## LISER ANNUAI RP()RI 2()22



### ALINE MULLER, CEO OF LISER

We are thrilled to present the 2022 edition of our LISER annual report. As a leading research institute, we have made significant strides in addressing the most pressing challenges facing our society today. At LISER, we are committed to mitigating the effects of social and economic adversities, advancing Green Deal initiatives, and leveraging digitalization to contribute to making our society a better place. Our belief in the need for bold action to meet these challenges drives us to be ready to rise up and make a difference.

Our success is due to the exceptional talents and competencies we continue to attract and develop in our researchers. They have published in top-tier academic journals, collaborated with other leading research institutions, and received numerous accolades for their work. These remarkable achievements reflect the impact of groundbreaking research projects that we have undertaken, some of which are highlighted in this report.

We strive to deepen our expertise, investing in cutting-edge methodologies and technology to enable us to push the frontiers of knowledge. This approach has led to innovative solutions that were once thought to be impossible. We are proud to be at the forefront of research in various scientific fields, making groundbreaking discoveries that have tangible value for our economy and society.

Moreover, we foster a culture of innovation and collaboration within our institute, enabling us to leverage the strengths and expertise of our collective to tackle the challenges facing our society. We believe in the power of working together and combining our talents to achieve greater impact and make meaningful contributions towards creating a better society.

In the past year, we conducted a rigorous performance evaluation process that identified areas where we need to improve. We are taking necessary steps to address these gaps, confident that they will lead to even better outcomes in the coming years.

In conclusion, we express our sincere gratitude to all our staff members and partners for their unwavering engagement over the years. At LISER, we remain committed to our vision of applying research to serve society, and we look forward to a future where our research will continue to play a critical role in shaping our society for the better.

### VÉRONIQUE HOFFELD, CHAIRWOMAN OF LISER

We are proud to present LISER's 2022 annual report. The departments of LISER were evaluated in 2022 and a comprehensive external evaluation of LISER's departments and research programmes concluded that they have "clear research strategies that demonstrate a strong commitment to the institute's mission of achieving scientific and societal impact in Luxembourg and abroad through excellent fundamental and applied research".

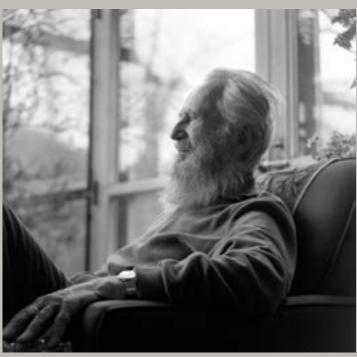
These achievements have been obtained through restructurings during recent years, which have transformed the institute into a project-based organisation. This new structure enhances the flexibility and above all the collaboration between researchers.

LISER cooperates both nationally and internationally with a broad range of partners. On the national level, LISER has built long term relationships with the ministries, civil society, private actors, the University of Luxembourg and other public research institutions. Through these cooperations, LISER ensures its societal impact and provides research-based findings to the public actors who can take these into account when making decisions. The commissioned research on behalf of different public policy actors have also resulted in numerous public reports and recommendations.

On an international level, collaboration was strengthened with different stakeholders and the institute's international visibility has increased. LISER researchers have also overall obtained substantially more competitive funding at both international and national levels.

LISER has not only broadened its societal impact but has also simultaneously focused on the high quality of its scientific output. LISER has thus successfully accomplished its mission of excellent scientific output and societal impact. Further systemisation and monitoring of societal impact will be developed in the future, in line with the recommendation of the evaluation report.

Finally, I would like to thank every single person at the institute. Their motivation and commitment contribute to the overall success of LISER.



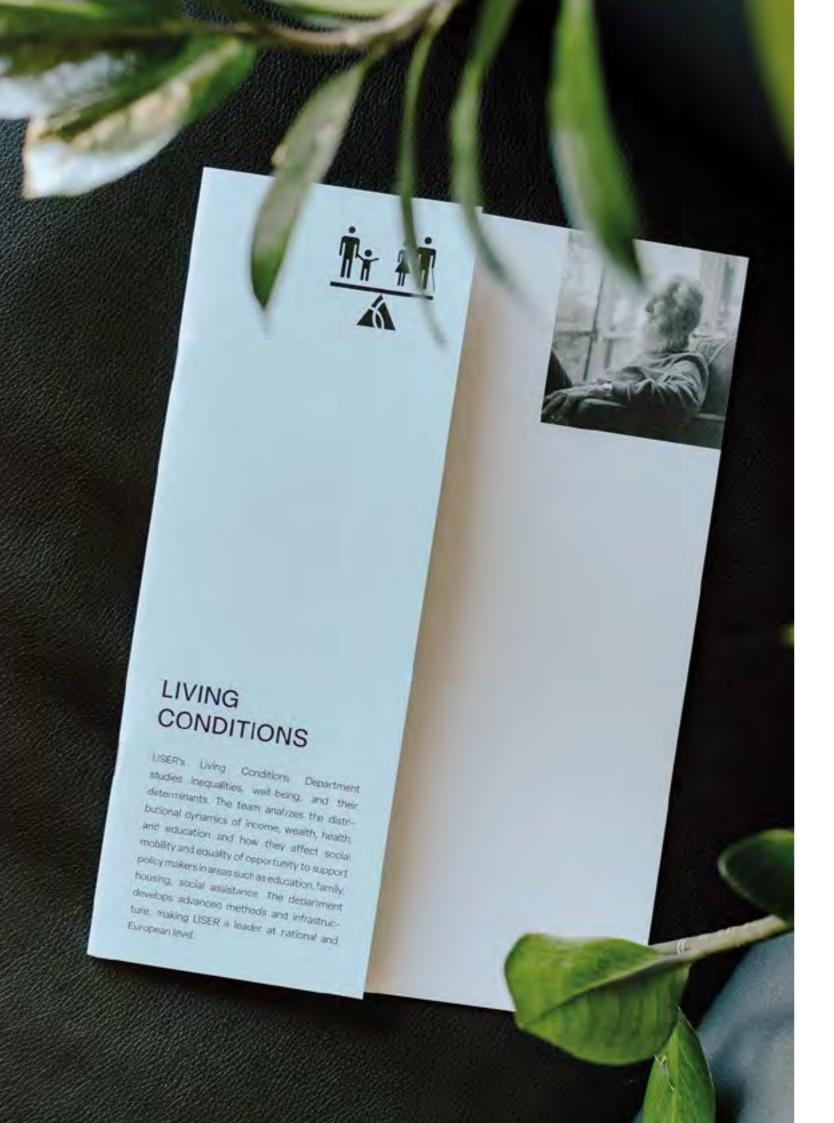
E. STEICHEN © CBS PHOTO ARCHIVE / CONTRIBUTEUR VIA GETTY IMAGES





### LIVING CONDITIONS

LISER's Living Conditions department studies inequalities, well-being, and their determinants. The team analyzes the distributional dynamics of income, wealth, health, and education and how they affect social mobility and equality of opportunity to support policy makers in areas such as education, family, housing, social assistance. The department develops advanced methods and infrastructure, making LISER a leader at national and European level.



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## WORD OF THE CHAIRWOMAN OF LISER.

### **VÉRONIQUE HOFFELD**

In Luxembourg, where poverty levels are relatively lower compared to other regions in Europe, it is crucial not to overlook the importance of poverty policies. On the contrary, as a prosperous nation, we have a unique opportunity to minimize poverty through active and targeted policies. Our initial step towards achieving this goal is to identify not only individuals living in poverty but also those who are most vulnerable, at risk of slipping into impoverished conditions.

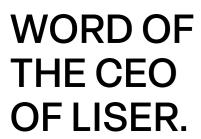
Over time, the factors associated with poverty have undergone significant changes. While foreign citizenship continues to pose a significant risk, the lack of education and challenges faced by

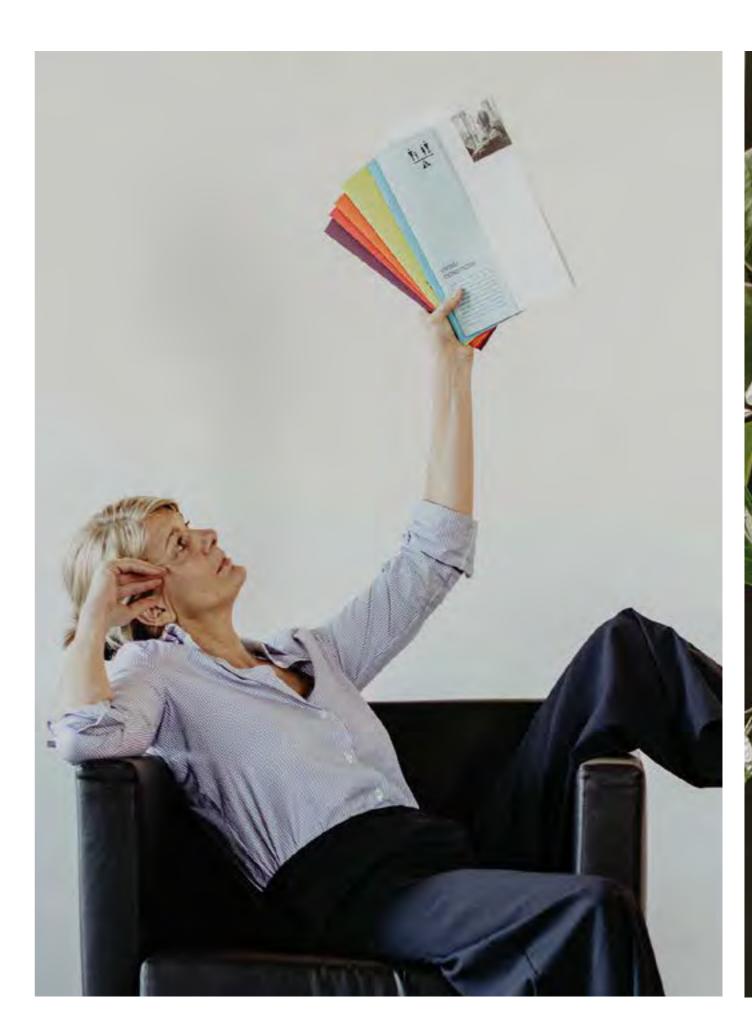
the youth have emerged as key contributors in the present day. This recent evolution presents us with the urge of integrating young individuals and immigrants, ensuring they are not excluded from society. Education plays a crucial role in addressing these issues, while we must not turn a blind eye to the ever-present risk of perpetuating social inequality. Luxembourg lags behind other European Union countries in terms of meeting the objective of equal opportunity linked to family circumstances, such as parental education levels, which children have no control over. This underlines the urgent need to address these disparities and calls for action to create equal opportunities for all.

In light of these circumstances, we have the great pleasure to introduce the work of our Living Conditions team and their commendable efforts in setting a promising and ambitious research agenda. Under the generous and inspirational guidance of Eugenio Peluso, our researchers are extending our methodological expertise to areas that significantly influence the living conditions of our citizens, encompassing family dynamics, childhood, education, health, and even the potential inequalities arising from environmental policies.

Within the pages of this report, you will discover the enthusiastic work of our department's researchers as they continuously push the boundaries of innovation in their research projects. Their daily endeavors not only contribute to advancing knowledge in these crucial areas that underpin our collective well-being but also aim to inform policymakers and citizens alike. By working together, we aim to make significant contributions to building an inclusive and prosperous society for all.

**ALINE MULLER** 





**08 |** EUGENIO PELUSO LIVING CONDITIONS DEPARTMENT HEAD OF DEPARTMENT | 09

### WORD OF THE HEAD OF LIVING CONDITIONS DEPARTMENT.

### **EUGENIO PELUSO**

2022 was an important year for the Living Conditions department (LC). Despite the many challenges posed by the pandemic, which had previously made internal collaboration and participating in international scientific events difficult, 2022 was a year full of excitement and accomplishments. The LC not only contributed significantly to the analysis of the socio-economic impact of the pandemic in Luxembourg and Europe, but also opened up new research fronts.

The preparation of a detailed self-assessment report of the last four years for an external evaluation – a joint effort involving many department members – further highlighted the department's ability to combine scientific excellence with societal impact through its activities, thanks to a cloud-based strategy of projects in key research areas: children well-being and education, social and redistributive policies, health and ageing issues, multi-dimensional poverty and housing market problems, and the effects of inflation and transformations in the energy and environmental sector.

Our main scientific results were published in important international journals and have proved to be highly relevant

for policy-makers at both the national and the European level, especially in areas such as housing taxation, education, health, and social policies. Moreover, two new major CORE project grants were awarded to LC members by the Luxembourg National Research Fund (FNR), reinforcing our position as a key player in socio-economic issues.

Throughout the year, the department organised several important events and workshops, some of them as joint initiatives together with the Luxembourg Income Study, the European GUIDE consortium, or the Crossing Borders transversal programme. The department also contributed to the launch of two new LISER competence centres by further developing research infrastructure based on microsimulation models, machine learning, and digitalisation tools in the school sector.

All of these elements further demonstrate our department members' resilience, proactive attitude, and commitment to advancing research and innovation in areas that impact society positively. The LC's success is a testimony to our commitment to scientific excellence, our collaborative approach to research, and our focus on societal impact.



SOME FLAGSHIP

## PRO JEC TS.

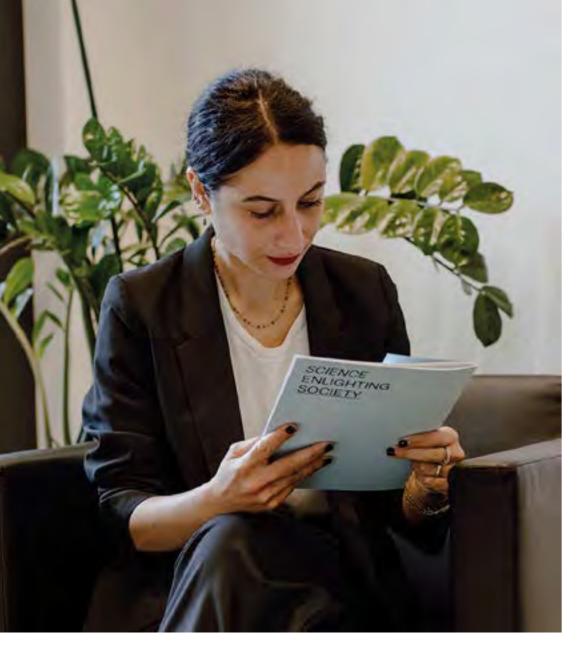






12 I AUDREY BOUSSELIN LIVING CONDITIONS DEPARTMENT CHILDHOOD & FAMILY | 13

### CHILDHOOD & FAMILY.







### AUDREY BOUSSELIN

The Childhood thematic illustrates how the LC aims to bring together scientific research and societal impact.

The project "Child well-being in Luxembourg", funded by the MENJE (Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse) was launched in 2018 for a period of four years. The project's objective was to study the well-being of children in various aspects of their daily life, as a response to the Government's need to provide the Parliament with statistics and analyses on the situation of children (and youths) every five years. The project involved a large-scale survey among children, based on the international Children's Worlds questionnaire, the International Survey of Children's Well-Being (ISCWeB)1. Data from this survey were linked to administrative records to create an interconnected database providing new information on children and their well-being. The results were published in the national report in March 2022, in collaboration with the University of Tubingen (Germany) and the University of Luxembourg. The results were also presented to and discussed with the Parliament, the press, and a large audience during a public event that gathered scholars, policy makers, members of NGOs and the non-profit sector, and workers from the early childcare industry.

The importance of the research programme and the database built in this project have initiated an innovative research infrastructure that is relevant for future studies and for the research community, policy makers, and the general public.

To date, the research infrastructure has paved the way for two research projects and a commissioned survey. The FNR funded the first two:

- 1) The "Family Response and WELL-being effects of COVID-19" project (Farewell-to-C19) started in 2020 for a two-year period. The project focused on the consequences of the pandemic on families with children.
- 2) The project "Investigating the consequences of public investments in Early Childhood Education and Care (ECEC) services for the quality of provision and child development" (ChilDev) which started in June 2022 and will last for three years. This project aims at analysing the relationship between household's demand of Early Childhood Education and Care services and public and private supply, by considering the interaction between policies, household's characteristics and provision of ECEC. This project also aims at providing innovative causal evidence about the effect of different margins (in terms of coverage, affordability and quality) of early childhood education and care on educational outcomes and child well-being.
- 3) Last but not least, the third survey on child well-being in Luxembourg will be launched in Spring 2023. This two-year project funded by the MENJE aims at comparing child well-being by cohorts. The core of the questionnaire is similar to the previous surveys, but adds a new set of questions on transitions between primary and secondary school, participation in civic life, and children's and young people's rights.

<sup>&</sup>lt;sup>1</sup> For more details about the survey, see https://isciweb.org/

14 | KRISTELL LEDUC & NATHALIE LORENTZ LIVING CONDITIONS DEPARTMENT THE HOUSING CRISIS | 15

## THE HOUSING CRISIS AND ITS IMPACT ON HOUSEHOLD BUDGETS.

### KRISTELL LEDUC & NATHALIE LORENTZ

The issue of housing conditions and costs is key to understanding the living conditions of the least well-off. This is especially true for Luxembourg, where housing costs have risen sharply in recent years. Indeed, despite the COVID crisis, rents and property prices have further increased across the Grand Duchy in 2022. Over the years, the housing burden and the implementation of policies to support the most vulnerable part of the population has become a critical challenge in Luxembourg. To deal with this challenge of rising costs and to strengthen equity in society. the Government and the Ministry of Housing had to work on a new reform on housing benefits and the creation of affordable housing. In this context, the Ministry of Housing commissioned an annual study from the "Observatoire de l'Habitat". Produced by the Living Conditions Department (LC), this study analyses the evolution of affordability ratio broken down by the tenure status and the equivalized disposable income.

The affordability ratio is an indicator of households' living conditions and housing conditions. It illustrates the difficulties that households may face in financing access to housing, but also with other expenses. If housing costs become a very significant share of a household's disposable income, other essential needs may become unaffordable. In Luxembourg, the affordability ratio has increased considerably over the last years. As a result, housing costs are taking up an increasing share of household budgets, highlighting the growing difficulties faced by the resident population in financing their housing. Using EU-SILC data, this indicator

has also demonstrated that the increase in affordability ratio has not affected Luxembourg's population equally: tenants renting at market prices, the least well-off households, and those who have recently entered the housing market are most likely to face these difficulties.

Following this initial assessment, there was a need for more in-depth knowledge on the impact of social and fiscal policies on housing. A large number of studies carried out in different European countries have shown that tax systems and social policies tend to favour owners over tenants, but does this apply to Luxembourg? Using survey data, administrative data and a microsimulation model, we have highlighted the categories of households benefitting the most from the current socio-fiscal system. The Luxembourg socio-fiscal system offers a wide range of housing-related schemes, which can take the form of cash transfers, tax deductions or benefits in kind. Our study showed that benefits in-kind and cash transfers tend to favour tenants (rent subsidies, social housing, etc.), especially the lower quintiles (the least well-off 20%), while tax systems favour landlords, which in turn also increases their standard of living.

