehalten
9. Der Haupt-Fokus liegt darauf, die Kundenbedürfnisse zu erfüllen	1	2	3	4	5	Der Haupt-Fokus liegt darauf, den Firmen-Prozeduren zu folgen
10. Korrekt befolgte Prozeduren sind wichtiger als Ergebnisse	1	2	3	4	5	Ergebnisse sind wichtiger als korrekt befolgte Prozeduren
11. Angestellte haben nach detaillierten Anordnungen ihrer Vorgesetzten zu arbeiten	1	2	3	4	5	Angestellte organisieren ihre eigene Arbeit innerhalb der von den Vorgesetzten gegebenen breiten Rahmen
12. Wir liefern immer die gleichen gut getesteten Produkte und Dienstleistungen	1	2	3	4	5	Wir versuchen, Pioniere im Entwickeln neuer Produkte und Dienstleistungen zu sein
13. Kontakte sind meistens verbal, weniges wird aufgeschrieben	1	2	3	4	5	Alles ist schriftlich
14. Zeugnisse und akademische Titel sind sehr wichtig	1	2	3	4	5	Was zählt ist berufliche Kompetenz, egal wie man sie erreicht hat
15. Einige Fehler machen, wird als normale Konsequenz für Initiative akzeptiert	1	2	3	4	5	Fehler werden streng bestraft
16. Manager mögen es nicht, wenn Ihnen widersprochen wird	1	2	3	4	5	Manager wollen die Meinung ihrer Leute hören, selbst wenn sie anders als ihre eigene ist
17. Neulingen wird geholfen, sich schnell in die Arbeit und die Gruppe zu integrieren	1	2	3	4	5	Neue Angestellte müssen sich alleine zurecht finden
18. Unsere Firma hat keine Verbingungen mit der örtlichen Gemeinde	1	2	3	4	5	Unsere Firma ist ein integrierter Teil der örtlichen Gemeinde
19. Wir sind eher traditionnell in unserer Technologie und Arbeitsmethode	1	2	3	4	5	In unserer Technologie und Arbeitsmethode sind wir anderen voraus
20. Wir sprechen niemals über die Vergangenheit unserer Firma	1	2	3	4	5	Leute erzählen viele Geschichten über die Vergangenheit der Firma

21. Bei uns geht Qualität über Quantität	1	2	3	4	5	Bei uns geht Quantität über Qualität	
22. Uns ist die Konkurrenz anderer Firmen äusserst bewusst	1	2	3	4	5	Wir wissen nichts von der Konkurrenz anderer Firmen	
23. Unserem Arbeitsumfeld wird viel Achtung geschenkt	1	2	3	4	5	Unserem Arbeitsumfeld wird wenig Achtung geschenkt	
24. Neuerungen werden in Beratung mit den Betroffenen gemacht	1	2	3	4	5	Neuerungen werden per Management-Entscheidung gemacht	
25. Normale Angestellte sehen ihre Top-Manager nie	1	2	3	4	5	Normale Angestellte treffen ihre Top-Manager regelmässig	
26. Wir ziehen uns immer formell und korrekt an. Wir benehmen uns immer formell	1	2	3	4	5	Wir ziehen uns oft informell und lässig an. Wir benehmen uns meistens lässig.	

#### 2. <u>Semantische Gegensätze</u>

Wie würden Sie das Verhalten eines typischen Mitarbeiters Ihrer Firma beschreiben? (bitte umkreisen Sie nur eine Antwort pro Zeile)

27.	Reserviert	1	2	3	4	5	Initiative ergreifend
28.	Warm	1	2	3	4	5	Kalt
29.	Direct	1	2	3	4	5	Indirect
30.	Weich	1	2	3	4	5	Hart
31.	Langsam	1	2	3	4	5	Schnell
32.	Gepflegt	1	2	3	4	5	Lässig
33.	Pessimistisch	1	2	3	4	5	Optimistisch

#### 3. Gründe für Beförderung

#### Wie wichtig sind die folgenden Dinge für Ihre Beförderungsmöglichkeiten in Ihrer Firma?

(**bitte umkreisen Sie nur eine Antwort pro Zeile**); 1 = von grösster Wichtigkeit; 2 = sehr wichtig; 3 = von mittelmässiger Wichtigkeit; 4 = eher unwichtig; 5 = unwichtig

Nummer	Frage	Von grösster Wichtigkeit	Sehr wichtig	Von mittelmässiger Wichtigkeit	Eher unwichtig	Unwichtig
34.	Dauer der Firmenzugehörigkeit	1	2	3	4	5
35.	Bewiesene Leistung	1	2	3	4	5
36.	Persönlichtkeit und Präsentation	1	2	3	4	5
37.	Diplome und offizielle	1	2	3	4	5
	Qualifizierungen					
38.	Firmenverpflichtungen	1	2	3	4	5
39.	Als guter Kollege bekannt sein	1	2	3	4	5
40.	Kreativität und unkonventionelles	1	2	3	4	5
	Denken					

Vielen Dank für Ihre Mitarbeit



### Interview with Lindab Luxembourg

### Interview

### With Eva Wüllner

## Human Resources Director Europe, Russia & CIS – Lindab Buildings

In the frame of my doctorate thesis in business administration at London Graduate School of Management, Millennium City Academy Ursula Schinzel

# Hofstede in Luxembourg: An Intercultural Comparison with France and Germany Applying Geert Hofstede In Collaboration with Lindab

Interview Date: Tuesday, 28 June 2011, 9.00 am

Thank you for your participation in my research, your time and your cooperation.

## **GENERAL QUESTIONS (QGRL-1 – 14)**

### 1. What are the main activities of your company?

Lindab develops, manufactures, markets and distributes products and system solutions in steel for simplified construction and improved indoor climate. Lindab is number one in Europe in Steel Building. Lindab simplifies construction.

Lindab is Europe's largest manufacturer of steel building systems producing more than 1000 tailor-made buildings per year.

Lindab is headquartered in Luxembourg and distributes its products through 400 builders all over Europe and beyond.

There are three business areas:

- Ventilation: Duct systems with accessories plus indoor climate solutions for ventilation, heating and cooling
- Building Components: Steel products and systems for roof drainage, roof and wall cladding, steel profiles for walls, roof and beam constructions.
- Building Systems: Pre-engineered steel building systems, the entire outer shell with frames, walls, roofs and accessories.

The products are characterised by

- high quality
- ease of assembly
- energy efficiency
- environmentally friendly design.

The products are delivered with high levels of service.

The products and services offered are:

- A pre-engineered metal building system for single-storey and multi-storey buildings.
- A reliable approach for fast turnkey construction for non residential buildings such as manufacturing plants, warehouses, commercial, sports centres, offices, transportation, garages and aircraft hangars.
- Astron buildings are flexible, allowing easy integration of traditional materials, such as brickwork, glazing, timber or lightweight concrete.
- Different roof and wall panel systems, in various combinations, allow Lindab to create the building the customer requires.
- An Astron building provides almost endless construction possibilities respecting budgets and building personalization.
- In more than 40 years, 40,000 reference buildings representing 40,000,000m2 were built.
The main objective of Lindab is to simplify construction.

In 2010:

- Lindab had sales of SEK 6.527 m
- Lindab is established in 31 countries
- Lindab has nearly 4,400 employees
- Non-residential construction accounts for 80 percent of total sales, residential 20%.
- The Nordic Market accounts for 45% of total sales
- The CEE/CIS (Central Eastern Europe including former Soviet states) accounts for 22% of total sales
- Western Europe accounts for 29% of total sales
- Other markets account for 4% of total sales
- The Lindab share, under the ticker symbol LIAB, was quoted at the Nasdaq OMX, on 1 July 2011 at 69.15 SEK. The Nasdaq OMX is the Nordic Exchange, Stockholm, Mid Cap. The principle shareholders are Ratos, Sjätte AP-fonden and Skandia Liv.

The geographical coverage is:

- Europe
- Russia
- And beyond

The number of employees is

- Luxembourg: 160 office workers + 111 blue colour workers
- France: 11
- Germany: 23
- Worldwide: 4,400

The founding year in Luxembourg is 1962 under the name Astron Buildings.

In 2005, Astron Buildings was bought by the Swedish Group Lindab, and listed on the stock exchange.

In order to be present on the market with one single name and brand, by end of 2011 the name Astron will disappear.

The Managing CEO in Luxembourg is very important.

See: www.lindab.com

### 2. Where is your company located?

#### In Luxembourg:

In Luxembourg, Lindab is located and headquartered in Diekirch. It has facilities of 20,000 m2 and is the biggest plant in Europe.

#### In France:

In France, Lindab is located in Torcy, east of Paris, in Marne-la-Vallée, near Disney Land, in the department 77. There is no production in Torcy, France.

#### In Germany:

In Germany, Lindab is located in Mainz.

#### Worldwide:

There are 17 plants worldwide. In Europe there are 3 plants: one in Diekirch, one in Czech Republic, one in Yaroslavl Russia.

### 3. How many employees are working at your Company?

In Luxembourg	In France	In Germany	Worldwide
1. 1-10	1. 1-10	1. 1-10	1. 1-10
2.11-20	2. 11-20	2. 11-20	2.11-20
3. 21-50	3.21-50	3. 21-50	3. 21-50
4. 51-100	4. 51-100	4.51-100	4. 51-100
5. 101-250	5. 101-250	5. 101-250	5. 101-250
6. 251-500	6. 251-500	6. 251-500	6. 251-500
7.501-1000	7. 501-1000	7.501-1000	7. 501-1000
8. 1001-5000	8. 1001-5000	8. 1001-5000	8. 1001-5000
9. > 5000	9. > 5000	9. > 5000	9. > 5000

In Luxembourg, Lindab has 111 blue colour workers and 160 office employees, which makes a total of 271.

In France, Lindab has 12 employees.

In Germany, Lindab has 23 employees.

In Europe, Lindab has 860 employees.

Worldwide, Lindab has 4,400 employees.

In Luxembourg	In France	In Germany	Worldwide					
1. 23 Women: 8.4%	1. 1 Woman: 8.3%	1. 2 Women	1. 10% Women					
2. 248 Men: 91.5%	2. 11 Men: 91.7%	2. 23 Men: 100%	2. 90 % Men					
The female are mostly Secretaries and Executive Assistants			Because there are some women working at Lindab in Russia					

4. Approximately, how many women / men are working at your company?

### 5. What is the average age of the employees at your company?

In Luxembourg	In France	In Germany	Worldwide
1. Under 20	1. Under 20	1. Under 20	1. Under 20
2. 20-24	2. 20-24	2. 20-24	2. 20-24
3. 25-29	3. 25-29	3. 25-29	3. 25-29
4. 30-34	4. 30-34	4. 30-34	4. 30-34
5. 35-39	5. 35-39 it is 35-39 y	5. 35-39	5. 35-39
6.40-49 : it is 42	6. 40-49	6. 40-49 it is 40-49	6. 40-49
years	7. 50-59	7. 50-59	7. 50-59
7. 50-59	8. 60 or over	8. 60 or over	8. 60 or over
8. 60 or over			

In Luxembourg, the average age is 42. In France, the average age is 35-39. In Germany, the average age is 40-49. Worldwide, the average age is 35-39.

In Luxembourg	In France	In Germany	Worldwide
1. Under 1 year			
2. 1-2 years	2. 1-2 years	2. 1-2 years	2. 1-2 years
3. 2-3 years	3. 2-3 years	3. 2-3 years	3. 2-3 years
4. 3-5 years	4. 3-5 years	4. 3-5 years	4. 3-5 years
5. 5-10 years	5. 5-10 years	5. 5-10 years	5. 5-10 years
6. 10-15 years	6. 10-15 years	6. 10-15 years	6. 10-15 years
7. 15-20 years	7. 15-20 years	7. 15-20 years	7. 15-20 years
8. 20 years or over			

### 6. Which is the average seniority at your company?

In Luxembourg, Lindab has a high seniority. The average seniority is 10-15 years. Most people stay for their whole working career at Lindab. There are seniority awards every year. Two employees have a seniority of 40 years.

In France and Germany the average seniority is considerably long with 5-10 years, though a little shorter than in Luxembourg.

Worldwide, the seniority is shorter, 3-5 years, especially because of the new hires in Russia. The team in Russia is a young team.

# 7. Which is the company language? (The language most used and spoken)

In Luxembourg	In France	In Germany	Worldwide
1. German2. French3. English4. Dutch5. Luxembourgish6. Italian7. Spanish8. Portuguese9. Turkish10. Other:	<ol> <li>German</li> <li>French</li> <li>English</li> <li>Dutch</li> <li>Luxembourgish</li> <li>Italian</li> <li>Spanish</li> <li>Portuguese</li> <li>Turkish</li> <li>Other:</li> </ol>	1. German2. French3. English4. Dutch5. Luxembourgish6. Italian7. Spanish8. Portuguese9. Turkish10. Other:	<ol> <li>German</li> <li>French</li> <li>English</li> <li>Dutch</li> <li>Luxembourgish</li> <li>Italian</li> <li>Spanish</li> <li>Portuguese</li> <li>Turkish</li> <li>Other: Russian</li> </ol>

In Luxembourg, at Lindab but also in general, we see a special cultural group. A lot of different nationalities are living and working together, there are many languages spoken at Lindab Luxembourg. The official company language is English, but there are a lot of Belgians working here, who speak French, a lot of Luxembourgers from Diekirch and the region who speak Luxembourgish, a lot of Portuguese who speak Portuguese. The Germans speak German together.

In France, at Lindab, the company language is still English, but they speak French. The issue is that French people normally do not want to speak English and automatically switch to French.

In Germany, everybody speaks English, of course, but they speak German together. The official company language is English.

Worldwide, the official company language is English, but they all speak their native languages. In Russia, there are currently 250 employees, which constitute a significant portion of Russians and Russian language skills.

### 8. What is your job?

- 1. Manager of one or more Managers
- 2. Manager of one or more subordinates (non-managers)
- 3. Academically trained professional or equivalent (but not a manager of people)
- 4. Craftsperson, technician, IT-specialist, nurse, artist or equivalent
- 5. Office worker or secretary
- 6. Unskilled or semi-skilled manual worker
- 7. No paid job (includes full-time students?

8. Other \_\_\_\_\_Strategically workforce planning, Business plan set-up, Corporate Social Responsibility (LindabLife)\_\_\_\_\_

#### **Please specify:**

I am Human Resources Director for Europe, Russia and CIS at Lindab Buildings. I am responsible for 850 employees in 17 countries.

My responsibilities comprise the

- Coordination of people
- Coordination of the development of the people
- Succession plans
- Annual performance review
- Responsibilities for 10 people in Human Resources in 4 countries: 3 HR in Luxembourg,
  - 2 HR in Czech Republic, 3 HR in Russia, 1 HR in Hungary.

### 9. What is your nationality?

1. German	
2. French	
3. English	
4. Dutch	
5. Luxembourgish	
6. Italian	
7. Spanish	
8. Portuguese	
9. Other:	

### 10. What is your native language?

- 1. German
- 2. French
- 3. English
- 4. Dutch
- 5. Luxembourgish
- 6. Italian
- 7. Spanish
- 8. Portuguese
- 9. Other:\_\_\_\_\_

### 11. What other languages do you speak?

German
 French mainly
 English
 Dutch
 Luxembourgish
 Italian
 Spanish
 Portuguese
 Other: Russian

### 12. Where do you live?

- 1. Luxembourg
- 2. France

3. Germany, at the border with Luxembourg

### 13. Where do you come from originally?

1. Luxembourg

2. France

3. Germany, from Bavaria, near Munich

### 14. What is your educational background?

1. Bac - Abitur

2. Bac+2 – BTS - Berufsausbildung

3. Bac+3 – Bachelor – Diplom FH

4. Bac+4 – Maîtrise – Diplom Uni

5. Bac+5 – Masters, I finished my MBA in June 2011 at FOM/Luxemburg School of commerce

6. PhD – Doctorate, I started my DBA in November 2010, Distance Learning, at University of Surrey

### **LUXEMBOURG**

### **QUESTIONS about your HUMAN RESOURCES MANAGEMENT (QHRM-1-23)**

(Questions QHRM-1 – QHRM-11 in accordance with Geert Hofstede 2001, Culture's Consequences, Chapter 8, part 2)

This chapter is designed to identify symbols, values, heroes, rituals in your company.

### QHRM-1: According to you, what is typical for your company? (to identify symbols, heroes, rituals)

Our core values are:

- Customer success
- Down to earth
- Neatness and order.

Typical here at Lindab Luxembourg is that the door of the Manager is normally open. The difference between us and a bank is big. We have low PDI (Power Distance Index). Our hierarchy is low.

Luxembourg is a specific place:

- Its inhabitants are a big mixture
- with higher tolerance
- more open-minded
- with many different languages.

Once a year, we organise a boat race. This is made to increase our team building activities, with a low cost and maximum motivation factor, especially after the crisis. Furthermore, we invite our employees to the Schouberfouer. We participated in the 24 hours cycle race in Wintger. Every second year, we spend a sports weekend together, organized in different countries.

### QHRM-2: What terms are only used by insiders of your company?

The terms only used by insiders are:

#### **Our core values**:

- Customer success
- Down to earth
- Neatness and order.

#### Corporate social responsibility.

Mutual trust: we are working with 400 building dealers. They have to be able to trust us.

# *QHRM-3:* What are famous words here? (to identify organisational symbols)

**Trust**: we build our relationship on trust

**Good quality**: our products are TÜV certified, we have TÜV audit and we have internal audits **Zero corruption**: we have no room for corruption at all. There is zero tolerance for corruption. I had to lay off an employee in Russia for this.

#### LindabLife:

LindabLife embraces Guidelines, policies and activities within social responsibility, like business, society, environment and employees.

We have a Management Meeting every second week, and one section is booked for LindabLife.

#### **Environment**:

- Our objective is to reduce 20% of carbon dioxide emissions by the year 2020
- We use environment friendly paint
- We research in solar panels
- We innovate
- We offer environment friendly products
- Steel, for example, is stable in earthquake regions, it is re-usable, compared to concrete and/or wood.
- We offer internships to students
- We recruit from different universities.
- We collaborate with the Lycée classique, Diekirch for a book project
- We are sponsoring the ING Marathon with Lindab T-shirts
- We are sponsoring and participating in a 24 hour bicycle race in Wintger at the end of July 2011.

- We support PhD students in their research: one is writing his PhD in the R&D (Research & Development) Department at the Universität Weimar, the other one is writing his PhD in Engineering, Robotics, at the Universität Dortmund.
- We have students for BBA and MBA
- In summer, we give 20 to 30 students summer jobs. The students are placed in different departments, so that they do not all stick together. We try to match them with the right department, the department of their interest, in order that they learn something.

### QHRM-4: What things are important here to get on?

- The right personality
- Every company has a special culture
- We at Lindab in Luxembourg are looking for people who are:
- Open-minded
- Adaptable
- Flexible
- Easy with communication
- Willing to switch departments.

In the recruitment interview, I focus on the personality of the candidate.

# QHRM-5: Are there, according to you, people who are of great importance to the organisation? (to identify organisational heroes)

- Everybody is important here
- Everybody is part of the wheel
- Nevertheless, our big focus is on the sales people, because they bring the money, the profit that we need
- Our company is set up in a specific way, everybody is cooperating
- We have long, very long seniority of up and over 40 years. Many engineers started their career with us right after University and stay their lifetime. The Managing Director, for example started 27 years ago.

### QHRM-6: What events are celebrated in the organisation?

- Seniority awards
- Retirement
- Employee meetings
- Specific topic info session (for example: training)
- Invitation to the Schueberfouer fun fair for all.

- Open- house every second year: family and friends are invited to Lindab, with guided tours of the plant, with food and drinks and a children's castle, often with 700 people attending.
- Year-end sales meeting: in 2010 in Stettin, Poland, with 120 people attending.
- Sports event: in 2010 in Hungary: bringing together 200 people, for soccer and table tennis competitions. This is good for team building.

# *QHRM-7:* What are some of the important rules – written and unwritten – that apply here?

The rules that apply are our policies and our procedures. The policies are approved by the Board:

#### **Code of Ethics**

- Ethical behaviour toward customers, suppliers, competitors
- Transparent and correct accounting principles
- Respect for human rights
- Whistleblower function.

#### **Competition Law Handbook**

- Principles of fair competition
- Guidelines on how to act towards competitors
- Rules for actions in a dominant position.

#### **IT Policy**

- Maintained technical security by uniform IT infrastructure
- Efficiency of business system support and development
- Transparency and uniform benchmarking.

#### **Insider Policy**

- The treatment of sensitive information
- Definition of who is an insider within Lindab
- Rules for when insiders can trade in Lindab shares.

#### **Information Policy**

- Definition of who can communicate on behalf of Lindab
- Obligations for Lindab to release information
- Description on the releasing of information.

#### **Treasury Policy**

- Framework for management of Lindab Group's financial risks
- Guideline for Lindab Treasury function on how to manage financial risk
- Centralisation of all financial transactions to Lindab Group Treasury Department.

#### **Environmental Policy**

- Statement of the Group's environmental commitment
- Products and production with a minimal environmental and health impact
- Continuous improvement and benchmarking of key objectives.

#### Additional policies are:

#### **Financial Manual**

- Comprehensiveness and comparability
- Relevance and reliability
- Adherence to International Financial Reporting Standard, IFRS.

#### Intellectual Property Rights (IPR) Policy

- Guidelines on protecting our trademarks
- New inventions and trade secrets
- Defending our IPR and stopping of infringements.

#### **Anti-corruption Policy**

- No employee may demand or accept a bribe
- No employee may offer or give a bribe
- Payments/Kickbacks to others than the contracting party are forbidden.

#### **Acquisition Handbook**

- Outlines the acquisition process within Lindab
- Guidelines for due diligence and price calculation
- Stresses the importance of integration of target into Lindab.

#### Sponsorship/event Guidelines

- Harmonise with brand communications
- Satisfy defined objectives
- Focused on reaching selected target groups.

#### The unwritten rules are:

- The way how you treat your colleague
- Your working attitude
- Your soft skills
- Trust.

# QHRM-8: How are, according to you, important decisions made? (to identify organisational rituals)

Important decisions are made in a team. In 2010, we elaborated our Lindab Gold Strategy 2010 to 2015: 8% growth per year

Vision: to be the preferred partner for building professionals in our core products Europe wide

#### Ventilation:

Focus:

- Aggressively grow fittings
- Expand distribution in selected key markets
- Step change growth in comfort
- Separate supply and distribution to enhance performance.

Vision: "The Number 1 Ventilation supplier and distributor in Europe and Russia"

#### **Building Components:**

Focus:

- Separate focus between residential and non-residential
- Aggressively grow rainline & residential Europe wide
- Strengthen non-residential sales in our 8 core markets.

Vision: "The European Number 11 supplier in Rainline / steel residential roofing and market leader for non-residential steel roof and wall solutions in core markets"

#### **Building Systems:**

Focus:

- 1<sup>st</sup> focus larger buildings
- Grow Builder-dealer net
- Strengthen direct sales in Russia & CIS
- Develop a more cost competitive smaller building concept.

Vision: "The preferred supplier of sustainable solutions for industrial buildings in Europe, Russia and CIS"

The new geographic growth focus is Russia and CIS. We are looking for acquisitions to strengthen core positions.

- Optimise
- Grow
- Deliver
- Lindab people & culture.

### QHRM-9: What do people especially like to see here?

Open-mindedness Internationality Tolerance Respect of each other Trust Quality in work Team work

We have a Timix clocking system. The core time is 8:30 to 11:45 and 14:00to 16:15. There is flexi-time. Doctor's visits are of course permitted once approved by the manager.

Punctuality is very important to us.

We insist on the balance between work and private life.

Burn-out-syndrome has to be avoided.

## QHRM-10: What are the greatest mistakes one can make here? (What are the don'ts)

I'll give you an example: there was a new hire, a Portuguese, who was holding speeches in front of the others, he was so egocentric and incapable of working in a team.

Being egocentric is the biggest mistake here.

Being corrupt is the biggest mistake here.

Robbery, stealing or any mistrustful behaviour is the biggest mistake here.

# QHRM-11: What is the most a) positive b) negative image in the outside world about this organisation that you can think of? (to identify organisational values)

#### The most positive image is:

- Lindab is a good employer
- Lindab gives fair treatment
- Lindab pays a fair salary
- At Lindab there is time to talk about problems and to solve them
- Lindab wishes to attract people
- Lindab is the largest employer in Diekirch.
- Lindab has social responsibility.

#### The most negative image is:

- The eventuality of closing down the Lindab Diekirch manufacturing plant, because production is too expensive compared to Czech or Russia.
- The fear of losing jobs.
- Products with negative impact on the environment.

### **FRANCE**

### **QUESTIONS about your HUMAN RESOURCES MANAGEMENT (QHRM-1-23)**

(Questions QHRM-1 – QHRM-11 in accordance with Geert Hofstede 2001, Culture's Consequences, Chapter 8, part 2)

This chapter is designed to identify symbols, values, heroes, rituals in your company.

# QHRM-1: According to you, what is typical for your company? (to identify symbols, heroes, rituals)

At Lindab France, the company culture is the same Lindab culture, but it is in France. The employees are only French people. Therefore, the cultural diversity is not the same as in Luxembourg. There is a big mixture of nationalities in Luxembourg. In France, authority is more important.

In 2009, one French Manager was transferred from Lindab France to Lindab Luxembourg and he spoke about the pure French culture at Lindab France.

### QHRM-2: What terms are only used by insiders of your company?

See Lindab Luxembourg:

- customer success
- Down to earth
- Neatness and order
- Corporate social responsibility
- Mutual trust.

At Lindab France, there is only one engineer, because the engineering is mainly done in Luxembourg.

# *QHRM-3:* What are famous words here? (to identify organisational symbols)

The LindabLife values.

### QHRM-4: What things are important here to get on?

The same as in Luxembourg.

Very important is:

- team building
- the performance appraisal
- and the performance review at the start of the new year.

# QHRM-5: Are there, according to you, people who are of great importance to the organisation? (to identify organisational heroes)

At Lindab, everybody is important. We are a team and we are well integrated into the team.

### QHRM-6: What events are celebrated in the organisation?

Christmas and Birthdays.

The big events are celebrated at Lindab Luxembourg.

Seniority awards are the big event, they are celebrated at Lindab Luxembourg, for Lindab France employees. For example 25 years of seniority. The employee is offered a week-end with partner in Luxembourg, gifts, a golden watch.

# *QHRM-7:* What are some of the important rules – written and unwritten – that apply here?

The same rules apply at Lindab France as at Lindab Luxembourg. What is important to know is that the Labour Law is different in France from Luxembourg.

# QHRM-8: How are, according to you, important decisions made? (to identify organisational rituals)

In meetings and then transmitted to Lindab France.

### QHRM-9: What do people especially like to see here?

- A safe working place
- A good team
- A good manager
- Being appreciated
- Being challenged.

# QHRM-10: What are the greatest mistakes one can make here? (What are the don'ts)

There are several big mistakes one can make at Lindab France, besides the same mistakes that apply to Lindab, like stealing, lying, corruption.

In France, the personality of the people is more arrogant. They have special pride in themselves.

The one difficulty is the English language as Lindab's company language. The English language skills at Lindab France are not so high and employees automatically switch to French.

The Trade Unions are important in France. It is a big mistake not to involve the Trade Unions.

# QHRM-11: What is the most a) positive b) negative image in the outside world about this organisation that you can think of? (to identify organisational values)

#### The most positive:

The name Lindab is associated with: Being a good employer

The most negative:

Lindab France is shutting down.

### **GERMANY**

### **QUESTIONS about your HUMAN RESOURCES MANAGEMENT (QHRM-1-23)**

(Questions QHRM-1 – QHRM-11 in accordance with Geert Hofstede 2001, Culture's Consequences, Chapter 8, part 2)

This chapter is designed to identify symbols, values, heroes, rituals in your company.

# QHRM-1: According to you, what is typical for your company? (to identify symbols, heroes, rituals)

The same as at Lindab Luxembourg and France:

- customer success
- Down to earth
- Neatness and order
- Corporate social responsibility
- Mutual trust.

Lindab Germany is a more **stand-alone** company.

Lindab has a common corporate culture, and then the culture of the nation where it is located has an influence.

Lindab Germany employs only Germans, besides one recently hired Macedonian nationality person, just like Lindab France where only French are employed,

The German Lindab is more a stand-alone company with a Business Unit Manager who is more isolated.

### QHRM-2: What terms are only used by insiders of your company?

Same as Lindab Luxembourg.

# *QHRM-3:* What are famous words here? (to identify organisational symbols)

The LindabLife values.

### QHRM-4: What things are important here to get on?

Team Building The well functioning of the company

# QHRM-5: Are there, according to you, people who are of great importance to the organisation? (to identify organisational heroes)

We recently (in June) hired one new person for Lindab Germany in order to support the team. He will start in August 2011.

### QHRM-6: What events are celebrated in the organisation?

More informal events, like Christmas and birthdays. The formal events like Seniority Awards are celebrated at Lindab Luxembourg.

# *QHRM-7:* What are some of the important rules – written and unwritten – that apply here?

The same as at Lindab Luxembourg.

Again, like for Lindab France, the Labour Law is different in Germany.

# QHRM-8: How are, according to you, important decisions made? (to identify organisational rituals)

Important decisions are taken in meetings.

### QHRM-9: What do people especially like to see here?

The same things as at Lindab Luxembourg

- Team building
- Well functioning
- Trust
- Lindab Germany is more hands-on
- Germans have no problems with the English language.

# QHRM-10: What are the greatest mistakes one can make here? (What are the don'ts)

Same as for Lindab Luxembourg.

# QHRM-11: What is the most a) positive b) negative image in the outside world about this organisation that you can think of? (to identify organisational values)

- Lindab has to work on its branding in Germany
- There are many competitors in Germany
- The name Lindab is not known in Germany
- And the acceptance of the name change from Astron to Lindab has to be pushed in Germany.

### Thank you very much for your cooperation!

### **Interview with Lindab France**

### Interview

### With Lindab Buildings France

In the frame of my doctorate thesis in business administration at London Graduate School of Management, Millennium City Academy Ursula Schinzel

> Hofstede in Luxembourg: An Intercultural Comparison with France and Germany Applying Geert Hofstede In Collaboration with Lindab

> > Interview-Date: 04 July 2011

Thank you for your participation in my research, your time and your cooperation.

### **FRANCE**

### **QUESTIONS about your HUMAN RESOURCES MANAGEMENT (QHRM-1-23)**

(Questions QHRM-1 – QHRM-11 in accordance with Geert Hofstede 2001, Culture's Consequences, Chapter 8, part 2)

This chapter is designed to identify symbols, values, heroes, rituals in your company.

# QHRM-1: According to you, what is typical for your company? (to identify symbols, heroes, rituals)

• Lindab is the leader in building construction

### QHRM-2: What terms are only used by insiders of your company?

- Simplify construction
- LindabLife
- Think less
- Excellence in construction.

# *QHRM-3:* What are famous words here? (to identify organisational symbols)

- Simplify construction
- LindabLife
- Think less
- Excellence in construction.

### QHRM-4: What things are important here to get on?

Normally people enter Lindab France and make a career from their entry on. People stay in their job from their entry. My job for example is without evolution. This is the case for most of the jobs here at Lindab France. People join us, stay with us in the same job and develop in this same job.

## QHRM-5: Are there, according to you, people who are of great importance to the organisation? (to identify organisational heroes)

At Lindab France, our Director is of great importance. He transmits the decisions that are taken at Lindab Diekirch to Lindab Torcy.

### QHRM-6: What events are celebrated in the organisation?

- The Year End Celebration (La fête de fin d'année).
- Christmas, where all the employees are invited with their wife and their children.
- Sometimes there is a drink given in the evening, but that's quiet rare.

# *QHRM-7:* What are some of the important rules – written and unwritten – that apply here?

The important rules are in our 'internal procedure'.

We have internal rules, which are normal, logical rules, as for example not to drink alcohol or not to steal.

# QHRM-8: How are, according to you, important decisions made? (to identify organisational rituals)

For Torcy: the important decisions taken at Lindab Diekirch are transmitted by our Director.

### QHRM-9: What do people especially like to see here?

- Good relations among us
- There are only about 10 people here
- We get along very well
- Everybody is important
- It is a little structure where everybody gets along well with everybody.

# QHRM-10: What are the greatest mistakes one can make here? (What are the don'ts)

- Take advantage of the system
- Receive money
- Corruption.

# QHRM-11: What is the most a) positive b) negative image in the outside world about this organisation that you can think of? (to identify organisational values)

• <u>The most positive:</u>

Our good relationships.

Lindab allows its employees to have private relationships.

• <u>The most negative:</u>

Less and less people work with Lindab and Lindab is being shut down.

### Thank you very much for your cooperation!

### Interview with Lindab Germany

### Interview

### With Lindab Buildings Germany

In the frame of my doctorate thesis in business administration at London Graduate School of Management, Millennium City Academy Ursula Schinzel

> Hofstede in Luxembourg: An Intercultural Comparison with France and Germany Applying Geert Hofstede In Collaboration with Lindab

> > Interview-Date: 15 July2011

Thank you for your participation in my research, your time and your cooperation.

### **GERMANY**

### **QUESTIONS about your HUMAN RESOURCES MANAGEMENT (QHRM-1-23)**

(Questions QHRM-1 – QHRM-11 in accordance with Geert Hofstede 2001, Culture's Consequences, Chapter 8, part 2)

This chapter is designed to identify symbols, values, heroes, rituals in your company.

# QHRM-1: According to you, what is typical for your company? (to identify symbols, heroes, rituals)

- Our main power focus is on conquering new markets.
- We strive to get new markets.
- We want to have the opportunity for new business.
- We are an international company with diverse employees from diverse cultures, with diverse languages and diverse origins.
- But we in our diversity are all collaborating together at one common objective: the success of our company.

### QHRM-2: What terms are only used by insiders of your company?

- The astronisation (from the name Astron, Lindab's name before the name change) of each project.
- Each project is brought up to our standard.
- Our internal documents represent these standards:
  - Our code of ethics
  - Our cost analyses
  - Our quality handbooks
  - Our procedures.

# QHRM-3: What are famous words here? (to identify organisational symbols)

- In the sales domain it is: work sheets, IWS.
- The astronisation.
- In the engineering domain these are technical documents such as TM, CPM, DM, EM.

These are internal company words that one cannot find in other companies.

### QHRM-4: What things are important here to get on?

Determination, having an objective in front of one's eyes Being reliable Being long-sighted – looking into the future Respecting colleagues and self.

# QHRM-5: Are there, according to you, people who are of great importance to the organisation? (to identify organisational heroes)

Yes of course, these are the Directors of course. They have the objectives in front of their eyes and they transmit the objectives to the employees at the next level. They transmit the vision.

### QHRM-6: What events are celebrated in the organisation?

The employees celebrate their birthdays. Normally the birthday-person puts a birthday cake out for everybody and everybody can take a piece of cake.

At the year end we celebrate Christmas with a small Christmas Party.

At the end of the month we meet and the results are published to all. If we all have been collaborating well for the same objective, we meet and if the success was really high, we are invited for some snacks in our conference-room.

# *QHRM-7:* What are some of the important rules – written and unwritten – that apply here?

Yes, of course there are rules, I wouldn't call them laws. There is the Code of Ethics, which every new hire has to sign on the hiring day. We are ISO 9000 certified, and have the Quality Manual with its Procedures Each Department has its own handbooks where the procedures and production phases are documented.

# QHRM-8: How are, according to you, important decisions made? (to identify organisational rituals)

At Lindab Germany: When a question arises to an employee, he goes and discusses it with his boss. If necessary, a third person is involved, a specialist, if the task is difficult. Together they discuss and the decision is taken together. Of course there are also situations where the boss has to decide alone. But normally the decision is taken together with the employee.

Concerning the parent company Lindab Luxembourg: there are employee Meetings at least once a year with an official presentation and the possibility to asking questions. During the year, there are several possibilities for decisions: they are published, via email.

### QHRM-9: What do people especially like to see here?

- The good collaboration
- The good team work
- There is always an open ear, the employee can come and talk, he is never standing alone.

# QHRM-10: What are the greatest mistakes one can make here? (What are the don'ts)

The greatest mistakes would be to commit a criminal act, for example corruption or theft.

# QHRM-11: What is the most a) positive b) negative image in the outside world about this organisation that you can think of? (to identify organisational values)

<u>The most positive</u> image that Lindab Germany could show to the outside world is:

Satisfied clients! When a project is handled successfully from the beginning to the end. When the client praises the complete handling of the project. This satisfaction will be made public by the satisfied client who will talk about it with other clients.

<u>The most negative</u> image that Lindab Germany could show to the outside world is just the contrary:

Dissatisfied clients!

If the material is incomplete If there are a stop in the production time If the waiting time gets prolonged If the client calls the office and no-body picks up the phone The delay in Montage Dissatisfied clients will let the market feel that they are dissatisfied.

### Thank you very much for your cooperation!

### **Excel Evaluation**

#### LINDAB DATA ALL QUESTIONNAIRES (QGRL1-7.2)

Question nr =>	PL.	Coun rtv	QGR L1	QGR L2	QGR L3	QGR L4.1	QGR L4.2	QGR L4.3	QGR L4.4	QGR L4.5	QGR L4.6	QGR L4.7	QGR L4.8	QGR L4.9	QG RL5	QG RL6	QGR L7.1	QGR L7.2
1	L1	L	1	6	7	1	2	3	4	0	0	7	0	0	2	4	3	7
2	L2	L	1	5	2	1	0	3	0	0	0	0	0	0	2	3	1	0
3	L3	L	1	4	2	0	0	3	0	0	0	0	0	0	3	4	4	0
4	L4	L	1	2	2	0	0	3	0	0	0	0	0	0	4	3	1	0
6	L5 L6	L	1	5	5	1	2	3	0	0	0	0	0	0	5	2	5	0
7	L7	L	1	5	2	0	2	3	4	0	0	0	0	0	2	4	1	0
8	L8	L	1	7	2	0	0	3	0	0	0	7	0	0	7	5	1	0
9	L9	L	1	6	4	1	2	3	0	5	0	0	0	0	7	5	3	0
10	L10	L	1	6	2	0	0	0	0	0	0	0	0	0	7	4	4	0
11	L11 L12	L	1	7	5	1	2	3	4	0	0	0	0	0	5	2	5	0
13	L13	L	1	7	1	1	0	3	4	0	0	0	0	0	2	1	2	0
14	L14	L	1	6	4	1	2	3	4	0	0	0	0	0	3	7	3	0
15	L15	L	2	5	1	1	2	3	4	0	0	0	0	Ned.	3	5	4	0
16	L16	L	1	6	1	0	2	3	4	0	0	0	0	0	1	2	4	0
17	L17 L18	L	1	3	2	0	0	3	4	0	0	0	0	Ned	2	3	4	0
19	L10	L	1	6	1	0	0	3	4	0	0	0	0	0	7	5	2	0
20	L20	L	2	5	1	0	2	3	0	0	6	0	0	0	5	3	2	0
21	L21	L	1	7	4	1	2	3	0	0	0	0	0	0	1	5	3	0
22	L22	L	1	7	2	1	0	3	0	0	0	0	0	0	4	2	4	0
23	L23 1 24	L I	1	6 5	2	1	2	3	4	0	0	0	0	0	1	4	4	0
25	L24	L	1	6	1	1	2	3	4	0	0	0	0	0	1	4	2	0
26	L26	L	1	6	4	1	2	3	4	0	0	0	0	0	4	1	3	0
27	L27	L	1	6	2	0	0	3	0	0	0	0	0	0	4	3	4	0
28	L28	L	1	7	4	1	2	3	4	0	0	0	0	0	3	2	3	0
29	L29	L	1	6	2	0	0	3	0	0	0	0	0	0	4	3	4	0
30	L30 L31	L	1	6	2	0	0	3	0	0	0	0	0	0	2	4	1	0
32	L32	L	1	6	2	0	0	3	0	0	0	0	0	Ned.	3	2	4	0
33	L33	L	1	4	2	0	0	3	4	0	0	0	0	0	5	3	1	0
34	L34	L	2	6	2	1	0	3	0	0	0	0	0	Ned.	4	3	4	0
35	L35	L	1	2	3	0	0	0	0	0	0	0	0	0	1	1	9	0
30	L30	L	1	5	1	0	0	3	4	0	0	0	0	0	7	4	3	0
38	L38	L	1	5	7	1	2	3	4	0	0	0	0	0	1	7	3	7
39	L39	L	1	6	2	1	0	3	0	0	0	0	0	0	5	3	1	0
40	L40	L	2	6	2	1	0	3	0	0	0	0	0	0	3	5	4	0
41	L41 L42	L	1	6	2	0	0	3	0	0	0	0	0	0	3	3	2	0
42	L42 L43	L	1	6	2	1	0	3	4	0	0	0	0	0	4	2	4	0
44	L44	L	1	4	2	1	0	3	0	0	0	0	0	0	4	3	4	0
45	L45	L	1	7	2	1	0	0	0	0	0	0	0	0	7	5	1	0
46	L46	L	1	7	4	1	2	3	4	0	0	0	0	0	1	4	3	0
47	L47 1 48	L	1	6 7	2	1	0	3	0 4	0	0	0	0	0	4	3	4	0
40	L40 L49	L	2	4	2	0	0	3		0	0	0	0	0	5	3	4	0
50	L50	L	1	6	2	1	0	3	0	0	0	7	0	0	5	3	4	0
51	I 51	т	1	7	Slov	1	0	3	0	0	0	0	0	Russ, Cz	6	2	3	Slov
52	L51	L	1	4	2	0	0	3	0	0	0	0	0	0	3	3	4	0
53	L53	L	1	6	4	1	2	3	0	0	0	0	0	0	5	1	3	0
54	L54	L	1	6	2	0	0	3	0	0	0	0	0	0	2	3	1	0
55	L55	L	1	6	2	0	0	3	0	0	0	0	0	0	4	3	4	0
56	L56 1.57	L I	1	6 7	2	0	2	3	4	0	0	0	0	0	2	4	4 9	0
58	L57	L	1	6	1	0	2	3	4	0	0	0	0	0	2	1	2	0
59	L59	L	1	7	4	1	2	3	0	0	0	0	0	Russ	5	1	3	0
60	I 60	т	1	7	2	0	0	3	4	0	0	0	0	Ruan	5	2	3	Ruan dais
61	L60	L	1	6	4	1	2	3	0	0	0	0	0	0	2	4	3	2
62	L62	L	1	7	4	1	2	3	0	0	0	0	0	0	1	2	3	0
63	L63	L	1	6	2	0	0	3	0	5	0	0	0	0	3	3	1	0
64	L64	L	1	6	2	1	0	3	4	0	0	0	0	0	5	1	3	4
65	L65	L	1	2 5	4	1	2	3	0	0	0	0	0	0	3	2	3	0
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Question nr =>	PL	Coun rtv	QGR L1	QGR L2	QGR L3	QGR L4.1	QGR L4.2	QGR L4.3	QGR L4.4	QGR L4.5	QGR L4.6	QGR L4.7	QGR L4.8	QGR L4.9	QG RL5	QG RL6	QGR L7.1	QGR L7.2
67	L67	L	1	6	4	1	2	3	0	0	0	0	0	0	2	4	3	0
68	L68	L	2	5	4	1	2	3	0	0	0	7	0	0	2	4	3	0
69	L69	L	1	6	4	1	2	3	0	0	0	0	0	0	3	2	3	0
70	L70	L	2	6	4	1	2	3	0	0	0	0	0	0	7	5	3	0
72	L72	L	1	7	1	1	2	3	4	0	0	0	0	0	1	1	3	0
73	L73	L	1	-7	2	0	0	3	0	0	0	0	0	0	1	5	4	0
74	L74	L	1	4	4	1	2	3	4	0	0	0	0	0	5	2	4	0
76	L75	L	1	6	2	0	0	3	0	0	0	0	0	0	4	4	4	0
77	L77	L	1	6	2	0	0	3	0	0	0	0	0	0	4	3	4	0
78	L78	L	2	5	1	0	2	3	0	0	0	0	0	0	5	3	2	0
79	L79	L	1	7	2	1	0	3	4	0	6	0	0	0	4	4	4	0
80	L80	L	1	5	2	0	0	3	0	0	0	0	0	0	5	3	4	0
81	L81	L	1	2	2	0	0	3	0	0	0	0	0	0	3	7	1	0
82	L82	L	1	4	-7	1	2	3	4	0	0	0	0	0	2	3	3	7
83	L83	L	1	4	4	1	2	3	0	0	0	0	0	0	2	2	3	Marocai
04	L64	L	1	3	2	1	0	3	0	0	0	0	0	Arabic Hung	3	3	4	n
85	L85	L	1	5	7	1	2	3	4	5	6	7	0	arian	5	2	7	0
86	L86	L	2	6	2	1	0	3	4	0	0	0	0	0	3	5	4	0
87	L87	L	2	4	7	1	2	3	4	0	6	0	0	0	1	5	3	7
88	L88 1.90	L	1	5	5	1	2	3	4	0	6		0	0	1	5	2	0
90	L09	L	1	6	2	1	2	3	0	0	0	0	0	0	4	1	4	0
91	L91	L	1	3	Russ	1	2	3	4	0	6	0	0	0	5	3	Russ	0
92	L92	L	1	6	1	0	2	3	4	0	0	0	0	Ned.	4	2	4	0
93	L93	L	1	7	4	1	2	3	0	0	0	0	0	0	1	2	3	0
94	L94	L	1	5	4	1	2	3	0	0	0	0	0	0	2	2	3	0
95	L95	L	1	6	1	0	0	3	4	0	0	0	0	0	2	4	2	Austria
96	L96	L	1	4	1	0	2	3	4	0	0	0	0	0	4	2	4	0
97	L97	L	2	6	1	0	2	3	4	5	6	0	0	Russ	6	1	2	0
98	L98 1.99	L	1	7	4	1	2	3	4	0	0	0	0	0	4	2	3	4
100	L100	L	1	6	2	1	0	3	0	0	0	0	0	0	4	1	4	0
101	L101	L	1	6	2	1	0	3	0	0	0	0	0	0	5	2	4	0
102	L102	L	1	7	2	0	0	3	0	0	0	0	0	0	5	2	4	0
103	L103	L	1	6	2	0	0	3	0	0	0	0	0	Ned.	5	3	4	0
104	L104	L	1	6	2	0	0	3	0	0	0	0	0	0	1	4	4 Canadia	0
105	L105	L	1	3	Russ	1	0	3	0	0	0	0	0	Hebrew	5	3	n/Israeli	Russ
106	L106	L	1	6	Polish	1	0	3	0	0	0	0	0	0	4	3	2	Polish
107	F1 F2	F	1	7	Arabic 2	0	0	3	0	0	0	0	0	0	2	4	1	0
100	F3	F	1	6	Poular	0	2	0	0	0	0	0	0	0	2	4	1	Guinás
110	F4	F	2	6	2	1	0	3	0	0	6	0	0	0	2	3	1	0
111	F5	F	1	6	2	0	0	3	0	0	0	0	0	0	2	2	1	0
112	F6	F	1	7	2	0	0	3	0	0	6	0	0	0	1	1	1	1
113	F7	F	1	6	2	0	0	3	0	0	0	0	0	0	2	1	4	0
114	F8	F –	1	4	Lari	0	0	3	0	0	0	0	0	0	2	3	1	is -
115	F9	F	1	7	2	0	0	3	0	0	0	0	0	0	2	3	1	0
116	F10 C1	F	1	6	2	0	0	3	0	0	0	0	0	0	2	2	1	0
117	G2	G	1	6	1	0	0	3	0	0	0	0	0	0	4	2	2	0
119	G2	G	2	7	1	0	0	3	0	0	0	0	0	0	3	2	2	0
120	G4	G	1	3	1	0	2	3	0	0	6	0	0	0	4	3	2	0
121	G5	G	1	6	1	0	2	3	0	0	0	0	0	0	4	1	2	0
122	G6	G	2	2	1	0	0	3	0	0	0	0	0	0	7	7	2	0
123	G7	G	1	5	1	0	0	3	0	0	0	0	0	0	3	3	2	0
124	G8	G	1	6	1	0	0	3	0	0	0	0	0	0	4	3	2	0
125	G9	G	1	6	1	0	0	3	0	0	0	0	0	0	4	3	2	0
120	G10 G11	G	1	5	1	1	2	3	0	0	0	0	0	0	3	4	2	U Turk
127	G12	G	1	5	1	0	0	3	0	0	0	0	0	0	4	3	2	0
129	G13	G	1	5	1	0	2	3	Ű	0	0	0	0	0	3	3	2	0
130	G14	G	1	6	1	0	2	3	0	0	0	0	0	0	3	3	2	0
131	G15	G	1	6	1	0	2	3	4	5	0	0	0	0	3	3	2	0
132	G16	G	1	2	1	0	0	3	0	0	0	0	0	0	1	7	2	0
133	G17	G	1	6	4	1	2	3	0	0	0	0	0	0	2	4	3	0
134	G18	G	1	6	1	0	2	3	0	0	0	0	0	0	3	3	2	0

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Question		COUN	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA	QVA
nr =>	PL	TRY	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16
1	L1	L	3	2	3	1	2	2	2	2	3	2	2	4	2	2	3	3
2	1.2	I	2	2	2	2	2	2	2	2	5	3	3	3	2	3	2	3
2	L2	ь	2	L	2	2	2	2	2	2	5	5	5	5	2	5	L	5
3	L3	L	3	2	3	3	3	2	3	3	4	3	2	3	2	3	1	4
4	L4	L	1	4	2	2	1	1	2	3	3	3	2	4	3	1	2	4
5	1.5	I	2	2	1	1	2	1	2	2	2	1	2	2	2	2	1	2
5	LJ	ь	2	L	1	1	2	1	2	5	5	1	2	2	5	5	1	5
6	L6	L	2	2	1	2	3	3	2	2	3	2	2	3	3	3	4	3
7	L7	L	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	1
	1.0		2	2	1	2	2	1	2	2	2	1	2	-	-	1	2	2
0	Lð	L	Z	Z	1	2	Z	1	2	Z	Z	1	Z	Z	Z	1	3	3
9	L9	L	2	1	3	2	1	3	3	3	3	3	1	1	1	1	1	3
10	L10	L	3	2	2	1	1	1	2	2	1	2	2	3	1	2	3	4
11	T 11		2		1	2	2	1	1	-	2	-	-	5	2	1	2	2
11	LII	L	3	1	1	2	2	1	1	Z	2	2	2	3	2	1	3	3
12	L12	L	3	2	2	3	3	1	2	3	3	2	3	5	2	1	3	4
13	L13	L	2	2	2	2	3	1	2	2	2	2	3	2	3	3	1	3
14	1.1.4	- T	-	-	1	-	2	2	2	-	-	-	2	-	2	1	1	2
14	L14	L	2	2	1	2	5	2	5	4	4	4	5	2	2	1	1	2
15	L15	L	1	2	1	1	2	2	3	3	3	2	1	1	1	1	1	3
16	L 16	I	1	2	1	1	2	2	2	2	4	3	2	2	2	1	1	3
10	L10		-	2	1	1	2	2	2	2	7	-	2		2		1	5
17	L17	L	2	2	2	3	3	2	2	3	3	2	3	4	3	3	2	3
18	L18	L	1	3	2	2	2	1	2	2	2	2	2	4	3	3	1	3
10	T 10	T	1	2	2	1	2	2	2	2	n	2	1	2	2	2	1	2
17	- L17	L	1	4	2	1	4	2	2	2	2	4	1	2	2	2	1	2
20	L20	L	1	1	1	1	1	3	2	1	1	1	2	3	3	2	1	1
21	L21	L	2	2	2	1	3	3	3	4	4	4	2	4	3	3	3	3
22	1.00	- T	1	2	-	1	1	1	5	1	1	5	-	2	1	4	1	2
22	L22	L	1	3	5	1	1	1	5	1	1	5	3	3	1	4	1	2
23	L23	L	2	2	2	1	3	3	3	4	4	4	2	4	3	3	3	3
24	L.24	L	2	3	2	2	2	2	2	2	3	3	2	3	3	3	1	2
25	1.05	т	- -	2	-	-	-	-		-	4	4	-	2	2	2		-
25	L25	L	2	2	2	5	2	2	5	2	4	4	2	5	2	2	1	5
26	L26	L	2	2	2	1	2	2	1	3	4	4	2	2	2	1	2	2
27	I 27	I	2	2	2	2	2	2	2	3	3	2	2	3	3	2	2	3
27	L27		2	2	2	2		2	2	5		2	2	5	5	2		5
28	L28	L	2	3	2	2	1	1	2	2	3	2	2	3	2	3	1	3
29	L29	L	1	1	1	2	1	1	1	2	2	2	2	5	1	1	2	1
20	I 20	I	1	2	2	1	r	n	2	1	1	1	2	5	2	2	2	1
50	L30	L	1	Z	2	1	2	2	2	1	1	1	2	5	2	2	5	1
31	L31	L	2	2	2	2	2	3	2	2	2	2	3	3	2	2	2	1
32	L32	L	3	2	1	2	1	1	1	4	5	1	2	3	2	4	1	3
22	I 22	I	2	2	2	2	2	2	2	2	2	2	2	1	2	1	1	2
	L33	L	2	2	2	3	2	2	2	2	3	3	2	1	3	1	1	2
34	L34	L	1	1	2	2	2	3	3	3	2	3	2	3	3	2	2	3
35	L35	L	2	2	3	2	2	1	3	3	3	3	2	4	2	3	1	3
26	1.26	т	2	2	1	2	1	1	2	2	2	2	2	2	2	1	1	2
30	L30	L	2	Z	1	2	1	1	2	3	3	3	2	2	2	1	1	2
37	L37	L	3	2	2	2	2	2	2	3	4	2	3	2	2	2	3	2
38	L38	L	2	2	1	2	2	2	1	5	4	1	3	4	3	3	3	4
20	1.20	-	-	-	-		-	-	-	2		-	-	-	-	-	0	
39	L39	L	1	5	5	2	2	2	2	2	4	5	2	5	4	4	2	5
40	L40	L	3	3	2	1	1	1	2	2	3	2	2	5	2	2	1	3
41	I 41	I	2	2	2	1	2	1	2	3	3	3	2	2	2	2	1	3
-71	1.71	ь •	-	-	-	1	-	1	-			5	-	- -	-		-	5
42	L42	L	3	2	2	2	2	2	3	4	4	3	2	4	3	4	1	2
43	L43	L	2	2	2	3	3	2	2	3	2	2	2	4	3	2	1	2
44	I 44	T	1	1	1	1	1	1	1	1	n	1	n	3	2	1	n	2
	L.+++	-		-		1			-		-	1		-	-			<u>ک</u>
45	L45	L	1	2	1	1	1	1	2	1	5	1	1	5	3	1	1	4
46	L46	L	2	1	1	1	2	2	2	2	3	1	1	2	1	2	1	4
17	I 47	T	2	2	2	2	3	2	2	2	3	2	3	3	3	3	1	3
47	L4/	L		2	2	2	3	2	2	2	3	2	3	3	5	5	1	3
48	L48	L	2	1	3	3	2	2	1	4	4	3	3	4	2	2	1	3
49	L49	L	2	1	2	3	3	2	2	4	3	3	1	5	3	3	1	3
50	1.50	т	n	А	n	2	n	2	2	А	4	2	2	=	2	2	1	2
50	L30	L	2	4	2	2	2	5	5	4	4	5	5	5	2	2	1	2
51	L51	L	2	2	2	2	3	2	2	2	4	2	3	3	3	3	3	3
52	L52	L	4	2	1	4	3	2	2	2	5	1	4	4	3	3	3	1
52	1.52	т					2	1			2				2	2	2	
53	L53	L	1	2	2	2	3	1	3	1	3	3	1	3	2	3	2	3
54	L54	L	3	1	1	1	1	2	2	2	2	3	2	3	3	4	2	5
55	L.55	I.	2	4	2	2	2	2	3	2	2	4	2	4	3	3	1	3
		-		-+	-	2	-	-	-	4		**		4	-			-
56	L56	L	1	3	3	3	3	2	3	4	4	4	1	4	3	4	2	3
57	L57	L	1	1	2	2	2	1	2	2	2	2	1	3	2	2	1	1
20	T 20	- T	2	2	2	-	1	1	- 1	2	-	2	2	1	2	2	1	2
58	L38	L	2	2	2	3	1	1	1	2	4	2	2	1	2	2	1	3
59	L59	L	2	1	2	3	1	1	1	2	3	2	4	3	2	2	2	3
60	L60	T.	3	3	1	3	4	1	2	4	4	3	3	3	4	3	1	2
00	1.00						-	-	2	-	-	2	-	2	-			2
61	L61	L	2	1	1	1	2	2	2	2	2	2	2	3	3	1	1	3
62	L62	L	3	2	2	1	2	3	2	2	3	2	3	2	2	3	1	3
63	I 63	I	2	3	2	2	1	2	3	1	4	3	2	3	3	2	1	3
	105	-	-	-	-	-	-		-	-	-	-		-				-
64	L64	L	3	2	2	2	3	1	2	2	2	2	4	3	1	4	1	3
65	L65	L	2	2	1	2	1	3	2	3	2	3	2	3	2	3	1	3
66	T 44	т	n	1	2	2	2	1	1	2	А	4	А	2	2	2	1	2
00	L00	L	4	1	3	2	3	1	1	3	4	4	4	3	3	L 2	1	