These studies have had a great impact, as they have provided the Government and the Ministry of Housing with various results for the prior assessment of the current reforms of housing benefits and affordable housing and housing taxation.

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   Ministère du Logement - Observatoire de l'Habitat. https://logement.public.lu/fr/publications/observatoire/note-25.html



16 I DENISA M. SOLOGON & JULES LINDEN LISER © 2022 LIVING CONDITIONS DEPARTMENT GROWING UP IN DIGITAL EUROPE I 17

### GROWING UP IN GREEN & DIGITAL EUROPE.

AN ACCELERATED COHORT SURVEY OF GROWING UP IN EUROPE.





### DENISA M. SOLOGON, GUIDE / EUROCOHORT NATIONAL TEAM LEADER

Despite ongoing efforts to improve children's quality of life in Europe, they remain vulnerable economically, socially, and physically. Comparative longitudinal surveys monitoring well-being from birth to young adulthood are crucial in addressing this issue. The GUIDE project (https://www.guidecohort.eu/) will provide Europe's first comparative nationally representative longitudinal birth cohort survey, examining child and youth well-being across Europe to identify effective national policies and inform future interventions. It will include a sample of newborns and school-age children, surveyed using a common questionnaire and data collection methodology at regular intervals until the age of 24. GUIDE's inclusion in the 2021 European Strategy Forum on Research Infrastructures (ESFRI) Roadmap signifies its importance in providing high-quality research infrastructures. By providing high-quality data, the project will help policymakers develop and evaluate policy interventions, contributing to Europe's Sustainable Development Goals in areas like poverty, health, and education.

LISER, a core GUIDE partner, organised a roundtable on the "Role of a European Comparative Longitudinal Birth Cohort Survey in Designing Better Policies for Children and their Well-being", bringing together academics and policymakers to understand the need for such a survey and its value to Luxembourg. The event stressed the importance of using comparative longitudinal surveys to inform policy decisions and highlighted the need for a coordinated approach to enhance children's well-being across Europe.

### DENISA M. SOLOGON, & JULES LINDEN

Microsimulation infrastructure for social, economic and environmental policy.

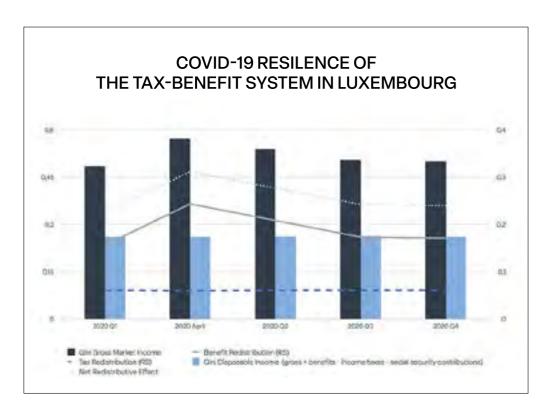
A core activity of the LC is to establish a *microsimulation* capacity for social, economic, and environmental policy analysis. This involves enhancing expertise in microsimulation, developing advanced policy tools, and positioning LISER as a global leader in societal research. Notable achievements include infrastructure development, high-quality publications, and societal impact, such as the 2020 Miriam Herderman O'Brien Prize from the Foundation for Fiscal Studies for our COVID-19 work. Building on a decade of developmental research led by Denisa M. Sologon at LISER, in partnership with National University of Ireland Galway (NUIG) and funded by various sources including the Luxembourg National Research Fund, a scalable modeling infrastructure has been created to assess the impact of crises on well-being, such as financial, COVID-19, cost of living, and climate crisis. This framework has generated extensive research across multiple policy areas and contexts, involving a strong international team.

We evaluated the distributional and welfare impacts of price changes and mitigation measures amid the Cost of Living Crisis, presenting results at the European Commission. In collaboration with the OECD, the framework is being expanded to evaluate the effects of environmental policies, including compensatory government transfers, on household budgets in response to the Climate Crisis. Its primary goal is to help EU policymakers facilitate households' transition from fossil fuels. One PhD project (ENVI-ROSIM) funded by the FNR-AFR scheme evaluates the distributional impact of carbon taxes and mitigation policies across EU countries. It models consumption behaviour and estimates price and income elasticities to assess carbon tax effectiveness in reducing CO2 emissions. The project links carbon emissions and consumption data with income information and tax-transfer models. To explore broader behavioural drivers, a survey based on the Theory of Planned Behaviour will investigate sustainable consumption factors in Luxembourg, such as transportation behaviour and energy efficiency investments. Supported by Fond Climat Energie, the results will inform Luxembourg's government ministries to aid policymaking and maximise LISER's societal impact.

18 | DENISA M. SOLOGON & JULES LINDEN LISER © 2022 LIVING CONDITIONS DEPARTMENT SOME FLAGSHIP EVENTS | 19

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- Institute of Labor Economics.



Based on Sologon et al. (2022). The COVID-19 Resilience of a Continental Welfare Regime - Nowcasting the Distributional Impact of the Crisis. Journal of Economic Inequality, 20(4), 777-809.

We studied in near "real-time" how well Luxembourg's tax-benefit system handled the financial stress of COVID-19 by looking at how it affected household incomes in 2020. The income-support policies shielded household incomes and prevented a rise in disposable income inequality, with inequality returning to normal by the end of 2020. Even though gross incomes decreased and became more unequal, the increase in benefit redistribution offset this imbalance.

### SOME FLAGSHIP

## EV EN TS.



20 | ÉGALITÉS DE GENRE FACE AU COVID-19 LISER © 2022 LIVING CONDITIONS DEPARTMENT GLOBALIZATION, ATTITUDES & POPULISM | 21

### ÉGALITÉS DE GENRE FACE AU COVID-19.



© MEGA

Event: Conference - Panel

Date: 7 March 2022

Place:
Luxembourg
Learning Centre
(Ellipse conference room)

People: 60 participants

At the beginning of March 2022, the Ministry for Equality between Women and Men (MEGA) organised a press conference to present the results of a study on the impact of the COVID-19 pandemic covering different dimensions of individual well-being in Luxembourg. The study, carried out by a team of researchers from the LC, examined the varying importance of work and family relationships on individual outcomes during the pandemic, and focused on three main areas: health effects, the impact of individual traits on compliance with COVID-19 measures, and gender differences in the various impacts of the pandemic on labour markets, economic insecurity, and social interactions.

The presentation of the study generated considerable interest from journalists and the national media. The fact that gender differences in health are masked by factors such as age, sector of employment and family structure was one of the key findings of the study. For instance, young mothers were more vulnerable to the risk of infection, while elderly men were more susceptible to severe forms of COVID-19.

The study also found that women tended to be more compliant with health measures than men during the pandemic. However, women were more likely to experience job loss, reduced working hours, and financial difficulties due to increased childcare responsibilities. In addition, women's social interactions were more affected by the pandemic than men's, with higher levels of loneliness and social isolation reported.

Overall, the report highlighted the importance of gender-specific policies that take into account the different ways in which the pandemic has affected people's lives. The findings suggest that communication about COVID-19 and health policies may be more effective by accounting for gender differences.

### GLOBALIZATION, ATTITUDES & POPULISM.

were to understand:

1) the reasons behind the hostile or positive reactions of natives to trade and migration;

2) the specific determinants of left-wing and right-wing responses:

In collaboration with Frédéric Docquier, director of the Crossing Borders transversal programme, the LC organised a workshop

on "Globalization, Attitudes, and Populism" on March 23-24,

2022. The workshop, supported by the FNR (EUFIRST, grant

no. 13956644) and the FNRS for the Belgian side, explored the

complex relationship between perceptions of inequality

and cultural threats, trade and immigration shocks, and the

emergence of populist movements. The four main objectives

3) the political competition generated by the entry or rise of populist parties and how populism affects the political platforms of traditional parties; and

4) the reverse effects of populism on the size and structure of trade and immigration.

We ensured a well-balanced event, combining the insights of established experts in the field of Economics of Migration and Political Economy, such as Prof. Massimo Morelli (Bocconi University), with the fresh perspective of promising young researchers and PhD students from Luxembourg and other European countries.

The workshop was met with great success, shedding light on the complex dynamics of globalisation, attitudes, and populism. It provided a platform for thought-provoking discussions, inspiring new avenues of research, and enhancing our collective understanding of this critical and timely topic.

Event: Workshop

Date: 23-24 March 2022

Place: Maison des Sciences Humaines

People: 35 participants

22 | DEPARTMENT'S PUBLICATIONS LISER © 2022

### DEPARTMENT'S PUBLICATIONS.

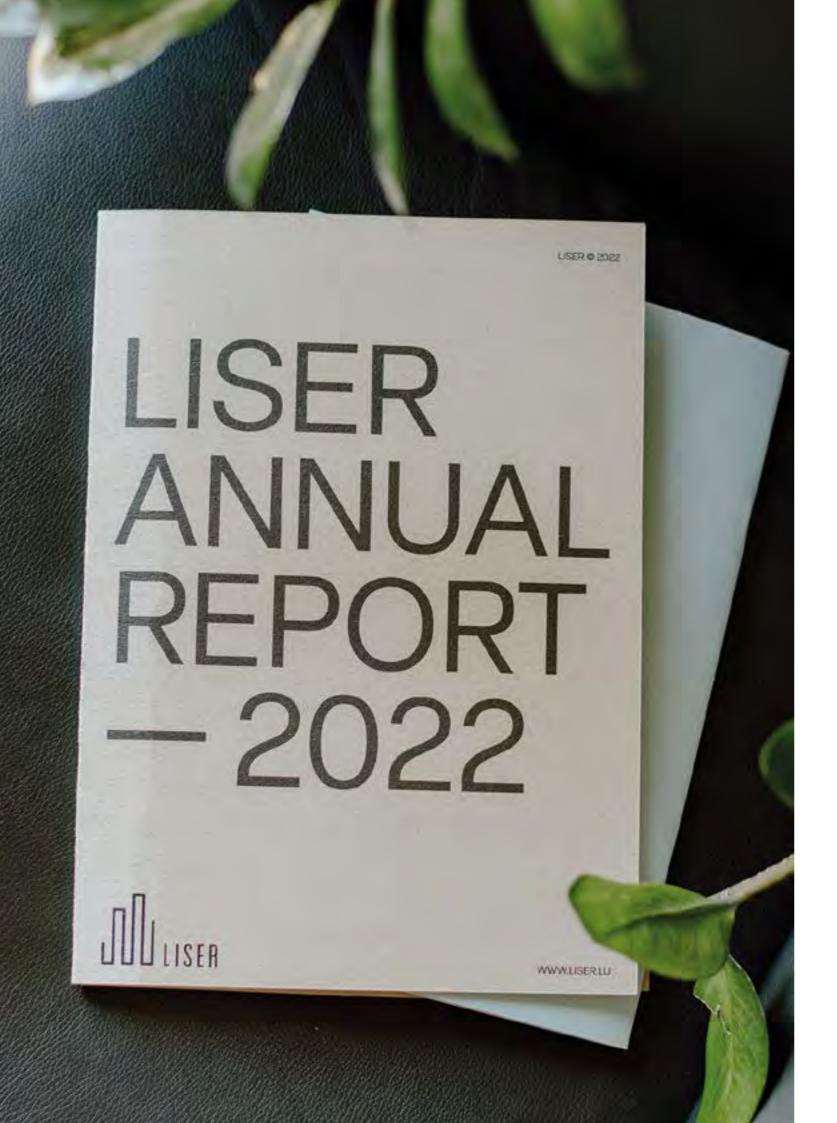
In 2022, the LC published numerous articles in prestigious peer-reviewed journals, reflecting the wide range of disciplines covered by the department. These included public economics, health economics, sociology, social sciences, education sciences, and public policy. The publications were the result of various research projects, often funded by renowned sources such as the FNR, international consortiums like SHARE, and the European Commission through its H2020 and Horizon Europe funding programmes.

It is worth noting that the authors of these publications included not only experienced researchers, but also junior researchers and PhD students, demonstrating our strong commitment to involve all our members in our mission to achieve scientific excellence. Moreover, in addition to increasing our collaborations with colleagues from other departments within LISER, including the Crossing Borders and Health & Health Systems transversal research programmes, we have also pursued the development of our international research network.

The publications themselves covered a wide range of topics, from income inequality and redistribution to population change and ageing in Europe. Some focused on specific regions, such as Luxembourg, Lithuania, and Russia, while others had a global perspective. The impact of legalising same-sex marriage on mental health, the dynamics of poverty in urban slums, and the effectiveness of COVID-19 resilience interventions were among our most notable publications.

These publications represent our department's dedication to advancing knowledge and addressing issues of critical importance to society. They were published in prestigious journals such as Socio-Economic Review, Health Economics, Oxford Bulletin of Economics and Statistics, Empirical Economics, Journal of Economic Inequality, and Fiscal Studies, among others, and have undoubtedly contributed to the advancement of research on Living Conditions at the European level.





The audit report issued on April 21st, 2023 on the financial statements as at December 31st, 2022 of LISER was based on the French version of those financial statements.

TOTAL ASSETS	2022	2021
FIXED ASSETS Intangible fixed assets Tangible fixed assets Financial fixed assets	37.636,78 808.624,45 4.100,00	71.911,85 505.275,31 4.100,00
	850.361,23	581.287,16
CURRENT ASSETS		
Debtors		
Trade receivables due and payable within one year Other receivables due and payable within one year	4.475.981,31 490.005,43	3.227.493,43 275.526,69
Cash at bank, cash in postal cheque accounts,		
cheques and Cash in hand	9.054.646,46	10.163.627,76
	14.020.633,20	13.666.647,88
Deferred charges - Prepayments	309.579,37	276.177,27
Total assets	15.180.573,79	14.524.112,31
TOTAL LIABILITIES  CAPITAL AND RESERVES  Retained earnings  Profit/(Loss) of the financial year Investment	5.718.775,38 103.146,62 846.261,19	4.597.410,89 1.121.364,49 577.187,17
	6.668.183,19	6.295.962,55
PROVISIONS		
Other provisions	693.112,43	825.836,70
NON SUBORDINATED DEBTS		
Trade creditors due and payable within one year Other debts	1.425.961,92	2.495.932,73
Tax debts	388.716,94	433.374,86
Social security debts Other creditors due and payable within one year	483.908,43 364.612,54	473.251,05 711.341,99
Other ereditors due and payable within one year	2.663.199,83	4.113.900,63
Deferred income	5.156.078,33	3.288.412,43
Total liabilities	15.180.573,79	14.524.112,31

26 | FINANCIALS & KEY FIGURES LIVING CONDITIONS DEPARTMENT GOVERNANCE | 27

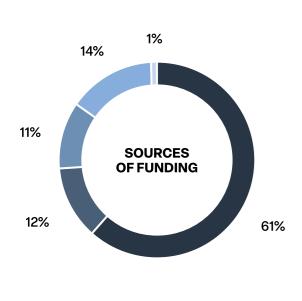
### PROFIT & LOSS ACCOUNT

Net Turnover
Other income
Use of merchandise and consumables
Other expenses
Staff costs

Salaries and wages Social security on salaries and wages

Value adjustment on tangibles and intangibles Other operating expenses Other interest and financial income Interest payable and similar financial expenses

### **Profit of the year**







International Competitive Funding 2 673 757€ | 11%

Collaborative Funding 3 506 618€ I 14%

Other Revenues 219 347€ I 1%

### 2022 2021

23.968.790,30 24.615.417,41 7.920,03 231.529,52 (178.424,76) (120.454,31) (5.104.219,45) (5.129.380,02) (15.442.890,06) (16.045.699,14) (2.207.679,93) (2.115.798,68) (263.029,64) (200.221,10)(375.595,95)(394.361,47) 855,26 (15.260,84)(6.986,06)

75%

103.146,62

COST

**CATEGORIES** 

Personnel Cost

18 161 499€ **I** 75%

Other Expenditures

5 936 530€ I 25%

25%

1.121.364,49

### GOVERNANCE.

The board of directors is nominated by the government and is composed of nine external members of different professional backgrounds. Its mission is to define LISER's strategic orientations and oversee its activities.

### MEMBERS OF THE BOARD OF DIRECTORS

### Véronique HOFFELD — Chairwomen

Partner - Attorney at Law, Luxembourg

### Jean-Marc GOY

### - Vice Chairman

Conducting Officer Senior Counsel at Capital Group, Luxembourg

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Independent Director

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Chair for Environment & Economy, Université Libre de Bruxelles

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Registered architect and urban planner managing partner, Jim Clemes Associates, Luxembourg

### Claude LÜSCHER

Founder of Licent Sàrl, Luxembourg

### Carole RECKINGER

Social Policy Analyst Caritas Luxembourg

### Aline SCHILTZ

Project Manager at the Embassy of Luxembourg in Lisbon

### Nico WEYDERT

Honorary Deputy Director at STATEC, Luxembourg

### ATTENDING THE BOARD OF DIRECTORS MEETINGS WITHOUT VOTING RIGHTS

Christiane HUBERTY

Government Commissioner Chair of the Staff Delegation

Carole BLOND-HANTEN

Aline MULLER
CEO



### SCIENCE ENLIGHTENING SOCIETY







### LABOUR MARKET

The mission of LISER's Labour Market department is to analyze the reshaping of the labour market in the wake of four big challenges: the digital and green transition, the energy crisis and demographic ageing. The team informs and advises policy-makers and the public how to create the future conditions for a healthy labour market and inclusive society.





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LABOUR MARKET

The mission of LISER's Labour Market Department's to analyze the reshaping of the labour market in the wake of four big challenges: the digital and green transition, the energy crisis and demographic ageing. The team informs and solvices policy-makers and the public how to create the future conditions for a healthy labour market and inclusive society.





## WORD OF THE CHAIRWOMAN OF LISER.

### VÉRONIQUE HOFFELD

It is with great pleasure that we present the Annual Report of LISER's Labour Market department, highlighting our research endeavours and key findings in addressing the critical challenges facing our economies and societies.

The advent of digitalisation and the imperative of a sustainable future embodied in the Green Deal have brought about profound transformations in production, labour, and markets. These developments are reshaping the way we work, the skills required in our labour market, and the dynamics of employment. Our department has been at the forefront of investigating these transformations and their implications for labour market outcomes.

The increasing skills gap and the rapidly evolving labour market dynamics pose significant challenges for policymakers, employers, and individuals. Understanding the changing nature of work and equipping individuals with the right skills has become paramount for inclusive growth and social progress. Moreover, the aftermath of the COVID-19 pandemic has further accentuated the need to reassess our relationship with work, including the emergence of remote work and the potential long-term impact on job security and well-being.