LINDAB DATA ALL QUESTIONNAIRES (continued) (QVAL1-QVAL16)
Question	рт	COUN	QVA	QVA 10	QVA L 10	QVA	QVA	QVA L 13	QVA L 14	QVA	QVA L 16							
67	L67	TRY L	1	2	2	1	2	2	2	2	2	1	1	2	2	2	2	4
68	L68	L	1	3	1	1	1	1	1	1	1	1	1	1	1	1	3	2
69	L69	L	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
70	L70	L	1	2	1	1	2	2	2	2	3	3	2	2	3	3	1	2
72	L72	L	2	2	2	2	2	1	2	2	3	2	2	2	3	2	1	3
73	L73	L	4	3	1	2	3	2	2	3	4	3	4	4	1	2	1	2
74	L74	L	1	1	2	1	2	2	1	3	2	3	1	3	3	2	1	3
75	L75	L	3	4	2	1	2	1	3	5	4	2	2	4	1	1	2	3
76	L76	L	2	2	2	2	2	2	1	3	3	3	3	3	2	3	1	3
79	L//	L	1	1	2	3	2	3	2	2	2	2	2	3	2	2	2	4
70	L/0 1/0	L	1	2	1	1	1	2	2	2	4	1	1	2	2	2	2	2
80	L79	L	2	3	2	3	2	3	3	2	3	2	1	5	2	3	2	3
81	L81	L	3	3	2	3	2	3	2	4	4	2	2	4	3	4	2	3
82	L82	L	1	1	2	1	1	2	2	3	2	2	2	3	3	2	1	3
83	L83	L	2	2	2	1	1	2	3	2	2	2	1	2	2	2	3	3
84	L84	L	4	2	1	1	2	1	2	1	2	1	2	3	2	4	5	3
85	L85	L	1	2	2	1	1	2	3	1	2	2	2	4	1	4	3	3
86	L86	L	3	2	3	2	2	2	3	3	4	2	3	5	3	3	2	3
87	L87	L	2	3	1	1	1	1	2	1	1	1	2	2	2	2	3	4
88	L88	L	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	3
89	L89	L	3	1	2	3	1	1	1	1	2	2	3	4	3	3	1	2
90	L90 T 01	L T	2	2	2	2	2	2	3	2	2	2	2	3	2 1	1	2	3
92	L91 L92	L	2	2	2	2	1	2	3	3	2	2	2	2	2	2	1	4
93	L92	L	2	2	2	1	2	2	1	2	1	2	2	2	1	1	1	3
94	L94	L	3	2	2	2	1	2	1	2	3	1	1	2	2	3	1	4
95	L95	L	2	2	3	1	2	2	3	3	3	3	3	2	2	2	1	3
96	L96	L	2	2	2	2	2	1	3	2	4	2	2	3	3	3	1	3
97	L97	L	3	1	2	3	2	1	2	3	5	3	2	3	3	2	1	3
98	L98	L	3	4	1	2	2	2	3	2	2	2	1	3	3	3	2	2
99	L99	L	2	1	1	1	2	2	1	2	3	2	2	4	2	1	2	3
100	L100	L	1	2	3	3	3	2	1	3	2	3	3	4	3	3	2	2
101	L101	L	1	2	2	2	1	3	2	2	4	4	2	3	2	2	4	3
102	L102	L	1	3	2	1	3	2	3	3	4	3	2	3	2	3	1	3
103	L 103	I	1	1	1	1	1	1	1	1	4	1	1	3	1	4	3	2
104	L104	L	2	1	2	3	2	1	3	4	4	4	2	4	4	4	1	4
106	L106	L	1	2	2	2	2	2	2	2	2	3	2	2	2	2	2	3
107	F1	F	2	2	2	1	1	1	2	2	2	1	2	2	2	2	3	4
108	F2	F	1	2	1	1	2	1	2	3	3	1	2	4	2	2	2	3
109	F3	F	2	3	1	1	1	2	2	1	2	2	1	4	1	2	3	4
110	F4	F	3	1	1	1	1	2	2	3	5	3	3	3	2	2	1	3
111	F5	F	2	1	2	2	1	2	2	2	3	3	2	3	4	3	3	3
112	F6	F	1	1	1	1	1	1	1	1	1	1	2	2	1	1	3	3
113	F7	F	1	1	2	2	2	2	2	2	2	2	1	2	1	1	1	4
114	F8 F0	г F	2	3	2	2	2	2	2	2	2	2	2	4	2	3	2	5 /
115	F10	F	1	2	2	1	2	1	2		2	2	1	4	2	2	1	3
117	G1	G	3	2	1	2	2	1	1	2	3	2	2	4	2	4	1	2
118	G2	G	2	2	1	2	3	2	1	3	3	3	2	2	2	2	2	2
119	G3	G	3	1	2	2	3	1	1	3	4	2	2	2	2	2	1	2
120	G4	G	1	2	2	3	3	2	2	1	3	3	1	3	3	3	1	2
121	G5	G	2	2	2	2	2	2	1	2	3	3	2	1	2	2	1	2
122	G6	G	2	2	2	1	2	2	3	3	3	2	2	3	3	3	1	3
123	G7	G	3	2	2	2	2	2	2	4	4	2	3	3	3	2	2	4
124	G8	G	2	2	1	2	3	2	1	3	3	3	2	3	2	2	1	2
125	69	G	2	1	2	2	2	2	2	2	3	3	2	3	2	2	1	2
120	G10 G11	D G	2	2	2	2	3	2	2	3 7	2 2	2	2	2	2	2	1	4
127	G12	G	2	2	3	2	2	2	3	2	2 	2	2	1	3	2	1	3
120	G12	G	2	3	2	2	2	3	3	4	5	3	2	4	3	3	2	3
130	G14	G	1	2	2	2	3	2	3	3	4	2	2	2	3	2	1	3
131	G15	G	2	1	1	1	2	1	3	4	3	3	1	2	3	2	1	2
132	G16	G	2	3	2	2	1	1	4	3	3	3	2	3	3	2	1	2
133	G17	G	1	2	2	1	1	1	2	2	3	2	1	2	1	2	2	2
134	G18	G	2	2	2	1	2	2	2	2	2	2	1	2	1	2	2	3

			OVA				OVA		OVA	ovi		014		
Question	ы	COUN	QVA L 17	QVA L 18	QVA 1 10	QVA L 20	QVA L 21		QVA 1.23	QVA L24	QVA L 25	QVA L26	QVA 1.27	QVA 1.28
m <sup>-</sup> =>	FL T	TRY	L1/	L10	LIY	1.20	1.21	1.44	1.23	1.24	L45	L20	L2/	1.20
1	LI	L	2	2	3	3	3	3	3	4	2	1	4	2
2	L2	L	2	1	3	2	3	2	4	2	2	2	5	3
3	13	I	2	1	3	4	4	4	2	1	1	1	2	5
	1.5		2		2	+			2			1		3
4	L4	L	2	1	5	2	3	3	3	2	3	1	4	2
5	L5	L	2	2	3	2	4	2	2	2	2	2	2	2
6	L6	L	2	2	3	2	4	4	3	2	2	1	3	2
	17		2	Ĩ	2	-		-	-	-	Ĩ		1	
/	L/	L	2	4	2	5	1	5	5	5	4	1	1	1
8	L8	L	1	2	4	2	4	4	3	4	2	2	2	2
9	L9	L	2	3	3	1	4	5	4	4	1	2	1	3
10	I 10	т	2	2	2	2	5	4	5	2	1	1	2	2
10	L10	L	2	Z	3	2	5	4	3	Z	1	1	3	2
11	L11	L	2	2	3	2	3	4	4	2	3	1	4	2
12	L12	L	2	2	4	2	5	3	4	1	3	1	2	3
13	I 13	I	2	1	4	2	4	3	4	1	2	2	2	4
15	L15	L	2	1		2		5	-	1	2	2	2	
14	L14	L	2	1	4	3	5	2	2	4	2	3	2	5
15	L15	L	2	1	2	2	3	2	4	2	2	2	3	3
16	I 16	I	2	3	2	2	4	3	3	1	5	1	2	4
10	LIU	L	2	5	2	2		5	5	1	5	1	2	
17	L17	L	2	4	3	3	4	3	4	1	1	1	2	2
18	L18	L	2	2	3	2	5	4	4	4	2	2	2	3
10	I 10	I	2	4	3	2	4	4	4	5	2	1	4	5
1/	1.20	-	2		5	-	-	-	-			-		-
20	L20	L	3	4	3	3	2	3	4	4	4	1	4	5
21	L21	L	2	2	3	2	4	1	4	4	2	2	3	4
22	L.22	L	2	2	5	3	4	4	3	2	1	1	2	1
22	1.00		~	2	2	2	-	-		-	-	2	2	
23	L23	L	2	2	3	2	4	1	4	4	2	2	3	4
24	L24	L	2	2	3	2	4	2	3	4	2	2	2	3
25	L25	L	2	1	1	1	5	2	3	1	1	3	4	2
20	1.20	т	2			2	2		4	2	1	2	2	-
20	L20	L	3	1	2	3	2	4	4	2	1	Z	2	5
27	L27	L	2	2	3	1	4	5	3	2	2	1	4	2
28	L28	L	2	2	3	1	2	3	3	2	2	2	1	3
20	1.20		2	-	2	2	2	2	4	2	-	1	4	2
29	L29	L	3	2	2	2	3	3	4	2	2	1	4	2
30	L30	L	2	1	3	3	5	2	4	2	1	1	4	2
31	L31	L	2	2	1	3	3	4	4	2	2	1	2	2
22	1.22	т	1	1	5	2	5	2	4	2	2	1	5	1
32	L32	L		1	5	2	5	5	4	5	2	1	5	1
33	L33	L	3	3	2	1	5	2	4	2	4	2	3	4
34	L34	L	2	2	3	2	2	4	4	3	2	2	2	1
35	I 35	т	2	2	3	1	5	3	2	3	2	3	4	3
35	L33	L	2		5	1	5	5	2		2	5	4	5
36	L36	L	2	5	2	2	1	5	1	4	2	3	1	2
37	L37	L	2	4	3	3	4	2	3	4	2	2	2	2
38	I 38	I	2	3	3	3	4	4	4	4	2	1	3	3
50	1.30	L	2	5	5	5	4	4	-	4	2	1	5	5
39	L39	L	2	3	2	1	3	2	4	3	1	1	- 3	5
40	L40	L	2	2	3	2	2	4	3	2	2	2	3	2
41	I 41	I.	2	2	4	3	4	4	3	5	2	2	4	4
+1	L+1	 	2		7		7	7	5		2	2		
42	L42	L	3	4	3	4	3	3	3	4	2	2	3	3
43	L43	L	2	2	4	2	5	4	4	2	2	1	2	2
44	L.44	L	2	1	2	1	4	5	4	5	2	1	3	1
45	T 45	т		2	2	2	-	1	-	5	2	1	2	-
45	L45	L	5	3	3	3	5	1	3	5	2	1	3	5
46	L46	L	1	2	2	1	4	4	4	5	1	1	4	3
47	L47	L	3	4	2	2	4	2	3	2	2	1	4	2
48	I 48	I	2	3	3	3	4	3	4	2	2	1	2	3
40	140	L -	2	5	5	5	-	5	*	2			2	5
49	L49	L	2	2	3	3	5	2	4	2	4	1	3	3
50	L50	L	2	1	3	2	4	3	2	4	2	1	4	3
51	L51	L	2	2	3	2	3	5	4	2	2	2	2	2
50	1.50	т	2	2	2	-	-	2		2	-	- 1	2	-
52	L52	L	5	5	5	4	5	2	4	5	2	1	2	5
53	L53	L	2	1	4	2	3	4	3	4	2	1	2	2
54	L54	L	2	4	3	1	5	4	3	2	1	1	1	2
==	1 55	т	2	2	2	2	2	2	4	2	2	1	-	-
33	LJJ	L	3	2	2	3	3	3	4	2	2	1	5	3
56	L56	L	4	4	2	2	5	3	5	5	4	1	3	3
57	L57	L	2	2	3	1	5	3	4	3	2	4	3	2
50	1.50	т	n	n	2	n	2	4	2	2	n	2	2	2
30	LJO	L	2	2	3	2	3	4	3	2	2	3	2	3
59	L59	L	2	2	3	2	3	3	3	2	2	1	1	2
60	L60	L	2	2	4	1	3	3	4	1	1	1	1	2
61	I 61	т	n	А	2	n	n	5	А	2	n	2	n	2
01	LOI	L	2	4	3	2	2	5	4	5	2	3	2	4
62	L62	L	2	2	3	2	3	4	3	2	2	3	3	2
63	L63	L	2	2	3	2	2	3	4	2	2	1	4	3
64	1.64	т	1	n	А	1	2	n	2	n	n	2	n	A
	L04	- L		-	-+	1	-	-		-	-	-	-	*
65	L65	L	1	2	3	1	5	5	2	3	3	2	3	4
66	L66	L	3	2	2	2	2	2	2	1	3	2	1	2
67	I 67	т	Λ	2	Λ	1	5	Δ	3	1	n	1	3	2
07	L07	L	4	4	4	1	5	4	5	4	2	1	5	2

LINDAB DATA ALL QUESTIONNAIRES (continued) (QVAL17-QVAL28)

m         Los         L         2         2         3         2         4         5         4         5         4         5         2         2         1           09         LO         L         2         2         3         3         5         5         3         3         4         4         2         2         1         1           71         LT7         L         2         2         3         3         2         3         3         4         4         2         4         1         3         3         1         4         1         4         1         4         1         4         1         4         1         4         3         3         5         2         1         1         4         4         1         3         3         3         3         3         3         3         3         3         3         3         3         3         3         1         5         4         4         2         5         3         3         3         3         3         3         3         3         3         3         3         3         3         3<	Question nr =>	PL.	COUN TRY	QVA L17	QVA L18	QVA L19	QVA L20	QVA L21	QVA L22	QVA L23	QVA L24	QVA L25	QVA L26	QVA L27	QVA L28
10.         L.0         2         2         3         2         3         4         4         4         2         2         3         5         5         3         3         3         4         4         4         2         4         3         3           72         17.2         1.1         2         2         3         3         3         2         3         3         4 <td< td=""><td>68</td><td>L68</td><td>L</td><td>2</td><td>2</td><td>3</td><td>2</td><td>4</td><td>5</td><td>4</td><td>5</td><td>3</td><td>2</td><td>2</td><td>1</td></td<>	68	L68	L	2	2	3	2	4	5	4	5	3	2	2	1
70         L00         L         2         2         3         3         3         4         2         2         1         1           72         L173         L         3         3         2         3         3         4         2         2         1<	69	L69	L	2	2	3	2	3	4	3	2	2	2	3	2
72         L12         L         2         3         3         2         3         3         4         4         4         1         4           73         L13         L         2         3         3         1         3         4         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3 </td <td>70</td> <td>L70</td> <td>L</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>5</td> <td>3</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>1</td>	70	L70	L	2	2	3	3	5	3	3	4	2	2	1	1
1/4       L/3       L       3       3       2       3       3       3       1       4       4       1         1/4       L       2       3       4       4       4       4       3       3       3       4       4       4       4       4       4       4       4       4       4       4       1       3       2       3       3       4	72	L72	L	2	3	3	2	3	3	4	4	2	4	3	3
15         Lia         1         2         3	73	L73	L	3	3	2	3	5	2	3	3	1	4	1	4
Display         Display <t< td=""><td>74</td><td>L/4</td><td>L</td><td>2</td><td>5</td><td>3</td><td>2</td><td>3</td><td>3</td><td>3</td><td>2</td><td>5</td><td>3</td><td>3</td><td>5</td></t<>	74	L/4	L	2	5	3	2	3	3	3	2	5	3	3	5
b         b	75	L75	L	2	2	3	1	4	3	5	2	1	1	2	1
78         1.78         1.         2         2         2         3         2         4         4         2         3         3         3         3         2           80         1.80         L         2         2         3         1         5         4         4         4         2         4         3         3         5         3         3         2         2         3         2         2         3         3         3         2         3         3         3         2         3         3         3         2         2         3	70	L77	L	2	2	4	1	3	3	5	2	1	1	3	2
79         L         2         2         3         3         1         5         4         4         4         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         2         3         3         2         3         3         2         3         3         2         3         3         2         3         3         2         3         3         4         4         4         4         4         4         3         1         2         3         3         2         3         3         4         4         4         3         3         2         3         3         4         2         3         3         3         3         3         2         2         3         3         2         3         3         2         2         3	78	L78	L	2	2	2	2	3	2	4	4	2	3	3	3
80         1.00         1.0         2         3         1         5         4 </td <td>79</td> <td>L79</td> <td>L</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>3</td> <td>2</td>	79	L79	L	2	2	3	3	3	1	5	4	3	2	3	2
81         1.81         L         2         3         4         3         3         3         5         2         3         1         4         2         3         3         3         3         5         2         1         4         4         2           84         1.83         L         2         3         4         3         3         5         3         3         4         4         3         3         1         4         2         3         3         4         3         3         4         2         1         4         4         4         5         3         3         4         2         2         3         3         3         4         2         4	80	L80	L	2	2	3	1	5	4	4	2	4	1	3	2
B2         L         2         2         3         4         3         3         3         5         2         3         1         4         4         3         1         2         1         4         4         3         1         2         1         4         4         3         1         2         1         4         3         2         3         3         4         4         3         1         2         1         4         2         3         3         4         4         3         3         2         2         1	81	L81	L	2	1	3	2	4	4	4	4	2	3	2	3
88         L83         L         2         2         3         3         4         4         4         4         3         1         1         2         3         3         2         2         3         3         2         2         1         4         4         5           88         L85         L         3         4         3         3         3         2         2         4         4         4         4         4         5           87         L87         L         2         2         3         3         4         2         5         4         5         1         1         2         2         3         3         3         2         2         3         3         3         2         2         3         3         3         2         3         3         3         2         3         3         3         3         2         3	82	L82	L	2	3	4	3	3	3	5	2	3	1	4	2
88         L84         L         2         3         5         3         2         1         4         4         2         3           85         L85         L         2         1         3         3         3         4         2         4         4         4         5           87         L88         L         2         2         2         3         2         3         3         4         2         4         4         4         5         3         2         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         3         3         3         2         2         3	83	L83	L	2	2	3	3	4	4	4	3	1	2	3	2
88         L. I. J.         J. J.         J. <thj.< th=""> <thj.< th="">         J.</thj.<></thj.<>	84	L84	L	2	3	2	2	3	5	3	2	1	4	2	3
bb         L         2         1         3         2         3         3         4         2         4         5         5         1	85	L85	L	3	4	3	3	5	3	3	2	2	1	2	1
b         b         c	80	L80 I 87	L I	2	2	3	2	3	3	4	2	4	4	4	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	88	L87	L.	2	4	3	2	3	5	3	2	2	3	2	2
90         L90         L         2         2         3         2         3         3         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         2         2         3         3         1         1         4         4         1         1         1         4         2         3         3         3         2         2         3         3         3         3         3         4         4         4         1         1         4         1         1         1         4         2         3         3         3         3         3         1         3         2         2         3         1 <th1< th="">         1         1         1</th1<>	89	L89	L	3	3	3	4	2	5	4	5	1	1	1	2
91         L91         L         3         4         3         3         5         2         4         2         4         1         4         2           92         L92         L         1         1         4         1         2         4         1         3         4         4         4         1         1         4         2         3           93         L93         L         2         1         4         1         4         5         4         5         1         1         1         4         2         3           96         L96         L         2         2         3         1         3         3         3         1         3         2         2         3         1         3           98         L98         L         4         2         3         3         3         2         2         2         3         3         3         2         2         2         3         3         4         4         2         1         1         1         1         1         1         3         1         3         3         3         1	90	L90	L	2	2	3	2	3	3	3	2	3	3	2	2
92         193         L         1         1         4         1         2         4         4         4         4         4         1         3         2         3           93         L93         L         2         2         2         4         1         3         5         1         1         1         4         2           94         L94         L         2         2         3         3         3         4         4         4         4         4         1         2         2         3           95         L95         L         2         2         3         1         3         5         4         4         4         1         1         1         1         1         1         1         1         1         1         1         1         1         1         2         2         3         3         3         4         4         4         4         1         1         3         3         1         1         1         1         1         3         3         3         3         3         3         1         1         1         3         <	91	L91	L	3	4	3	3	5	2	4	2	4	1	4	2
93         L93         L         2         2         4         1         3         4         3         5         1         1         1         4         2           94         L94         L         2         2         1         4         1         4         5         4         4         5         1         1         1         3         3         3         4         4         4         1         2         2         3         3         3         3         1         3         2         2         2         3         1         3         3         3         1         3         3         3         1         3         3         1         3         3         3         2         2         2         3         1         3         3         3         3         3         4         3         3         4         3         3         4         3         4         2         2         1         3         3         3         3         4         4         1         3         3         3         1         1         1         1         1         3         3 <td< td=""><td>92</td><td>L92</td><td>L</td><td>1</td><td>1</td><td>4</td><td>1</td><td>2</td><td>4</td><td>4</td><td>4</td><td>1</td><td>3</td><td>2</td><td>3</td></td<>	92	L92	L	1	1	4	1	2	4	4	4	1	3	2	3
94         194         L         2         1         4         1         4         5         4         5         1         1         1         1         3           95         L95         L         2         2         3         3         3         4         4         4         4         1         2         2         3         3           96         L96         L         2         2         3         1         3         4         3         2         2         3         1         3           98         L98         L         4         2         2         3         1         3         5         44         4         1         2         2         3         3           99         L99         L         2         1         3         1         3         3         2         2         2         2         3         3         4         4         4         4         4         4         4         4         4         2         4         2         1         1         3         3           101         L10         L         2	93	L93	L	2	2	4	1	3	4	3	5	1	1	4	2
96         196         L         2         2         3         3         3         4         4         4         4         1         1         2         2         3         3         3         3         1         3         3         1         3         2         2         2         4           97         L97         L         2         2         3         1         5         5         5         5         4         1         1         1           99         L99         L         2         1         3         1         3         5         4         4         4         4         1	94	L94	L	2	1	4	1	4	5	4	5	1	1	1	3
961.96L222313331132224971.97L2411343122311991.99L213135441122331001.100L22131354441222331011.101L2223344244213341021.102L22233442213311031.103L221415421213311051.105L21415421222222106L.106L22334421212222222222222121222222222212122222222222 <td< td=""><td>95</td><td>L95</td><td>L</td><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>4</td><td>4</td><td>4</td><td>1</td><td>2</td><td>2</td><td>3</td></td<>	95	L95	L	2	2	3	3	3	4	4	4	1	2	2	3
99         L9         L         4         2         2         4         1         3         4         3         2         2         3         1         1           99         L99         L         2         1         3         1         5         5         5         4         4         1         2         2         3           100         L100         L         2         2         4         2         5         1         2         1         3         4           101         L101         L         2         2         3         3         4         3         4         2         4         4         2         4         2         1         4         3         1         2         1         3         3           103         L103         L         2         1         4         1         5         4         2         1         2 </td <td>96</td> <td>L96</td> <td>L</td> <td>2</td> <td>2</td> <td>3</td> <td>1</td> <td>3</td> <td>3</td> <td>3</td> <td>1</td> <td>3</td> <td>2</td> <td>2</td> <td>4</td>	96	L96	L	2	2	3	1	3	3	3	1	3	2	2	4
38L.SL.42313334411199L100L2233322222233100L101L22242525112134102L102L223334342421233103L103L22334444242131105L106L2141542122222106L106L214135243222122106L106L2141352412122222222222211212112112311333444231124311111211211111111111111 <t< td=""><td>97</td><td>L97</td><td>L</td><td>2</td><td>2</td><td>4</td><td>1</td><td>3</td><td>4</td><td>3</td><td>2</td><td>2</td><td>3</td><td>1</td><td>3</td></t<>	97	L97	L	2	2	4	1	3	4	3	2	2	3	1	3
100 $L100$ $L$ $2$ $1$ $3$ $3$ $2$ $2$ $2$ $2$ $2$ $3$ $3$ $101$ $L100$ $L$ $2$ $2$ $3$ $2$ $4$ $4$ $2$ $2$ $1$ $3$ $4$ $102$ $L102$ $L$ $2$ $2$ $3$ $2$ $4$ $4$ $2$ $1$ $2$ $1$ $3$ $4$ $103$ $L103$ $L$ $2$ $2$ $3$ $3$ $4$ $4$ $2$ $1$ $4$ $3$ $2$ $2$ $1$ $3$ $3$ $106$ $L106$ $L$ $2$ $1$ $4$ $1$ $3$ $3$ $3$ $4$ $4$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$ $2$	98	L98 1.00	L	4	2	3	1	3	5	5	5	4	1	2	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	100	L100	L	2	2	3	3	3	2	2	2	2	2	3	3
102L102L22232444242123103L103L22233434221133104L104L2243253312131105L106L2214154212432106L106L2233221222222108F2F2233442212123100F3F3133334423123110F4F223354321131111F5F1242454221112113F7F213134422143114F8F223254422143115F9F22325511243 <td>100</td> <td>L100</td> <td>L</td> <td>2</td> <td>2</td> <td>4</td> <td>2</td> <td>5</td> <td>2</td> <td>5</td> <td>1</td> <td>2</td> <td>1</td> <td>3</td> <td>4</td>	100	L100	L	2	2	4	2	5	2	5	1	2	1	3	4
103       L103       L       2       2       3       3       4       3       4       2       2       1       3       3         104       L104       L       2       4       3       2       5       3       3       1       2       1       3       1         105       L106       L       2       1       4       1       5       4       2       1       2       4       3       1         106       L106       L       2       2       3       2       2       2       1       2       2       2       3         107       F1       F       2       1       4       1       3       5       2       1       2       2       2       2       3         108       F2       F       2       2       3       3       3       3       4       4       2       2       1       2       3         110       F4       F       2       2       3       3       1       3       4       3       2       1       1       1       2       3       3       1       3	102	L102	L	2	2	3	2	4	4	2	4	2	1	2	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	103	L103	L	2	2	3	3	4	3	4	2	2	1	3	3
105L105L214154212432106L06L22232233222223107F1F21413521222222108F2F2233444231233107F1F2233344423123109F3F3133543211233110F4F22431534423124111F5F24315344221124112F6F1242433442211222113F7F2131344221433116F10F2233444221441118G2G2532	104	L104	L	2	4	3	2	5	3	3	1	2	1	3	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	105	L105	L	2	1	4	1	5	4	2	1	2	4	3	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	106	L106	L	2	2	3	2	2	3	3	2	2	2	2	3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	107	F1	F	2	1	4	1	3	5	2	1	2	2	2	2
109F3F3133344423123110F4F2233543211131111F5F243153442324112F6F12424543221112113F7F213254322214333 <t< td=""><td>108</td><td>F2</td><td>F</td><td>2</td><td>2</td><td>3</td><td>3</td><td>4</td><td>4</td><td>2</td><td>2</td><td>1</td><td>2</td><td>1</td><td>2</td></t<>	108	F2	F	2	2	3	3	4	4	2	2	1	2	1	2
110174172233344321131111F5F243153442324112F6F11242543221112113F7F21313422222222114F8F21313442222222115F9F223254422143116F10F22334434223243118G2G2112334434511243118G2G2112334434511244119G3G333344345111133120G4G223323531333333333 </td <td>109</td> <td>F3</td> <td>F</td> <td>3</td> <td>1</td> <td>3</td> <td>3</td> <td>3</td> <td>4</td> <td>4</td> <td>2</td> <td>3</td> <td>1</td> <td>2</td> <td>3</td>	109	F3	F	3	1	3	3	3	4	4	2	3	1	2	3
Image: Point of the point	110	F4 F5	г F	2		2	3	5	4	3		2	2	3 7	<u> 1</u> Л
113       F7       F       2       1       3       2       5       4       3       2       2       1       2       2         114       F8       F       2       1       3       1       3       4       2       1       4       3       4       4       3       3       4       4       3       4       4       3       4       4       4       3       4       4       4       1       1       1       2       4       4       4       3       3       3       1       3       3       3       3 <th1< td=""><td>112</td><td>F6</td><td>F</td><td></td><td>2</td><td>4</td><td>2</td><td>4</td><td>5</td><td>4</td><td>2</td><td>2</td><td>1</td><td></td><td>2</td></th1<>	112	F6	F		2	4	2	4	5	4	2	2	1		2
114       F8       F       2       1       3       1       3       4       2       2       2       2       2       2         115       F9       F       2       2       3       2       5       4       4       2       2       1       4       3         116       F10       F       2       2       3       2       2       5       5       1       1       2       4       3         116       F10       F       2       2       3       3       4       4       2       2       3       2       4       1         118       G2       G       2       1       2       3       4       4       3       4       5       1       1       2       4         119       G3       G       3       3       3       4       4       3       4       5       1       1       1       3       3       3       1       3       3       3       1       3       3       3       3       3       3       3       3       3       3       3       3       3       3	112	F7	F	2	1	3	2	5	4	3	2	2	1	2	2
115       F9       F       2       2       3       2       5       4       4       2       2       1       4       3         116       F10       F       2       2       3       2       2       5       5       1       1       2       4       3         117       G1       G       2       2       3       3       4       4       2       2       3       2       4       1         118       G2       G       2       1       2       3       4       3       4       5       1       1       2       4       1         118       G2       G       2       5       3       2       4       2       3       3       1       1       3       3       3       1       1       1       1       1       1       1       3       3       3       1       1       3       3       3       3       1       3	114	F8	F	2	1	3	1	3	4	2	2	2	2	2	2
116       F10       F       2       2       3       2       2       5       5       1       1       2       4       3         117       G1       G       2       2       3       3       4       4       2       2       3       2       4       1         118       G2       G       2       1       2       3       4       3       4       5       1       1       2       4       1         118       G2       G       2       1       2       3       4       3       4       5       1       1       2       4         119       G3       G       3       3       3       4       4       3       4       5       1       1       1       1       3       3       3       1       3       3       3       1       1       3       3       3       3       1       1       3	115	F9	F	2	2	3	2	5	4	4	2	2	1	4	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	116	F10	F	2	2	3	2	2	5	5	1	1	2	4	3
118       G2       G       2       1       2       3       4       3       4       5       1       1       2       4         119       G3       G       3       3       3       4       4       3       4       5       1       1       2       4         119       G3       G       3       3       3       4       4       3       4       5       1       1       1       2       5       5         120       G4       G       2       5       3       2       4       2       3       3       3       1       3       3       3       1       1       1       1       1       1       3       3       3       1       1       3	117	G1	G	2	2	3	3	4	4	2	2	3	2	4	1
119       G3       G       3       3       3       4       4       3       4       5       1       2       5       5         120       G4       G       2       5       3       2       4       2       3       3       3       1       3       3         121       G5       G       2       3       3       2       3       5       4       4       1       1       1       3       3         121       G5       G       2       2       3       3       2       3       5       4       4       1       1       1       1       3	118	G2	G	2	1	2	3	4	3	4	5	1	1	2	4
120       04       G       2       5       3       2       4       2       3       3       3       1       3       3         121       G5       G       2       3       3       2       3       5       4       4       1       1       1       3       3         122       G6       G       2       2       4       1       4       4       3       3       4       3	119	G3	G	3	3	3	4	4	3	4	5	1	2	5	5
121       GG       G       2       3       3       2       3       5       4       4       1       1       1       1       3         122       G6       G       2       2       4       1       4       4       3       3       4       3	120	G4	G	2	2	3	2	4	2	3	3	3	1	3	3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	121	CG CK	G G	2	3 2	3 /	2	3	5 /	4	4	1	2	1	3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	122	G7	G	1	2	4	1	3		3	1	3	3	3	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	124	G8	G	3	4	2	2	4	5	4	1	4	1	2	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	125	G9	G	2	2	3	2	4	3	4	4	2	1	4	3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	126	G10	G	2	2	3	2	3	3	4	4	2	3	2	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	127	G11	G	2	3	3	2	5	1	4	2	2	3	4	5
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	128	G12	G	2	1	4	1	5	5	4	2	1	1	5	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	129	G13	G	2	1	2	2	5	4	1	4	2	3	1	2
151         G15         G         4         2         2         2         3         1         2         1         4         2         5         4           132         G16         G         2         3         3         2         5         4         4         1         3         3         2         1           133         G17         G         2         3         3         2         2         5         4         4         1         3         3         2         1           133         G17         G         2         3         3         2         2         5         4         4         1         1         3         2         2         4         4         4         1         1         3         2         1           134         G18         G         2         2         3         1         4         4         4         1         1         1         2         4	130	G14	G	2	3	4	3	5	2	4	1	5	- 1	- 4	2
132         O10         G         2         3         3         2         5         4         4         1         3         3         2         1           133         G17         G         2         3         3         2         2         5         4         4         1         3         3         2         1           133         G17         G         2         3         3         2         2         5         4         4         1         1         3         2         2           134         G18         G         2         2         3         1         4         4         4         1         1         1         2         4	131	G15	G	4	2	2	2	3	1	2	1	4	2	5	4
133 017 0 2 3 3 2 2 3 4 3 4 1 3 2 134 G18 G 2 2 3 1 4 4 4 1 1 1 2 4	132	G16	G	2	3	3	2	5	4	4	1	3	3	2	1
	133	G18	G	2	2	3	2	2 4	5 4	4	1	4	1	2	2 

			000				OCRV		OCTA	OCRY						OCD	OCD	OCD
Question	DI	COUN	QCP V1	QCP V2	QCP V3	QCP1	QCPY	QCPY	QCP1	QCP1	QCPY	10	QCP V11	QCP V12	QCP V12	QCP V14	QCP V15	QCP V16
m ->	IL II	IKY		12	15		3	0	,	0	,	10	111	112	115	114	115	110
1	LI	L	3	2	5	4	2	2	2	2	3	3	2	3	4	4	2	4
2	L2	L	2	3	2	5	1	3	3	4	4	2	2	3	4	4	3	5
3	L3	L	3	4	1	5	1	1	4	5	2	3	2	4	2	2	2	1
4	14	I	3	3	1	2	4	3	4	5	3	2	5	4	4	4	1	2
	1.5				2				-		2	2	2	7	-	-	2	2
5	L5	L	2	1	3	4	4	2	Z	2	3	3	2	3	3	2	3	2
6	L6	L	2	2	3	5	3	2	2	4	2	4	4	4	4	4	3	3
7	L7	L	1	5	1	5	1	1	5	5	2	5	1	2	2	2	3	1
8	1.8	L.	1	3	3	2	4	1	3	5	1	5	5	5	4	5	1	3
0	LO	т. Т	2	2	2				2	2	2	2	2	2		4	2	1
9	L9	L	2	2	2	4	4	4	3	2	2	3	3	2	4	4	3	1
10	L10	L	1	3	4	5	5	1	3	3	3	5	3	2	5	4	3	1
11	L11	L	4	2	4	3	3	2	2	4	3	4	2	4	3	4	3	3
12	L12	L	1	1	4	5	2	2	3	4	4	4	4	3	4	4	3	1
12	I 12	T	2	1	2	2	- 4	2	2	2	2	2	2	2	4	5	2	2
15	LIJ	L	2	1	5		-+	2	5	2	2	5	5	2	4	5	2	5
14	L14	L	4	5	I	1	1	2	3	4	1	3	5	3	4	4	4	3
15	L15	L	2	5	2	5	4	2	4	4	2	5	2	2	4	4	3	2
16	L16	L	1	2	2	2	5	2	2	2	1	3	3	5	4	4	1	4
17	L17	L	2	2	4	3	4	2	2	4	3	4	2	1	3	2	2	1
19	L19	T	2	-	4	4	2		2		1	2		2	2	- 4	2	4
10	L10	- L		- 4	4	4	-	-	2	4				-		- 4		4
19	L19	L	1	5	3	5	5	5	1	3	3	3	3	5	5	5	1	5
20	L20	L	1	3	2	5	2	1	4	4	4	2	4	1	4	3	2	1
21	L21	L	1	1	4	5	3	2	2	5	4	5	3	4	2	3	2	1
22	L.22	L	3	4	5	.5	5	1	3	5	1	5	.5	1	.5	.5	1	4
22	1 22	т	1	. 1	1	5	2	ว	2	5	4	5	2	л	2	2	ว	1
23	L23	L	1	1	4	5		2	2	5	4			4		5	2	1
24	L24	L	2	2	4	5	4	2	2	2	2	4	2	3	4	2	2	2
25	L25	L	2	4	3	5	1	1	3	3	5	1	2	3	3	1	3	3
26	L26	L	1	3	5	4	3	1	4	5	3	3	4	4	1	2	1	2
27	L27	L	1	2	4	4	2	3	4	1	5	2	2	1	4	2	2	2
28	1.29	Т	2	2	1	2	2	1	4	2	2		2	2	4	2	1	
20	L20	L	2	2	1	5	2	1	4	2	5	4	5	5	4	5	1	4
29	L29	L	2	1	5	4	3	2	1	4	2	3	1	3	3	5	3	2
30	L30	L	1	3	2	4	3	1	2	5	4	5	5	3	4	3	4	1
31	L31	L	1	5	4	5	4	3	3	5	1	1	1	1	5	3	3	1
32	L32	L	2	3	2	5	1	1	2	2	3	4	4	4	4	5	2	4
22	I 22	т	2	5	2	4	1	2	4	4	1	4	2	1	4	2	1	2
35	1.33	L	2	5	2	4	1		4	4	1	4	5	1	4	5	1	2
	L34	L	5	5	5	4	2	4	2	5	2	3	5	3	3	5	5	3
35	L35	L	2	5	3	3	3	2	2	2	2	4	2	4	3	4	3	4
36	L36	L	1	3	1	4	4	3	1	3	5	4	3	3	1	5	3	1
37	L37	L	3	4	1	4	2	2	5	4	3	4	3	3	4	2	2	3
29	1.29	т	2	4	2	5	2	1	2	2	4	4	4	4	2	1	2	1
30	1.30	L	2	-	5	5	5	1	5	5	4	4	-	4	5	1	2	1
39	L39	L	2	5	1	5	3	1	3	4	2	3	4	2	4	5	1	1
40	L40	L	3	3	2	3	3	3	3	5	3	5	2	3	4	3	3	2
41	L41	L	2	3	2	4	4	2	3	5	3	4	4	4	4	4	1	3
42	L42	L	2	4	1	5	2	1	3	3	3	4	2	3	4	4	3	3
43	I 43	т	1	2	5	4	2	1	5	3	3	2	2	1	5	5	2	2
44	1.44 1.44	T	1		2			1	5	2	2		2	1	2	2		
44	L44	L	1	4	2	5	1	1	5	5	2	5	2	1	5	2	4	1
45	L45	L	1	3	1	5	1	4	5	5	5	1	1	1	3	5	3	1
46	L46	L	2	5	1	5	3	3	3	4	5	3	3	2	3	4	3	1
47	L47	L	2	4	2	5	2	2	2	4	2	4	3	1	2	2	4	2
48	L48	L	2	3	4	3	4	1	3	2	1	3	4	2	4	5	2	1
40	I 40	т	1	2	5	5	ว	2	2	2		2	ว	2	5	2	2	1
49	L49	L	1			5	2	5	2	-	4	3	2	3			2	1
50	L50	L	2	4	5	5	2	2	3	5	2	3	3	3	4	4	3	1
51	L51	L	3	1	1	2	2	2	2	2	1	4	4	5	3	4	2	3
52	L52	L	3	4	2	5	1	1	3	4	3	4	2	4	4	1	2	1
53	L53	L	4	2	3	2	3	2	2	1	1	4	4	4	4	4	2	4
54	I 54	т	2	1	1	-	3	1	3	1	1	2	2	3	1	1	2	Л
55	1.55	T		2	1		2	1	2	1	2	5					2	
55	L33	L	1	5	5	1	5	1	2	5	2	5	4	4	4	4	5	1
56	L56	L	2	3	2	5	1	4	4	5	3	1	2	1	1	2	5	1
57	L57	L	1	4	1	3	4	2	3	4	4	5	2	2	4	4	4	1
58	L58	L	2	3	2	3	2	2	5	5	2	3	4	4	3	5	2	4
50	I 59	т	4	2	4	2	4	4	2	2	2	3	4	4	4	4	4	3
	1.00	T		1	-			1			2	1						5
60	L60	L	5	1	5	5	1	1	4	4	2	1	1	2	1	1	5	1
61	L61	L	4	1	5	2	5	1	3	2	2	3	5	2	3	4	2	3
62	L62	L	4	1	2	3	4	3	3	2	2	4	4	3	4	4	2	4
63	L63	L	4	3	5	3	4	1	3	3	4	2	3	2	4	2	1	2
64	I 64	т	1	2	3	2	5	2	2	2	2	4	2	4	4	3	2	4
	1.45	T	4		2	2	2	2	2	2		-	2		4	4	2	7
C0	L03	L -	4	5	3	2	2	2	3		4	2	2	4	4	4	2	3
66	L66	L	2	3	3	2	1	1	2	5	2	2	3	1	4	2	2	4
67	L67	L	1	5	1	5	4	1	1	4	3	3	1	4	5	5	1	1

LINDAB DATA ALL QUESTIONNAIRES (continued) (QCPY1-QCPY16)

Question		COUN	QCP	QCP	QCP	QCPY	QCPY	QCPY	QCPY	QCPY	QCPY	QCPY	QCP	QCP	QCP	QCP	QCP	QCP
nr => 68	PL I 68	TRY	Y1 2	Y2	¥3	4 5	5	6	7 5	8	9 3	10	Y11 2	¥12	Y13	Y14	¥15	Y16
69	L69	L	3	3	3	3	4	3	4	2	3	4	4	2	4	4	2	3
70	L70	L	1	3	5	5	3	4	2	2	1	3	5	2	3	2	2	3
72	L72	L	3	2	3	1	3	1	1	5	1	3	2	4	4	4	2	3
73	L73	L	1	2	1	1	3	5	1	1	4	2	1	1	3	4	3	1
74	L74	L	3	4	4	5	4	3	4	3	4	5	5	5	3	4	4	4
75	L75	L	1	4	4	4	2	1	1	2	2	2	2	1	4	2	4	4
77	L77	L	2	2	2	5	1	3	2	5	2	1	1	1	5	3	2	1
78	L78	L	2	3	3	4	3	2	2	4	2	3	4	3	3	4	3	2
79	L79	L	2	3	4	5	3	2	2	5	3	2	1	2	3	5	2	2
80	L80	L	1	3	2	2	4	2	3	4	2	3	4	4	3	3	2	3
81	1.82	L	2 4	4	4	5	3	2	4	3	1	5	4	2	3	4	2	3
83	L82	L	3	3	2	3	2	1	4	3	3	4	4	4	4	3	3	1
84	L84	L	5	1	5	2	5	5	1	5	1	2	4	5	5	1	2	5
85	L85	L	2	2	5	4	3	2	3	4	4	3	2	2	4	3	2	2
86	L86	L	2	2	2	1	1	2	3	5	4	3	2	4	4	2	1	5
87	L87	L T	2	1	1	3	1	3	2	5	3	3	2	4	3	4	3	3
89	L88 L89	L	3	4	4	4	4	4	4	2	2	3	2	4	4	4	2	2
90	L90	L	4	2	2	3	1	4	1	5	2	5	2	3	3	5	2	5
91	L91	L	1	2	2	3	3	4	4	4	4	2	2	2	4	4	3	2
92	L92	L	1	2	3	2	3	3	3	2	2	4	3	2	3	4	3	4
93	L93	L	4	1	4	2	5	4	2	4	1	4	5	4	4	1	5	1
94	L94	L	1	1	2	5	2	2	1	1	2	4	3	1	4	5	1	3
95	L95	L	2	2	3	4	5	4	4	4	3	4	2	2	5	4	2	3
97	L97	L	3	1	4	2	5	2	2	1	2	3	4	2	4	4	3	5
98	L98	L	2	2	1	5	1	1	4	5	4	5	3	1	3	5	4	1
99	L99	L	2	2	3	4	2	1	3	1	1	2	2	4	3	4	2	3
100	L100	L	3	3	2	4	3	2	3	4	3	3	3	3	3	4	2	2
101	L101 L102	L	2	3	2	5	2	1	3	5	4	1	2	2	3	3	2	2
102	L102	L	2	2	2	3	2	3	3	3	3	4	4	1	4	4	2	2
104	L104	L	2	4	4	5	1	1	3	5	3	4	3	1	4	1	1	2
105	L105	L	2	1	3	1	3	1	3	2	2	4	4	2	3	4	3	4
106	L106	L	2	3	3	3	3	1	2	2	2	4	4	2	4	3	3	3
107	FI F2	F	4	2	3	3	4	3	3	3	3	3	3	3	4	5	2	3
103	F3	F	4	2	1	1	4	1	1	2	4	4	1	5	1	4	2	5
110	F4	F	2	4	3	2	3	3	4	3	4	3	5	2	3	4	2	4
111	F5	F	3	4	3	2	3	2	2	2	2	3	3	4	2	5	2	5
112	F6	F	3	2	3	2	5	3	2	3	5	4	3	3	5	4	2	3
113	F7	F E	2	3	2	3	1	3	2	4	3	3	4	2	4	5	2	3
114	го F9	F	3	2	2	4	2	2	2	4	3	3	3	1	4	4	2	3
116	F10	F	1	1	5	5	1	1	1	5	5	5	1	3	5	5	1	5
117	G1	G	1	5	2	4	1	2	2	3	3	3	4	2	3	2	2	2
118	G2	G	2	3	1	5	1	1	3	5	4	1	4	3	3	4	3	1
119	G3	G	2	4	1	4	1	1	4	5	4	3	2	4	3	5	5	2
120	G4 G5	G	5	4	3	3	3	3	3	5	5	5	5	3	5 4	5	5	5
121	G6	G	3	2	4	2	4	3	3	4	3	3	3	3	4	3	2	4
123	G7	G	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
124	G8	G	1	2	4	3	4	2	4	5	2	5	5	2	4	5	2	2
125	G9	G	1	4	1	5	2	1	3	4	4	2	2	2	4	3	4	1
126	G10	G	3	3	3	3	3	3	3	4	5	1	3	3	5	3	1	5
127	GI1 G12	G	2	3	5 4	3	3	5 4	2	3	2	5	4	5 4	4	5 4	4	5
120	G12	G	2	5	1	2	4	4	4	4	2	5	2	4	3	4	1	2
130	G14	G	1	4	1	5	2	2	3	4	5	2	2	1	4	3	3	1
131	G15	G	1	2	1	4	1	3	2	2	4	2	3	3	4	5	1	4
132	G16	G	1	2	2	3	4	2	1	1	3	2	2	2	3	2	2	2
133	G17	G	2	4	2	3	3	2	3	2	4	4	4	3	4	3	2	3
134	GI8	G	2	4	3	4	3	1	- 3	- 3	3	4	4	2	4	4	- 3	4

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Question	DI	COUN	QCP	QCP V10	QCP V10	QCPY	QCPY	QCPY	QCPY	QCPY	QCPY 25	QCPY	QCP	QCP	QCP	QCP V20	QCP	QCP
mr =>	FL T	TRY	11/	110	119	20	21	44	23	24	43	20	12/	120	129	130	131	132
1	L1	L	2	1	4	4	2	2	4	3	3	3	3	2	3	2	4	2
2	L2	L	3	3	2	3	4	3	4	4	1	3	2	4	4	4	2	3
3	L3	L	1	1	4	4	5	3	4	5	4	2	2	2	4	3	3	4
4	14	I	4	2	3	3	2	3	2	4	4	4	4	3	2	4	3	2
	L			2	2	2	2		2	4	7		-		1	-	2	2
5	L5	L	4	3	3	3	2	2	3	3	2	2	2	I	1	2	3	Z
6	L6	L	4	3	4	3	4	3	4	4	2	4	2	3	2	3	3	3
7	L7	L	4	2	2	1	5	5	5	5	1	3	1	4	4	3	3	2
8	L8	L	2	2	1	1	3	2	2	2	2	5	3	2	4	3	3	2
9	19	I	3	4	1	4	3	2	2	3	1	4	3	3	3	3	3	3
10	L 10	T	2	1	1	+	2	2	4	5	5		2	2	2	2	2	1
10	L10	L	2	1	1	3	2	2	4	5	5	2	3	2	3	3	3	1
11	L11	L	4	2	4	4	4	2	3	4	4	3	4	3	2	3	2	2
12	L12	L	3	1	2	3	3	1	4	5	2	4	2	4	4	3	2	2
13	L13	L	2	5	4	4	2	2	2	3	3	3	3	3	3	3	3	3
14	L14	L	5	5	5	3	3	5	5	5	1	3	4	3	3	5	5	1
15	L 15	I	4	2	2	4	4	2	5	4	2	4	2	2	2	4	2	4
15	LIJ	L	4	2	2	4	+	2	5	4	2	4	2	5	2	4	5	4
16	L16	L	2	2	4	4	3	1	2	4	5	3	2	3	2	4	4	2
17	L17	L	4	2	1	4	3	4	4	5	3	4	4	4	4	3	3	3
18	L18	L	2	2	1	4	2	1	3	4	2	4	4	1	2	2	4	1
19	L.19	L	4	1	5	5	1	1	5	5	2	5	2	2	2	2	4	4
20	1.20	Т	2		2	2	4		2	5	1	2	2	2		2	2	- -
20	L20	- L		4			4	- 4		5	-		2		4	5		<u> </u>
21	L21	L	2	4	2	1	3	5	4	4	2	3	3	3	4	3	3	4
22	L22	L	1	1	4	1	2	1	4	5	2	4	4	2	2	3	5	1
23	L23	L	2	4	2	1	3	5	4	4	2	3	3	3	4	3	3	4
24	L24	L	2	3	3	3	4	4	3	4	2	2	3	3	3	4	3	4
25	1.25	т	3	3	1	3	5	2	5	1	- 1	3	3	3	3	3	3	3
23	1.25	L •		5	1	د -	, ,		5	4	2		5		ر ۲	5		5
26	L26	L	4	2	2	5	5	1	5	3	3	2	3	3	4	3	3	2
27	L27	L	2	3	4	2	5	3	4	3	2	2	2	3	3	2	2	3
28	L28	L	2	2	3	3	2	3	3	4	2	4	4	2	2	3	3	2
29	L29	L	2	1	4	2	3	2	2	3	2	3	3	3	3	3	3	2
30	I 30	I	4	2	1	2	4	3	4	4	2	4	4	2	2	2	5	1
21	L 21	T		2	1		-	2	2		2		-7		4		2	4
31	L31	L	5	3	1	4	5	3	3	5	3	2	1	4	4	4	3	4
32	L32	L	4	1	3	4	4	4	2	5	5	5	4	2	2	4	3	4
33	L33	L	5	2	2	3	4	4	2	4	2	2	2	5	4	3	3	3
34	L34	L	3	3	3	5	2	2	3	4	2	2	2	2	3	3	3	2
35	L35	L	2	4	3	2	2	4	2	2	4	4	2	4	1	4	4	3
26	1.26	T		5	2		2	1	- 4	2	2	5	2	2	2	2	2	4
30	L30	L	3	3	3	5	3	1	4	3	2	3	3	2	3	3	2	4
37	L37	L	3	2	3	4	3	4	4	5	3	3	3	3	3	4	2	4
38	L38	L	1	1	2	3	4	2	5	5	1	4	2	4	4	3	2	3
39	L39	L	3	1	2	2	3	5	4	4	2	5	3	3	3	3	3	3
40	L40	L	2	3	3	4	3	2	3	3	3	3	2	3	3	3	3	2
41	L 41	Т	2	2	2	2	2	2	4	4	2	2	2	2	2	2	4	2
41	L41	L	2	2	3	2	2	5	4	4	2	3	5	5	2	2	4	5
42	L42	L	5	2	5	2	3	4	4	5	2	5	3	4	4	4	5	2
43	L43	L	2	1	1	4	4	4	3	4	4	2	2	2	4	3	3	2
44	L44	L	4	2	1	2	5	5	5	5	1	2	1	3	4	3	3	3
45	L45	L	5	1	1	1	5	1	5	5	3	5	5	5	5	5	5	1
46	I 46	I.	4	3	3	3	5	2	4	4	3	3	3	4	3	3	3	3
17	L 17	т	5	2	2	2	2	2		5	2	1	n	5	5	2	2	4
4/	L47			2	2	5	3	2	4	3	2	4	2	5	3	2		4
48	L48	L	4	2	3	2	3	4	4	4	2	3	2	3	3	4	4	3
49	L49	L	3	3	1	4	5	5	3	5	4	3	2	3	2	3	4	3
50	L50	L	3	2	2	2	5	2	4	4	3	5	3	3	2	2	4	2
51	L51	L	3	2	3	4	3	2	3	3	4	3	3	3	3	3	3	3
52	1.52	т	3	1	3	2	5	5	5	5	1	4	2	3	4	3	2	2
52	1.52	T	1	2	1		2	2	5	2	4			2		2	2	2
	L33	L -			1	4				2	4	2	4	2	2	2	3	2
54	L54	L	2	3	2	3	4	3	4	2	2	4	2	3	3	3	2	3
55	L55	L	4	1	3	2	4	1	3	5	1	2	5	3	1	3	5	1
56	L56	L	4	2	1	3	5	4	5	5	1	3	1	3	3	3	3	3
57	L57	L	2	4	1	4	4	4	4	3	3	4	3	3	4	4	3	4
57	1 50	т	2	2	2		2	2		2	2		2	2	2	2	2	
58	L38	L -	3		3	5		2	4	2		4	2	2		3	2	4
59	L59	L	2	2	3	2	2	2	2	2	4	2	4	2	1	4	4	2
60	L60	L	5	5	1	1	4	5	3	1	3	3	5	3	3	4	3	3
61	L61	L	2	1	3	5	2	1	3	4	4	4	4	2	3	2	3	2
62	L62	L	3	3	3	3	2	2	2	2	3	3	4	2	3	3	4	3
62	1 42	т	2	1	2	2		2	2		1	2	7	2	2	2		2
0.0	L03	L -	2	-		3	4	3	3	4	1	3	3	3	2	3	4	2
64	L64	L	2	3	3	4	2	1	3	2	4	1	3	2	2	2	4	3
65	L65	L	3	4	3	4	2	2	2	2	4	4	4	2	2	3	3	3
66	L66	L	2	2	1	2	3	2	5	4	5	4	4	3	4	3	2	3
67	L67	L	2	3	3	5	3	3	5	5	2	3	3	3	3	3	4	2
	207		-	~	~	-	,	~	,	~	1	~	,	,	,	-		-

LINDAB DATA ALL QUESTIONNAIRES (continued) (QCPY17-QCPY32)