To develop comparative advantages for our competitivity and ensure a skilled workforce for the future, our researchers are delving into education systems, identifying skills gaps, and proposing policy measures to enhance labour market outcomes. Furthermore, our studies are focusing on labour market matching performance, exploring the factors influencing successful job matching and the potential barriers faced by certain groups in the labour market. In this frame, we are also acutely aware of the

importance of our integration performance, particularly for disadvantaged groups and immigrants.

Addressing these formidable challenges requires the effective utilisation of the vast amount of information generated by our society and markets. Transforming this information into societal value is crucial for informed decision-making in key areas that will shape the future of our economies and societies.

We extend our deepest appreciation to the dedicated researchers and its leader, Christina Gathmann, at the Labour Market department for their unwavering commitment to producing innovative high-quality research. Their contributions are not only advancing our understanding of labour market dynamics but also provide valuable insights to policymakers, stakeholders, and citizens, ultimately contributing to the development of our future.

We invite you to explore the pages of this report, which highlight our research findings and shed light on the transformative journey that lies ahead.

Together, let us forge a path towards inclusive and resilient labour markets that serve as the foundation for prosperous and equitable societies.

### **ALINE MULLER**

WORD OF THE CEO OF LISER.



**08 |** CHRISTINA GATHMANN LISER © 2022 LABOUR MARKET DEPARTMENT HEAD OF DEPARTMENT | **09** 

### WORD OF THE HEAD OF LABOUR MARKET DEPARTMENT.

### **CHRISTINA GATHMANN**

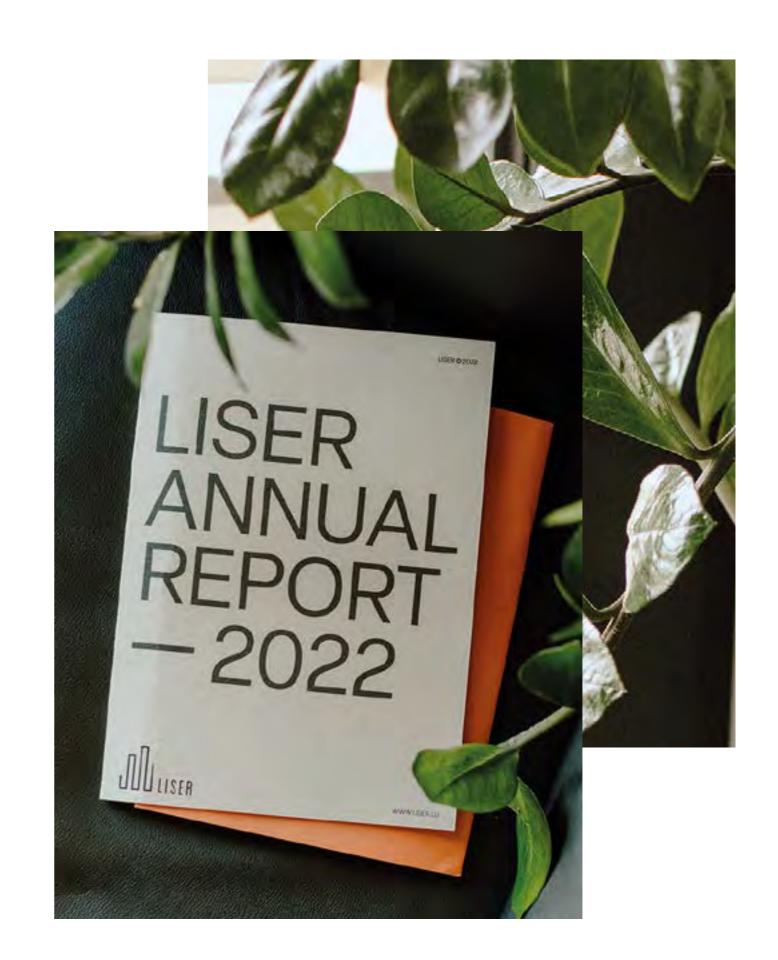
During 2022, the Labour Market department has engaged in many activities to improve its opportunities and potential for high-quality research and societal impact.

To bring in new skills and talents, the department has hired a number of new Ph.D. students, which are financed through individual AFR scholarships or through doctoral training units (DTU) on migration (ACROSS), data science (D4H) and behavioural economics (3E). In addition, staff members of the Labour Market department are some of the most active participants in training courses offered by LISER. The combination of hiring new talents and upskilling the existing skills is key to improve the research performance and societal impact of the department.

The department has invested substantially in its data science skills and data infrastructure. First, we hired a data science specialist who supports researchers with handling and analysing big data in their projects and policy work. Second, we have organised the opportunity to exchange with computer science from the

University and LIST through the new doctoral training unit on data science as well as the UPSKILL project, which uses data science tools, among others, to study the labour market consequences of the digital and green transition. Together with the Information System Platform, we have worked out a simplified access to the High-Powered Computing facility at the University to analyse big data and complex estimation models. In addition, we have further invested in our data infrastructure by providing access to German social security data by opening up a Safe Room that is available to all LISER researchers.

In order to increase its international visibility, the head of department has co-founded a European Network of Labour Market Research Institutes (ELMI) that includes the best research institutes on research activities in Europe. Moreover, the Labour Market department has co-organised several conferences, including the IAB-LISER conference on "Digitalisation and the Future of Work", the "Congress on Cross-Border Workers" and the "1st LUX-ERC workshop".



SOME FLAGSHIP

## PRO JEC TS.







## SKILLS & LABOUR MARKETS IN THE DIGITAL & GREEN TRANSITION.







### CHRISTINA GATHMANN

Since December 1, 2022, the team of the Labour Market department has been working on the UPSKILL project, which is funded by the FNR as an INITIATE grant for six months. The project is jointly with engineers and computer scientists from the Luxembourg Institute of Science and Technology (LIST).

The UPSKILL project lies at the intersection of a triple challenge: the need for a green transition, a competitive and socially harmonious digital transformation of the economy, and an adequate and proactive up- and reskilling of the workforce. These goals, part of the EU Skills Initiative, are at the heart of a broader strategy to strengthen Europe's sustainable competitiveness (set out in the Green Deal); to build resilience to crises (based on the lessons learned during the COVID-19 pandemic); and to strengthen access to education, training and lifelong learning (laid down in the Pillar of Social Rights). The Luxembourgish government has also identified the three challenges of green transition, digitalisation and innovation, upskilling and reskilling as core issues to be addressed in its "Recovery and Resilience Plan".

Studying the impact of the digital and green transitions on the labour market and society, UPSKILL contributes frontier research and provides practical solutions to foster a responsible and sustainable development for Luxembourg. The project has five broad domains: the first domain focuses on the evolution of skill

needs fueled by technological and organisational innovations; the second domain investigates the evolution of skill supply and skill gaps, including an analysis of the skills imported through immigrants and cross-border workers. The third domain aims to provide pathways to solving skill gaps and potential shortages in the labour market. In the fourth domain, we focus on the evaluation of existing policies and assess their impact on the transition process and up- and reskilling of the workforce. The fifth domain aims to improve the data infrastructure by creating, linking and improving access to data sources from Luxembourg and international sources. The sixth domain is focused on technical and methodological solutions for the other domains, including the development of an online Skills Dashboard.

The teams of the Labour Market department and LIST have taken the first steps to collect and formulate the broad research ideas and practical issues of the project. The end goal of the project is to formulate concrete research questions including a research plan, which also incorporate the needs of stakeholders from private companies, ADEM, ministries and other interested parties into a final report, which is then assessed by the FNR. Based on this strategic merit assessment, which will occur in 2023, the FNR will decide whether the team is invited to prepare an application for a National Center of Excellence (NCER), which provides long-run funding for the project.

14 | MICHAL BURZYNSKI LISER © 2022 LABOUR MARKET DEPARTMENT CLIMATE CHANGE MIGRATION MODEL | 15

### CLIMATE CHANGE MIGRATION MODEL FOR ACTION.







### MICHAL BURZYNSKI

There is a growing demand for climate action all over the world. LISER is a part of these discussions in local and global contexts. The paper "Climate Change, Inequality, and Human Migration" by Michal Burzynski, Fréderic Docquier and co-authors, has recently been used as a reference for modelling the way that climatic shocks will foster human mobility. The authors have been involved in numerous climate-migration panels, round tables and non-academic initiatives in the US, Europe and in Luxembourg. They have joined international teams in providing quantitative analysis for projects funded by the United Nations, USAID and other foundations that care about scientific evidence on nexus between climate change and migration.

One crucial societal contribution that the ongoing work on climate mobility brings, relates with an ongoing cooperation between Luxembourg and Senegal. In the frame of "Cellule d'analyse d'impact des politiques de développement", a project funded by the Luxembourgish Ministry of Cooperation and Humanitarian Action, we have developed an updated model of world economy that translates future climate damage into economic losses. These losses, in turn, incentivise people to move locally, regionally and internationally to escape climate damage. The model keeps its global overview, although we focus our attention to Senegal: a country with almost 17 million inhabitants, who are at the forefront of climate crisis.

In our model, we find that climate change will bring immense losses to Senegalese economy. The hardest hit agricultural sector

will see 40 percent of population losing approximately 60 percent of their incomes over the course of 21st century. Some of these people will choose to move: to the capital city Dakar (net immigration of 100.000 people) or abroad (net out-migration of 140.000 people). The majority, however, will very likely remain in the damaged regions experiencing famine, poverty and misery. In our worst-case scenario projections, more than 85% of Senegalese population will be classified as extremely poor in 2100. Keep in mind, that today's share of extreme poverty in Senegal reaches 30%.

These projections are going to be utilised by the Ministry to identify vulnerable areas and people at risk. Together, we will talk about potential solutions in the form of policies, structural reforms and mitigation strategies that could improve economic outlook of the country and reduce climate damages. The government of Luxembourg hand in hand with LISER commits to improve the knowledge about likely futures and dangers that they bring.

Indeed, there is a growing demand for climate action all over the world. However, people tend to underestimate the magnitudes of potential losses. Many still think that their individual actions do not matter. People believe that climate change is not their business, or that they can escape the suffering in the worst-case scenario. Our quantifications give convincing arguments that things will get much worse if we stay inactive, passive and ignorant. All actions matter, because we still have a long way ahead of us to ensure a safe and habitable world for the next generations.

16 | EVA SIERMINSKA LISER © 2022 LABOUR MARKET DEPARTMENT FIELD SPECIALIZATION IN ECONOMICS | 17

## THE MANY DIMENSIONS OF FIELD SPECIALISATION IN ECONOMICS.







### **EVA SIERMINSKA**

Over the past year, I have been involved in finalising elements of the project funded by the Alfred Sloan Foundation. The project studies the reasons for the lack of diversity in fields of specialisation in Economics. Specifically, my work is focused on the choices among beginning economists in graduate school.

The presence of a gender and underrepresented minority scholar (URM) gap in economics is concerning, given the field's pervasive influence in academia and policy. However, understanding disparities within economics sub-fields has been challenging due to the lack of data and framework, resulting in limited research in this area. To address this issue, we developed a data framework (Sierminska and Oaxaca, 2021, 2022), which includes over 9000 PhD Economics graduates from US universities (2008-18). Field specialisation is developed using Journal of Economic Literature (JEL) codes and topic modelling.

Considering the gaps in the literature and the newly compiled data source, together with PhD candidate Karan Singhal we continue to extend the discipline by further focusing on ethnicity and to the extent possible race.

The composition of gender and ethnicity within sub-fields may affect research preferences and viewpoints, as male and female economists have different perspectives on important issues. Additionally, ethnicity may influence field choice due to differences in social norms and environments. This overreaching aim of these studies is to provide a better understanding of decision

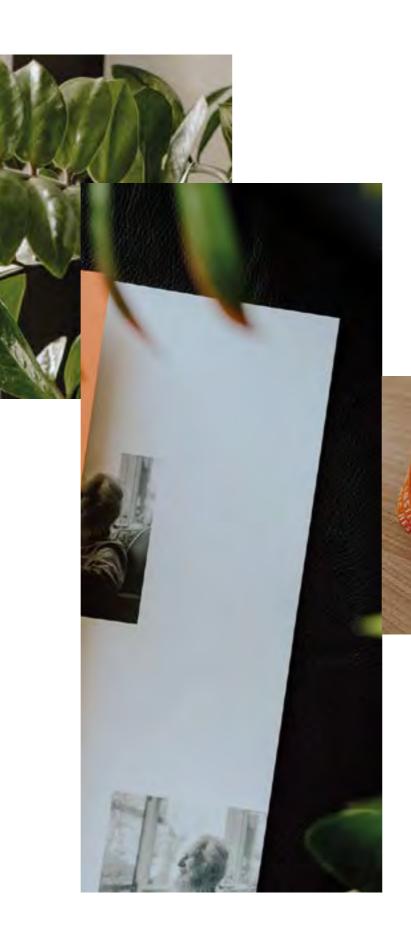
making in Economics in order to increase representation in Economics and STEM disciplines and close the existing gender and URM gaps.

As in any intellectual setting, I think it is important to exchange on the topic of interest thus to accompany my research agenda, since January 2022 I have lead a Reading Group on Gender Topics. Approximately once a month a group of scholars of all levels meets to discuss a selected article. It is an interdisciplinary group bringing together people from LISER and the University of Luxembourg and is open to everyone. Many of the topics consider the issue of inequalities in the labour market. The interactions of senior and junior researchers have been vital in creating new synergies across institutions and it has had a mentoring effect for some participants.

To continue my involvement in hands on practice I have been developing the Gender Equality Plan for LISER and contributing to the national Gender Working Group in Research, whose aim is to create conditions in research that would facilitate an equal representation of women across academic fields. We have developed a document on the importance of promoting gender equality in research adapted to Luxembourg and guideline on collection, monitoring, and publication of gender-disaggregated data to discern and track potential inequalities over time. Our future agenda will focus on administering a fair recruitment process that guarantees an inclusive working environment across all research domains and administrative positions.

### SOME FLAGSHIP

## EV EN TS.



### INAUGURATION OF LISER'S SAFE ROOM.

Excellent research requires high-quality data, many of which come from administrative sources. The Institute of Employment Research (IAB) has offered access to social security data from Germany for many years. The data provide information for up to 30 million employees and their employers since the 1970s. Given the highly sensitive and detailed data, it is important to ensure proper data protection and access rules. The IAB implements this through access points in so-called Safe Rooms within Germany, in selected European locations and North America.

To allow researchers in Luxembourg and its surroundings to

To allow researchers in Luxembourg and its surroundings to access such data for their research, LISER has applied and invested in the construction of such a secure Safe Room, which was opened in 2022.

To gain access to the Safe Room, researchers first obtain a data contract with the data provider (the Institute of Employment Research), which details the research questions, the methods used and the data needed for the analyses. Once the agreement is approved, the researcher obtains a project account and can schedule their visit to LISER's Safe Room.

This data infrastructure offers numerous benefits for researchers, including the elimination of travel requirements to access the data, availability at short notice, free usage and while upholding the necessary security standards. Furthermore, the Safe Room's installation has enhanced LISER's visibility to the international community of researchers and other stakeholders by serving as a hub for accessing data securely.

Overall, LISER's Safe Room provides a secure and convenient space for researchers to access sensitive data. Its implementation has been a significant achievement for LISER in 2022, further positioning the institute as a leading centre of knowledge and research services to the academic community.

Date: 17 May 2022

Place: LISER

### ELMI – NETWORK OF EUROPEAN LABOUR MARKET RESEARCH INSTITUTES.

### PATRICK THILL

In cooperation with the German Institute for Employment Research (IAB) in Nürnberg and 11 EU research institutes, LISER initiated in October 2022 the EU network ELMI. ELMI stands for Network of European Labour Market Research Institutes and comprises the following network partners: the Center for Economic Research and Graduate Education CERGE-EI (Czech Republic), the Center for Research in Economics and Statistics CREST (France), the Institute for Fiscal Studies (United Kingdom), the Fundación de Estudios de Economía Aplicada FEDEA (Spain), the Institute for Structural Research IBS (Poland), the Institute for Evaluation of Labour Market and Education Policy IFAU (Sweden), the Institut des Politiques Publiques IPP (France), the Research Centre for Education and the Labour Market ROA (Netherlands) and the Institute of Economic Research VATT (Finland).

ELMI constitutes a platform for the continuous exchange of ideas, projects and data. It is dedicated to the study of labor markets and employment with a focus on policy advice. Based on a multi-disciplinary approach combining a wide range of scientific research methods, ELMI members initiate common research projects and joint publications from various fields and disciplines of labour market research. The network also seeks to facilitate international exchanges of researchers (especially young researchers).

ELMI organises a yearly conference and other regular events on labour market research, such as a regular policy talks with experts from the field. LISER will organise on the 30th and 31th of October 2023 the international scientific conference *Skills for the Future:* Navigating the Digital, Green, and Social Transitions in European Labor Markets at the Hall des Poches in Belval.

Project website: https://www.elmi-network.eu/ Coordinator at LISER: Patrick Thill



ELMI - members countries

Date: 30-31 October 2023

Place: Halle des Poches à Fonte, Belval

People: 100 participants

The audit report issued on April 21st, 2023 on the financial statements as at December 31st, 2022 of LISER was based on the French version of those financial statements.

TOTAL ASSETS	2022	2021
FIXED ASSETS		
Intangible fixed assets	37.636,78	71.911,85
Tangible fixed assets	808.624,45	505.275,31
Financial fixed assets	4.100,00	4.100,00
	850.361,23	581.287,16
CURRENT ASSETS		
Debtors		
Trade receivables due and payable within one year	4.475.981,31	3.227.493,43
Other receivables due and payable within one year	490.005,43	275.526,69
Cash at bank, cash in postal cheque accounts,		
cheques and Cash in hand	9.054.646,46	10.163.627,76
	14.020.633,20	13.666.647,88
Deferred charges - Prepayments	309.579,37	276.177,27
Total assets	15.180.573,79	14.524.112,31
TOTAL LIABILITIES		
TOTAL LIABILITIES  CAPITAL AND RESERVES  Retained earnings  Profit/(Loss) of the financial year  Investment	5.718.775,38 103.146,62 846.261.19	1.121.364,49
CAPITAL AND RESERVES Retained earnings	103.146,62 846.261,19	1.121.364,49 577.187,17 ————
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment	103.146,62	1.121.364,49 577.187,17 ———————————————————————————————————
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year	103.146,62 846.261,19	1.121.364,49 577.187,17 <b>6.295.962,55</b>
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS	103.146,62 846.261,19 6.668.183,19	1.121.364,49 577.187,17 <b>6.295.962,5</b> 5
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS Other provisions	103.146,62 846.261,19 6.668.183,19	1.121.364,49 577.187,17 <b>6.295.962,55</b> 825.836,70
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS Other provisions  NON SUBORDINATED DEBTS Trade creditors due and payable within one year	103.146,62 846.261,19 6.668.183,19 693.112,43	1.121.364,49 577.187,17 <b>6.295.962,55</b> 825.836,70 2.495.932,73
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS Other provisions  NON SUBORDINATED DEBTS Trade creditors due and payable within one year Other debts	103.146,62 846.261,19 6.668.183,19 693.112,43	1.121.364,49 577.187,17 <b>6.295.962,55</b> 825.836,70 2.495.932,73 433.374,86
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS Other provisions  NON SUBORDINATED DEBTS Trade creditors due and payable within one year Other debts Tax debts	103.146,62 846.261,19 6.668.183,19 693.112,43 1.425.961,92 388.716,94	1.121.364,49 577.187,17 <b>6.295.962,55</b> 825.836,70 2.495.932,73 433.374,86 473.251,05
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS Other provisions  NON SUBORDINATED DEBTS Trade creditors due and payable within one year Other debts Tax debts Social security debts	103.146,62 846.261,19 6.668.183,19 693.112,43 1.425.961,92 388.716,94 483.908,43	1.121.364,49 577.187,17 <b>6.295.962,55</b> 825.836,70 2.495.932,73 433.374,86 473.251,05 711.341,99
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment  PROVISIONS Other provisions  NON SUBORDINATED DEBTS Trade creditors due and payable within one year Other debts Tax debts Social security debts	103.146,62 846.261,19 6.668.183,19 693.112,43 1.425.961,92 388.716,94 483.908,43 364.612,54	4.597.410,89 1.121.364,49 577.187,17 6.295.962,55 825.836,70 2.495.932,73 433.374,86 473.251,05 711.341,99 4.113.900,63

22 | FINANCIALS & KEY FIGURES LISER © 2022 LABOUR MARKET DEPARTMENT GOVERNANCE | 23

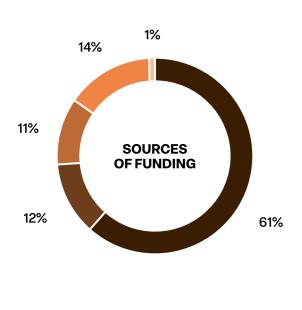
### **PROFIT & LOSS** ACCOUNT

Net Turnover Other income Use of merchandise and consumables Other expenses Staff costs

> Salaries and wages Social security on salaries and wages

Value adjustment on tangibles and intangibles Other operating expenses Other interest and financial income Interest payable and similar financial expenses

### **Profit of the year**







**International Competitive Funding** 2 673 757€ I 11%

Collaborative Funding 3 506 618€ I 14%

Other Revenues 219 347€ **I** 1%

### 2022 2021

23.968.790,30 24.615.417,41 7.920,03 231.529,52 (178.424,76) (120.454,31) (5.129.380,02) (5.104.219,45) (15.442.890,06) (16.045.699,14) (2.207.679,93) (2.115.798,68) (263.029,64)(200.221,10)(375.595,95)(394.361,47) 855,26 (15.260,84)(6.986,06)

103.146,62

COST

**CATEGORIES** 

Personnel Cost

18 161 499€ **I** 75%

Other Expenditures

5 936 530€ I 25%

75%

25%

1.121.364,49

### GOVERNANCE.

The board of directors is nominated by the government and is composed of nine external members of different professional backgrounds. Its mission is to define LISER's strategic orientations and oversee its activities.

### MEMBERS OF THE BOARD **OF DIRECTORS**

### Véronique HOFFELD - Chairwomen

Partner - Attorney at Law,

Luxembourg

### Jean-Marc GOY

### - Vice Chairman

Conducting Officer Senior Counsel at Capital Group, Luxembourg

### Valérie BALLOUHEY

- DAUPHIN Independent Director

### Tom BAULER

Chair for Environment & Economy, Université Libre de Bruxelles

### Jim CLEMES

Registered architect and urban planner managing partner, Jim Clemes Associates, Luxembourg

### Claude LÜSCHER

Founder of Licent Sàrl, Luxembourg

### Carole RECKINGER

Social Policy Analyst Caritas Luxembourg

### Aline SCHILTZ

Project Manager at the Embassy of Luxembourg in Lisbon

### Nico WEYDERT

Honorary Deputy Director at STATEC, Luxembourg

### ATTENDING THE BOARD OF DIRECTORS MEETINGS WITHOUT VOTING RIGHTS

**Christiane HUBERTY** 

Chair of the Staff Delegation Government Commissioner

Aline MULLER CEO

Carole BLOND-HANTEN



### SCIENCE ENLIGHTENING SOCIETY







### URBAN DEVELOPMENT & MOBILITY

The mission of LISER's Urban Development & Mobility department is to advance scientific-robust and relevant societal knowledge to improve 1) the understanding of the impact of exposures to dynamic urban environments on people, 2) the impact of urban stakeholders' choices on the functioning of dynamic urban environments, and 3) to identify effective behavioral strategies and policies to support urban vitality and live ability for all actors.



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V. Hoffeld I A. Muller

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## WORD OF THE CHAIRWOMAN OF LISER.

### **VÉRONIQUE HOFFELD**

Welcome to LISER's Urban Development and Mobility department's annual report. Our team of dedicated researchers is committed to studying society and its dynamics, with a focus on understanding the bidirectional relationship between their components and environment. As you read through this report, you will discover a thrilling and captivating research agenda that is driven by the pressing challenges society faces.

As we confront the effects of climate change and embrace the Green Deal, it is essential to consider not only optimal spatial planning, but also how we can adapt and make changes in our way of living, working, and enjoying life in a rejuvenated ecosystem.

Recognising that land plays a decisive role in determining sustainable development in our country, it is crucial to evaluate

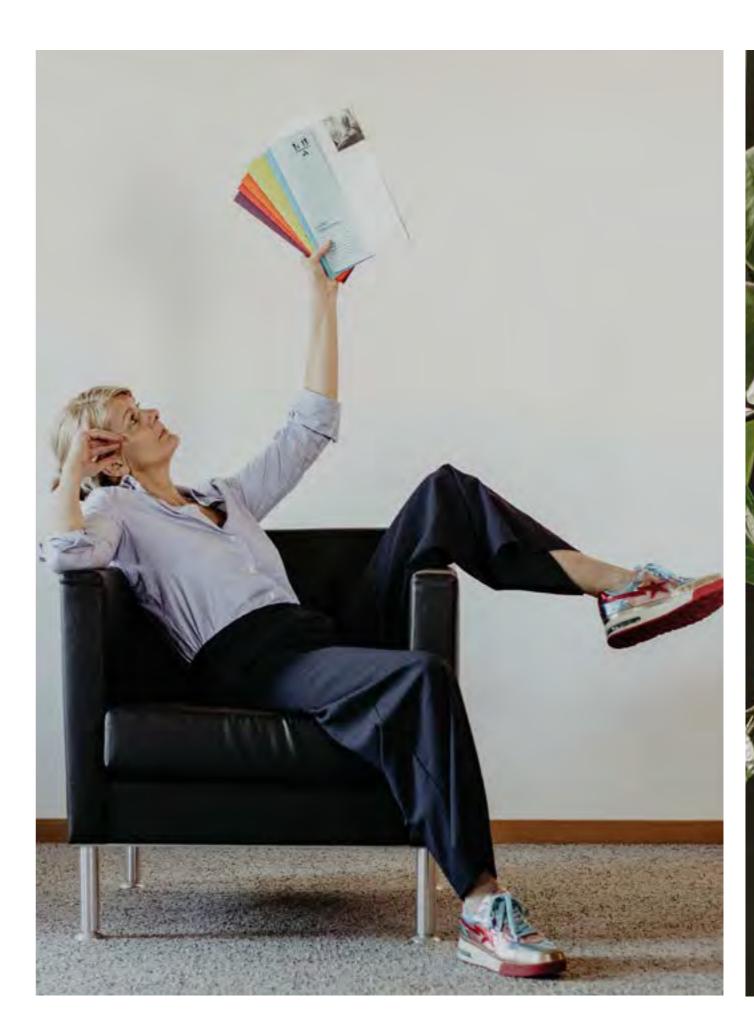
various policies aimed at redistributing property wealth as a means of addressing housing and land inequality. The existing situation highlights that the structure of land and housing ownership has a determinant impact, and targeted policies are necessary to counterbalance private wealth accumulation.

As we explore these vital questions related to how our society is organised, we believe that citizens, stakeholders, and policy-makers must all participate in developing our research agendas that foster societal innovations and evolutions.

Under the inspiring leadership of Martin Dijst, LISER's Urban Development and Mobility department has made impressive progress in many areas, and our research unit is today recognised as one of the most distinguished in Europe. Our department is at the forefront of numerous prestigious research projects, funded by Europe's leading research funding instruments. We invite you to explore some snapshots of our journey in this 2022 annual report.

**ALINE MULLER** 

WORD OF THE CEO OF LISER.



## WORD OF THE HEAD OF URBAN DEVELOPMENT & MOBILITY DEPARTMENT.

### **MARTIN DIJST**

### MAKING RESEARCH MATTER MORE

Being significant is an existential value for human beings as well as for other entities in society. That also counts for social sciences. More than 20 years ago, the Danish economic geographer Bent Flyvbjerg (Oxford University) published his widely read book, Making Social Science Matter, in which he made a strong plea to return to meaningful social sciences by making more optimal use of the developed knowledge to influence society in a practical manner. His opinion is that social sciences were modelled too much on the natural ones by developing explanatory or predictive theories and methods, relevant for other academics.

Flyvbjerg's work had a large impact on the debate how to improve the impact of social science research on society. In the last couple of years, this debate has also reached LISER. Increasingly, it becomes clear that to have impact with research on society it is no longer sufficient (but still valuable!) to focus only on short-term concrete outputs, like policy reports, an article in a popular magazine or a news item in the media. A change of behaviours, activities and actions of stakeholders in the mid-term could be another important result of research. The same is true for, but more difficult to demonstrate, the contribution of research to long-term societal changes, like reaching sustainability goals.

To improve the impact on society and to contribute to the scientific debate on this topic, it is important to think about the potential outcomes and impacts of research from the start of proposal writing and to monitor it during project execution. Identifying stakeholders with an interest in the research results and preferably developing jointly a proposal and research activities are in that respect crucial. In that sense, researchers should think and act more pro-actively.

As demonstrated by the Interface evaluation, UDM has improved over the years its impact on science but also on society. A great achievement of the team! In line with the described paradigm shift, some staff members have taken steps to innovate their impact on society as well as on science. Good examples in this annual report are the synergies between competitive and contractual research developed in the Housing Observatory, the PhD-position of Joe Birsens in the Social Observatory of Esch-sur-Alzette and the MMUST project in the Greater Region. All important stepping stones to make research matter more.



### SOME FLAGSHIP

## PRO JEC TS.







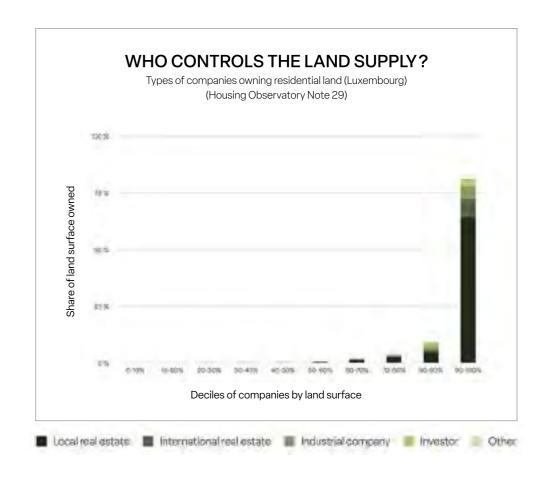


## LAND IN LUXEMBOURG'S HOUSING AFFORDABILITY CRISIS: TOWARDS A POLITICAL ECONOMY OF LAND.









### ANTOINE PACCOUD

Most commentators agree that Luxembourg's perpetual housing crisis is due to the gap between a growing demand and a low and stable supply of housing. Since the 1980s, Luxembourg has only known two years in which more than 4,000 new housing units were built, but 10 years (all since 2011) in which the population grew by more than 10,000 inhabitants. No wonder housing prices have grown by 140% between 2010 and 2022, the third highest in the EU. These facts are nonetheless puzzling: faced with such pressure on the housing market for so long, why have housing producers not built more? In other words, why has housing supply remained so unresponsive to price increases?

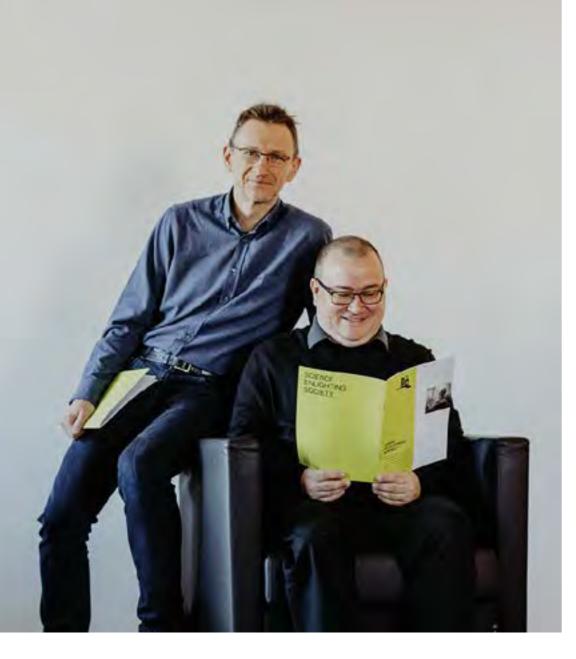
Researchers in the department of Urban Development and Mobility have become increasingly interested in the role that land plays in these housing market dynamics, and have been able to draw on synergies between competitive and contractual research projects to build a comprehensive picture of the country's landownership structure. The surveys of the land available for residential construction conducted in the Housing Observatory, a longstanding collaboration between LISER and the Ministry of Housing, show that there is largely enough land slotted for residential construction, and that the vast majority of this land belongs to private individuals and companies. There is thus enough land to build on, but its owners are reluctant to sell or develop it.

Through its detailed investigations of the landownership structure of Dudelange, the FNR-funded Territorial Inequality project brought complementary insights. It showed that a small group of residential landowners have played a central role in the city's development over the last seven decades. Through an analysis of 71 large-scale residential projects, it also shed light on the wealth accumulation strategies of landowners and developers. These findings provided new impetus for the work of the Housing Observatory. In 2019, a report confirmed empirically what was long suspected: that a small number of individuals and companies own a large share of residential land. In 2021, another Housing Observatory report showed that local property developers are the main corporate landowners.

Could it thus be that low housing supply had more to do with the strategies of individual and corporate landowners than with the 'natural' operation of supply and demand? That low housing supply is in some ways 'artificial'? To investigate these questions, the lens must shift to the political economy of land and housing production, which means mobilising a broader range of disciplines and methods. Research on the role of land in the housing affordability crisis will also soon enter a comparative dimension with the start of DISTRILAND, an FNR-funded INTER project with a team of researchers from UMR Espace in Avignon. In Luxembourg, the recent land tax reform is a sign that the country's concentrated landownership structure, and its impact on housing production, are no longer solely an academic concern.

14 | PHILIPPE GERBER & OLIVIER KLEIN LISER © 2022 URBAN DEVELOPMENT & MOBILITY DEPARTMENT MMUST | 15

## THE MULTIMODAL MODEL AND CROSS-BORDER MOBILITY SCENARIOS — MMUST.







### PHILIPPE GERBER & OLIVIER KLEIN

The Multimodal Model and cross-border mobility Scenarios – MMUST – is an ambitious European project of travel modelling and simulation at the scale of the Greater Region. Its main goal is to improve the daily life of cross-border workers and residents by helping decision-makers and public authorities to efficiently organise and foresee in a collaborative way the daily mobility of people for the next decades. So far, several transport models exist in each region, but none of them is sufficiently developed to allow global analyses and shared impacts of the effect of economic development on the cross-border area of Luxembourg.

Funded by the European Regional Development Fund within the framework of the Interreg V A Grande Région programme, MMUST is developing a decision-making and evaluation tool for transport policies. Under the coordination of AGAPE (North Lorraine urban planning agency), a group of several actors are leading the project, including CEREMA (French centre for studies and expertise on risks, environment, mobility and development), LISER, the universities of Namur and Liège (Belgium), as well as the Ministry of Mobility and Publics Works of Luxembourg. The MMUST project undeniably brings two remarkable points of innovation.

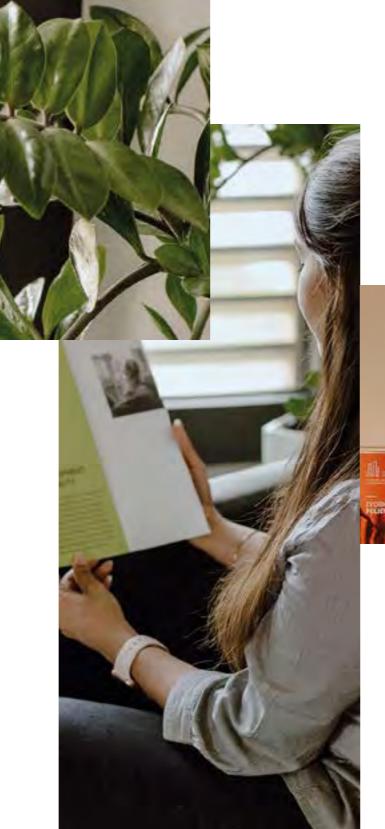
Without any doubt, the first innovation lies in the fact that it is the first 4-stage cross-border model in the Europe of 27. No other traffic model exists on this cross-border scale within the European Union. In this sense, it establishes a multimodal modelling on its most dynamic cross-border territorial part, namely Luxembourg, Northern Lorraine in France and the

Province of Luxembourg in Belgium. In order to do so, the research consortium favours cross-border cooperation, inspired by the precepts of cross-border integration advocated by the EU, by involving in the construction of the model at least two developers per French-speaking side of the Greater Region (2 institutions in Belgium, 2 institutions in France, 2 institutions in Luxembourg).

The second major innovation of the MMUST project is based on a methodological approach directly inspired by design thinking, and this at four different levels. The first started from the creation of the project, before its submission, by involving many stakeholders with different levels of competence. The second level of design thinking takes place right from the implementation of the MMUST project. Following discussions during workshops between stakeholders and developers of the model, the main steps were set up. Decisions about the continuation of the project actions are then taken, step by step, with all the partners, during co-constructed exchanges. The third level is the co-construction of scenarios and shared visions of cross-border territorial development, necessary for the simulation of travel in the 2040-2050 horizon. The last level consists of the will to continue the project after the end of the INTERREG funding. Indeed, a MMUST-B 3-year project is already running at LISER since February 2023. This project will lead, among others, to a new European project submission in the continuity of the previous one, by enlarging the modelling perimeter to Germany, but also by adding different modules related to residential development and environmental

### SOME FLAGSHIP

## EV EN TS.



### 4TH "RENCONTRES FRANCOPHONES TRANSPORT MOBILITÉ (RFTM)."

2035



Date: 8-9-10 June 2022

Place: Maison du Savoir, L-4365 Esch-sur-Alzette

Organised by: LISER & the University of Luxembourg

People: 150 participants Conceived as a meeting place for the world scientific community in the continuity of the "French-speaking seminars on the socio-economy of transport", the main keywords of the Rencontres Francophones Transport Mobilité (RFTM) are "mobility", "transport", "society", "territories", "logistics", "environment", as well as their interactions. Around these keywords, the RFTM addresses a wide range of disciplines in the humanities and social sciences, mainly economics, geography, urban planning and development, management, sociology and anthropology, psychology, political science, law, but also information sciences, engineering sciences and environmental sciences.