Question nr =>	PL	COUN	QCP Y17	QCP V18	QCP V19	QCPY 20	QCPY 21	QCPY 22	QCPY 23	QCPY 24	QCPY 25	QCPY 26	QCP Y27	QCP Y28	QCP Y29	QCP Y30	QCP V31	QCP Y32
68	L68	L	4	3	1	3	4	2	4	4	3	5	4	2	2	3	3	4
69	L69	L	2	3	3	4	3	4	3	3	4	2	3	2	3	3	3	3
70	L70	L	1	1	2	5	2	2	3	5	3	3	3	3	3	3	4	3
72	L72	L	3	2	4	4	3	4	4	4	4	4	1	5	5	4	2	4
73	L73	L	1	4	2	1	1	4	3	1	2	2	2	5	4	4	2	3
74	L74	L	4	3	4	2	4	4	4	3	3	3	3	3	3	3	3	3
75	L75	L	2	1	3	2	3	2	4	4	4	3	3	4	4	2	3	3
76	L76	L	4	3	1	1	4	3	5	5	4	2	1	2	4	3	4	3
70	L//	L	2	1	1	1	2	4	5	5	3	4	3	2	4	3	2	2
70	L/8 179	L	1	1	2	5	2	2	4	5	1	2	4	2		3	4	2
80	1.80	L	2	2	3	4	2	3	2	4	2	5	3	2	2	3	4	1
81	L81	L	2	3	2	4	4	2	3	3	4	4	2	2	2	2	2	3
82	L82	L	2	3	1	4	3	2	3	5	4	4	3	3	3	3	3	4
83	L83	L	2	2	2	3	3	2	4	5	3	3	3	3	2	3	3	2
84	L84	L	2	4	4	3	1	1	2	1	4	3	4	2	2	3	5	1
85	L85	L	3	4	2	2	4	2	3	4	2	3	4	2	2	3	4	2
86	L86	L	1	4	3	1	3	3	2	5	2	5	2	3	3	3	2	2
87	L87		2	3	3	3	3	2	1	3	5	3	4	1	2	3	3	2
88	L88	L	3	4	3	5	2	2	2	2	5	3	3	3	3	3	3	3
89	L89	L T	4	1	2	3	3	3	4	2	2	3	2	3	3	3	3	2
90	L90 I Q1	L I	2	2 	4 4	4	2	2		3 4	4	3 4	4	3	3	3	4	3
92	L91	L	1	2	2	-+	3	2	3	4	4	3	3	2	3	2	4	3
93	L93	L	4	4	5	1	1	2	1	5	2	4	2	2	4	4	4	2
94	L94	L	1	3	4	5	4	1	5	5	1	2	1	3	4	3	4	3
95	L95	L	2	1	3	3	2	2	4	5	3	3	3	3	3	3	3	2
96	L96	L	2	3	2	4	2	3	3	4	3	2	3	2	3	2	2	3
97	L97	L	1	4	3	4	2	2	2	4	3	4	4	3	2	3	4	3
98	L98	L	4	1	2	3	2	2	4	5	2	5	1	3	3	3	3	5
99	L99	L	1	2	2	3	1	1	2	4	4	4	3	2	3	4	5	1
100	L100	L	2	3	2	3	2	3	3	4	3	4	3	3	3	2	3	3
101	L101	L	3	3	2	3	4	3	4	4	2	4	3	2	3	2	3	3
102	L 102	L	2	1	2	3	4	2	4	4	3	4	2	3	4	3	2	4
103	L103	L	4	4	1	2	5	5	5	4	4	5	2	3	4	3	3	3
101	L101	L	1	3	3	5	2	2	2	2	5	4	5	1	3	3	3	3
106	L106	L	2	1	1	3	2	2	3	3	2	5	4	2	2	3	4	2
107	F1	F	2	2	5	5	2	2	3	3	4	4	5	1	2	3	5	2
108	F2	F	4	3	4	4	4	4	4	3	4	4	4	2	2	2	4	2
109	F3	F	1	3	4	3	1	2	2	4	5	4	4	1	2	2	2	1
110	F4	F	1	1	3	5	2	1	1	4	3	4	4	1	1	3	3	2
111	F5	F	2	1	4	5	2	2	2	2	1	5	3	2	2	3	2	3
112	F6	F	1	3	3	5	2	1	4	1	4	3	5	1	1	3	5	1
113	F/	F	2	1	2	5	2	5	2	5	5	3	4	2	3	2	5	2
114	F9	F	2	3	2	4	2	2	3	4	2	4	3	3	2	4	4	2
115	F10	F	5	3	1	5	4	4	4	5	2	2	3	1	5	3	1	2
117	G1	G	2	1	1	3	4	4	5	3	2	5	4	1	1	3	4	4
118	G2	G	4	1	3	5	4	2	4	4	2	3	3	4	5	2	2	3
119	G3	G	2	5	3	3	4	3	4	4	1	3	4	4	3	5	4	3
120	G4	G	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3
121	G5	G	1	1	1	3	5	3	3	5	3	3	3	4	4	2	3	3
122	G6	G	2	3	3	3	3	2	2	3	3	3	4	2	3	3	4	3
123	G7	G	3	3	3	3	3	3	3	3	3	3	3	2	3	3	4	2
124	G8	G	3	1	1	4	2	1	2	5	4	5	2	3	2	2	2	5
125	G10	C C	1	1	1	4	4	1	3	5	5	4	2	2	3	3	3	4
120	G11	G	3	1	1	3	3	2	4	4	3	5	3	3	3	3	3	4
127	G12	G	1	1	3	5	2	2	4	4	4	5	4	2	1	3	4	2
129	G13	G	3	1	1	3	3	2	3	4	2	4	2	3	3	4	2	3
130	G14	G	1	1	1	2	5	1	4	5	3	4	3	2	3	4	5	3
131	G15	G	2	1	3	5	4	1	3	5	2	4	3	2	2	4	2	4
132	G16	G	3	3	3	4	2	1	2	4	1	2	2	2	2	4	4	3
133	G17	G	3	2	3	4	3	4	3	5	3	5	2	2	4	2	3	5
134	G18	G	3	1	3	4	3	1	4	5	2	3	3	3	2	3	4	4

									eonu.	a contra
Question		COUN	QCP	QCP V24	QCP V25	QCPY 26	QCPY 27	QCPY	QCPY 20	QCPY 40
mr =>	PL	TRY	135	134	135	30	3/	30	39	40
1	L1	L	3	3	1	1	3	1	3	1
2	L2	L	2	4	2	2	3	3	3	3
2	12	т	1	2	1	4	2	1	1	1
5	LJ	L	1	5	1	4	5	1	1	1
4	L4	L	3	4	3	1	5	4	4	4
5	L5	L	3	4	2	2	2	2	1	2
6	I.C.	т	2	2	2	2	2	1	2	2
0	L0	L	Z	3	Z	2	3	1	Z	3
7	L7	L	3	5	5	4	4	5	3	4
8	L8	L	3	4	1	2	4	3	2	2
0	10	т	2	4	1	-	2	4	-	-
9	L9	L	2	4	1	2	3	4	4	3
10	L10	L	5	2	4	3	1	1	3	4
11	L11	L	2	3	2	2	3	2	3	2
12	L 12	т	1	4	2	2	4	2	2	2
12	LIZ	L	1	4	Z	2	4	Z	Z	2
13	L13	L	2	4	2	2	3	4	5	2
14	L14	L	1	5	1	3	2	3	3	3
15	T 15	т	2	2	1	2	2	2	2	2
15	LIS	L	2	3	1	2	3	3	2	2
16	L16	L	4	2	1	2	3	2	3	2
17	L17	L	2	3	2	2	3	2	3	2
10	L10		-	0	-	-		-	2	-
18	L18	L	5	2	1	2	1	1	5	1
19	L19	L	4	2	2	2	3	3	2	2
20	L20	I.	3	5	4	1	3	5	1	5
20	1.20	- L -		2	-			2		2
21	L21	L	2	2	2	3	4	2	4	3
22	L22	L	5	4	1	3	2	1	2	2
23	1.23	I	2	2	2	3	4	2	4	3
23	1223	- L -	-	-	-	5		-	-	5
24	L24	L	3	3	2	2	3	2	2	2
25	L25	L	2	3	2	3	3	3	3	3
26	I 26	I	1	3	2	2	4	3	4	2
20	L20	L	1	5	2	2	-	5	-	2
27	L27	L	3	5	3	3	3	2	4	4
28	L28	L	4	3	2	2	3	3	3	1
20	1.20	т	2	4	4	2	4	2	4	4
29	L29	L	2	4	4	5	4	5	4	4
30	L30	L	3	2	1	2	4	1	1	1
31	L31	L	2	5	2	2	5	1	5	5
22	1.22	т	2	4	4	1	5	2	4	2
32	L32	L	5	4	4	1	5	2	4	5
33	L33	L	2	3	4	1	4	3	5	4
34	L34	L	3	3	1	1	3	1	1	1
25	1.25	T	2	2	1	2	2	2	2	2
35	L35	L	2	3	1	3	3	2	2	2
36	L36	L	3	2	2	1	3	2	4	1
37	L37	L	2	3	4	4	4	4	4	4
20	1.29	т.	2	4		-	2	-	-	
38	L38	L	3	4	4	3	3	3	3	4
39	L39	L	3	1	4	2	3	1	5	4
40	I.40	L	3	4	4	4	3	3	3	3
10	L 10		4					2	2	2
41	L41	L	4	2	1	3	4	2	3	2
42	L42	L	4	3	1	4	3	1	3	2
43	I 43	I.	2	2	2	2	2	2	3	3
	1.15	-	-		-	-	-	-	5	-
44	L44	L	1	3	2	2	2	1	3	5
45	L45	L	5	5	1	1	5	2	5	1
46	I 46	I	3	4	3	4	2	2	3	3
40	140	- L -		-		+	2	2	5	- 5
47	L47	L	1	5	4	2	3	3	3	5
48	L48	L	2	3	2	1	3	2	2	1
49	I 49	I.	1	3	2	1	1	1	4	4
47 70	1.50	-			-	-	1		-	-
50	L50	L	4	3	1	1	3	1	2	2
51	L51	L	3	2	2	2	3	2	2	2
52	I 52	I	2	5	1	3	5	3	4	2
	1.52	-		-			-		-	<u>ل</u>
53	L53	L	4	3	1	1	2	1	3	1
54	L54	L	3	4	1	3	4	2	2	1
55	1.55	т	5	5	5	5	5	n	5	2
33	LJJ	L	5	3	3	5	5	2	5	5
56	L56	L	3	4	4	4	4	2	4	4
57	L57	L	3	4	2	2	4	2	2	4
20	1 20	т	2	4	- 1	2	5	2	-	1
58	L38	L	2	4	1	2	3	2	2	1
59	L59	L	4	4	2	2	4	1	3	2
60	L60	L	3	2	1	4	3	2	3	2
	T <1		-	~			-	~	~	~
61	L61	L	3	2	2	2	3	3	2	2
62	L62	L	3	3	1	2	3	1	3	3
63	I 63	I	2	4	3	4	3	2	3	3
	1.05		2	-		-		2	2	
64	L64	L	3	3	1	2	3	2	3	4
65	L65	L	2	2	2	2	3	3	2	3
66	I 66	T	2	3	1	А	3	Α	5	5
00	LUU	- L -	-	5		-			5	5
67	L67	L	1	2	1	2	3	3	3	2

### LINDAB DATA ALL QUESTIONNAIRES (continued) (QCPY33-QCPY40)

Question nr =>	PL	COUN TRV	QCP Y33	QCP Y34	QCP Y35	QCPY 36	QCPY 37	QCPY 38	QCPY 39	QCPY 40
m _> 68	L68	L	2	2	135	1	5	1	2	1
69	L69	L	3	3	2	2	3	2	3	2
70	L70	L	3	1	1	2	4	2	4	2
72	L72	L	1	2	1	2	2	2	3	3
73	L73	L	2	3	1	2	5	3	2	2
74	I 74	I	3	3	2	2	2	2	2	2
75	1.75	I	3	4	1	3	3	4	4	2
76	L76	L	1	3	4	3	4	4	4	4
77	1.77	I	3	3	1	2	4	2	2	3
78	L78	L	3	3	4	3	4	3	3	3
79	L79	L	2	4	4	3	4	2	5	4
80	1.80	L	4	3	3	1	4	2	3	3
81	L81	L	2	2	4	4	4	2	3	4
82	1.82	I	2	2	1	2	1	1	5	4
83	1.83	I	3	2	4	3	4	3	3	3
84	1.84	I	5	2		1		1	2	1
85	1.85	I	4	4	2	2	3	1	1	1
86	1.86	L	4	4	2	5	5	5	5	2
00	1.00	L T	2	2	2	2	2	2	2	2
07	100	T	2	2	2	2	2	2	2	2
00	1.00	L T	2	2	1	2	2	2	3	3
07	1.00	L T	3	2	1	2	3	2	4	4
90	L90 L01	L T	4	2	2	2	4	2	2	2
91	L91 L02	L T	2	2	2	2	4	2	2	2
92	L92 1.02	L T	3	2	2	2	2	3	3	2
95	L93	L T	4	2	1	2	3	1	4	2
94	L94	L T	4	5	1	2	4	2	2	1
95	L95	L	3	2	2	2	3	2	4	2
96	L96	L	1	4	2	2	3	2	2	2
97	L97	L	4	2	2	2	4	4	3	3
98	L98	L	2	2	2	3	4	1	2	2
99	L99	L	4	4	2	3	2	1	3	1
100	L100	L	3	3	2	2	5	2	3	5
101	L101	L	2	3	4	2	5	3	2	4
102	L102	L	2	4	1	4	3	2	2	1
103	L103	L	3	3	2	1	4	1	2	2
104	L104	L	1	3	2	1	3	2	1	4
105	L105	L	3	3	2	2	4	2	3	2
106	L106	L	3	4	1	2	4	4	4	2
107	FI	F	5	3	1	2	1	2	1	2
108	F2	F	5	2	1	3	3	1	2	2
109	F3	F	2	2	2	2	3	1	3	1
110	F4	F	3	4	1	2	3	2	2	3
111	F5	F	4	4	2	3	4	2	2	2
112	F6	F	4	4	1	2	3	1	2	2
113	F7	F	3	4	2	2	4	1	3	2
114	F8	F	4	3	2	3	3	2	4	3
115	F9	F	4	2	3	2	2	3	3	3
116	F10	F	2	2	3	4	5	2	3	5
117	G1	G	2	3	2	3	3	3	4	5
118	G2	G	1	1	3	2	4	3	5	4
119	G3	G	3	3	2	2	4	3	2	3
120	G4	G	3	1	2	3	4	5	4	3
121	G5	G	2	5	1	2	3	3	5	1
122	G6	G	4	3	2	2	3	3	2	3
123	G7	G	4	4	1	1	4	4	4	1
124	G8	G	2	3	1	2	4	4	4	2
125	G9	G	2	4	3	3	3	3	3	3
126	G10	G	3	5	2	2	2	2	3	3
127	G11	G	2	5	4	3	3	3	4	2
128	G12	G	5	3	2	1	2	2	3	1
129	G13	G	3	3	2	3	4	4	4	3
130	G14	G	2	4	1	1	3	3	2	2
131	G15	G	1	5	3	1	5	3	5	4
132	G16	G	3	2	1	1	2	3	3	4
133	G17	G	2	4	3	1	2	3	4	4
134	G18	G	3	2	2	2	3	3	4	3

# LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (QVAL1-QVAL10)

Average		QVAL1	QVAL2	QVAL3	QVAL4	QVAL5	QVAL6	QVAL7	QVAL8	QVAL9	QVAL 10
TOTAL         1.9         2.0         1.8         1.8         1.9         1.8         2.1         2.4         2.9         2.3           FR         1.6         1.9         1.6         1.3         1.6         1.5         1.9         2.0         2.4         1.9           GE         2.0         1.7         1.6         1.9         1.8         2.1         2.7         3.2         2.4           LUX.NAT.         2.2         2.0         1.7         1.6         1.9         1.8         2.1         2.7         3.2         2.4           Stäterors	Average										
LU         2.0         1.8         1.8         1.9         1.8         2.1         2.4         2.9         2.3           FR         1.6         1.9         1.6         1.3         1.6         1.5         1.9         2.0         2.4         1.9           GE         2.0         1.7         1.6         1.9         1.8         2.1         2.7         3.2         2.4           LUX.NAT.         2.2         2.0         1.7         1.6         1.9         1.8         2.1         2.7         3.2         2.4           StdError             0.9         0.6         0.7         0.7         0.7         0.9         1.0         0.9           GE         0.7         0.8         0.7         0.7         0.7         0.9         1.0         0.9         0.8           Median          0.7         0.8         0.7         0.8         0.7         0.5         0.3         0.8         0.7         0.5           LUX.NAT.         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0 <td>TOTAL</td> <td>1.9</td> <td>2.0</td> <td>1.8</td> <td>1.8</td> <td>1.9</td> <td>1.8</td> <td>2.1</td> <td>2.4</td> <td>2.9</td> <td>2.3</td>	TOTAL	1.9	2.0	1.8	1.8	1.9	1.8	2.1	2.4	2.9	2.3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	LU	2.0	2.0	1.8	1.8	1.9	1.8	2.1	2.4	2.9	2.3
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	FR	1.6	1.9	1.6	1.3	1.6	1.5	1.9	2.0	2.4	1.9
LUX.NAT.         2.2         2.0         1.7         1.6         1.9         1.8         1.9         2.4         2.8           Std Errors                  TOTAL         0.8         0.7         0.7         0.7         0.7         0.9         1.1         0.9           LU         0.8         0.7         0.5         0.5         0.7         0.7         0.7         0.9         1.1         0.9           FR         0.7         0.9         0.5         0.5         0.7         0.5         0.3         0.8         0.7         0.5           LUX.NAT.         0.7         0.8         0.6         0.7         0.8         0.7         0.7         0.9         0.8         0.7         0.5           LUX.NAT.         0.7         0.8         0.7         0.7         0.7         0.7         0.7         0.8         0.7         <	GE	2.0	1.9	1.8	1.9	2.2	1.8	2.1	2.7	3.2	2.4
Side Errors	LUX. NAT.	2.2	2.0	1.7	1.6	1.9	1.8	1.9	2.4	2.8	2.2
TOTAL         0.8         0.8         0.7         0.7         0.7         0.9         1.0         0.9           LU         0.8         0.7         0.7         0.7         0.9         1.1         0.9           FR         0.7         0.9         0.5         0.5         0.7         0.5         0.3         0.8         1.1         0.9           GE         0.6         0.5         0.5         0.7         0.5         0.3         0.8         0.1         0.5           LUX.NAT.         0.7         0.8         0.6         0.6         0.5         0.7         0.7         0.10         0.8         0.7         0.7         0.0         0.8         0.7         0.7         0.7         0.7         0.7         0.7         0.9         0.8         0.7           Median         U         0.7	Std Errors										
LU         0.8         0.7         0.8         0.7         0.7         0.9         1.1         0.9           FR         0.7         0.9         0.5         0.5         0.6         0.6         0.8         1.1         0.7           GE         0.6         0.5         0.5         0.6         0.6         0.5         0.9         0.8         1.0         0.7           Median	TOTAL	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.9	1.0	0.9
FR         0.7         0.9         0.5         0.7         0.5         0.3         0.8         1.1         0.7           GE         0.6         0.5         0.6         0.6         0.5         0.9         0.8         0.7         0.5           LUX.NAT.         0.7         0.8         0.7         0.8         0.7         0.10         0.9         0.8           Median           2.0         3.0         2.0         2.0         2.0         2.0         2.0         3.0         2.0         2.0         2.0         3.0         2.0         2.0         2.0         2.0         3.0         2.0         2.0         2.0         3.0         2.0         2.0         2.0         2.0         3.0         3.0         2.0         2.0         2.0         3.0         3.0         3.0         3.0	LU	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.9	1.1	0.9
GE         0.6         0.5         0.7         0.8         0.7         0.7         0.8         0.7         0.7         0.8         0.7         0.7         0.8         0.7         0.8         0.7         0.7         0.8         0.7         0.8         0.7         0.7         0.8         0.7         0.8         0.7         0.7         0.8         0.7         0.8         0.7         0.7         0.7         0.8         0.7         0.7         0.7         0.7         0.8         0.7         0.7         0.7         0.7         0.8         0.7	FR	0.7	0.9	0.5	0.5	0.7	0.5	0.3	0.8	1.1	0.7
LUX.NAT. $0.7$ $0.8$ $0.6$ $0.7$ $0.8$ $0.7$ $1.0$ $0.9$ $0.8$ Median                TOTAL $2.0$	GE	0.6	0.5	0.5	0.6	0.6	0.5	0.9	0.8	0.7	0.5
Median         Image: Network           TOTAL         2.0         2.0         2.0         2.0         2.0         2.0         3.0         3.0         2.0           LU         2.0         2.0         2.0         2.0         2.0         2.0         3.0         3.0         2.0           FR         1.5         2.0 <td< td=""><td>LUX. NAT.</td><td>0.7</td><td>0.8</td><td>0.6</td><td>0.7</td><td>0.8</td><td>0.7</td><td>0.7</td><td>1.0</td><td>0.9</td><td>0.8</td></td<>	LUX. NAT.	0.7	0.8	0.6	0.7	0.8	0.7	0.7	1.0	0.9	0.8
TOTAL         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         3.0         2.0           LU         2.0         2.0         2.0         2.0         2.0         2.0         2.0         3.0         2.0         3.0         2.0         2.0         3.0         2.0         3.0         2.0         2.0         3.0         3.0         2.0         2.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0	Median										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	TOTAL	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	LU	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	FR	1.5	2.0	2.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0
LUX.NAT.         2.0         2.0         2.0         2.0         2.0         2.0         2.0         3.0         2.0           Min	GE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0
Min         Image: Constraint of the second sec	LUX. NAT.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
TOTAL         1.0 </td <td>Min</td> <td></td>	Min										
LU         1.0 <th1.0< th=""> <th1.0< th=""> <th1.0< th=""></th1.0<></th1.0<></th1.0<>	TOTAL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
FR         1.0	LU	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
GE         1.0         1.0         1.0         1.0         1.0         1.0         1.0         2.0         2.0           LUX.NAT.         1.0 </td <td>FR</td> <td>1.0</td>	FR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
LUX.NAT.         1.0         1.	GE	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
Max         Image         I	LUX, NAT.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TOTAL         4.0         5.0         5.0         4.0         4.0         3.0         5.0         5.0         5.0         5.0           LU         4.0         5.0         5.0         4.0         4.0         3.0         5.0	Max										
LU         40         50         50         40         40         30         50         30           GE         3.0         3.0         3.0         3.0         3.0         3.0         3.0         4.0	TOTAL	4.0	5.0	5.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0
FR         3.0         3.0         2.0         2.0         3.0         2.0         2.0         3.0         2.0         3.0	LU	4.0	5.0	5.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0
GE         3.0         3.0         3.0         3.0         3.0         3.0         3.0         4.0         4.0         4.0         5.0         5.0           LUX. NAT.         3.0         4.0         3.0         3.0         3.0         3.0         3.0         3.0         4.0         3.0         3.0         4.0<	FR	3.0	3.0	2.0	2.0	3.0	2.0	2.0	3.0	5.0	3.0
UX. NAT.         3.0         4.0         3.0         4.0         3.0         4.0         3.0         3.0         4.0         4.0         3.0         5.0         4.	GE	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	3.0
Spread=max-min         IN	LUX NAT	3.0	4.0	3.0	3.0	4.0	3.0	3.0	5.0	4.0	4.0
TOTAL         3.0         4.0         4.0         3.0         3.0         2.0         4.0         4.0         4.0           LU         3.0         4.0         4.0         3.0         3.0         2.0         4.0         4.0         4.0           FR         2.0         2.0         1.0         1.0         2.0         1.0         1.0         2.0         4.0         4.0         4.0           GE         2.0         2.0         1.0         1.0         2.0         3.0         3.0         3.0         1.0           GE         2.0         2.0         2.0         2.0         3.0         3.0         3.0         1.0           LUX.NAT.         2.0         3.0         2.0         2.0         2.0         4.0         3.0         3.0           Q1 First quartile	Spread-max-min			010			010				
IOTAL         IO         IO <thi< td=""><td>TOTAL</td><td>3.0</td><td>4.0</td><td>4.0</td><td>3.0</td><td>3.0</td><td>2.0</td><td>4.0</td><td>4.0</td><td>4.0</td><td>4.0</td></thi<>	TOTAL	3.0	4.0	4.0	3.0	3.0	2.0	4.0	4.0	4.0	4.0
IC         IO         IO <thio< th="">         IO         IO         IO<!--</td--><td>IU</td><td>3.0</td><td>4.0</td><td>4.0</td><td>3.0</td><td>3.0</td><td>2.0</td><td>4.0</td><td>4.0</td><td>4.0</td><td>4.0</td></thio<>	IU	3.0	4.0	4.0	3.0	3.0	2.0	4.0	4.0	4.0	4.0
IR         210         100         100         210         100         100         210         100         210         100         210         100         210         100         210         100         210         100         210         100         210         100         210         100         210         100         100         210         100         100         100         100         100         100         100         100         100         100         100         100         200         2.0         3.0	FR	2.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	4.0	2.0
OIL         210 <td>CF</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>3.0</td> <td>3.0</td> <td>3.0</td> <td>1.0</td>	CF	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	1.0
Q1 First quartile         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         3.0	LUV NAT	2.0	3.0	2.0	2.0	3.0	2.0	2.0	40	3.0	3.0
TOTAL         1.0         2.0         1.0         1.0         1.0         2.0         1.3         2.0         2.0         1.3         2.0         2.0         1.3         2.0 </td <td>01 First quartile</td> <td>2.0</td> <td>0.0</td> <td>2.0</td> <td>2.0</td> <td>0.0</td> <td>2.0</td> <td>2.0</td> <td>-100</td> <td>0.0</td> <td>5.0</td>	01 First quartile	2.0	0.0	2.0	2.0	0.0	2.0	2.0	-100	0.0	5.0
IOTAL         Ito         Ito </td <td>TOTAI</td> <td>1.0</td> <td>2.0</td> <td>1.0</td> <td>1.0</td> <td>1.0</td> <td>1.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td>	TOTAI	1.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0
IC         IC<		1.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0
FR         1.0 <th1.0< th=""> <th1.0< th=""> <th1.0< th=""></th1.0<></th1.0<></th1.0<>	FP	1.0	1.0	1.0	1.0	1.0	1.0	2.0	13	2.0	13
GE         2.0         2.0         2.0         2.0         2.0         1.0         1.0         1.0         2.0         3.0         3.0         4.0         3.0		2.0	2.0	2.0	2.0	2.0	1.0	13	2.0	3.0	2.0
Q3 Third quartile         Z.0	UIV NAT	2.0	2.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0
TOTAL         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           LU         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           FR         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           GE.         2.0         2.0         2.0         2.0         2.0         3.0         3.0         3.0         3.0           LUX NAT         3.0         2.0         2.0         2.0         3.0         3.0         3.0         3.0	O3 Third quartile	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
LU         2.0         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           LU         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           FR         2.0         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           GE.         2.0         2.0         2.0         3.0	TOTAT	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	40	3.0
FR         2.0         2.0         2.0         2.0         2.0         2.0         3.0         3.0         4.0         3.0           FR         2.0         2.8         2.0         1.8         2.0         2.0         2.0         2.8         2.8         2.0           GE.         2.0         2.0         2.0         3.0         3.0         3.8         3.0           LIX NAT         3.0         2.0         2.0         2.0         2.0         3.0         3.0         3.0	IUIAL	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	3.0
FR         2.0         2.0         2.0         1.0         2.0         3.0		2.0	2.0	2.0	<u> </u>	2.0	2.0	2.0	2.0		2.0
GE.         2.0         2.0         2.0         2.0         2.0         3.0 <td></td> <td>2.0</td>		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	GE. LUV NAT	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0

		1			/					
	QVAL11	QVAL12	QVAL13	QVAL14	QVAL15	QVAL16	QVAL17	QVAL18	QVAL19	QVAL20
Average TOTAL	2.0	3.0	2.3	2.3	1.7	2.9	2.1	2.3	3.0	2.1
LU	2.1	3.0	2.3	2.3	1.7	2.8	2.2	2.3	3.0	2.1
FR	1.9	3.1	2.0	2.1	2.0	3.6	2.0	1.8	3.2	2.0
GE	1.8	2.5	2.4	2.3	1.3	2.6	2.2	2.4	3.0	2.1
LUX. NAT.	2.1	2.7	2.2	2.1	1.8	3.0	2.1	2.3	3.2	2.0
Std Emons								II		
	07	10	0.7	0.0	0.0	0.8	0.6	10	0.7	0.8
IUIAL	0.7	1.0	0.7	0.9	0.9	0.0	0.0	1.0	0.7	0.0
EU	0.0	0.0	0.7	0.7	0.9	0.0	0.5	0.0	0.7	0.0
FK	0.7	0.9	0.7	0.7	0.5	0.7	0.5	1.0	0.7	0.0
LUX NAT	0.8	1.0	0.7	0.0	0.5	0.0	0.0	1.0	0.7	0.0
LUA NAL	0.0	1.0	0.0	0.7	0.7	0.7	0.0	1.0	0.0	0.0
Median	• •	•	• •	• •	1.0		• •		2.0	• •
TOTAL	2.0	3.0	2.0	2.0	1.0	3.0	2.0	2.0	3.0	2.0
LU	2.0	3.0	2.0	2.0	1.0	3.0	2.0	2.0	3.0	2.0
FR	2.0	3.0	2.0	2.0	2.0	3.5	2.0	2.0	3.0	2.0
GE	2.0	2.5	2.5	2.0	1.0	2.0	2.0	2.0	3.0	2.0
LUX. NAT.	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	2.0
Min										
TOTAL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
LU	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
FR	1.0	2.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0
GE	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	2.0	1.0
LUX. NAT.	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0
Max										
TOTAL	4.0	5.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
LU	4.0	5.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
FR	3.0	4.0	4.0	3.0	3.0	5.0	3.0	4.0	4.0	3.0
GE	3.0	4.0	3.0	4.0	2.0	4.0	4.0	5.0	4.0	4.0
LUX. NAT.	4.0	5.0	4.0	4.0	3.0	5.0	4.0	5.0	4.0	4.0
6								I		
Spread=max-min	3.0	4.0	3.0	3.0	4.0	4.0	4.0	10	4.0	10
IUIAL	3.0	4.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
ED	2.0	<b>4.0</b>	3.0	2.0	<b>7.0</b>	2.0	2.0	3.0	<del>4.0</del>	2.0
	2.0	2.0	2.0	2.0	2.0	2.0	2.0	10	2.0	2.0
GE LUV NAT	2.0	<u> </u>	2.0	2.0	2.0	2.0	3.0	4.0	2.0	3.0
LUA. NAT.	5.0	4.0	5.0	5.0	2.0	5.0	5.0	<b>4.</b> 0	2.0	5.0
Q1 First quartile	• •		• •	• •	1.0	• •	• •	• • •	2.0	• •
TOTAL	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0	2.0
LU	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0	2.0
FR	1.3	2.3	1.3	2.0	1.0	3.0	2.0	1.0	3.0	1.3
GE	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0	2.0
LUX. NAT.	2.0	2.0	2.0	1.0	1.0	3.0	2.0	2.0	3.0	1.0
Q3 Third quartile										
TOTAL	2.0	4.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0	3.0
LU	2.0	4.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0	3.0
FR	2.0	4.0	2.0	2.8	3.0	4.0	2.0	2.0	3.0	2.8
GE	2.0	3.0	3.0	2.8	1.8	3.0	2.0	3.0	3.0	2.0
LUX. NAT.	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0

LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QVAL11-QVAL20)

Spread Q1		munuev			(11110)			
	OVAL21	OVAL22	OVAL23	OVAL24	OVAL25	OVAL26	OVAL27	OVAL28
Average TOTAL	3.7	3.4	3.5	2.7	2.1	1.8	2.6	2.7
LU	3.7	3.3	3.5	2.8	2.1	1.8	2.6	2.7
FR	3.9	4.2	3.3	2.0	1.8	1.6	2.3	2.4
CF	3.9	3.5	34	2.6	2.6	1.0	31	2.9
GE LUV NAT	3.7	3.5	3.5	33	2.0	1.0	23	2.5
LUA. NAT.		5.7	0.0	5.5	2.0	1.0	2.0	2.0
Std Errors					1.0			
TOTAL	1.0	1.1	0.9	1.3	1.0	0.9	1.1	1.1
LU	1.0	1.1	0.8	1.3	0.9	0.9	1.0	1.1
FR	1.1	0.6	1.1	0.8	0.6	0.7	1.1	0.8
GE	0.9	1.3	0.9	1.5	1.3	0.9	1.3	1.2
LUX. NAT.	1.0	1.1	0.8	1.2	0.9	0.8	1.1	1.1
Median								
TOTAL	4.0	3.0	4.0	2.0	2.0	2.0	3.0	3.0
LU	4.0	3.0	4.0	2.0	2.0	2.0	3.0	3.0
FR	4.0	4.0	3.5	2.0	2.0	1.5	2.0	2.0
GE	4.0	4.0	4.0	2.5	2.5	1.5	3.0	3.0
LUX. NAT.	3.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0
					200			
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TOTAL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
LU	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
FR	2.0	3.0	2.0	1.0	1.0	1.0	1.0	1.0
GE	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
LUX. NAT.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max								
TOTAL	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0
LU	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0
FR	5.0	5.0	5.0	4.0	3.0	3.0	4.0	4.0
GE	5.0	5.0	4.0	5.0	5.0	3.0	5.0	5.0
LUX. NAT.	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0
Sprood-mov-min								
Spreau-max-min	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
IUIAL	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
ED	3.0	2.0	3.0	3.0	2.0	2.0	3.0	3.0
FR CE	3.0	2.0	3.0	<u> </u>	2.0	2.0	<u> </u>	<u> </u>
GE LUV NAT	3.0	4.0	3.0	4.0	4.0	2.0	4.0	4.0
LUA. NAT.	4.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Q1 First quartile								
TOTAL	3.0	3.0	3.0	2.0	2.0	1.0	2.0	2.0
LU	3.0	3.0	3.0	2.0	2.0	1.0	2.0	2.0
FR	3.0	4.0	2.3	2.0	1.3	1.0	2.0	2.0
GE	3.3	3.0	3.0	1.0	1.3	1.0	2.0	2.0
LUX. NAT.	3.0	3.0	3.0	2.0	1.0	1.0	1.0	2.0
O3 Third avartile								
TOTAL	5.0	4.0	4.0	4.0	2.0	2.0	3.0	3.0
LU	4.8	4.0	4.0	4.0	2.0	2.0	3.0	3.0
FR	5.0	4.8	4.0	2.0	2.0	2.0	2.8	3.0
CE.	4.8	4.8	4.0	4.0	3.8	3.0	4.0	3.8
LUX NAT	4.0	5.0	4.0	4.0	2.0	2.0	3.0	3.0

LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 ((continued) QVAL21-QVAL28)

~p <b>x</b> -	<b>X</b> - (		) ( <b>t</b> )	<b>x</b>		-				
	QCPY1	QCPY2	QCPY3	QCPY4	QCPY5	QCPY6	QCPY7	QCPY8	QCPY9	QCPY10
Average TOTAL	2.2	2.8	2.8	3.6	2.9	2.1	2.8	3.4	2.7	3.3
LU	2.2	2.8	2.8	3.7	2.8	2.1	2.8	3.5	2.6	3.3
FR	2.7	2.5	3.0	2.7	3.3	2.2	2.2	3.2	3.3	3.3
GE	1.9	3.2	2.3	3.6	2.6	2.4	2.8	3.4	3.3	3.2
LUX. NAT.	2.6	2.5	2.7	3.5	2.9	2.1	2.8	3.0	2.5	3.4
Std Errors										
TOTAL	1.0	1.2	1.3	1.3	1.3	1.1	1.0	1.3	1.1	1.1
LU	1.0	1.2	1.3	1.3	1.3	1.1	1.1	1.3	1.1	1.1
FR	1.1	1.2	1.2	1.2	1.6	0.9	1.1	0.9	1.3	0.8
GE	0.8	1.2	1.1	1.0	1.1	1.0	0.8	1.2	1.1	1.3
LUX. NAT.	1.1	1.3	1.5	1.3	1.2	1.0	1.1	1.3	1.2	0.9
Median										
TOTAL	2.0	3.0	3.0	4.0	3.0	2.0	3.0	4.0	3.0	3.0
LU	2.0	3.0	3.0	4.0	3.0	2.0	3.0	4.0	2.0	3.0
FR	3.0	2.0	3.0	2.5	3.5	2.5	2.0	3.0	3.0	3.0
GE	2.0	3.0	2.5	3.0	3.0	2.5	3.0	3.5	3.0	3.0
LUX. NAT.	3.0	2.0	3.0	4.0	3.0	2.0	3.0	3.0	2.0	3.0
Min										
TOTAL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
LU	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
FR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
GE	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
LUX. NAT.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max										
TOTAL	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
LU	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
FR	4.0	4.0	5.0	5.0	5.0	3.0	4.0	5.0	5.0	5.0
GE	3.0	5.0	4.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0
LUX. NAT.	4.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0
Spread=max-min										
TOTAL	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
LU	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
FR	3.0	3.0	4.0	4.0	4.0	2.0	3.0	3.0	4.0	3.0
GE	2.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
LUX. NAT.	3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
O1 First quartile										
TOTAL	1.0	2.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	3.0
LU	1.0	2.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	3.0
FR	2.3	2.0	2.3	2.0	2.3	1.3	1.3	3.0	3.0	3.0
GE	1.0	2.0	1.0	3.0	2.0	2.0	2.3	3.0	3.0	2.0
LUX. NAT.	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0
O3 Third quartile										
TOTAL	3.0	4.0	4.0	5.0	4.0	3.0	3.0	5.0	4.0	4.0
LU	3.0	4.0	4.0	5.0	4.0	3.0	3.0	5.0	3.0	4.0
FR	3.0	3.8	3.0	3.0	4.8	3.0	2.8	3.8	4.0	3.8
GE	2.8	4.0	3.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0
LUX. NAT.	4.0	3.0	4.0	5.0	4.0	3.0	4.0	4.0	3.0	4.0

LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY1-QCPY10)

Average         Image         <	3.3
TOTAL         3.1         2.8         3.5         3.5         2.4         2.6         2.6         2.3         2.5	3.3
LU 3.0 2.8 3.5 3.4 2.4 2.5 2.7 2.4 2.5	3.1
FR 3.2 2.9 3.3 4.4 2.0 4.0 2.2 2.1 3.0	4.2
GE 3.3 2.8 3.6 3.6 2.4 2.6 2.4 1.7 2.1	3.7
LUX. NAT. 3.2 3.1 3.4 3.4 2.4 2.5 2.7 2.6 2.7	3.5
Std Errors	
TOTAL         1.2         1.2         0.9         1.1         0.9         1.3         1.1         1.2         1.1	1.2
LU 1.2 1.2 0.9 1.2 0.9 1.3 1.1 1.1 1.1	1.2
FR         1.4         1.3         1.3         0.5         0.5         0.9         1.3         1.0         1.3	1.3
GE         1.1         0.8         0.6         1.0         1.1         1.4         0.9         1.2         1.0	0.9
LUX. NAT. 1.2 1.1 1.0 1.2 0.9 1.2 1.2 1.2 1.1	1.1
Median	
TOTAL         3.0         3.0         4.0         4.0         2.0         3.0         2.0         3.0	3.0
LU 3.0 3.0 4.0 4.0 2.0 2.0 2.0 2.0 3.0	3.0
FR         3.0         3.0         3.5         4.0         2.0         4.0         2.0         2.5         3.0	5.0
GE 3.0 3.0 4.0 3.0 2.0 2.0 3.0 1.0 3.0	3.5
LUX. NAT. 3.0 3.0 4.0 4.0 2.0 3.0 2.0 3.0 3.0	4.0
Min	
TOTAL         1.0 </td <td>1.0</td>	1.0
LU 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0
FR         1.0         1.0         4.0         1.0         3.0         1.0         1.0         1.0	1.0
GE 2.0 1.0 3.0 2.0 1.0 1.0 1.0 1.0 1.0	2.0
LUX. NAT. 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	1.0
Max	
TOTAL 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	5.0
LU 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	5.0
FR 5.0 5.0 5.0 5.0 3.0 5.0 3.0 5.0 3.0 5.0	5.0
GE 5.0 4.0 5.0 5.0 5.0 5.0 4.0 5.0 3.0	5.0
LUX. NAT. 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	5.0
Spread=max-min	
TOTAL         4.0 </td <td>4.0</td>	4.0
	4.0
FR         4.0         4.0         1.0         2.0         2.0         4.0         2.0         4.0	4.0
GE 3.0 3.0 2.0 3.0 4.0 4.0 3.0 4.0 2.0	3.0
LUX. NAT. 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.	4.0
Q1 First quartile           manual         2.0         2.0         2.0         1.0         1.2	2.0
TOTAL         2.0         2.0         3.0         3.0         2.0         1.0         2.0         1.0         1.3	3.0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2.0
FR $3.0$ $2.3$ $2.0$ $2.0$ $3.0$ $1.3$ $1.0$ $2.3$ $GE$ $2.3$ $2.0$ $3.0$ $2.0$ $1.3$ $1.0$ $2.3$	4.0
GE         2.0         2.0         3.0         3.0         2.0         1.0 <th1.0< th=""> <th1.0< th=""> <th1.0< th=""></th1.0<></th1.0<></th1.0<>	3.0
	5.0
Q3 Third quartile         TOTAL         A0         A0         A0         A0         B0         B0 <td>10</td>	10
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	4.0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	5.0
IR         IO         IO <thio< th="">         IO         IO         IO<!--</td--><td>4.0</td></thio<>	4.0
LUX, NAT. 4.0 4.0 4.0 4.0 3.0 3.0 4.0 3.0 3.0	4.0

LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY11-QCPY20)

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	" <u> </u>	20 (00	munuca		~		T	· · · · · ·	1	-	
		QCPY21	QCPY22	QCPY23	QCPY24	QCPY25	QCPY26	QCPY27	QCPY28	QCPY29	QCPY30
Average	TOTAL	3.1	2.6	3.4	3.8	2.8	3.4	2.9	2.6	2.9	3.1
	LU	3.1	2.7	3.4	3.8	2.8	3.3	2.8	2.8	3.0	3.0
	FR	2.4	2.2	2.7	3.0	3.2	3.5	3.9	1.5	2.3	2.8
	GE	3.4	2.1	3.4	4.2	2.7	3.7	2.9	2.6	2.8	3.3
LU	UX. NAT.	2.9	2.4	3.4	3.6	3.0	3.2	3.1	2.7	2.9	3.1
Std Errors	:										
	TOTAL	1.1	1.2	1.1	1.1	1.2	1.0	1.0	0.9	0.9	0.7
	LU	1.1	1.2	1.1	1.1	1.2	1.0	1.0	0.9	0.9	0.6
	FR	1.0	1.1	1.1	1.3	1.2	1.0	0.7	0.7	1.2	0.6
	GE	1.0	1.0	0.9	0.8	1.0	1.0	0.8	0.8	1.0	0.9
LU	UX. NAT.	1.0	1.2	1.1	1.2	1.1	0.9	0.9	0.8	0.8	0.7
Median											
	TOTAL	3.0	2.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
	LU	3.0	2.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
	FR	2.0	2.0	2.5	3.0	3.5	4.0	4.0	1.0	2.0	3.0
	GE	3.0	2.0	3.0	4.0	3.0	3.5	3.0	2.5	3.0	3.0
LU	UX. NAT.	3.0	2.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
Min											
	TOTAL	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
	LU	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
	FR	1.0	1.0	1.0	1.0	1.0	2.0	3.0	1.0	1.0	2.0
	GE	2.0	1.0	2.0	3.0	1.0	2.0	2.0	1.0	1.0	2.0
LU	UX. NAT.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
Max											
	TOTAL	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	LU	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	FR	4.0	4.0	4.0	5.0	5.0	5.0	5.0	3.0	5.0	4.0
	GE	5.0	4.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	5.0
LU	UX. NAT.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=m	ax-min										
Spread III	TOTAL	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
	LU	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
	FR	3.0	3.0	3.0	4.0	4.0	3.0	2.0	2.0	4.0	2.0
	GE	3.0	3.0	3.0	2.0	4.0	3.0	2.0	3.0	4.0	3.0
LU	UX. NAT.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
O1 First a	uartile										
Q11nbt q	TOTAL	2.0	2.0	3.0	3.0	2.0	3.0	2.0	2.0	2.0	3.0
	LU	2.0	2.0	3.0	3.0	2.0	3.0	2.0	2.0	2.0	3.0
	FR	2.0	1.3	2.0	2.3	2.3	3.0	3.3	1.0	2.0	2.3
	GE	3.0	1.0	3.0	4.0	2.0	3.0	2.0	2.0	2.0	3.0
LU	UX. NAT.	2.0	2.0	3.0	3.0	2.0	3.0	3.0	2.0	2.0	3.0
O3 Third (	mortilo		•								
Q3 Timu (		4.0	3.0	40	5.0	4.0	4.0	4.0	3.0	4.0	3.0
	LU	4.0	3.8	4.0	5.0	4.0	4.0	4.0	3.0	4.0	3.0
	FR	2.8	2.8	3.8	4.0	4.0	4.0	4.0	2.0	2.8	3.0
	GE	4.0	3.0	4.0	5.0	3.0	4.8	3.0	3.0	3.0	4.0
LI	UX. NAT.	3.0	3.0	4.0	5.0	4.0	4.0	4.0	3.0	3.0	3.0

LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY21-QCPY30)

opread	- Y	<b>Q</b> 5 (00)	innucu		151 QU	1 1 40)	1	1	1		
		QCPY31	QCPY32	QCPY33	QCPY34	QCPY35	QCPY36	QCPY37	QCPY38	QCPY39	QCPY40
Average 7	FOTAL	3.2	2.7	2.8	3.2	2.1	2.3	3.3	2.3	3.0	2.6
	LU	3.2	2.7	2.8	3.2	2.1	2.3	3.3	2.2	3.0	2.6
	FR	3.2	1.9	3.6	3.0	1.8	2.5	3.1	1.7	2.5	2.5
	GE	3.3	3.4	2.6	3.3	2.1	1.9	3.2	3.2	3.6	2.8
LUX	K. NAT.	3.2	2.8	2.7	2.8	1.8	2.3	3.1	2.2	3.2	2.3
Std Errors											
7	ГОТАL	0.9	0.9	1.1	1.0	1.1	0.9	1.0	1.0	1.1	1.1
		0.8	0.9	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.1
	FR	1.3	0.6	1.1	0.9	0.8	0.7	1.1	0.7	0.8	1.1
	GE	0.9	0.8	1.0	1.3	0.9	0.8	0.9	0.7	1.0	1.2
LUX	K. NAT.	0.8	0.9	0.9	0.9	0.9	0.9	0.8	1.1	0.8	1.0
Madian											
meulan	ГОТАТ	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0	2.5
		3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0	2.0
	FR	3.0	2.0	4.0	3.0	2.0	2.0	3.0	2.0	2.5	2.0
	GE	3.0	3.0	2.5	3.0	2.0	2.0	3.0	3.0	4.0	3.0
LUX	K. NAT.	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0	2.0
			010	010	010			010		0.00	
Min	FOTAT	1.0	10	1.0	10	1.0	1.0	1.0	1.0	1.0	1.0
		2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	EU FD	1.0	1.0	2.0	2.0	1.0	2.0	1.0	1.0	1.0	1.0
		2.0	2.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0
LUN	V NAT	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
		2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
Max	FOTAL	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
J		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	ED	5.0	3.0	5.0	3.0	3.0	<u> </u>	5.0	3.0	3.0	5.0
		5.0	5.0	5.0	5.0	<u> </u>	3.0	5.0	5.0	5.0	5.0
LUN	GE Z NAT	5.0	5.0	<u> </u>	5.0	4.0	5.0	5.0	5.0	5.0	4.0
		2.0	2.0	-1.0	0.0	-1.0	2.0	0.0	0.0	2.0	-1.0
Spread=max	<u>x-min</u>	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10	4.0	1.0
1	TOTAL	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	LU	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	FK CE	4.0	2.0	3.0	2.0	2.0	2.0	4.0	2.0	3.0	4.0
T TIS	GE Z NAT	3.0	3.0	4.0	4.0	3.0	2.0	3.0	3.0	3.0	4.0
LUA	<b>. NA1</b> .	5.0	<b>4.</b> 0	5.0	<b>4.</b> 0	5.0	<b>4.</b> 0	<b></b> .0	<b></b> .	5.0	5.0
Q1 First qua	rtile	2.0	2.0	2.0		1.0	2.0	2.0	2.0	2.0	2.0
1	TOTAL	3.0	2.0	2.0	2.3	1.0	2.0	3.0	2.0	2.0	2.0
	LU	3.0	2.0	2.0	3.0	1.0	2.0	3.0	2.0	2.0	2.0
	FR	2.3	2.0	3.0	2.0	1.0	2.0	3.0	1.0	2.0	2.0
	GE	3.0	3.0	2.0	3.0	1.3	1.0	3.0	3.0	3.0	2.0
LUX	K. NAT.	5.0	2.0	2.0	2.0	1.0	2.0	5.0	1.0	5.0	2.0
Q3 Third qu	artile		• •	• •		• •	• •		• •		• •
]]	FOTAL	4.0	3.0	3.0	4.0	2.0	3.0	4.0	3.0	4.0	3.0
	LU	4.0	3.0	3.0	4.0	2.0	3.0	4.0	3.0	4.0	3.0
	FR	4.0	2.0	4.0	4.0	2.0	3.0	5.8	2.0	3.0	3.0
	GE	4.0	4.0	3.0	4.0	2.8	2.8	4.0	3.0	4.0	<u>3.8</u>
I LUX	NAT.	v		3.0	3.0	2.0	3.0	4.0	3.0	4.0	

LINDAB Total / LU / FR / GE / LUX. NAT – Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY31-QCPY40)

	QVAL1	QVAL2	QVAL3	QVAL4	QVAL5	QVAL6	QVAL7	QVAL8	QVAL9	QVAL 10
Average	1.9	2.0	1.8	1.8	1.9	1.8	2.1	2.4	2.9	2.3
Std Errors	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.9	1.0	0.9
Median	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	4.0	5.0	5.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	4.0	4.0	3.0	3.0	2.0	4.0	4.0	4.0	4.0
Q1 First quartile	1.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0
Q3 Third quartile	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	3.0
	[		1	1				[	[]	
	QVAL11	QVAL12	QVAL13	QVAL14	QVAL15	QVAL16	QVAL17	QVAL18	QVAL19	QVAL20
Average	2.0	3.0	2.3	2.3	1.7	2.9	2.1	2.3	3.0	2.1
Std Errors	0.7	1.0	0.7	0.9	0.9	0.8	0.6	1.0	0.7	0.8
Median	2.0	3.0	2.0	2.0	1.0	3.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	4.0	5.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	4.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0	2.0
Q3 Third quartile	2.0	4.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0	3.0
									l	
	QVAL21	QVAL22	QVAL23	QVAL24	QVAL25	QVAL26	QVAL27	QVAL28		
Average	3.7	3.4	3.5	2.7	2.1	1.8	2.6	2.7		
Std Errors	1.0	1.1	0.9	1.3	1.0	0.9	1.1	1.1		
Median	4.0	3.0	4.0	2.0	2.0	2.0	3.0	3.0		
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Max	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0		
Spread=max-min	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0		
Q1 First quartile	3.0	3.0	3.0	2.0	2.0	1.0	2.0	2.0		
Q3 Third quartile	5.0	4.0	4.0	4.0	2.0	2.0	3.0	3.0		
[]										
	QCPY1	QCPY2	QCPY3	QCPY4	QCPY5	QCPY6	QCPY7	QCPY8	QCPY9	QCPY10
Average	2.2	2.8	2.8	3.6	2.9	2.1	2.8	3.4	2.7	3.3
Std Errors	1.0	1.2	1.3	1.3	1.3	1.1	1.0	1.3	1.1	1.1
Median	2.0	3.0	3.0	4.0	3.0	2.0	3.0	4.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	1.0	2.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	3.0
Q3 Third quartile	3.0	4.0	4.0	5.0	4.0	3.0	3.0	5.0	4.0	4.0

LINDAB TOTAL - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (QVAL1-QCPY10)

			<i>´</i>							
	QCPY11	QCPY12	QCPY13	QCPY14	QCPY15	QCPY16	QCPY17	QCPY18	QCPY19	QCPY20
Average	3.1	2.8	3.5	3.5	2.4	2.6	2.6	2.3	2.5	3.3
Std Errors	1.2	1.2	0.9	1.1	0.9	1.3	1.1	1.2	1.1	1.2
Median	3.0	3.0	4.0	4.0	2.0	3.0	2.0	2.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	2.0	2.0	3.0	3.0	2.0	1.0	2.0	1.0	1.3	3.0
Q3 Third quartile	4.0	4.0	4.0	4.0	3.0	4.0	3.0	3.0	3.0	4.0
	r	r	r	r						
	QCPY21	QCPY22	QCPY23	QCPY24	QCPY25	QCPY26	QCPY27	QCPY28	QCPY29	QCPY30
Average	3.1	2.6	3.4	3.8	2.8	3.4	2.9	2.6	2.9	3.1
Std Errors	1.1	1.2	1.1	1.1	1.2	1.0	1.0	0.9	0.9	0.7
Median	3.0	2.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Q1 First quartile	2.0	2.0	3.0	3.0	2.0	3.0	2.0	2.0	2.0	3.0
Q3 Third quartile	4.0	3.0	4.0	5.0	4.0	4.0	4.0	3.0	4.0	3.0
<b></b>	r	r	r	r	1		1	1	· · · · · · · · · · · · · · · · · · ·	
	QCPY31	QCPY32	QCPY33	QCPY34	QCPY35	QCPY36	QCPY37	QCPY38	QCPY39	QCPY40
Average	3.2	2.7	2.8	3.2	2.1	2.3	3.3	2.3	3.0	2.6
Std Errors	0.9	0.9	1.1	1.0	1.1	0.9	1.0	1.0	1.1	1.1
Median	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0	2.5
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	3.0	2.0	2.0	2.3	1.0	2.0	3.0	2.0	2.0	2.0
Q3 Third quartile	4.0	3.0	3.0	4.0	2.0	3.0	4.0	3.0	4.0	3.0

LINDAB TOTAL - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY11-QCPY40)

	QVAL1	QVAL2	QVAL3	QVAL4	QVAL5	QVAL6	QVAL7	QVAL8	QVAL9	QVAL 10
Average	2.0	2.0	1.8	1.8	1.9	1.8	2.1	2.4	2.9	2.3
Std Errors	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.9	1.1	0.9
Median	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	4.0	5.0	5.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	4.0	4.0	3.0	3.0	2.0	4.0	4.0	4.0	4.0
Q1 First quartile	1.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0
Q3 Third quartile	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	3.0
	QVAL11	QVAL12	QVAL13	QVAL14	QVAL15	QVAL16	QVAL17	QVAL18	QVAL19	QVAL20
Average	2.1	3.0	2.3	2.3	1.7	2.8	2.2	2.3	3.0	2.1
Std Errors	0.8	1.1	0.7	0.9	0.9	0.8	0.6	1.0	0.7	0.8
Median	2.0	3.0	2.0	2.0	1.0	3.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	4.0	5.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	4.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0	2.0
Q3 Third quartile	2.0	4.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0	3.0
									1	
	QVAL21	QVAL22	QVAL23	QVAL24	QVAL25	QVAL26	QVAL27	QVAL28		
Average	3.7	3.3	3.5	2.8	2.1	1.8	2.6	2.7		
Std Errors	1.0	1.1	0.8	1.3	0.9	0.9	1.0	1.1		
Median	4.0	3.0	4.0	2.0	2.0	2.0	3.0	3.0		
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Max	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0		
Spread=max-min	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0		
Q1 First quartile	3.0	3.0	3.0	2.0	2.0	1.0	2.0	2.0		
Q3 Third quartile	4.8	4.0	4.0	4.0	2.0	2.0	3.0	3.0		
	QCPY1	QCPY2	QCPY3	QCPY4	QCPY5	QCPY6	QCPY7	QCPY8	QCPY9	QCPY10
Average	2.2	2.8	2.8	3.7	2.8	2.1	2.8	3.5	2.6	3.3
Std Errors	1.0	1.2	1.3	1.3	1.3	1.1	1.1	1.3	1.1	1.1
Median	2.0	3.0	3.0	4.0	3.0	2.0	3.0	4.0	2.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	1.0	2.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	3.0
Q3 Third quartile	3.0	4.0	4.0	5.0	4.0	3.0	3.0	5.0	3.0	4.0

# LINDAB LUXEMBOURG - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (QVAL1-QCPY10)

	\ <b>\</b>	<b>L</b> -	/							
	QCPY11	QCPY12	QCPY13	QCPY14	QCPY15	QCPY16	QCPY17	QCPY18	QCPY19	QCPY20
Average	3.0	2.8	3.5	3.4	2.4	2.5	2.7	2.4	2.5	3.1
Std Errors	1.2	1.2	0.9	1.2	0.9	1.3	1.1	1.1	1.1	1.2
Median	3.0	3.0	4.0	4.0	2.0	2.0	2.0	2.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	2.0	2.0	3.0	3.0	2.0	1.0	2.0	2.0	2.0	2.0
Q3 Third quartile	4.0	4.0	4.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
		-		-		-				
	QCPY21	QCPY22	QCPY23	QCPY24	QCPY25	QCPY26	QCPY27	QCPY28	QCPY29	QCPY30
Average	3.1	2.7	3.4	3.8	2.8	3.3	2.8	2.8	3.0	3.0
Std Errors	1.1	1.2	1.1	1.1	1.2	1.0	1.0	0.9	0.9	0.6
Median	3.0	2.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Q1 First quartile	2.0	2.0	3.0	3.0	2.0	3.0	2.0	2.0	2.0	3.0
Q3 Third quartile	4.0	3.8	4.0	5.0	4.0	4.0	4.0	3.0	4.0	3.0
		-		-						
	QCPY31	QCPY32	QCPY33	QCPY34	QCPY35	QCPY36	QCPY37	QCPY38	QCPY39	QCPY40
Average	3.2	2.7	2.8	3.2	2.1	2.3	3.3	2.2	3.0	2.6
Std Errors	0.8	0.9	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.1
Median	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0	2.0
Min	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	3.0	2.0	2.0	3.0	1.0	2.0	3.0	2.0	2.0	2.0
Q3 Third quartile	4.0	3.0	3.0	4.0	2.0	3.0	4.0	3.0	4.0	3.0

LINDAB LUXEMBOURG - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY11-QCPY40)