The conference covers all modes of land, sea, river and air transport, as well as the different forms of mobility (linked to daily life, tourism and events, both short and long distance), and concerns both people and goods, as well as their interactions with society and the environment, in their theoretical, empirical, historical, evaluation and modelling dimensions, whatever the geographical context.

The 4th RFTM was organised by LISER in 2022, with the support of two different ministries, the Ministry of Ecological Transition (France), the Ministry of Mobility and Public Works (Luxembourg), and the University of Luxembourg. The event took place on the 8th, 9th & 10th of June, and welcomed around 150 participants.

18 I JOE BIRSENS URBAN DEVELOPMENT & MOBILITY DEPARTMENT PORTRAIT | 19

### MY PHD EXPERIENCE IN THE SOCIAL OBSERVATORY OF ESCH-SUR-ALZETTE.

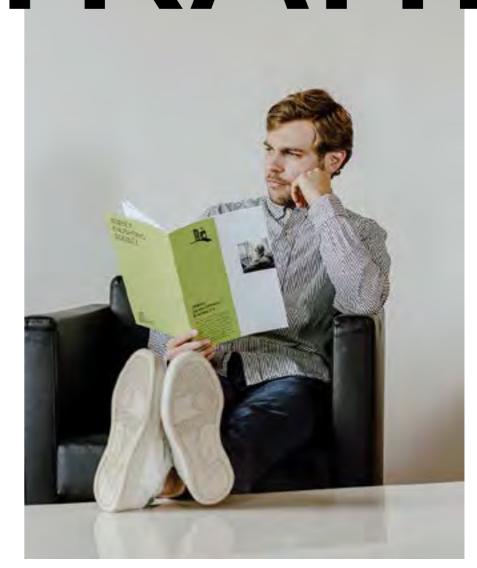
### **JOE BIRSENS**

The main motivation of doing research is to provide the necessary knowledge and tools that help the society to progress day by day. At LISER, policy-oriented research is a fundamental mission that aims to inform both public authorities and society.

For the past three years, I have been involved in the Social Observatory of Esch-sur-Alzette, while preparing my doctoral thesis. Combining these two tasks is an extremely rewarding experience as a PhD candidate. It is highly motivating to see that policymakers, communal administrations or civic associations use our work to accomplish their own daily tasks. A PhD thesis needs to go beyond the analysis of a city's social development in order to be of interest for the wider research community. At LISER, I luckily had the freedom to develop my own research interests, in relation to the specific urban context of Esch-sur-Alzette. I thus decided to put the focus on the socio-spatial relationship between the newly built Belval neighbourhood and the older parts of the city.

Through the investment in a policy-oriented observatory, I am developing in-depth knowledge in a specific context and there is of course a constant risk to overlook cases in other countries or cultures. However, I perceive my PhD path as a great opportunity to understand the functioning of a city and to support planners in future developments. By encouraging young researchers to engage in policy-oriented projects, we might better coordinate societal impacts in various contexts, which would benefit the society as a whole.

## POR TRAIL



The audit report issued on April 21st, 2023 on the financial statements as at December 31st, 2022 of LISER was based on

the French version of those financial statements.

Deferred income

**Total liabilities** 

ZOOM ON A PUBLICATION OF THE DEPARTMENT.

A multi-perspective review of the impact of a workplace relocation on commuting behaviour, commuting satisfaction and subjective well-being.

prominence in the literature on travel satisfaction and subjective well-being, as changing jobs directly and indirectly affects people's commuting and their overall well-being. In this light, Richa Maheshwari, Veronique Van Acker, Jonas De Vos and Frank Witlox wrote a systematic review paper entitled "A multi-perspective review of the impact of a workplace relocation on commuting behaviour, commuting satisfaction and subjective well-being" and published it in the Transport Reviews Journal. In the review paper, the authors examined 35 empirical studies and developed a conceptual model that reflects, among other things, four disciplinary perspectives dominating research on the impacts of a workplace relocation, individual and household interactions over a person's life course, and key knowledge gaps in the literature to date. Alternatively, the model also highlights two overlooked effects of a workplace relocation. First, a lack of empirical studies analysing the relationships between workplace relocation and satisfaction with life and life domains, including commuting. Second, a lack of comparison between those who change workplaces voluntarily vs those who are forced to do so (involuntary). The authors believe that it is essential to fill these knowledge gaps in order to gain a conclusive understanding of how people adapt to different commute conditions, whether or not they have the choice of the new workplace, and the impact this has on their life satisfaction and domain satisfaction. The insights from these rounded perspectives will help policy makers identify life domains that need tailored interventions to promote optimal happiness.

Workplace relocation-related mobility changes have gained



Richa Maheshwari, Veronique Van Acker, Jonas De Vos, Frank Witlox: A multi-perspective review of the impact of a workplace relocation on commuting behaviour, commuting satisfaction and subjective well-being. In: Transport Reviews (IF 10.2).

2021 2022 TOTAL ASSETS FIXED ASSETS Intangible fixed assets 37.636,78 71.911,85 Tangible fixed assets 808.624.45 505.275.31 Financial fixed assets 4.100,00 4.100,00 581.287,16 850.361,23 **CURRENT ASSETS** Debtors 3.227.493.43 Trade receivables due and payable within one year 4.475.981,31 275.526,69 Other receivables due and payable within one year 490.005,43 Cash at bank, cash in postal cheque accounts, 10.163.627.76 cheques and Cash in hand 9.054.646,46 14.020.633,20 13.666.647,88 Deferred charges - Prepayments 309.579,37 276.177,27 Total assets 15.180.573,79 14.524.112,31 **TOTAL LIABILITIES CAPITAL AND RESERVES** 4.597.410.89 Retained earnings 5.718.775.38 Profit/(Loss) of the financial year 103.146,62 1.121.364,49 Investment 846.261,19 577.187,17 6.668.183,19 6.295.962,55 **PROVISIONS** Other provisions 693.112,43 825.836,70 NON SUBORDINATED DEBTS Trade creditors due and payable within one year 1.425.961,92 2.495.932,73 Other debts Tax debts 388.716,94 433.374,86 483.908,43 473.251,05 Social security debts Other creditors due and payable within one year 364.612,54 711.341,99 4.113.900,63 2.663.199,83

5.156.078,33

15.180.573,79

3.288.412.43

14.524.112,31

22 | FINANCIALS & KEY FIGURES LISER © 2022 URBAN DEVELOPMENT & MOBILITY DEPARTMENT GOVERNANCE | 23

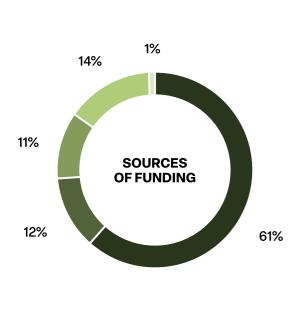
### PROFIT & LOSS ACCOUNT

Net Turnover
Other income
Use of merchandise and consumables
Other expenses
Staff costs

Salaries and wages Social security on salaries and wages

Value adjustment on tangibles and intangibles Other operating expenses Other interest and financial income Interest payable and similar financial expenses

### **Profit of the year**







International Competitive Funding 2 673 757€ | 11%

Collaborative Funding 3 506 618€ I 14%

Other Revenues 219 347€ I 1%

### 2022 2021

23.968.790,30 24.615.417,41 7.920,03 231.529,52 (178.424,76) (120.454,31) (5.104.219,45) (5.129.380,02) (15.442.890,06) (16.045.699,14) (2.207.679,93) (2.115.798,68) (263.029,64) (200.221,10)(375.595,95)(394.361,47) 855,26 (15.260,84)(6.986,06)1.121.364,49 103.146,62

75%

25%

COST

**CATEGORIES** 

Personnel Cost

18 161 499€ **I** 75%

Other Expenditures

5 936 530€ I 25%

### GOVERNANCE.

The board of directors is nominated by the government and is composed of nine external members of different professional backgrounds. Its mission is to define LISER's strategic orientations and oversee its activities.

### MEMBERS OF THE BOARD OF DIRECTORS

### Véronique HOFFELD

### - Chairwomen

Partner - Attorney at Law, Luxembourg

### Jean-Marc GOY

### - Vice Chairman

Conducting Officer Senior Counsel at Capital Group, Luxembourg

### Valérie BALLOUHEY

- DAUPHIN

Independent Director

### Tom BAULER

Chair for Environment & Economy, Université Libre de Bruxelles

### Jim CLEMES

Registered architect and urban planner managing partner, Jim Clemes Associates, Luxembourg

### Claude LÜSCHER

Founder of Licent Sàrl, Luxembourg

### Carole RECKINGER

Social Policy Analyst Caritas Luxembourg

### Aline SCHILTZ

Project Manager at the Embassy of Luxembourg in Lisbon

### Nico WEYDERT

Honorary Deputy Director at STATEC, Luxembourg

### ATTENDING THE BOARD OF DIRECTORS MEETINGS WITHOUT VOTING RIGHTS

Christiane HUBERTY

Government Commissioner Chair of the Staff Delegation

Carole BLOND-HANTEN

Aline MULLER

CEO



## SCIENTIFIC INNOVATION FOR SOCIETAL VALUE







### HEALTH & HEALTH SYSTEMS

LISER's HHS research programme coordinates, develops and contributes to the health-related work carried out within and across the three departments of LISER. The research agenda focuses on a wide range of primarily quantitative, social, economic & environmental aspects of health and health systems, by harnessing the expertise and infrastructure throughout LISER and in our collaborators outside.





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## WORD OF THE CHAIRWOMAN OF LISER.

### VÉRONIQUE HOFFELD

We are delighted to present the annual report of the Health & Health Systems Interdisciplinary Programme, which showcases the remarkable work conducted by research project groups across our departments and units. Their work highlights the crucial role that health plays as a determinant for socio-economic outcomes and emphasises the reciprocal relationship between socio-economic characteristics and health.

We live in a world where health outcomes are not solely influenced by health care but are profoundly shaped by a wide range of non-health policies. The impact of these policies on health outcomes cannot be underestimated. Our programme is exploring the intricate interplay between various sectors, policies and health outcomes. This understanding has profound implications for future policy formulation and implementation, as well as for promoting the well-being of individuals and societies.

The COVID-19 crisis has further highlighted the critical nature of health systems, their complexity in terms of functioning and financing and pivotal role in safeguarding public health. Our programme has been at the forefront of analysing health system responses and resilience during this unprecedented crisis, providing valuable insights to inform future policies and enhance our preparedness for future health risks.

Recognising the outmost importance of our resilience as individuals and as a society in facing health risk factors, our programme is committed to an interrelated research agenda. Under the stimulating leadership of Marc Suhrcke, we aim to contribute innovative and policy-relevant research that explores the complex dynamics between health and socio-economic factors. Our interdisciplinary approach allows us to uncover novel insights, inform policies, and make substantial contributions to the field of health and health systems.

As you peruse the pages of this report, you will gain valuable insights into the critical nexus between health, socio-economic outcomes, and non-health policies. Together, let us harness the power of research and collaborative efforts to build a healthier and more resilient future for our citizens and societies.

**ALINE MULLER** 

WORD OF THE CEO OF LISER.



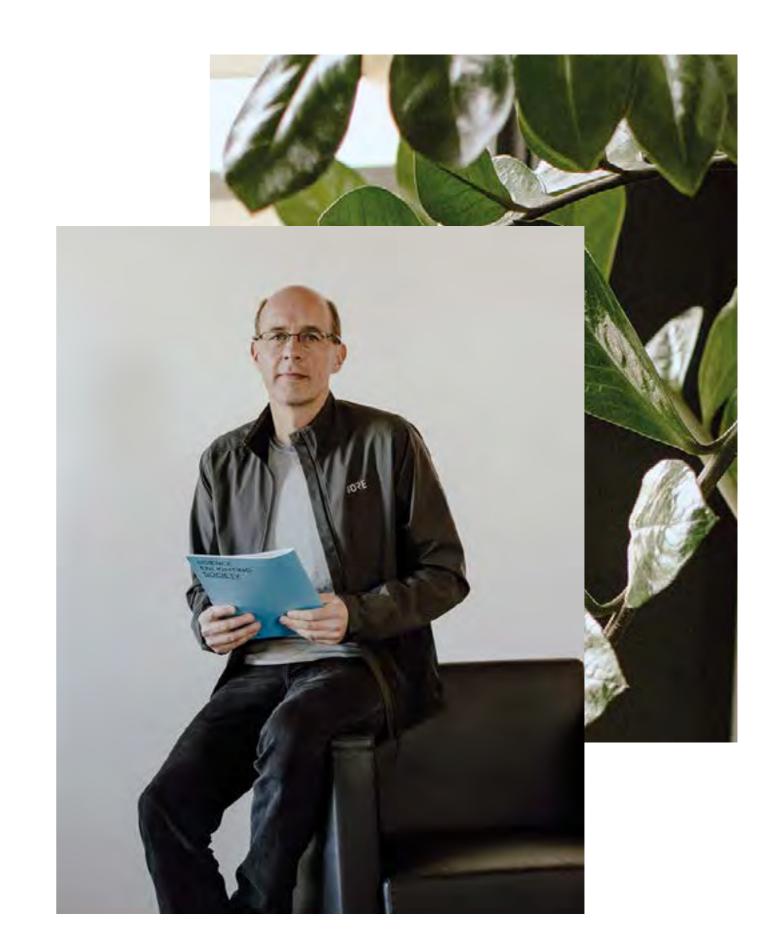
## WORD OF THE HEALTH & HEALTH SYSTEMS PROGRAMME LEADER.

### MARC SUHRCKE

The cross-departmental programme on Health and Health Systems provides research and policy advice in a wide range of issues around the social, economic and environmental determinants and consequences of health and health systems, using primarily (though not solely) quantitative approaches. In 2022, HHS has worked on a number of significant, externally funded projects, including the EU-funded Horizon2020 project EXHAUSTION ("Exposure to heat and air pollution in Europe – cardiopulmonary impacts and benefits of mitigation and adaptation"), where LISER leads the work package focusing on socioeconomic aspects, with Matteo Pinna Pintor, Till Seuring and Marc Suhrcke as collaborators. 2022 was also the first full year in Till Seuring's EU Marie Curie fellowship on "Uncovering and understanding differences in health behaviours in people with diabetes", and the final year of Valerie Moran's FNR CORE project ("Assessing Primary Care Performance in Luxembourg"), with important progress on – among others – the evaluation of a significant primary care programme in Luxembourg, using detailed administrative data from the national health fund (CNS). A major focus of our work was also the four-year project funded by the Ministry of the Family and Integration (MIFA), informing the planned reform of the national disability support system into one of personalised assistance for people with disabilities. As part of this, we launched and ran an important multi-stakeholder engagement process, involving several ministries, representatives of people with disabilities, and the umbrella organisation of the service providers. We also published our first academic publication coming from the project.

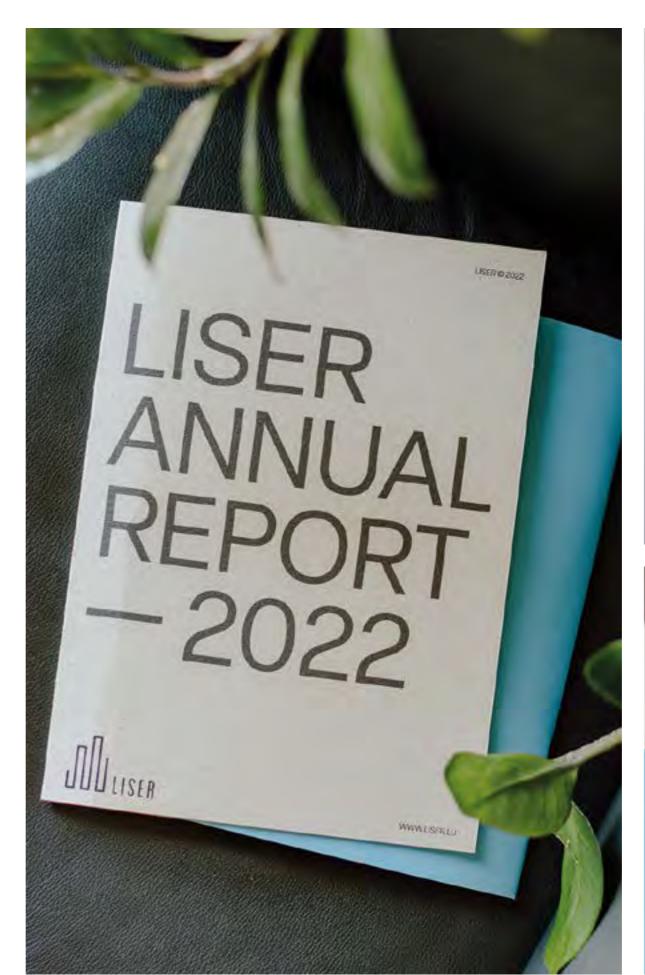
In 2022, we also completed the recruitment of all the 9 PhD students funded by the FNR in the Doctoral Training Unit on Experiments, Ethics and Economics (3E), coordinated by Marc Suhrcke. 3E is an inter-disciplinary collaboration between LISER and the University of Luxembourg. Earlier in the year, we have also launched our 3E seminar series, typically held every 4th Wednesday of the month.

In the above work and in other projects, we have actively engaged with policymakers and stakeholders. In some cases, these were the funders of our work (such as the World Health Organization, for work on the health impact of economic sanctions) or the European Investment Bank (for our contribution to the revision of the Bank's economic evaluation guidance). In other cases, they were advisors or partners in the projects (e.g. in the above-mentioned CORE project, with its regular national stakeholder advisory meetings; or in the above project on personalised assistance). In addition, HHS was well represented in high level international and national advisory panels, including the Health System Performance Assessment (HSPA) Expert Group hosted by the EC's DG SANCO, the HSPA sub-group on prevention, the WHO Europe Scientific Advisory Group on Health Equity, the WHO Europe "New Economics Alliance", the WHO Europe Technical Advisory Group on Behavioural and Cultural Insights, and the newly established Luxembourg Health Observatory.



SOME FLAGSHIP

## PRO JEC TS.







12 I MARC SUHRCKE LISER © 2022 HEALTH & HEALTH SYSTEMS PROGRAMME EXPOSURE TO HEAT AND AIR POLLUTION I 13

## EXPOSURE TO HEAT AND AIR POLLUTION IN EUROPE?

CARDIO-PULMONARY IMPACTS AND BENEFITS OF MITIGATION AND ADAPTATION.

### MARC SUHRCKE

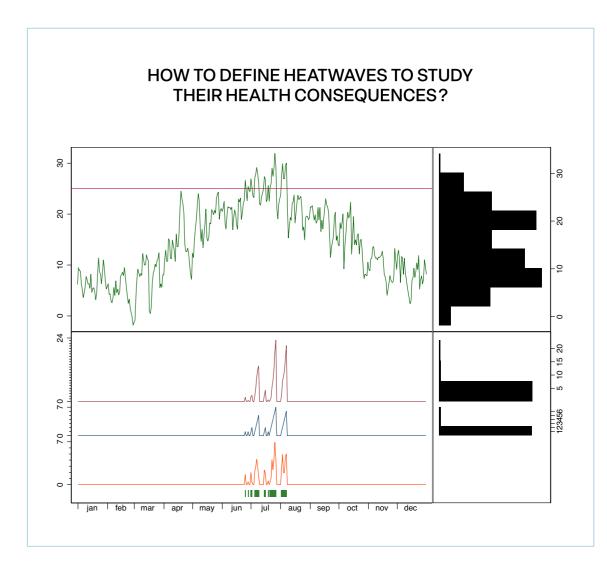
The contribution of HHS to the EU-funded Horizon2020 project EXHAUSTION ("Exposure to heat and air pollution in Europe – cardiopulmonary impacts and benefits of mitigation and adaptation")

The year 2022 also witnessed substantial progress in the team's involvement in EXHAUSTION, the Horizon2020 project on the health and economic consequences of climate extremes, now well into the second half of its life cycle. In this phase of the project, LISER's role gained prominence as a key player in work packages that are conceptually located downstream in the overall structure of the project, and gathered momentum by building upon inputs from other packages. Competences in the health and health systems cross-departmental programme came to the forefront in documenting the economic costs of the climate-related health impairments investigated by other teams in the large research consortium. The main contribution resulted from the production and delivery of microeconomic estimates of impacts on labour productivity, focusing on high temperatures - a major consequence of climate change predicted to grow in frequency and intensity across multiple scenarios. The analysis made use of state-of-the-art climate re-analysis data from the Copernicus project of the European Centre for Medium Range Forecasting, and socio-economic indicators from the British Understanding Society panel survey – one of the few longitudinal studies with such data to provide the geographic information

required to link high-resolution climate information to individual survey respondents and their characteristics. Results have been presented to several audiences and submitted to the European Commission, although additional findings are scheduled for inclusion in the final deliverable.

In addition to this primary effort, continuing cooperation with other project members has been motivated by the further goal of establishing a macroeconomic framework to understand how the impacts of climate extremes on specific domains of economic activity and groups in the population reverberate throughout the economy as a whole. This challenging task has helped the identification of evidence gaps and future research needs, and assists the interpretation of results from micro-level evidence. Beyond attempts to integrate empirical microeconomic estimates and macroeconomic modeling, other red threads that run through the project have facilitated communication and learning across research teams, leading to occasional contributions. This was the case in the project's planned work on adaptation to climate change, where different members of LISER had previously provided authorship contributions and internal review. Collaboration on this topic has strengthened during the year, with the aim of fostering cross-package and interdisciplinary potential.

Team members in LISER have been Marc Suhrcke, Matteo Pinna Pintor and Till Seuring.



The definition of heatwaves is a hot topic in climate epidemiology. Absent a unique solution, the EXHAUSTION team at LISER constructed multiple 'heat indicators' to capture different aspects of the distribution of temperature for a given area (top-left): occurrence, intensity, and duration (bottom-left).

### PERSONAL ASSISTANCE FOR PEOPLE WITH DISABILITIES.







### MARC SUHRCKE

LISER had been commissioned by the Ministry of Family, Integration and the Greater Region (MIFA) to carry out a major programme of work to inform and guide the reform towards Personal Assistance (PA) for people with disabilities in the country. The idea for the work had been proposed by our close collaborator on the project, Professor Germain Weber, from the University of Vienna. Within LISER, the project is led by Marc Suhrcke, with Marie Blaise as post-doc funded on the project. The project has drawn on the valuable input from several colleagues in LISER, including Manon Schröder, Carla Martins, Patrick Bousch, Bérengère David and Gaetan de Lanchy.

The need for a reform of the present, somewhat "traditional" support system had been recognised at the political level, and reflects the country's commitment to the United Nations Convention of the Rights for People with Disabilities (UNCPRD). The aim is for people with disabilities to be able to lead an independent life, participate actively in society and make their own decisions. To achieve this, personal assistance is extremely important. The autonomy and self-determination of people with disabilities is one of the priorities of the National Action Plan on Disability.

Our work started in 2021 and in its first phase is to last until at least the end of 2024. The work in 2022 comprised several components of both quantitative and qualitative work, as well as a substantive stakeholder engagement ("co-creation") process. For instance, we wrote up and submitted to the funder our report on a qualitative survey with the management of all 14-service providers. We also analysed the rich quantitative survey data we had collected from among 150 people with disabilities, hosted by – or living in – the 14 service providers in the country. This has been the first such survey in Luxembourg, asking the respondents about many dimensions of their life situation, as well as their satisfaction

in different domains. Having submitted a first, general report to MIFA in 2022, we are currently under way to exploit the unique resource for several scientific outputs. A further piece of analysis – this time more qualitative again – involved the comparative analysis of the personal development plans that is done for each person with a disability at regular intervals. Comparing the development plans for a select group of individuals, each associated with different service providers, highlighted the lack of harmonisation of these key development instruments for the people concerned in Luxembourg.

In November and December 2022, we conducted three working groups discussing with different stakeholder groups: 1) the umbrella organisation of service providers for people with disabilities (FEDAS), 2) representatives from five different ministries involved – from different perspectives – in providing support to people with disabilities, and 3) representatives from the people directly concerned. The idea was to hear and take stock of the views of the various stakeholders regarding key elements of the reform, covering in particular the topics

- Definition und conception of personal assistance
- Assessing the individual need for assistance and support
- Personal budget
- One-stop-shop

Following the three workshops, we analysed and synthesized the findings, which in turn then fed into an overall workshop bringing together all stakeholder into one room. in early January of 2023.

The work will continue in 2023, with an extensive stakeholder engagement process and the view to further elaborate the details of the proposed reform of the system.

The audit report issued on April 21st, 2023 on the financial statements as at December 31st, 2022 of LISER was based on the French version of those financial statements.

### SELECTION OF PUBLICATIONS OF THE PROGRAMME.

### ARTICLES IN PEER-REVIEWED JOURNALS

Gabani, J., Mazumdar, S., & Suhrcke, M. (2022). The effect of health financing systems on health system outcomes: A cross-country panel analysis. Health Economics. https://doi.org/10.1002/hec.4635

Kreif, N., Mirelman, A., Suhrcke, M., Buitrago, G., & Moreno-Serra, R. (2022). The impact of civil conflict on child health: Evidence from Colombia. Economics and Human Biology, 44, [101074].

Moler-Zapata, S., Kreif, N., Ochalek, J., Mirelman, A. J., Nadjib, M., & Suhrcke, M. (2022). Estimating the Health Effects of Expansions in Health Expenditure in Indonesia: A Dynamic Panel Data Approach. Applied Health Economics and Health Policy, 20(6), 881-891.

Robinson, M., Blaise, M., Weber, G., & Suhrcke, M. (2022). The Effects and Costs of Personalized Budgets for People with Disabilities: A Systematic Review. International Journal of Environmental Research and Public Health, 19(23).

Moran, V., Makougang Foka, A., Aubart-Schuller, M., Leners, J-C., Stein, R., Vidaillac, C., Montanes, G., Vaillant, M., Menster, M., von der Wense, L., & Gantenbein, M. (2022). Exploring the association between patient characteristics and emergency department use in Luxembourg. Bulletin de la Societe des Sciences Medicales du Grand-Duche de Luxembourg, 2021(2), 21-31.

Lau, T., Maltby, A., Ali, S., Moran, V., & Wilk, P. (2022). Does the definition of preventable emergency department visit matter? An empirical analysis using 20 million visits in Ontario and Alberta. Academic Emergency Medicine, 29(11), 1329-1337.

### COLLECTIONS OF LISER - LISER'S WORKING PAPER

Bernal, N., Olivera, J., & Suhrcke, M. (2022). Assessing heterogeneity in the health effects of social pensions among the poor elderly: evidence from Peru. LISER. (Working papers; No. 2022-01), 60 p.

TOTAL ASSETS	2022	2021
FIXED ASSETS Intangible fixed assets Tangible fixed assets Financial fixed assets	37.636,78 808.624,45 4.100,00 850.361,23	71.911,85 505.275,31 4.100,00 581.287,16
CURRENT ASSETS		
Debtors Trade receivables due and payable within one year Other receivables due and payable within one year	4.475.981,31 490.005,43	3.227.493,43 275.526,69
Cash at bank, cash in postal cheque accounts, cheques and Cash in hand	9.054.646,46	10.163.627,76
	14.020.633,20	13.666.647,88
Deferred charges - Prepayments	309.579,37	276.177,27
Total assets	15.180.573,79	14.524.112,31
TOTAL LIABILITIES		
CAPITAL AND RESERVES Retained earnings	5.718.775,38	4.597.410,89
Profit/(Loss) of the financial year	103.146,62	1.121.364,49
Investment	846.261,19	577.187,17 
PROVISIONS	6.668.183,19	0.290.902,00
Other provisions	693.112,43	825.836,70
NON SUBORDINATED DEBTS		
Trade creditors due and payable within one year Other debts	1.425.961,92	2.495.932,73
Tax debts	388.716,94	433.374,86
Social security debts	483.908,43	473.251,05
Other creditors due and payable within one year	364.612,54	711.341,99
	2.663.199,83	4.113.900,63
Deferred income	5.156.078,33	3.288.412,43
Total liabilities	15.180.573,79	14.524.112,31

18 | FINANCIALS & KEY FIGURES LISER © 2022 **GOVERNANCE | 19** HEALTH & HEALTH SYSTEMS PROGRAMME

### **PROFIT & LOSS** ACCOUNT

Net Turnover Other income Use of merchandise and consumables Other expenses Staff costs

> Salaries and wages Social security on salaries and wages

Value adjustment on tangibles and intangibles Other operating expenses Other interest and financial income Interest payable and similar financial expenses

**International Competitive Funding** 

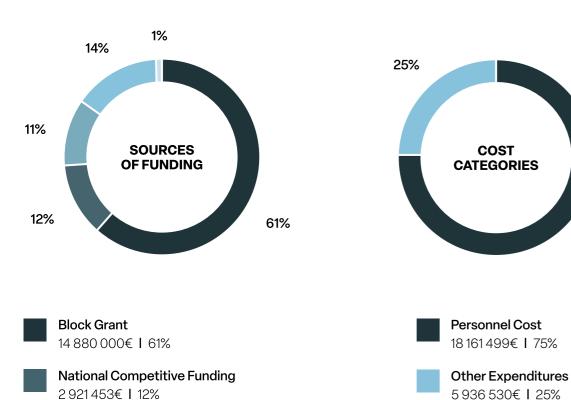
2 673 757€ I 11%

Other Revenues

219 347€ **I** 1%

Collaborative Funding 3 506 618€ I 14%

### **Profit of the year**



### 2022 2021

23.968.790,30 24.615.417,41 7.920,03 231.529,52 (178.424,76) (120.454,31) (5.104.219,45) (5.129.380,02) (15.442.890,06) (16.045.699,14) (2.207.679,93) (2.115.798,68) (263.029.64) (200.221,10)(375.595,95)(394.361,47) 855,26 (15.260,84)(6.986,06)

75%

103.146,62

1.121.364,49

### GOVERNANCE.

The board of directors is nominated by the government and is composed of nine external members of different professional backgrounds. Its mission is to define LISER's strategic orientations and oversee its activities.

### MEMBERS OF THE BOARD **OF DIRECTORS**

### Véronique HOFFELD

### - Chairwomen

Partner - Attorney at Law, Luxembourg

### Jean-Marc GOY

### - Vice Chairman

Conducting Officer Senior Counsel at Capital Group, Luxembourg

### Valérie BALLOUHEY

- DAUPHIN

Independent Director

### Tom BAULER

Chair for Environment & Economy, Université Libre de Bruxelles

### Jim CLEMES

Registered architect and urban planner managing partner, Jim Clemes Associates, Luxembourg

### Claude LÜSCHER

Founder of Licent Sàrl, Luxembourg

### Carole RECKINGER

Social Policy Analyst Caritas Luxembourg

### Aline SCHILTZ

Project Manager at the Embassy of Luxembourg in Lisbon

### Nico WEYDERT

Honorary Deputy Director at STATEC, Luxembourg

### ATTENDING THE BOARD OF DIRECTORS MEETINGS WITHOUT VOTING RIGHTS

Christiane HUBERTY

Chair of the Staff Delegation

Carole BLOND-HANTEN Aline MULLER CEO

Government Commissioner



## SCIENTIFIC INNOVATION FOR SOCIETAL VALUE





### CROSSING BORDERS

The cross-departmental research programme on Crossing Borders at LISER promotes and coordinates studies related to the movements of people across national borders. It develops tools to analyze the causes of these movements as well as their effects on the economy and social cohesion. Constant efforts are being made to advance scientific knowledge in this field, produce high-quality publications, and maximize their impact on society.





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## WORD OF THE CHAIRWOMAN OF LISER.

### **VÉRONIQUE HOFFELD**

Immigration and integration continue to be significant challenges for aging European societies. Over the past 60 years, long-term international comparisons have revealed substantial changes in the size and composition of immigration to industrialized countries. The population of foreign origin has grown at a much faster pace than the total population, with the proportion of immigrants in our high-income countries increasing from 4.5% to 12%, primarily due to the influx of immigrants from developing countries. This demographic shift is driven by various factors,

including political instability, climatic shocks, and economic inequalities. This reality generates fears among the population and pose major challenges in terms of integration and social cohesion.

Recognizing the magnitude of these challenges, an interdisciplinary research programme was initiated at LISER to comprehensively address their multifaceted nature. In just over three years of existence, the Crossing Borders Programme, under the remarkable leadership of Fréderic Docquier, has garnered outstanding scientific recognition, already ranking among the top 10 institutions in the Economics of Human Migration field. The programme's innovative research agenda encompasses highly innovative projects on migration, integration, populism and commuting. It fosters collaborations with the most renowned researchers worldwide, promotes active dissemination and discussion of its findings with stakeholders and society, and extends its impact far beyond scientific excellence.

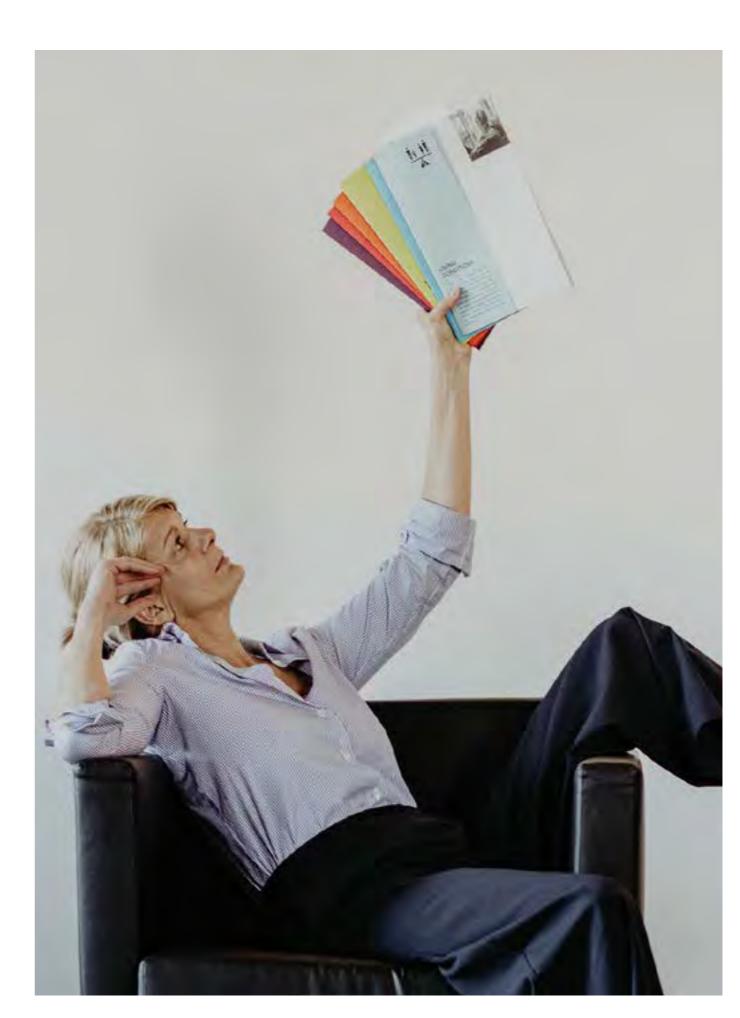
The programme's influence extends to tangible societal value derived from its contributions to policy evaluation and formulation regarding integration, development cooperation, racism,

social cohesion, and the establishment of a more inclusive and sustainable society. Through rigorous research, the Crossing Borders Programme is actively informing the actions necessary for addressing the challenges associated with immigration and fostering integration in our rapidly changing world.

We invite you to delve into this annual report and explore for yourself the exciting research agenda and remarkable achievements of our Crossing Borders Programme. It is through our collective commitment to knowledge, dialogue, and collaboration that we strive towards building a more inclusive, cohesive, and prosperous society.

**ALINE MULLER** 

WORD OF THE CEO OF LISER.