	QVAL1	QVAL2	QVAL3	QVAL4	QVAL5	QVAL6	QVAL7	QVAL8	QVAL9	QVAL 10
Average	1.6	1.9	1.6	1.3	1.6	1.5	1.9	2.0	2.4	1.9
Std Errors	0.7	0.9	0.5	0.5	0.7	0.5	0.3	0.8	1.1	0.7
Median	1.5	2.0	2.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	3.0	3.0	2.0	2.0	3.0	2.0	2.0	3.0	5.0	3.0
Spread=max-min	2.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	4.0	2.0
Q1 First quartile	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.3	2.0	1.3
Q3 Third quartile	2.0	2.8	2.0	1.8	2.0	2.0	2.0	2.8	2.8	2.0
			1	1						
	QVAL11	QVAL12	QVAL13	QVAL14	QVAL15	QVAL16	QVAL17	QVAL18	QVAL19	QVAL20
Average	1.9	3.1	2.0	2.1	2.0	3.6	2.0	1.8	3.2	2.0
Std Errors	0.7	0.9	0.9	0.7	0.9	0.7	0.5	0.9	0.4	0.8
Median	2.0	3.0	2.0	2.0	2.0	3.5	2.0	2.0	3.0	2.0
Min	1.0	2.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0
Max	3.0	4.0	4.0	3.0	3.0	5.0	3.0	4.0	4.0	3.0
Spread=max-min	2.0	2.0	3.0	2.0	2.0	2.0	2.0	3.0	1.0	2.0
Q1 First quartile	1.3	2.3	1.3	2.0	1.0	3.0	2.0	1.0	3.0	1.3
Q3 Third quartile	2.0	4.0	2.0	2.8	3.0	4.0	2.0	2.0	3.0	2.8
									l	
<b>A</b>	QVAL21	QVAL22	QVAL23	QVAL24	QVAL25	QVAL26	QVAL27	QVAL28		
Average	3.9	4.2	3.3		1.0	1.0	<u> </u>	2.4		
Sta Errors	1.1	0.0	1.1	0.0	2.0	0.7	1.1	0.0		
Median	4.0	4.0	3.5	2.0	2.0	1.5	2.0	2.0		
Min	2.0	5.0	2.0	1.0	1.0	1.0	1.0	1.0		
Max	5.0	<u> </u>	5.0	4.0	3.0	3.0	4.0	4.0		
Spread=max-min	3.0	2.0	3.0 2.2	3.0	<b>4.0</b>	2.0	3.0	3.0		
Q1 First quartile	5.0	4.0	<i>2.3</i>	2.0	1.5	1.0	2.0	2.0		
Q3 Third quartile	5.0	4.8	4.0	2.0	2.0	2.0	2.8	3.0		
	OCBV1	OCPV2	OCPV2	OCPV4	OCPV5	OCBV6	OCPV7	OCDV8	OCPV0	OCPV10
Average	2.7	2.5	3.0	2.7	3.3	2.2	2.2	3.2	3.3	3.3
Std Errors	1.1	1.2	1.2	1.2	1.6	0.9	1.1	0.9	1.3	0.8
Median	3.0	2.0	3.0	2.5	3.5	2.5	2.0	3.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Max	4.0	4.0	5.0	5.0	5.0	3.0	4.0	5.0	5.0	5.0
Snreed-mey-min	3.0	3.0	4.0	4.0	4.0	2.0	3.0	3.0	4.0	3.0
Spicau-max-min						1.0	1.0	2.0	2.0	2.0
O1 First constills	2.3	2.0	23	2.0	2.4	14	1 1	2.11	<u>, , , , , , , , , , , , , , , , , , , </u>	<b>NU</b>
Q1 First quartile	2.3	2.0	2.3	2.0	2.3 4 8	1.3	1.3	3.0	<u> </u>	<u> </u>

LINDAB FRANCE - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (QVAL1-QCPY10)

	QCPY11	QCPY12	QCPY13	QCPY14	QCPY15	QCPY16	QCPY17	QCPY18	QCPY19	QCPY20
Average	3.2	2.9	3.3	4.4	2.0	4.0	2.2	2.1	3.0	4.2
Std Errors	1.4	1.3	1.3	0.5	0.5	0.9	1.3	1.0	1.3	1.3
Median	3.0	3.0	3.5	4.0	2.0	4.0	2.0	2.5	3.0	5.0
Min	1.0	1.0	1.0	4.0	1.0	3.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	1.0	2.0	2.0	4.0	2.0	4.0	4.0
Q1 First quartile	3.0	2.3	2.3	4.0	2.0	3.0	1.3	1.0	2.3	4.0
Q3 Third quartile	4.0	3.8	4.0	5.0	2.0	5.0	2.0	3.0	4.0	5.0
[	[	[	[						[]	
	QCPY21	QCPY22	QCPY23	QCPY24	QCPY25	QCPY26	QCPY27	QCPY28	QCPY29	QCPY30
Average	2.4	2.2	2.7	3.0	3.2	3.5	3.9	1.5	2.3	2.8
Std Errors	1.0	1.1	1.1	1.3	1.2	1.0	0.7	0.7	1.2	0.6
Median	2.0	2.0	2.5	3.0	3.5	4.0	4.0	1.0	2.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	2.0	3.0	1.0	1.0	2.0
Max	4.0	4.0	4.0	5.0	5.0	5.0	5.0	3.0	5.0	4.0
Spread=max-min	3.0	3.0	3.0	4.0	4.0	3.0	2.0	2.0	4.0	2.0
Q1 First quartile	2.0	1.3	2.0	2.3	2.3	3.0	3.3	1.0	2.0	2.3
Q3 Third quartile	2.8	2.8	3.8	4.0	4.0	4.0	4.0	2.0	2.8	3.0
	1	1	1	1		1	1	1		
	QCPY31	QCPY32	QCPY33	QCPY34	QCPY35	QCPY36	QCPY37	QCPY38	QCPY39	QCPY40
Average	3.2	1.9	3.6	3.0	1.8	2.5	3.1	1.7	2.5	2.5
Std Errors	1.3	0.6	1.1	0.9	0.8	0.7	1.1	0.7	0.8	1.1
Median	3.0	2.0	4.0	3.0	2.0	2.0	3.0	2.0	2.5	2.0
Min	1.0	1.0	2.0	2.0	1.0	2.0	1.0	1.0	1.0	1.0
Max	5.0	3.0	5.0	4.0	3.0	4.0	5.0	3.0	4.0	5.0
Spread=max-min	4.0	2.0	3.0	2.0	2.0	2.0	4.0	2.0	3.0	4.0
Q1 First quartile	2.3	2.0	3.0	2.0	1.0	2.0	3.0	1.0	2.0	2.0
Q3 Third quartile	4.0	2.0	4.0	4.0	2.0	3.0	3.8	2.0	3.0	3.0

LINDAB FRANCE - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY11-QCPY40)

	QVAL1	QVAL2	QVAL3	QVAL4	QVAL5	QVAL6	QVAL7	QVAL8	QVAL9	QVAL 10
Average	2.0	1.9	1.8	1.9	2.2	1.8	2.1	2.7	3.2	2.4
Std Errors	0.6	0.5	0.5	0.6	0.6	0.5	0.9	0.8	0.7	0.5
Median	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
Max	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	3.0
Spread=max-min	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	1.0
Q1 First quartile	2.0	2.0	2.0	2.0	2.0	1.3	1.3	2.0	3.0	2.0
Q3 Third quartile	2.0	2.0	2.0	2.0	3.0	2.0	3.0	3.0	3.8	3.0
				1						
	QVAL11	QVAL12	QVAL13	QVAL14	QVAL15	QVAL16	QVAL17	QVAL18	QVAL19	QVAL20
Average	1.8	2.5	2.4	2.3	1.3	2.6	2.2	2.4	3.0	2.1
Std Errors	0.5	0.9	0.7	0.6	0.5	0.8	0.6	1.0	0.7	0.8
Median	2.0	2.5	2.5	2.0	1.0	2.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	2.0	1.0
Max	3.0	4.0	3.0	4.0	2.0	4.0	4.0	5.0	4.0	4.0
Spread=max-min	2.0	3.0	2.0	2.0	1.0	2.0	3.0	4.0	2.0	3.0
Q1 First quartile	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0	2.0
Q3 Third quartile	2.0	3.0	3.0	2.8	1.8	3.0	2.0	3.0	3.0	2.0
	QVAL21	QVAL22	QVAL23	QVAL24	QVAL25	QVAL26	QVAL27	QVAL28		
Average	3.9	3.5	3.4	2.6	2.6	1.8	3.1	2.9		
Std Errors	0.9	1.3	0.9	1.5	1.3	0.9	1.3	1.2		
Median	4.0	4.0	4.0	2.5	2.5	1.5	3.0	3.0		
Min	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Max	5.0	5.0	4.0	5.0	5.0	3.0	5.0	5.0		
Spread=max-min	3.0	4.0	3.0	4.0	4.0	2.0	4.0	4.0		
Q1 First quartile	3.3	3.0	3.0	1.0	1.3	1.0	2.0	2.0		
Q3 Third quartile	4.8	4.8	4.0	4.0	3.8	3.0	4.0	3.8		
							[	[		
	QCPY1	QCPY2	QCPY3	QCPY4	QCPY5	QCPY6	QCPY7	QCPY8	QCPY9	QCPY10
Average	1.9	3.2	2.3	3.6	2.6	2.4	2.8	3.4	3.3	3.2
Std Errors	0.8	1.2	1.1	1.0	1.1	1.0	0.8	1.2	1.1	1.3
Median	2.0	3.0	2.5	3.0	3.0	2.5	3.0	3.5	3.0	3.0
Min	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	3.0	5.0	4.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0
Spread=max-min	2.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
Q1 First quartile	1.0	2.0	1.0	3.0	2.0	2.0	2.3	3.0	3.0	2.0
Q3 Third quartile	2.8	4.0	3.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0

LINDAB GERMANY - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (QVAL1-QCPY10)

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	QCPY11	QCPY12	QCPY13	QCPY14	QCPY15	QCPY16	QCPY17	QCPY18	QCPY19	QCPY20
Average	3.3	2.8	3.6	3.6	2.4	2.6	2.4	1.7	2.1	3.7
Std Errors	1.1	0.8	0.6	1.0	1.1	1.4	0.9	1.2	1.0	0.9
Median	3.0	3.0	4.0	3.0	2.0	2.0	3.0	1.0	3.0	3.5
Min	2.0	1.0	3.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0
Max	5.0	4.0	5.0	5.0	5.0	5.0	4.0	5.0	3.0	5.0
Spread=max-min	3.0	3.0	2.0	3.0	4.0	4.0	3.0	4.0	2.0	3.0
Q1 First quartile	2.3	2.0	3.0	3.0	2.0	1.3	2.0	1.0	1.0	3.0
Q3 Third quartile	4.0	3.0	4.0	4.0	3.0	3.8	3.0	2.8	3.0	4.0
	r	r	r	r	1		1	1	· · · · · · · · · · · · · · · · · · ·	
	QCPY21	QCPY22	QCPY23	QCPY24	QCPY25	QCPY26	QCPY27	QCPY28	QCPY29	QCPY30
Average	3.4	2.1	3.4	4.2	2.7	3.7	2.9	2.6	2.8	3.3
Std Errors	1.0	1.0	0.9	0.8	1.0	1.0	0.8	0.8	1.0	0.9
Median	3.0	2.0	3.0	4.0	3.0	3.5	3.0	2.5	3.0	3.0
Min	2.0	1.0	2.0	3.0	1.0	2.0	2.0	1.0	1.0	2.0
Max	5.0	4.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	5.0
Spread=max-min	3.0	3.0	3.0	2.0	4.0	3.0	2.0	3.0	4.0	3.0
Q1 First quartile	3.0	1.0	3.0	4.0	2.0	3.0	2.0	2.0	2.0	3.0
Q3 Third quartile	4.0	3.0	4.0	5.0	3.0	4.8	3.0	3.0	3.0	4.0
<b></b>	n	r	n	n			1	1	· · · · · · · · · · · · · · · · · · ·	
	QCPY31	QCPY32	QCPY33	QCPY34	QCPY35	QCPY36	QCPY37	QCPY38	QCPY39	QCPY40
Average	3.3	3.4	2.6	3.3	2.1	1.9	3.2	3.2	3.6	2.8
Std Errors	0.9	0.8	1.0	1.3	0.9	0.8	0.9	0.7	1.0	1.2
Median	3.0	3.0	2.5	3.0	2.0	2.0	3.0	3.0	4.0	3.0
Min	2.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	1.0
Max	5.0	5.0	5.0	5.0	4.0	3.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	3.0	4.0	4.0	3.0	2.0	3.0	3.0	3.0	4.0
Q1 First quartile	3.0	3.0	2.0	3.0	1.3	1.0	3.0	3.0	3.0	2.0
Q3 Third quartile	4.0	4.0	3.0	4.0	2.8	2.8	4.0	3.0	4.0	3.8

LINDAB GERMANY - Average – Std Errors – Median – Min – Max – Spread – Q1 – Q3 (continued) (QCPY11-QCPY40)

			1ax = 0	preau –	<u>y - 1y</u>	JUVA		110)		
	QVAL1	QVAL2	QVAL3	QVAL4	QVAL5	QVAL6	QVAL7	QVAL8	QVAL9	QVAL 10
Average	2.2	2.0	1.7	1.6	1.9	1.8	1.9	2.4	2.8	2.2
Std Errors	0.7	0.8	0.6	0.7	0.8	0.7	0.7	1.0	0.9	0.8
Median	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	3.0	4.0	3.0	3.0	4.0	3.0	3.0	5.0	4.0	4.0
Spread=max-min	2.0	3.0	2.0	2.0	3.0	2.0	2.0	4.0	3.0	3.0
Q1 First quartile	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
Q3 Third quartile	3.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0
[				1			[	[		
	QVAL11	QVAL12	QVAL13	QVAL14	QVAL15	QVAL16	QVAL17	QVAL18	QVAL19	QVAL20
Average	2.1	2.7	2.2	2.1	1.8	3.0	2.1	2.3	3.2	2.0
Std Errors	0.8	1.0	0.8	0.9	0.9	0.7	0.6	1.0	0.6	0.8
Median	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	2.0
Min	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0
Max	4.0	5.0	4.0	4.0	3.0	5.0	4.0	5.0	4.0	4.0
Spread=max-min	3.0	4.0	3.0	3.0	2.0	3.0	3.0	4.0	2.0	3.0
Q1 First quartile	2.0	2.0	2.0	1.0	1.0	3.0	2.0	2.0	3.0	1.0
Q3 Third quartile	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0
	Г Г		1			[	[		I	
	QVAL21	QVAL22	QVAL23	QVAL24	QVAL25	QVAL26	QVAL27	QVAL28		
Average	3.4	3.7	3.5	3.3	2.0	1.8	2.3	2.6		
Std Errors	1.0	1.1	0.8	1.2	0.9	0.8	1.1	1.1		
Median	3.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0		
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Max	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0		
Spread=max-min	4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0		
Q1 First quartile	3.0	3.0	3.0	2.0	1.0	1.0	1.0	2.0		
Q3 Third quartile	4.0	5.0	4.0	4.0	2.0	2.0	3.0	3.0		
				1						
	QCPY1	QCPY2	QCPY3	QCPY4	QCPY5	QCPY6	QCPY7	QCPY8	QCPY9	QCPY10
Average	2.6	2.5	2.7	3.5	2.9	2.1	2.8	3.0	2.5	3.4
Std Errors	1.1	1.3	1.5	1.3	1.2	1.0	1.1	1.3	1.2	0.9
Median	3.0	2.0	3.0	4.0	3.0	2.0	3.0	3.0	2.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	4.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0
Spread=max-min	3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0
Q1 First quartile	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	2.0	3.0
Q3 Third quartile	4.0	3.0	4.0	5.0	4.0	3.0	4.0	4.0	3.0	4.0

LINDAB LUXEMBOURGER WITH LUXEMBOURGISH NATIONALITY- Average – Std Errors – Median – Min – Max – Spread – O1 – O3 (OVAL1-OCPY10)

LINDAB LUXEMBOURGER WITH LUXEMBOURGISH NATIONALITY- Average –
Std Errors – Median – Min – Max – Spread – O1 – O3 (continued) (OCPY11-OCPY40)

	OCPY11	OCPY12	OCPY13	OCPY14	OCPY15	OCPY16	OCPY17	OCPV18	OCPV19	OCPY20
Average	3.2	3.1	3.4	3.4	2.4	2.5	2.7	2.6	2.7	3.5
Std Errors	1.2	1.1	1.0	1.2	0.9	1.2	1.2	1.2	1.1	1.1
Median	3.0	3.0	4.0	4.0	2.0	3.0	2.0	2.0	3.0	4.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q1 First quartile	2.0	2.0	3.0	3.0	2.0	1.0	2.0	2.0	2.0	3.0
Q3 Third quartile	4.0	4.0	4.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
	1	1								
	QCPY21	QCPY22	QCPY23	QCPY24	QCPY25	QCPY26	QCPY27	QCPY28	QCPY29	QCPY30
Average	2.9	2.4	3.4	3.6	3.0	3.2	3.1	2.7	2.9	3.1
Std Errors	1.0	1.2	1.1	1.2	1.1	0.9	0.9	0.8	0.8	0.7
Median	3.0	2.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
Min	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
Max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spread=max-min	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Q1 First quartile	2.0	2.0	3.0	3.0	2.0	3.0	3.0	2.0	2.0	3.0
Q3 Third quartile	3.0	3.0	4.0	5.0	4.0	4.0	4.0	3.0	3.0	3.0
	1	1								
	QCPY31	QCPY32	QCPY33	QCPY34	QCPY35	QCPY36	QCPY37	QCPY38	QCPY39	QCPY40
Average	3.2	2.8	2.7	2.8	1.8	2.3	3.1	2.2	3.2	2.3
Std Errors	0.8	0.9	0.9	0.9	0.9	0.9	0.8	1.1	0.8	1.0
Median	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0	2.0
Min	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
Max	5.0	5.0	4.0	5.0	4.0	5.0	5.0	5.0	5.0	4.0
Spread=max-min	3.0	4.0	3.0	4.0	3.0	4.0	4.0	4.0	3.0	3.0
Q1 First quartile	3.0	2.0	2.0	2.0	1.0	2.0	3.0	1.0	3.0	2.0
Q3 Third quartile	4.0	3.0	3.0	3.0	2.0	3.0	4.0	3.0	4.0	3.0

### Discussion of the responses of the paper-questionnaire

(continued from page 243)

### Discussion of the responses of the paper-questionnaire

#### QVAL1 to have sufficient time for your personal or home life.

Luxembourg:	2.0
France:	1.6
Germany:	2.0
Lux. Nat.:	2.2

This shows, how much importance French bring to private life and Luxembourg with Luxembourgish Nationality less, but still private life is very important for all of the 4.

#### QVAL2 to have a boss (direct superior) you can respect.

Luxembourg:	2.0
France:	1.9
Germany:	1.9
Lux. Nat.:	2.0

For all 4 it is very important to have a boss they can respect, there is no significant difference to be seen.

#### QVAL3 to get recognition for good performance.

Luxembourg:	1.8
France:	1.6
Germany:	1.8
Lux. Nat.:	1.7

For all 4 it is very important to get recognition for good performance. Again the Lux. Nat. are between France and Germany.

#### QVAL4 to have security of employment.

Luxembourg:	1.8
France:	1.3
Germany:	1.9
Lux. Nat.:	1.6

Security of employment is of utmost importance in France, followed by Luxembourg with Luxembourgish Nationality, Luxembourg and then only Germany.

#### QVAL5 to have pleasant people to work with.

Luxembourg:	1.9
France:	1.6
Germany:	2.2
Lux. Nat.:	1.9

The French (1.6) put high emphasis on the fact of working with pleasant people, higher than in Germany with only 2.2.

#### QVAL6 to do work that is interesting.

Luxembourg:	1.8
France:	1.5
Germany:	1.8
Lux. Nat.:	1.8

The French (1.5) emphasised interesting work, followed equally by Luxembourg, Germany and Luxembourg with Luxembourgish Nationality at 1.8.

#### QVAL7 to be consulted by your boss in decisions involving your work.

Luxembourg:	2.1
France:	1.9
Germany:	2.1
Lux. Nat.:	1.9
F 11 4 '4 '	

For all 4 it is important to be consulted by their boss in decisions involving their work. Lux.Nat score 1.9, France 1.9 and Germany 2.1.

#### QVAL8 to live in a desirable area.

Luxembourg:	2.4
France:	2.0
Germany:	2.7
Lux. Nat.:	2.4

It is important to the French (2.0) to live in a desirable area, much more than to Luxembourgers and Luxembourg with Luxembourgish Nationality both 2.4, than Germany with 2.7.

#### QVAL9 to have a job respected by your family and friends.

Luxembourg:	2.9
France:	2.4
Germany:	3.2
Lux. Nat.:	2.8

There are quiet different scores here. For Germany (3.2), it is of moderate to little importance to have a job respected by the family and friends. In France (2.4), the importance is much higher, it is very important to French. Lux. Nat. scores 2.8 and shows again its position between France and Germany. Luxembourg scores 2.9, of moderate importance.

#### QVAL10 to have chances for promotion.

Luxembourg:	2.3
France:	1.9
Germany:	2.4
Lux. Nat.:	2.2

The difference between Germany (2.4) and France (1.9) is half a point. Lux. Nat. score again in between the two, with 2.2. Luxembourg scores 2.3. Interestingly the chances for promotion are not so important in Germany as they are in France, where they are very important.

#### In your private life, how important is each of the following to you?

#### **QVAL11:** keeping time free for fun.

Luxembourg:	2.1
France:	1.9
Germany:	1.8
Lux Nat:	2.1

For all 4 it is very important to keep time free for fun with scores from 1.8 (Germany) over 1.9 (France) to 2.1 for Luxembourg and Lux. Nat. Interestingly, this time. Lux. Nat. score lower than the others.

#### QVAL12: moderation: having few desires.

Luxembourg:	3.0
France:	3.1
Germany:	2.5
Lux. Nat.:	2.7

Having few desires is more a German habit (2.5) than Luxembourg with Luxembourgish Nationality (2.7), or Luxembourg (3.0) or even in France (3.1).

#### **QVAL13:** being generous to other people.

Luxembourg:	2.3
France:	2.0
Germany:	2.4
Lux. Nat.:	2.2

France scores 2.0, it is very important to French to be generous to other people. This is less the case in Germany with 2.4 points, and Lux. Nat. scoring 2.2, and Luxembourg scoring 2.3, in between France and Germany.

#### QVAL14: modesty: looking small, not big.

Luxembourg:	2.3
France:	2.1
Germany:	2.3
Lux. Nat.:	2.1
France and Lux.	Nat score 2.1, Germany and

France and Lux.Nat score 2.1, Germany and Luxembourg score 2.3. For all the 4 it is very important to look modest.

#### QVAL 15: if there is something expensive you really want to buy but you do not have enough money, what do you do? Save first or buy now and pay off later?

Luxembourg:	1.7
France:	2.0
Germany:	1.3
Lux. Nat.:	1.8
C .	•.1

Germany outscores with 1.3: always save before buying, followed by Luxembourgers (1.7), Luxembourg with Luxembourgish Nationality (1.8) and France (2.0).

#### QVAL16: How often do you feel nervous or tense?

Luxembourg:	2.8
France:	3.6
Germany:	2.6
Lux. Nat.:	3.0

There is a big difference between France (3.6) and Germany's 2.6 score, with Luxembourg 2.8 and Luxembourg with Luxembourgish Nationality. 3.0.

#### QVAL17: Are you a happy person?

Luxembourg:	2.2
France:	2.2
Germany:	2.2
Lux. Nat.:	2.1
	C .1

Happiness is one of the cultural dimensions that Hofstede added to his dimensions. Happiness studies are of increasing interest to culture researchers. In my research, all in all, the 4 are happy.

#### QVAL18: Are you the same person at work and at home?

2.3
1.8
2.4
2.3

Interestingly, there is a 0.6 point difference between France (1.8) and Germany (2.4), with Lux.Nat and Luxembourg scoring in between again (2.3). French people are more the same at work, whereas Germans are less the same at work than at home, just like the Lux.Nat and Luxembourg.

### QVAL19: Do other people or circumstances ever prevent you from doing what you really want to do?

Luxembourg:	3.0
France:	3.2
Germany:	3.0
Lux. Nat.:	3.2

Sometimes, would be the general answer to this question for the four, a very diplomatic answer to this question.

#### QVAL20: How would you describe your state of health?

Luxembourg:	2.1
France:	2.0
Germany:	2.1
Lux. Nat.:	2.0
Besides being happy	y, all the 4 are healthy.

#### QVAL21: How important is religion in your life?

Luxembourg:	3.7
France:	3.9
Germany:	3.9
Lux. Nat.:	3.4
Besides being	happy and healthy, all the 4 attach moderate to little importance to religion

#### QVAL22: How proud are you to be a citizen of your country?

3.3
4.2
3.5
3.7

Besides being happy, healthy, with moderate to little importance attached to religion, the people of the 4 countries are somewhat to fairly proud to being a citizen of their country. French are more than fairly proud with 4.2, compared to Luxembourg's 3.3 score.

#### QVAL23: How often, in your experience, are subordinates afraid to contradict their boss?

Luxembourg:	3.5
France:	3.3
Germany:	3.4
Lux. Nat.:	3.5

Between sometimes and usually is the score for all four. This means, the fear to contradict the boss exists still in these countries.

#### To what extent do you agree or disagree with each of the following statements? (QVAL24-QVAL28): 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = strongly disagree

### QVAL24: One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work?

Luxembourg:	2.8
France:	2.0
Germany:	2.6
Lux. Nat.:	3.3
Interesting is the 1.3	3 point difference between France (2.0) and with Lux.Nat (3.3) and
Luxembourg scorin	g in between again (2.8) as well as Germany (2.6).
_	

#### QVAL25: Persistent efforts are the surest way to results?

Luxembourg:	2.1
France:	1.8
Germany:	2.6
Lux. Nat.:	2.0

France (1.8) and Germany (2.6) differ with a 0.8 point difference in this question. In France (1.8) persistent efforts are the surest way to results, more than for Lux. Nat. (2.0), and Luxembourg (2.1), with Germany scoring (2.6).

### QVAL26: An organization structure in which certain subordinates have two bosses should be avoided at all cost?

Luxembourg:	1.8
France:	1.6
Germany:	1.8
Lux. Nat.:	1.8
The answers to the	nis question are nearly unanimously identical (1.8) with F

The answers to this question are nearly unanimously identical (1.8), with France scoring 1.6.

### QVAL27: A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest?

Luxembourg:	2.6
France:	2.3
Germany:	3.1
Lux. Nat.:	2.3

France (2.3) and Lux. Nat. (2.3) differ from Germany (3.1) with a 0.8 point difference in this question. In France (2.3) and for Lux. Nat. (2.3) rules should not be broken, whereas in Germany the score is 3.1, with Luxembourg (2.6) scoring in between.

#### QVAL28: We should honour our heroes from the past?

Luxembourg:	2.7
France:	2.4
Germany:	2.9
Lux. Nat.:	2.6

The scores of this question are very close (2.4-2.9), with France scoring 2.4, Germany 2.9 and Lux. Nat. (2.6) and Luxembourg (2.7) in between, as usual.

#### Questions about your company

#### **QCPY1:** People are uncomfortable in unfamiliar situations.

Luxembourg:	2.2
France:	2.7
Germany:	1.9
Lux. Nat.:	2.6

There is a difference between high scorer Germany (1.9) and France (2.7). Luxembourg (2.2) is a typical mid-scorer, illustrating that Luxembourg is between Germany and France, geographically and culturally. Lux. Nat.'s (2.6) are much closer to France than to Germany, confirming the overall assumption that Luxembourgers are culturally French and linguistically German.

#### QCPY2: Each day brings new challenges – or Each day is pretty much the same.

Luxembourg:	2.8
France:	2.5
Germany:	3.2
Lux. Nat.:	2.5

This question confirms the above theory: Lux. Nat's (2.5) are identical to France (2.5) and not to Germany (3.2), confirming the overall assumption that Luxembourgers are culturally French and linguistically German.

### QCPY3: All important decisions are taken by individuals – or All important decisions are taken by groups / committees.

Luxembourg:	2.8
France:	3.0
Germany:	2.3
Lux. Nat.:	2.7

This question confirms again the above theory: Lux. Nat's (2.7) score in between France (3.0) and Germany (2.3), confirming the overall assumption that Luxembourgers are culturally French and linguistically German.

### **QCPY4:** Our company takes a major responsibility for the welfare of its employees and their families – or: our company is only interested in the work our employees do.

Luxembourg:	3.7
France:	2.7
Germany:	3.6
Lux. Nat.:	3.5

There is a 0.9 point difference between France (2.7) and Germany (3.6), and even a difference of 1 point between France and Luxembourg. Besides France, the tendency is that the company is only interested in the work employees do. Lux. Nat. score 3.5.

### **QCPY5:** We do not think more than a day ahead – or: We think three years ahead or more.

Luxembourg:	2.8
France:	3.3
Germany:	2.6
Lux. Nat.:	2.9

Lux. Nat. (2.9) and Luxembourg (2.8) score between Germany (2.6) and France (3.3). France confirms that they are pioneers and think more ahead than Germany, which is more traditional.

### QCPY6: People's private lives are considered their own business – or – The norms of our company cover people's behaviour both on the job and at home.

Luxembourg:	_	2.1
France:		2.2
Germany:		2.4
Lux. Nat.:		2.1

People's private lives are considered more their own business in Lux. Nat. (2.1) and in Luxembourg (2.1), followed directly by France (2.2) than in Germany with 2.4.

QCPY7: Everybody is highly conscious of the cost of time and/or materials - or: Nobody
ever thinks of the cost of times and/or materials.