## WORD OF THE CROSSING BORDERS PROGRAMME LEADER.

### FRÉDÉRIC DOCQUIER

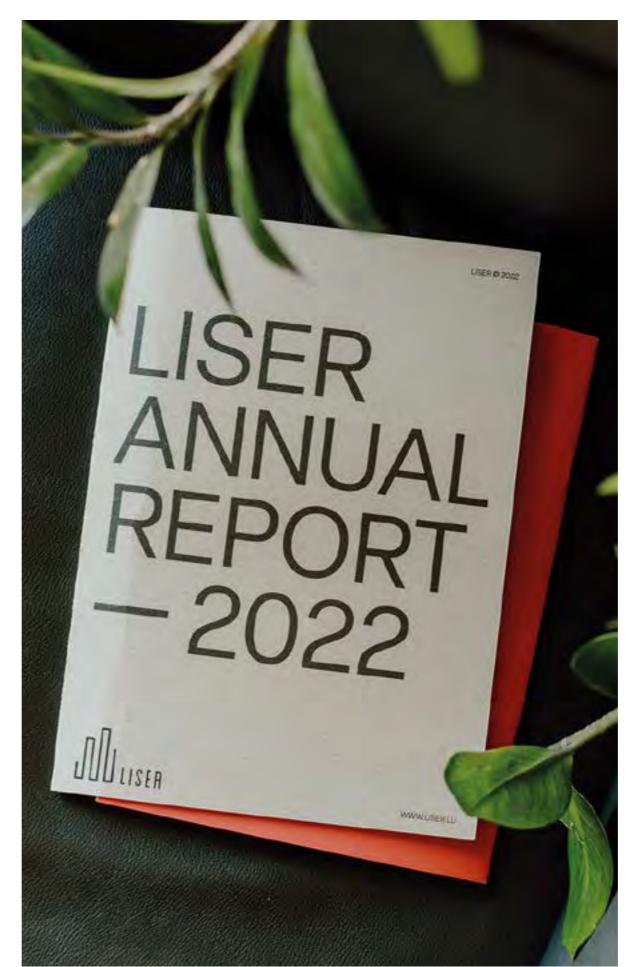
The cross-departmental research programme on Crossing Borders at LISER promotes and coordinates studies related to the movements of people across national borders. It develops tools to analyse the causes of these movements as well as their effects on the economy and social cohesion. During the year 2022, the transversal programme has directly contributed to several projects on immigration and populism in Europe, the role of cross-border mobility in the transmission of COVID-19, the evaluation of integration and development cooperation policies, perceptions of racism and ethno-racial discrimination in Luxembourg, and the determinants of location and commuting choices within the Greater Region. Some of these activities involved partnerships with governmental institutions and generated media exposure. The transversal program also coordinates a doctoral training unit gathering the partners, LISER, the University of Luxembourg and STATEC. Linked to this doctoral training unit, the Crossing

Borders Visiting Programme attracts renowned researchers from all over the world and involves them in our research and dissemination activities. With international partners, we organised a set of monthly lectures on cross-border mobility, a twin-webinar series on the Economics of Migration, and the 12th edition of the Annual International Conference on Immigration in OECD countries, which examines the economic aspects of international migration in OECD countries by mapping the migratory flows and analysing their socio-economic determinants and consequences. Constant efforts are being made to advance scientific knowledge on cross-border mobility issues, produce high-quality publications, and maximise their impact on society. Our activities have contributed to increasing visibility beyond publication records as well as LISER's academic rankings. According to the RePEc/IDEAS ranking, LISER has joined the world top-10 institutions in the field of Economics of Human Migration.



SOME FLAGSHIP

## PRO JEC TS.







12 | FRÉDÉRIC DOCQUIER & MICHEL TENIKUE RACISM & DISCRIMINATION IN LUXEMBOURG | 13

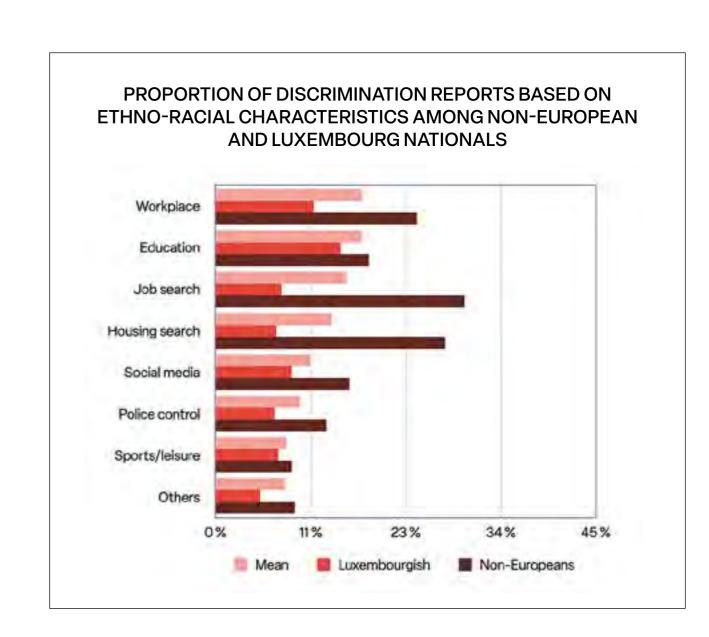
## RACISM AND DISCRIMINATION IN LUXEMBOURG.

### FRÉDÉRIC DOCQUIER & MICHEL TENIKUE

Racism and ethno-racial discrimination are social phenomena that cannot be ignored. This is particularly the case in a multicultural, multilingual and cosmopolitan country such as Luxembourg, where almost 50% of the population are foreigners originating from about 170 countries, and many native-born have an immigration background. The fight against all forms of intolerance and discrimination is one of the Government's priorities. and the implementation of effective policies in this area requires not only collective reflection on these phenomena, but also factual knowledge and empirical evidence. The Chamber of Deputies has invited the Government to carry out a national study on racism in Luxembourg and, the government commissioned LISER to conduct a national survey on racism and ethno-racial discrimination in Luxembourg. The survey allows addressing questions such as: How widespread is racism and ethno-racial discrimination in Luxembourg? Which groups of people are mainly targeted? In which contexts and situations do residents perceive discriminatory practices and treatment? Where and how can actions be taken to combat these issues?

The LISER survey shows that the share of residents, including natives, establishing a hierarchy between races is small, at least significantly smaller than in the neighbouring countries. The same result holds for the share of respondents justifying racist reactions, wishing to avoid a neighbour or a superior of a parti-

cular ethno-racial type. This suggests that ideological racism (of the "supremacist" type) is sparse in Luxembourg. Nevertheless, the survey also reveals that stereotypes are well entrenched in Luxembourg society. Furthermore, the share of respondents perceiving discrimination in the labour market, the housing market and in education is large in the Portuguese community as well as among people self-identified as blacks or Muslims. Among the main experiences are feelings of unequal treatment, inappropriate words or gestures, comments about accent or lack of knowledge of languages. Cases of physical aggression are very rare. As far as the reporting of experiences is concerned, more than two thirds of the victims claim not to report them and only one tenth claim to report them. This underlines the risk of invisibility of discrimination. Yet, when the population is questioned about their perception of discrimination as witnesses (and not as victims), their perceptions are very close to those of the groups at risk. These findings generate clear expectations at the population level. About half of the respondents think that the identification and sanctioning of discriminatory practices are insufficient. About two thirds of the population (and 80% of the Portuguese, Muslims and blacks) plead for new decisions in several areas - mainly at the workplace, in education and the housing market - and in the form of priority actions - encouraging initiatives that promote diversity and inter-culturality, strengthening sanctions and awareness campaigns on anti-discrimination.



CROSSING BORDERS PROGRAMME

## RESEARCH TEAM ON IMPACT EVALUATION OF DEVELOPMENT POLICIES.







FRÉDÉRIC DOCQUIER, MICHAL BURZYNSKI & RANA CÖMERTPAY

Developing countries are faced with major structural challenges related to their demographic structure, poverty and inequality, insecurity, political instability, climate change, etc. To face these challenges, cooperation and development policy actors are increasingly interacting with the research community with the aim of increasing the effectiveness and efficiency of their interventions. Where possible, policy decisions should be based on, or informed by, rigorously established evidence. The Research unit on Impact Evaluation of Development Policies was created in June 2022 at the initiative of the Directorate of Development Cooperation and Humanitarian Affairs to advise the Government. The missions are multiple: they involve linking decision makers and their partners with research teams, conducting research to improve knowledge about the causes and persistence of poverty, helping achieve a better targeting of policy measures, assessing the impact of development policies and cooperation strategy on targeted beneficiaries and development outcomes, collaborating with research and non-research organisations in Luxembourg and in partner countries, and organising training sessions for various types of stakeholders.

The Research Unit is organised around three research axes. The first axis targets sectoral analyses of the impact of

development policies/program using various survey and administrative databases available in the partner countries, to produce analyses to guide ex-ante policy choices, and carry out an expost evaluation of policies using instrumental and quasi-experimental methods. In the second axis, structural models are used for analysing the vulnerability of regions and countries to climate shocks and conflicts, or for predicting the impact of development policies in specific locations and sectors. These models are used to generate worldwide projections, or to "zoom in" on regions of interest for the Luxembourgish cooperation. In the third axis, we use Randomized controlled trials (RCTs) that involve subjecting a randomly selected subpopulation to an intervention, and then analysing how that subpopulation responds compared to a randomly selected control group from the same eligible population. This comparison allows for the precise identification of the causal effect of the intervention on the treated population, which is useful before generalising the intervention to a region or country. These RCTs have gradually become the "gold standard" in impact analyses. This third axis involves a partnership between LISER and JPAL-Europe

SOME FLAGSHIP

## EV EN TS.





18 I CONFERENCE SERIES: «NOUS ET LES AUTRES» LISER © 2022 CROSSING BORDERS PROGRAMME CONFERENCE SERIES: «NOUS ET LES AUTRES» I 19

### CONFERENCE SERIES "NOUS ET LES AUTRES".







field associations. Following the official presentation of the report in March 2022 and in partnership with the Ministry of Family Affairs, Integration and the Greater Region, LISER and CEFIS (Centre d'Étude et de Formation Interculturelles et Sociales) co-organised a conference series in order to be able to respond to a need for awareness-raising expressed by the resident population. The conference series helped disseminate the main results of the above-mentioned study, to put them into perspective with the results of other surveys carried out in neighbouring countries or on groups at risk, as well as to stimulate reflection, sometimes critical, on the concepts, on the strategies for identifying discriminatory practices and on the policies to be implemented. The four conferences were attended by about a hundred participants from the research sector, public administrations and field associations. At the closing session, the Minister Corinne Cahen announced that the government is preparing a national action

plan against racism. Concrete actions should be conducted in the

sectors of education, housing and labour market.

The Government asked LISER to conduct a national survey on racism and ethno-racial discrimination in Luxembourg. In parallel, CEFIS conducted a qualitative survey of experts and

Place: Chambre des salariés (Luxembourg city)

People: 75-90 (for each event)

Dates: 19 September 2022 I 17 October 2022 17 November 2022 I 30 January 2023

### SELECTION OF PUBLICATIONS OF THE PROGRAMME.

I would like to put forward two recent academic publications that were particularly impactful.

The first is an article on "Climate change, Inequality and Human Migration" published in the prestigious Journal of the European Economic Association by Michal Burzynski, Frédéric Docquier and co-authors. There has been much discourse on how longterm climate change will affect human mobility over the course of the 21st century. This paper estimates the long-term welfare and mobility responses to climate change at a very detailed spatial level (spatial cells of 5x5 km squared). Developing regions that have contributed the least to climate change will be the most adversely affected. Considering official climate scenarios, we confirm that forced and voluntary movements of millions of climate migrants should be observed over the 21st century. However, the results suggest that most of them will relocate internally. In poor countries and regions, long-haul migration to OECD destinations is a costly adaptation strategy of last resort. The study suggests that massive international flows of climate refugees are unlikely, except under generalised and persistent conflicts over resources. On the contrary, climate change will most likely increase global inequality and extreme poverty. This is the real threat to all of us.

Burzynski, M. & C. Deuster & F. Docquier & J. de Melo (2022). Climate change, Inequality and Human Migration. Journal of the European Economic Association, 20(3), 1145-1197

The second is a working paper on "Populism and the Skill-Content of Globalization" published in the CESifo series by Frédéric Docquier, Lucas Guichard, Stefano Iandolo, Hillel Rapoport, Riccardio Turati, Gonzague Vannoorenberghe. This work is part of the EU-FIRST project that examines the conditions that cause natives' populist reactions. The paper documents the long-run evolution of populism and explores the role of globalisation in shaping such evolution. A first novelty is the reliance on both standard (the vote share of populist parties) and new (the vote-weighted average of populism scores of all parties) measures of the extent of populism. It shows that levels of populism in the world have strongly fluctuated since the 1960s, peaking after each major economic crisis and reaching an all-time high after the great recession of 2008-09. The second novelty is that it consistently demonstrates that populism responds to globalisation shocks in a way, which is closely linked to the skill structure of these shocks. Imports of low-skill labour intensive goods increase both total and right-wing populism at the volume and mean margins, and more so in times of de-industrialisation and of internet expansion. Low-skill immigration, on the other hand, tends to induce a transfer of votes from left-wing to right-wing populist parties, apparently without affecting the total.

Docquier, F., Guichard, L., Iandolo, S., Rapoport, H., Turati, R., & Vannoorenberghe, G. (2022). Populism and the Skill-Content of Globalization: Evidence from the Last 60 Years. (CESifo Working Papers; No. 10068). Ifo institute for Economic Research e.V. https://www.cesifo.org/en/publications/2022/working-paper/populism-and-skill-content-globalization-evidence-last-60-years

The audit report issued on April 21st, 2023 on the financial statements as at December 31st, 2022 of LISER was based on the French version of those financial statements.

TOTAL ASSETS	2022	2021
FIXED ASSETS		
Intangible fixed assets	37.636,78	71.911,85
Tangible fixed assets	808.624,45	505.275,31
Financial fixed assets	4.100,00	4.100,00
	850.361,23	581.287,16
CURRENT ASSETS Debtors		
Trade receivables due and payable within one year	4.475.981,31	3.227.493,43
Other receivables due and payable within one year	490.005,43	275.526,69
Cash at bank, cash in postal cheque accounts,		
cheques and Cash in hand	9.054.646,46	10.163.627,76
	14.020.633,20	13.666.647,88
Deferred charges - Prepayments	309.579,37	276.177,27
Total assets	15.180.573,79	14.524.112,31
CAPITAL AND RESERVES Retained earnings Profit/(Loss) of the financial year Investment	5.718.775,38 103.146,62 846.261,19	4.597.410,89 1.121.364,49 577.187,17
	6.668.183,19	6.295.962,55
PROVISIONS		
Other provisions		
Other provisions	693.112,43	825.836,70
NON SUBORDINATED DEBTS		
NON SUBORDINATED DEBTS  Trade creditors due and payable within one year	693.112,43 1.425.961,92	825.836,70 2.495.932,73
NON SUBORDINATED DEBTS		
NON SUBORDINATED DEBTS  Trade creditors due and payable within one year  Other debts	1.425.961,92	2.495.932,73
NON SUBORDINATED DEBTS  Trade creditors due and payable within one year Other debts  Tax debts	1.425.961,92 388.716,94	2.495.932,73 433.374,86
NON SUBORDINATED DEBTS  Trade creditors due and payable within one year  Other debts  Tax debts  Social security debts	1.425.961,92 388.716,94 483.908,43	2.495.932,73 433.374,86 473.251,05
NON SUBORDINATED DEBTS  Trade creditors due and payable within one year Other debts  Tax debts  Social security debts	1.425.961,92 388.716,94 483.908,43 364.612,54	2.495.932,73 433.374,86 473.251,05 711.341,99

**CROSSING BORDERS PROGRAMME** GOVERNANCE | 23 22 | FINANCIALS & KEY FIGURES LISER © 2022

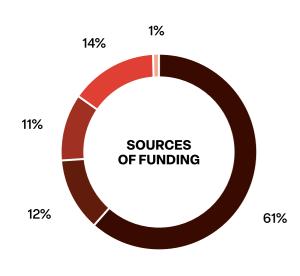
### PROFIT & LOSS ACCOUNT

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23.968.790,30 231.529,52 (178.424,76) (5.104.219,45) (16.045.699,14)

> (263.029.64) (375.595,95)855,26 (15.260,84)

(2.115.798,68)

103.146,62

COST

**CATEGORIES** 

Personnel Cost

18 161 499€ **I** 75%

Other Expenditures

5 936 530€ I 25%

75%

25%

### 2021

24.615.417,41 7.920,03 (120.454,31) (5.129.380,02)

(15.442.890,06) (2.207.679,93)

> (200.221,10)(394.361,47)

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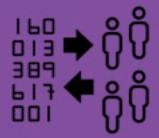
Carole BLOND-HANTEN

Aline MULLER CEO



### SCIENCE ENLIGHTENING SOCIETY





## INFORMATION SYSTEMS PLATFORM (ISP)

LISER's Information Systems Platform is establishing a sustainable, innovative and scalable data and IT infrastructure to appropriately combine technologies, skills and standards. ISP supports capabilities required to deliver research data services to researchers and partners, while meeting security and legal requirements, and preserving and leveraging LISER's analytical and informational assets.





04 WORD OF THE CHAIRWOMAN & CEO

V. Hoffeld I A. Muller

08 WORD OF THE HEAD OF PLATFORM

T. Kruten

- 10 Designing scalable ISP services meeting researchers' needs I T. Kruten
- 12 ISP ServiceNow to power effective IT services aligned with employee-centric priorities I ISP Team
- 14 Continuous streamlining of Research Data Services through a co-creative approach | T. Kruten | A. Dober
- 16 LISER Safe Room, a facility to access confidential administrative data securely I F. Stips
- 18 HR4U a platform dedicated to manage LISER's HR lifecycle I J. La Schiazza
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# WORD OF THE CHAIRWOMAN OF LISER.

#### **VÉRONIQUE HOFFELD**

We are thrilled to introduce the annual report of our Information Systems platform, highlighting the pivotal role it plays in driving the future development of our research institute in socio-economic research. LISER's Information Systems' work is anchored in building research capabilities in a privacy-by-design and sustainable manner, leveraging data about society to inform decision-making. Privacy-by-design is not just a desirable feature; it is a must-have for us to maintain our credibility and reliability as a research institute delivering tangible value to society.

We are committed to developing groundbreaking technical research environments that are not only secure but also highly performant, catering to the unique needs of our researchers. By providing them with state-of-the-art tools and systems, we empower them to explore new frontiers and unlock innovative research solutions. Our dedicated platform serves as the bridge between technology and research, fostering a co-creation mindset that fuels creativity and enables the development of cutting-edge research enabling solutions.

The future is a collaborative endeavour, and our Information Systems are deeply invested in shaping it through a synergistic approach between technology and research. Our goal is to enhance our capacity to address complex socio-economic challenges and drive positive change. We firmly believe that by embracing co-creation, we can harness the collective intelligence and expertise of our teams, as well as external partners, to deliver impactful results.

We would like to express our deepest gratitude to the entire team led by Thierry Kruten, whose inspiring and open-minded attitude has propelled our unit forward. Their unwavering dedication to serving research and society has been instrumental in our accomplishments.

As you delve into this report, you will discover the strides we have made in building privacy-aware and sustainable research capabilities, creating secure and performant technical environments, and fostering a culture of co-creation. Together, let us embrace the intertwined nature of our futures and work towards shaping a brighter and more prosperous tomorrow, where technology and research collaborate harmoniously.

**ALINE MULLER** 

WORD OF THE CEO OF LISER.



# WORD OF THE HEAD OF ISP PLATFORM.

#### THIERRY KRUTEN

Clive Humby, a data science entrepreneur and professor of data science at Sheffield University, once famously said that "data is the new oil of the 21st century". Although data as a strategic asset has been widely accepted in recent years, setting up an adequate infrastructure to process data efficiently is still challenging, as intrinsic characteristics of data require overcoming two major challenges to become valuable:

- Similar to oil, it is mainly messy and needs to be cleaned, broken down, analysed, transformed, etc. to be completely useful and impactful for organisations or society.
- However, unlike oil, data is infinite and versatile. The quality of it, even if it is constantly refined, and therefore its value, depends primarily on the skilful use of the relevant data sources for the right purposes.

LISER has decided to respond to these challenges by providing technological capacities, skills and services to support its researchers, by setting as a main objective in its Strategic Plan 2022-2025 the creation of an Information Systems Platform (ISP). The aim is to best position talent within our Institute for facilitating social science research.

Since then, the ISP has embarked on a remarkable and exciting transformational journey to become an effective partner of the LISER scientific community, committed to its mission and guided by a solid roadmap based on two main pillars:

- A successful transformation relies on a co-creation approach where all stakeholders bring their expertise, competence and enthusiasm to deliver appropriate services that ultimately meet the level of excellence expected by LISER;
- Investing in a sustainable and efficient research data infrastructure with a spirit of continuous improvement of its technical, human and organisational capacities to keep pace with the ever-changing research landscape.

The ongoing transformation is far from complete, but with the right mindset and sustained commitment, resilience and adaptability, the platform is equipped to continue making meaningful contributions to the field of social science research.



# DESIGNING SCALABLE ISP SERVICES MEETING RESEARCHERS' NEEDS.



#### THIERRY KRUTEN

Improving and turning historic data and IT functions into a relevant range of user-oriented services and responsive support tailored to meet researchers' needs has been one central activity of the Information Systems Platform (ISP) in 2022. Ensuring that those researchers are aware of the available services to make use of them effectively has been the other central activity of the transformation of the ISP in the last months.

ISP services typically accompany researchers throughout the lifecycle of their project by offering standard types of support with planning, processing, analysing, sharing, and preserving their research data. However, fine-tuning services to meet the expectations of social science researchers requires overcoming, through careful planning and continuous engagement with researchers, a thorough understanding of their specific needs and challenges and an appropriate allocation of the ISP's technical, human and organisational resources.

Indeed, social science research employs a wide range of data types, including surveys, interviews, and observational data. Those data types are often sensitive and require the implementation of adequate data security and privacy protections to protect the integrity of the research, preserving the rights, interests and trust of research participants. Secondly, the field has become increasingly collaborative across disciplines and organisations, creating challenges around data sharing, ownership and access. Finally, social science research is ever-evolving with new types of data, innovative research methods and technologies constantly emerging, requiring data services to integrate them as they emerge.

Resulting from discussions in 2022, a new design of platform's services is emerging. It is likely to be segmented into five families of key services, supported by a robust technical infrastructure and support.

- 1. Data planning services to help researchers to manage and plan data treatments throughout their research projects;
- 2. Data management and analysis services to provide tools and services to clean, collect, process, analyse and visualise their research data;
- 3. Data sharing services to enable researchers to share their data securely and in compliance with relevant ethical and legal requirements both internal and external parties;
- 4. Data curation and preservation services to ensure the data long-term preservation by helping researchers to curate, document and format data so that it can be used over time, even with new technologies as they become available;
- 5. Data storage and discovery services to make research data findable, accessible and retrievable while being stored in a secure, reliable and scalable archive.



Following the example of the French adage "Tell me what you do, I will tell who you are", the definition and implementation of a set of structured, coherent and, above all, well communicated services will enable researchers to better perceive the role and added value of such an infrastructure within LISER. Ultimately, the aim is to become a valued partner, enabling them to achieve their objectives more effectively.

12 I ISP TEAM LISER © 2022 ISP PLATFORM ISP SERVICENOW I 13

# ISP SERVICENOW TO POWER EFFECTIVE IT SERVICES ALIGNED WITH EMPLOYEE-CENTRIC PRIORITIES.

#### **ISP TEAM**

The main objective of LISER's Information Systems Platform (ISP) is to create an ecosystem to provide the technology, skills and support necessary to operationalise the research data management services at LISER requested by the researchers in the 2022-205 strategic plan and in a sufficiently responsive way to address possible future developments.

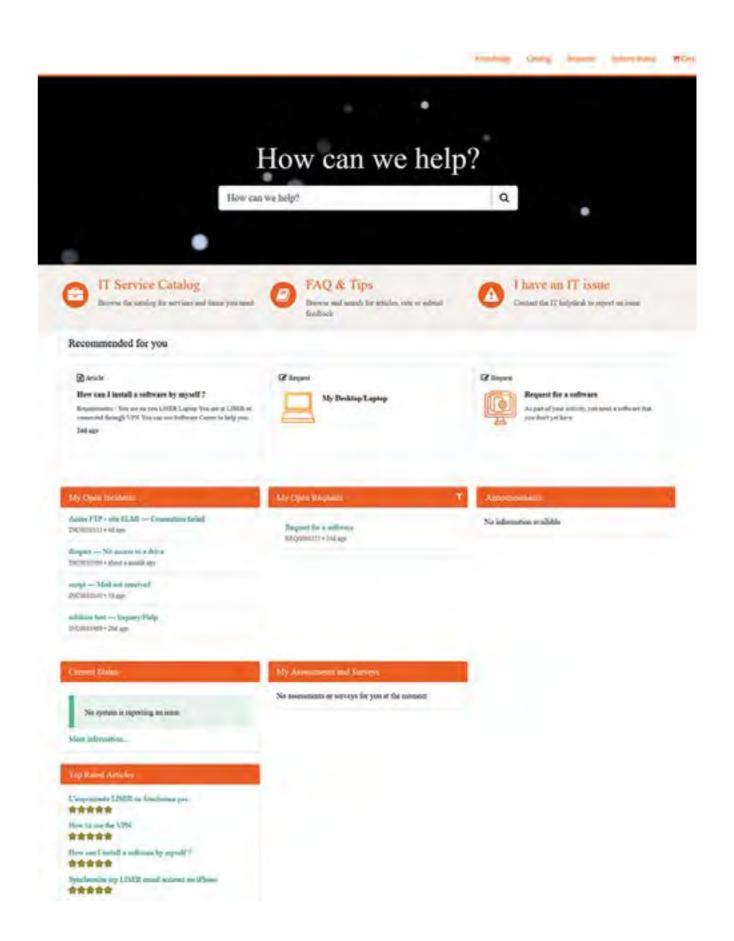
Since the merger of the former Data Centre and IT departments, the newly created ISP strives for an holistic and coherent approach to operational activities of the platform to successfully meet the expectations of research. Furthermore, the design and management of the IT infrastructure require particular attention as this infrastructure is the basis on which all ISP services are built and delivered.

Consequently, in 2022, ISP continues redefining and progressively implementing high quality IT services, which are based on the internationally recognised ITSM (IT Service Management) standard. The expected benefits are sustainable alignment with end-user needs and continuous improvement of efficiency and IT capabilities. Developing such a framework ultimately enables all LISER employees to spend less time combating one -off incidents, problems and non-value added tasks and directing them towards core business and strategic initiatives.

As a first step in this journey, ISP deployed ServiceNow, a cloud-based platform that provides IT service management solutions. Moreover, it brings features that help increase LISER's IT maturity, benefiting the end users and the ISP staff.

ISP ServiceNow has been developed based on analysis of ticket submissions and queries made to the former IT department over three years, to power an effective knowledge management system. This system enables end users to self-access to IT requests through a single portal available 24/7 to request services, submit incidents, access knowledge articles and track progress directly within the tool, to closure with the resolution of the submitted requests. ServiceNow is being continuously improved based on the feedback on experience of its users.

Finally, by leveraging ServiceNow's robust process automation capabilities to route incidents and request to the appropriate support teams and analytics and reporting functions as well as to identify through adequate dashboards common issues and pro-actively address them, ISP has already been able to deliver resilient services aligned to employee-centric priorities.



# CONTINUOUS STREAMLINING OF RESEARCH DATA SERVICES THROUGH A CO-CREATIVE APPROACH.







#### THIERRY KRUTEN

LISER recognises the importance of research data services to the successful achievement of research goals. The services, operated by its Information Systems Platform (ISP), ensure that researchers have access to the data they need and the appropriate technical environment to process and analyse it for their projects.

In 2022, the ISP has established a Working Group on Research Data Services, consisting of representatives from the research departments and the platform, with the aim of designing optimal and practical services to meet researchers' needs in their daily tasks. Through a co-creative approach, ISP guides periodic workshops where participants who come from diverse perspectives offer their insights. Consequently, the ISP captures a more holistic view of what product or service should include in its catalogue.

The group has started by reviewing the traditional research data services provided by LISER, such as survey data collection and access to research data. The objective pursued was twofold. On the one hand, to identify the areas (key operations, skills, roles, processes, communication and tools), which required improvement including the legal, administrative and security barriers to overcome to make these tasks more efficient and attractive for the LISER research community. On the other hand, to develop new and easily implementable services or products to facilitate sustainable collaboration between the platform and researchers.

As a result, in addition to streamlining and formalising existing data services, practical projects were launched by the working group participants already within a few months. For example, a set up of an intranet web repository compiling relevant information about managing data at LISER or a compilation and design of a standard socio-economic catalogue of questions to build research surveys.

The ISP will continue to work with the group to implement their recommendations to ensure that researchers have long-term access to the data they need for their projects.

## TESTIMONY — ANNA DOBER RESEARCH DATA STEWARD

Setting up a Data Services Working Group with representatives from the three departments has proven an excellent way for me, as the newly appointed Research Data Steward, to fulfill my role in a more insightful way. As a Research Data Steward, my main responsibility is to ensure that LISER's data policy and practice is communicated to all. This role requires collaboration with both, researchers and ISP staff, to understand their needs and challenges, and to develop solutions to address them.

The working group helps me to gain a broader perspective on LISER's data services and the challenges faced by departments. By working collaboratively with these researchers, I can identify areas where the experience of data service can be improved, to streamline data management processes and identify opportunities for better integration.

Finally, joining the working group has helped me to build relationships with researchers and pursue the co-creation approach within our Institute.

# LISER SAFE ROOM, A FACILITY TO ACCESS CONFIDENTIAL ADMINISTRATIVE DATA SECURELY.





Access to administrative data, collected and maintained by public institutions, is crucial for socio-economic researchers, as it allows them to explore social trends and patterns, identify social problems and inequalities, and to assess the impact of policies and programmes. In contrast to surveys or other forms of data collection, administrative data are often considered more complete and accurate, since they are collected continuously, cover large populations, offer greater representativeness of the data and more opportunities for comparative analysis.

Whilst administrative data provides valuable information for research, access to this data can be difficult due to privacy concerns, given that it typically contains sensitive personal information, and its illegal release could pose risk to the privacy and the safety of individuals. As a result, researchers seeking to access to administrative data often face significant legal and administrative hurdles, which take up a lot of their time and sometimes even ultimately prevent them from accessing such essential information.

Providing simple and secure access to a wide range of relevant research data is one of the main missions of LISER's Information Systems Platform (ISP). In addition to its long-standing resource and expertise in collecting and archiving data for scientific purposes, ISP has begun to extend its data access services to a broader set of data sources.

In this context, the ISP with the Labour Market research department approached the Institute for Employment Research (IAB FDZ) to set up a facility called Safe Room, which facilitates access to confidential administrative microdata to researchers from Luxembourg and the Great Region. The data made available through this infrastructure concern firms and workers as well as matched employer-employee data, and are based on Social Security records from the German Federal Employment Agency.



# TESTIMONY — FELIX STIPS PHD CANDIDATE, LABOUR MARKET

The LISER safe room is a huge improvement to the available research data infrastructure in Luxembourg. Using the German Social Security data in my research has helped me a lot as being able to access these data directly. Indeed, looking at the raw data is essential during the early stages of any research project using such complex datasets. Before its existence, I would have had to either use the FDZ remote access server (JoSua) without being able to explore the actual data or organise on-site visits at the FDZ premises in Nuremberg. I hope that the Luxembourg research community will always benefit from access to such an infrastructure and that this first successful initiative is the premise of making available administrative datasets from other European countries.

18 | JENNIFER LA SCHIAZZA LISER © 2022 ISP PLATFORM HR4U | 19

# HR4U A PLATFORM DEDICATED TO MANAGE LISER'S HR LIFECYCLE.





#### JENNIFER LA SCHIAZZA

Since January 1, 2023, LISER has launched its implementation of an HRIS, to which the employees have given the name of HR4U, which integrates five specific modules accompanying the life cycle of the employee, from recruitment through integration, data and time management, up to the development of their skills. This implementation is part of a global HR transformation project aimed primarily at generating efficiency gains within the People Management department by automating manual and repetitive HR processes.

In addition, the implementation of a shared HR platform in which all HR information is centralised in one place allows efficient data management and creates opportunities in terms of data quality and reliability, but also to create specific HR dashboards.

Finally, this platform enriches the user experience on the one hand by giving employees access to Employee Self Service functionalities, giving them autonomy in the management of their personal data. On the other hand, by offering managers better visibility on their team, thus facilitating the management of their human resources.

## HR4U: the result of a co-creation between the People Management department and the Information Systems Platform

Thanks to close collaboration throughout the HR4U implementation project, which started in September 2022, between the People Management team and the ISP IT team, the first HR4U modules were implemented and launched in January 2023. The union of these two teams, who were continually listening to each other and sharing a common goal, greatly facilitated the progress and development of the project as well as the integration of this new HR system into the LISER IT lanscape.

Indeed, the pooling of knowledge of HR processes and existing simplification needs, on the one hand, and knowledge of the technical specificities of LISER's IT infrastructure, on the other hand, has proven to be a major asset for the successful completion of the project. The active participation and valuable advice provided by each member of the project in the module design and configuration workshops enabled optimal use of the system's capacities as well as consistency with existing IT applications.

The success of HR4U is based above all on the pooling of various technical and human skills, but also on a spirit of collaboration, commitment and mutual trust.



The audit report issued on April 21st, 2023 on the financial statements as at December 31st, 2022 of LISER was based on the French version of those financial statements.

TOTAL ASSETS	2022	2021
FIXED ASSETS		
Intangible fixed assets	37.636,78	71.911,85
Tangible fixed assets Financial fixed assets	808.624,45	505.275,31
Financial fixed assets	4.100,00	4.100,00
	850.361,23	581.287,16
CURRENT ASSETS		
Debtors		
Trade receivables due and payable within one year	4.475.981,31	3.227.493,43
Other receivables due and payable within one year	490.005,43	275.526,69
Cash at bank, cash in postal cheque accounts,		
cheques and Cash in hand	9.054.646,46	10.163.627,76
	14.020.633,20	13.666.647,88
Deferred charges - Prepayments	309.579,37	276.177,27 <b>-</b>
Total assets	15.180.573,79	14.524.112,31
TOTAL LIABILITIES  CAPITAL AND RESERVES  Retained earnings  Profit/(Loss) of the financial year Investment	5.718.775,38 103.146,62 846.261,19	4.597.410,89 1.121.364,49 577.187,17
	6.668.183,19	6.295.962,55
PROVISIONS	ŕ	·
Other provisions	693.112,43	825.836,70
NON SUBORDINATED DEBTS		
Trade creditors due and payable within one year	1.425.961,92	2.495.932,73
Other debts		
Tax debts	388.716,94	433.374,86
Social security debts Other creditors due and payable within one year	483.908,43 364.612,54	473.251,05 711.341,99
Other creditors due and payable within one year	<u></u>	
	2.663.199,83	4.113.900,63
Deferred income	5.156.078,33	3.288.412,43
Total liabilities	15.180.573,79	14.524.112,31

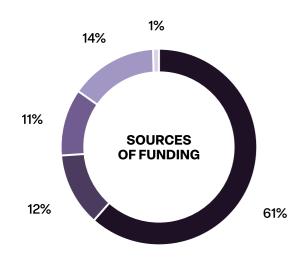
### **PROFIT & LOSS** ACCOUNT

Net Turnover Other income Use of merchandise and consumables Other expenses Staff costs

> Salaries and wages Social security on salaries and wages

Value adjustment on tangibles and intangibles Other operating expenses Other interest and financial income Interest payable and similar financial expenses

#### **Profit of the year**







**International Competitive Funding** 2 673 757€ I 11%

Collaborative Funding 3 506 618€ I 14%

Other Revenues 219 347€ **I** 1%

#### 2022 2021

23.968.790,30 24.615.417,41 7.920,03 231.529,52 (178.424,76) (120.454,31) (5.129.380,02) (5.104.219,45) (15.442.890,06) (16.045.699,14) (2.207.679,93) (2.115.798,68) (263.029.64) (200.221,10)(375.595,95)(394.361,47) 855,26 (15.260,84)(6.986,06)

75%

103.146,62

COST

**CATEGORIES** 

Personnel Cost

18 161 499€ **I** 75%

Other Expenditures

5 936 530€ I 25%

25%

1.121.364,49

### GOVERNANCE.

The board of directors is nominated by the government and is composed of nine external members of different professional backgrounds. Its mission is to define LISER's strategic orientations and oversee its activities.

#### MEMBERS OF THE BOARD **OF DIRECTORS**

#### Véronique HOFFELD - Chairwomen

Partner - Attorney at Law, Luxembourg

#### Jean-Marc GOY

- Vice Chairman

Conducting Officer Senior Counsel at Capital Group, Luxembourg

#### Valérie BALLOUHEY

- DAUPHIN

Independent Director

#### Tom BAULER

Chair for Environment & Economy, Université Libre de Bruxelles

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#### Claude LÜSCHER

Founder of Licent Sàrl, Luxembourg

#### Carole RECKINGER

Social Policy Analyst Caritas Luxembourg

#### Aline SCHILTZ

Project Manager at the Embassy of Luxembourg in Lisbon

#### Nico WEYDERT

Honorary Deputy Director at STATEC, Luxembourg

#### ATTENDING THE BOARD OF DIRECTORS MEETINGS WITHOUT VOTING RIGHTS

**Christiane HUBERTY** 

Government Commissioner Chair of the Staff Delegation Aline MULLER CEO

Carole BLOND-HANTEN

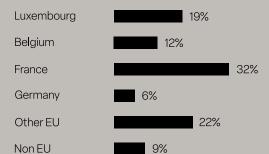


# SCIENTIFIC INNOVATION FOR SOCIETAL VALUE



#### KEY FIGURES LISER © 2022

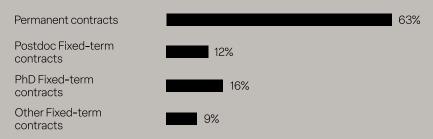
#### **NATIONALITIES OF STAFF MEMBERS**



#### **STAFF CAREERS**



#### **TYPES OF CONTRACTS**



#### **IMPRESSUM**

#### **CONTENT & EDITING**

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