Luxembourg:	2.8
France:	2.2
Germany:	2.8
Lux. Nat.:	2.8

France (2.2) is somewhat more conscious about the cost of time and/or materials than the others, scoring all three 2.8, which is more mid-score than France, where more attention is put on costs and time.

### **QCPY8:** Meeting times are kept very punctually – or: Meeting times are only kept approximately.

Luxembourg:	3.5
France:	3.2
Germany:	3.4
Lux. Nat.:	3.0

Meeting times are kept approximately in all 4 cases. This question contradicts the interviews, where it is said that punctuality is important in Luxembourg and Germany, whereas in France punctuality is less important.

### **QCPY9:** The major emphasis is on meeting the needs of the customer – or: The major emphasis is on correctly following organisational procedures.

Luxembourg:	2.6
France:	3.3
Germany:	3.3
Lux. Nat.:	2.5

Interestingly, for Lux. Nat. (2.5) and Luxembourg (2.6) the emphasis is more on meeting the needs of the customer, whereas for France (3.3) and Germany (3.3), the tendency is more on correctly following organisational procedures.

### **QCPY10:** Correct procedures are more important than results – or: Results are more important than following correct procedures.

Luxembourg:	3.3
France:	3.3
Germany:	3.2
Lux. Nat.:	3.4

Results are more important than following correct procedures for all four of them with only slight differences: 3.2 for Germany, 3.3 for France and Luxembourg, and Lux. Nat. with 3.4.

# QCPY11: Subordinates have to work according to detailed instructions from their superiors – or: Subordinates organise their own work within broad standards set by superiors.

Luxembourg:	3.0
France:	3.2
Germany:	3.3
Lux. Nat.:	3.2

All four are mid-scorers for this question, Luxembourg with 3.0 hitting the middle, and France and Lux. Nat. with 3.2 and Germany with 3.3 with a slight tendency to organise their own work within broad standards set by superiors.

## **QCPY12:** We always supply the same well-tested products and services – or: We try to be pioneers in developing new products and services.

Luxembourg:	2.8
France:	2.9
Germany:	2.8
Lux. Nat.:	3.1
Lux. Nat. (3.1) try	to be more pioneers in developing new products and services than France
(2.9) or Germany (2	2.8) and Luxembourg (2.8). The difference in between Lux. Nat. and
Luxembourg of 0.3	points is to be noted.

### **QCPY13:** Contacts are mostly verbal, few things are written down – or: Everything is put down in writing.

	<u> </u>	
Luxembourg:		3.5
France:		3.3
Germany:		3.6
Lux. Nat.:		3.4
		/

"La confiance règne" (trust is king) as the French would say. Everything is put down in writing in all four cases. Germany (3.6) is the highest scorer in this question, where things happen in writing. But closely followed by Luxembourg (3.5), Lux. Nat. (3.4), and France (3.3).

### QCPY14: Diplomas and academic titles are very important – or: Job competence is what counts, regardless of how it was acquired.

Luxembourg:	3.4
France:	4.4
Germany:	3.6
Lux. Nat.:	3.4

Job competence counts very much in France (4.4), with 1 point difference to Luxembourg (3.4) and Lux. Nat. (3.4), Germany scoring 3.6 in between. This shows that diplomas and academic titles do not count that much, job competence is more important.

### **QCPY15:** Some mistakes are accepted as a normal consequence of initiative – Mistakes are severely punished.

Luxembourg:	2.4
France:	2.0
Germany:	2.4
Lux. Nat.:	2.4
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In other cases, Luxembourg (2.4) and Lux. Nat. (2.4) are identical with Germany (2.4) and not with France (2.0). This demonstrates that Luxembourg has traits of Germany.
QCPY16 Managers resent being contradicted -	- Managers want to hear people's opinions,
even if different from theirs.	

Luxembourg:	2.5
France:	4.0
Germany:	2.6
Lux. Nat.:	2.5

Again, in this case, Luxembourg (2.5) and Lux. Nat. (2.5) is much closer to Germany (2.6) than to France (4.0). In France, managers want to hear peoples' opinions, even if different from theirs. In Germany and Luxembourg, managers resent being contradicted.

# QCPY17: Newcomers are helped to adapt quickly to the job and to the group – or: Newcomers are left to find their own way.

Luxembourg:	2.7
France:	2.2
Germany:	2.4
Lux. Nat.:	2.7

Newcomers are helped to adapt quickly in France (2.2) with the usual French friendliness, followed by Germany (2.4) and only with 2.7 for Luxembourg and 2.7 Lux. Nat. Maybe this depends on the fact, that also in Luxembourg and Lux. Nat., people's private business is their private business.

# **QCPY18:** Our company has no special ties with the local community – or: Our company is an integrated part of the local community.

<b>U</b>	
Luxembourg:	2.4
France:	2,1
Germany:	1.7
Lux. Nat.:	2.6

In Germany (1.7) Lindab has no special ties with the local community, in France with 2.1 score a little more but still not a lot, and Luxembourg (2.4) and Lux. Nat. 2.6 are thinking they have a neutral integration.

# **QCPY19:** In our technology and working methods, we are rather traditional – or: We are ahead of others.

Luxembourg:	2.5
France:	3.0
Germany:	2.1
Lux. Nat.:	2.7

All in all, the 4 are more traditional than ahead of others in their technology and working methods. France is a mid-scorer with 3.0. Whereas Germany is with 2.1 more traditional than France, and Luxembourg (2.5) and Lux. Nat. (2.7) are in between Germany (more traditional) and France (less traditional, more ahead of others).

QCPY20: We never talk about the history of our company – or: People tell a lot of stories	•
about the history of our company.	

Luxembourg:	3.1
France:	4.2
Germany:	3.7
Lux. Nat.:	3.5

At Lindab France (4.2) more stories are told about the history of the company than in Luxembourg (3.1). Germany also tells some stories about the history (3.7), and Lux. Nat. (3.5).

## **QCPY21:** We let quality prevail over quantity – or: We let quantity prevail over quality.

Luxembourg:	3.1
France:	2.4
Germany:	3.4
Lux. Nat.:	2.9

There is a one point difference between France (2.4) and Germany (3.4). In France, Quality is given more attention to, than in Germany, where quantity seems to prevail. Luxembourg (3.1) and Lux. Nat. (2.9) are mid-scorers, undecided for both quality and quantity, again, situating Luxembourg in between France and Germany.

# **QCPY22:** we are strongly aware of the competition of other organisations – or: We are not aware of any competition.

Luxembourg:	2.7
France:	2.2
Germany:	2.1
Lux Nat	24

Germany (2.1) and France (2.2) are ahead of Lux. Nat. (2.4) and Luxembourg (2.7) in awareness of competition.

# QCPY23: much attention is paid to our physical work environment – or: Little attention is paid to it.

Luxembourg:	3.4
France:	2.7
Germany:	3.4
Lux. Nat.:	3.4

It seems as if this is a little call for more attention to be paid to their physical work environment in general in Luxembourg (3.4, Lux. Nat. 3.4 also), and Germany (3.4). Only France has 2.7, a bit better than 3.0, but still not a very good score concerning their physical work environment. There is certainly room for improvement.

## **QCPY24:** Changes are implemented in consultation with the people concerned – or: Changes are implemented by management decree.

Luxembourg:	3.8
France:	3.0
Germany:	4.2
Lux. Nat.:	3.6

In Germany (4.2) changes are mainly implemented by management decree, as well as in Luxembourg (3.8) and Lux. Nat. (3.6). At Lindab France, the score is 3.0, mid-score, undecided.

# **QCPY25:** Ordinary members of the organisation never meet their top managers – or: Meet their top managers.

Luxembourg:	2.8
France:	3.2
Germany:	2.7
Lux. Nat.:	3.0

Mid-scores for this question. Top-Managers are not really often met by the ordinary employees. If this is desired, there might be room for improvement here for all 4.

# **QCPY26:** We always dress and behave formally and correctly – or: We often dress and behave informally and casually.

Luxembourg:	3.3
France:	3.5
Germany:	3.7
Lux. Nat.:	3.2

The times are over, where people came to work in suit and tie. Mostly employees dress and behave informally and casually, with a tendency to being correct, clean, but not formal.

# How would you describe the behaviour of a typical member of your organisation?

## **QCPY27: Reserved – Initiating**

Luxembourg:	2.8
France:	3.9
Germany:	2.9
Lux. Nat.:	3.1

There is a difference of 1 point in the scores between Germany (2.9), moderately reserved, and the more initiating France (3.9).

There is a difference of 1.1 points in the scores between Luxembourg (2.8), moderately reserved, and the more initiating France (3.9).

## QCPY28: Warm - Cold

Luxembourg:	2.8
France:	1.5
Germany:	2.6
Lux. Nat.:	2.7

QCPY27 and QCPY28 are going into the same direction and showing the same results in the end.

Lindab France has a score of 1.5, demonstrating the warmth of their employees.

Lindab Germany has a score of 2.6, Lux. Nat. 2.7 and Luxembourg 2.8, still below 3.0, but certainly not 1.5 as in France.

## **QCPY29: Direct - Indirect**

Luxembourg:	3.0
France:	2.3
Germany:	2.8
Lux. Nat.:	2.9

France (2.3) tends more to the direct behaviour, whereas Luxembourg (3.0) is a mid-scorer, preceded by Germany (2.8) and Lux. Nat. (2.9).

Luxembourg:	3.5
France:	2.8
Germany:	3.3
Lux. Nat.:	3.1

The difference between Luxembourg's 3.5 score and Frances 2.8 score is big. The typical behaviour of a member of the company is seen as more hard than soft. Germany (3.3) sees this the same, followed by Lux. Nat. with 3.1.

QCPY31: Slow	- Fast
Luxembourg:	3.2
France:	3.2
Germany:	3.3
Lux. Nat.:	3.2

Mainly, all four agree that the typical member of the company is behaving more fast than slow with 3.2 nearly for all of them, besides Germany with 3.3.

## **QCPY32: Well-groomed - Sloppy**

Luxembourg:	2.7
France:	1.9
Germany:	3.4
Lux. Nat.:	2.8

Between 1.9 points in France and 3.4 points in Germany, there is a 1.5 points difference. France's employees are better dressed and taken care of, than Germans. That is not new. French like fashion and being well-dressed. Germans tend to let themselves go. Luxembourg (2.7) and Lux. Nat. (2.8) score in between, being mid-scorers.

## **QCPY33: Pessimistic - Optimistic**

Luxembourg:	2.8
France:	3.6
Germany:	2.6
Lux. Nat.:	2.7

France (3.6) is much more optimistic, than Germany (2.6), with a 1 point difference. Lux. Nat. (2.7) and Luxembourg (2.8) tend to being somewhat more pessimistic as well, just like Germans.

# **Reasons for promotion**

## **QCPY34:** Seniority with the organisation

Luxembourg:	3.2
France:	3.0
Germany:	3.3
Lux. Nat.:	2.8

Mid-scores for all of the four as regards seniority as reason for promotion, with a slight tendency between moderate and very important for Lux. Nat. (2.8), but 3.3 for Germany, between moderate and little importance. France is mid-scorer with 3.0 of moderate importance.

### **QCPY35:** Proven performance

Luxembourg:	2.1
France:	1.8
Germany:	2.1
Lux. Nat.:	1.8

Proven performance is a very important factor for promotion in all countries, with France scoring 1.8 and Luxembourg with Luxembourgish Nationality also 1.8, nearly of utmost importance. Luxembourg and Germany both score 2.1.

### **QCPY36:** Personality and self-presentation

Luxembourg:	2.3
France:	2.5
Germany:	1.9
Lux. Nat.:	2.3

Personality and self-presentation are very important for promotion in Germany with 1.9, whereas in France the score is only 2.5. Luxembourg and Luxembourg with Luxembourgish Nationality are again in between the two big countries with 2.3, a moderate importance.

### **QCPY37: Diplomas and formal qualifications**

Luxembourg:	3.3
France:	3.1
Germany:	3.2
Lux. Nat.:	3.1

Moderate importance for the four with a slight tendency to little importance. France (3.1) and Lux. Nat. (3.1), Germany (3.2) and Luxembourg (3.3). Diplomas and formal qualifications are of moderate importance for promotion

### **QCPY38:** Commitment to the organisation

Luxembourg:	2.2
France:	1.7
Germany:	3.2
Lux. Nat.:	2.2

There is a big difference in the score for the importance of the commitment to the company as a reason for promotion with Germany scoring only 3.2, moderate to little importance, whereas

France scores 1.7: utmost until very important. Luxembourg and Lux. Nat. score 2.2, very important.

## QCPY39: Being known as a good colleague

Luxembourg:	3.0
France:	2.5
Germany:	3.6
Lux. Nat.:	3.2

Being known as a good colleague is much more important for promotion in France (2.5) than in Germany (3.6). This 1.1 point difference shows that promotion in Germany is not measured in being a good colleague, but in facts and figures. In France, conviviality, friendliness, good work climate and helping each other is more important, than in Germany. Lux. Nat.(3.2) and Luxembourg (3.0) score in between France and Germany, as so often.

## **QCPY40:** Creativity and unconventional thinking

Luxembourg:	2.6
France:	2.5
Germany:	2.8
Lux. Nat.:	2.3
~	

Creativity and unconventional thinking are reasons for promotion much more for Lux. Nat. (2.3), than for Germans (2.8). This is interesting. France scores 2.5, between very and moderate important, and Luxembourg 2.6 with a slight tendency to moderate importance.

# **SPSS: Logistic Regression**

## Logistic Regression 1

FIRST MODEL

#### Case Processing Summary

Unweighted Cases b		N	Percent
Selected Cases <sup>a</sup>	Included in Analysis	134	100,0
	Missing Cases	0	,0
	Total	134	100,0
Unselected Cases		0	,0
Total		134	100,0

a. The variable NATIO1 is constant for all selected cases. Since a constant was requested in the model, it will be removed from the analysis.

b. If weight is in effect, see classification table for the total number of cases.

#### **Dependent Variable Encoding**

Original Value	Internal Value
0	0
1	1

# **Block 0: Beginning Block**

#### Classification Table<sup>a,b</sup>

		Predicted			
			HAF	PPY	Percentage
	Observed		0	1	Correct
Step 0	HAPPY	0	0	21	,0
		1	0	113	100,0
	Overall Percentage				84,3

a. Constant is included in the model.

b. The cut value is ,500

		6	0 -		.15	0.5	
		В	5.E.	vvaid	at	Sig.	EXD(B)
Step 0	Constant	1,683	,238	50,152	1	,000	5,381

			Score	df	Sig.
Step	Variables	RISK	3,886	1	,049
0		TIMELIFE	,888,	1	,346
		EDUC1	2,417	1	,120
	Overall Statistics		7,861	3	,049

Variables not in the Equation

## Block 1: Method = Enter

### **Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	8,414	3	,038
	Block	8,414	3	,038
	Model	8,414	3	,038

#### **Model Summary**

	-2 Log	Cox & Snell	Nagelkerke
Step	likelihood	R Square	R Square
1	107,948	,061	,105

#### Classification Table<sup>a</sup>

			Predicted		
			HAF	<u> </u>	Percentage
	Observed		0	1	Correct
Step 1	HAPPY	0	0	21	,0
		1	0	113	100,0
	Overall Percentage				84,3

a. The cut value is ,500

#### Variables in the Equation

								95,0% C.I.	for EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step	RISK	1,291	,671	3,699	1	,054	3,638	,976	13,565
1	TIMELIFE	,898	,583	2,373	1	,123	2,456	,783	7,702
	EDUC1	-,786	,505	2,419	1	,120	,456	,169	1,227
	Constant	1,027	,539	3,627	1	,057	2,793		

a. Variable(s) entered on step 1: RISK, TIMELIFE, EDUC1.

		Constant	RISK	TIMELIFE	EDUC1
Step	Constant	1,000	-,354	-,732	-,291
1	RISK	-,354	1,000	,163	,039
	TIMELIFE	-,732	,163	1,000	-,221
	EDUC1	-,291	,039	-,221	1,000

**Correlation Matrix** 

# Logistic Regression 2

SECOND MODEL

#### Case Processing Summary

Unweighted Cases <sup>b</sup>	Ν	Percent	
Selected Cases <sup>a</sup>	134	100,0	
	Missing Cases	0	,0
	Total	134	100,0
Unselected Cases		0	,0
Total		134	100,0

a. The variable NATIO1 is constant for all selected cases. Since a constant was requested in the model, it will be removed from the analysis.

b. If weight is in effect, see classification table for the total number of cases.

#### **Dependent Variable Encoding**

Original Value	Internal Value
0	0
1	1

# **Block 0: Beginning Block**

#### Classification Table<sup>a,b</sup>

				Predicted	
			НАГ	ΡΡΥ	Doroontogo
	Observed		0	1	Correct
Step 0	HAPPY	0	0	21	,0
		1	0	113	100,0
	Overall Percentage				84,3

a. Constant is included in the model.

b. The cut value is ,500

		В	S.E.	Wald	df	Siq.	Exp(B)
Step 0	Constant	1,683	,238	50,152	1	,000	5,381

			Score	df	Sig.
Step	Variables	RISK	3,886	1	,049
0		TIMELIFE	,888	1	,346
		EDUC1	2,417	1	,120
		MANAGER	,540	1	,462
	<b>Overall Statistics</b>		9,583	4	,048

#### Variables not in the Equation

## **Block 1: Method = Enter**

#### **Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	10,476	4	,033
	Block	10,476	4	,033
	Model	10,476	4	,033

#### **Model Summary**

	-2 Log	Cox & Snell	Nagelkerke
Step	likelihood	R Square	R Square
1	105,885	,075	,130

#### Classification Table<sup>a</sup>

		Predicted			
			HAH	<u> </u>	Percentage
	Observed		0	1	Correct
Step 1	HAPPY	0	0	21	,0
		1	0	113	100,0
	Overall Percentage				84,3

a. The cut value is ,500

#### Variables in the Equation

								95,0% C.I.	for EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step	RISK	1,261	,677	3,468	1	,063	3,528	,936	13,301
1	TIMELIFE	1,147	,620	3,429	1	,064	3,150	,935	10,610
	EDUC1	-1,044	,548	3,626	1	,057	,352	,120	1,031
	MANAGER	,860	,627	1,881	1	,170	2,364	,691	8,087
	Constant	,726	,574	1,602	1	,206	2,067		

a. Variable(s) entered on step 1: RISK, TIMELIFE, EDUC1, MANAGER.

		Constant	RISK	TIMELIFE	EDUC1	MANAGER
Step	Constant	1,000	-,349	-,748	-,126	-,348
1	RISK	-,349	1,000	,159	,059	-,010
	TIMELIFE	-,748	,159	1,000	-,334	,307
	EDUC1	-,126	,059	-,334	1,000	-,344
	MANAGER	-,348	-,010	,307	-,344	1,000

**Correlation Matrix** 

# Logistic Regression 2.1

SECOND MODEL, MODIFIED (NOT REPRESENTED IN THE MAIN TEXT)

Unweighted Cases <sup>t</sup>		Ν	Percent
Selected Cases <sup>a</sup>	Included in Analysis	134	100,0
	Missing Cases	0	,0
	Total	134	100,0
Unselected Cases		0	,0
Total		134	100,0

#### **Case Processing Summary**

a. The variable NATIO1 is constant for all selected cases. Since a constant was requested in the model, it will be removed from the analysis.

b. If weight is in effect, see classification table for the total number of cases.

#### **Dependent Variable Encoding**

Original Value	Internal Value
0	0
1	1

# **Block 0: Beginning Block**

#### Classification Table<sup>a,b</sup>

				Predicted	
			НАГ	DDV	Demonsterne
	Observed		0	1	Correct
Step 0	HAPPY	0	0	21	,0
		1	0	113	100,0
	Overall Percentage				84,3

a. Constant is included in the model.

b. The cut value is ,500

		в	<u>е</u> Е	Wold	df	Sia	Exp(B)
		D	3.⊑.	walu	u	Joig.	
Step 0	Constant	1,683	,238	50,152	1	,000	5,381

			-		
			Score	df	Sig.
Step	Variables	RISK	3,886	1	,049
0		TIMELIFE	,888,	1	,346
		EDUC1	2,417	1	,120
		HEALTH	10,865	1	,001
	<b>Overall Statistics</b>		18,918	4	,001

Variables not in the Equation

## **Block 1: Method = Enter**

#### **Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	19,574	4	,001
	Block	19,574	4	,001
	Model	19,574	4	,001

#### **Model Summary**

	-2 Log	Cox & Snell	Nagelkerke
Step	likelihood	R Square	R Square
1	96,787	,136	,234

#### Classification Table<sup>a</sup>

				Predicted	
			HAF	<u> </u>	Percentage
	Observed		0	1	Correct
Step 1	HAPPY	0	5	16	23,8
		1	4	109	96,5
	Overall Percentage				85,1

a. The cut value is ,500

#### Variables in the Equation

								95,0% C.I.	for EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step	RISK	1,350	,699	3,725	1	,054	3,856	,979	15,182
1	TIMELIFE	,926	,617	2,254	1	,133	2,524	,754	8,456
	EDUC1	-1,097	,560	3,836	1	,050	,334	,111	1,001
	HEALTH	1,758	,539	10,622	1	,001	5,800	2,015	16,693
	Constant	,065	,613	,011	1	,916	1,067		

a. Variable(s) entered on step 1: RISK, TIMELIFE, EDUC1, HEALTH.

		Constant	RISK	TIMELIFE	EDUC1	HEALTH
Step	Constant	1,000	-,387	-,677	-,145	-,404
1	RISK	-,387	1,000	,179	,044	,079
	TIMELIFE	-,677	,179	1,000	-,270	,068
	EDUC1	-,145	,044	-,270	1,000	-,256
	HEALTH	-,404	,079	,068	-,256	1,000

**Correlation Matrix** 

# Logistic Regression 2.2

SECOND MODEL, MODIFIED (NOT REPRESENTED IN THE MAIN TEXT)

#### **Case Processing Summary**

Unweighted Cases <sup>b</sup>		N	Percent
Selected Cases <sup>a</sup>	Included in Analysis	134	100,0
	Missing Cases	0	,0
	Total	134	100,0
Unselected Cases		0	,0
Total		134	100,0

a. The variable NATIO1 is constant for all selected cases. Since a constant was requested in the model, it will be removed from the analysis.

b. If weight is in effect, see classification table for the total number of cases.

#### **Dependent Variable Encoding**

Original Value	Internal Value
0	0
1	1

# **Block 0: Beginning Block**

## Classification Table<sup>a,b</sup>

			Predicted			
			HAF	РРҮ	Percentage	
	Observed		0	1	Correct	
Step 0	HAPPY	0	0	21	,0	
		1	0	113	100,0	
	Overall Percentage				84,3	

a. Constant is included in the model.

b. The cut value is ,500

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,683	,238	50,152	1	,000	5,381

			Score	df	Sig.
Step	Variables	RISK	3,886	1	,049
0		TIMELIFE	,888,	1	,346
		EDUC1	2,417	1	,120
		VOICE	10,495	1	,001
		HEALTH	10,865	1	,001
		RELIGION	,001	1	,974
	<b>Overall Statistics</b>		22,568	6	,001

#### Variables not in the Equation

# **Block 1: Method = Enter**

### **Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	24,345	6	,000
	Block	24,345	6	,000
	Model	24,345	6	,000

#### **Model Summary**

	-2 Log	Cox & Snell	Nagelkerke	
Step	likelihood	R Square	R Square	
1	92,016	,166	,286	

#### Classification Table<sup>a</sup>

				Predicted	
			НАГ	DDV	Demonsterne
	Observed		0	1	Percentage Correct
Step 1	HAPPY	0	5	16	23,8
		1	2	111	98,2
	Overall Percentage				86,6

a. The cut value is ,500

### Variables in the Equation

								95,0% C.I.	for EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step	RISK	1,366	,779	3,073	1	,080	3,919	,851	18,042
1	TIMELIFE	1,161	,657	3,128	1	,077	3,195	,882	11,572
	EDUC1	-,757	,587	1,662	1	,197	,469	,148	1,483
	VOICE	1,315	,681	3,729	1	,053	3,723	,981	14,136
	HEALTH	1,438	,567	6,435	1	,011	4,211	1,387	12,790
	RELIGION	-,674	,587	1,318	1	,251	,510	,161	1,611
	Constant	-,255	,678	,141	1	,707	,775		

a. Variable(s) entered on step 1: RISK, TIMELIFE, EDUC1, VOICE, HEALTH, RELIGION.

		Constant	RISK	TIMELIFE	EDUC1	VOICE	HEALTH	RELIGION
Step	Constant	1,000	-,350	-,679	-,192	-,287	-,283	-,074
1	RISK	-,350	1,000	,276	,087	-,011	,078	-,308
	TIMELIFE	-,679	,276	1,000	-,183	,196	,010	-,144
	EDUC1	-,192	,087	-,183	1,000	,210	-,276	-,147
	VOICE	-,287	-,011	,196	,210	1,000	-,235	-,225
	HEALTH	-,283	,078	,010	-,276	-,235	1,000	-,003
	RELIGION	-,074	-,308	-,144	-,147	-,225	-,003	1,000

**Correlation Matrix** 

With coding for **religion** : if QVAL21 = 1,2,3,4 then religion = 1; otherwise if QVAL21 eq 5 then religion = 0.

# **Logistic Regression 3**

THIRD MODEL

#### **Case Processing Summary**

Unweighted Cases <sup>b</sup>		N	Percent
Selected Cases <sup>a</sup>	Included in Analysis	134	100,0
	Missing Cases	0	,0
	Total	134	100,0
Unselected Cases		0	,0
Total		134	100,0

a. The variable NATIO1 is constant for all selected cases. Since a constant was requested in the model, it will be removed from the analysis.

b. If weight is in effect, see classification table for the total number of cases.

#### **Dependent Variable Encoding**

Original Value	Internal Value
0	0
1	1

## **Block 0: Beginning Block**

#### Classification Table<sup>a,b</sup>

			Predicted				
			ЦАГ	VOV	_		
			HAF	771	Percentage		
	Observed		0	1	Correct		
Step 0	HAPPY	0	0	21	,0		
		1	0	113	100,0		
	Overall Percentage				84,3		

a. Constant is included in the model.

b. The cut value is ,500

		в	SE	Wald	df	Sia	Exp(B)
			0.2.	Wala	a	Oig.	
Step 0	Constant	1,683	,238	50,152	1	,000	5,381

			Score	df	Sig.
Step	Variables	RISK	3,886	1	,049
0		TIMELIFE	,888,	1	,346
		EDUC1	2,417	1	,120
		VOICE	10,495	1	,001
		HEALTH	10,865	1	,001
		RELI	3,241	1	,072
	<b>Overall Statistics</b>		23,261	6	,001

#### Variables not in the Equation

# Block 1: Method = Enter

### **Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.	
Step 1	Step	24,425	6	,000	
	Block	24,425	6	,000	
	Model	24,425	6	,000	

#### **Model Summary**

	-2 Log	Cox & Snell	Nagelkerke	
Step	likelihood	R Square	R Square	
1	91,936	,167	,287	

#### Classification Table<sup>a</sup>

			Predicted			
			НАРРҮ		Percentage	
	Observed		0	1	Correct	
Step 1	HAPPY	0	4	17	19,0	
		1	2	111	98,2	
	Overall Percentage				85,8	

a. The cut value is ,500

#### Variables in the Equation

								95,0% C.I.for EXP(B)	
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step	RISK	,931	,755	1,520	1	,218	2,538	,577	11,154
1	TIMELIFE	,974	,650	2,240	1	,134	2,647	,740	9,473
	EDUC1	-,930	,586	2,520	1	,112	,394	,125	1,244
	VOICE	1,096	,659	2,765	1	,096	2,993	,822	10,896
	HEALTH	1,485	,569	6,820	1	,009	4,416	1,449	13,463
	RELI	,677	,568	1,423	1	,233	1,969	,647	5,992
	Constant	-,628	,716	,769	1	,380	,534		

a. Variable(s) entered on step 1: RISK, TIMELIFE, EDUC1, VOICE, HEALTH, RELI.

In this table the probability for a person of Lindab for whom religion is important in his/her life, has 2 times more chances (97%) of being happy than a person of Lindab for whom religion has no importance.

		Constant	RISK	TIMELIFE	EDUC1	VOICE	HEALTH	RELI
Step	Constant	1,000	-,260	-,602	-,135	-,230	-,310	-,365
1	RISK	-,260	1,000	,214	,054	-,149	,105	-,195
	TIMELIFE	-,602	,214	1,000	-,213	,126	,006	-,101
	EDUC1	-,135	,054	-,213	1,000	,182	-,279	-,122
	VOICE	-,230	-,149	,126	,182	1,000	-,233	-,065
	HEALTH	-,310	,105	,006	-,279	-,233	1,000	,086
	RELI	-,365	-,195	-,101	-,122	-,065	,086	1,000

**Correlation Matrix**