

What Drives eWork?

**An Exploration into the
Determinants of eWork
Uptake in Europe**

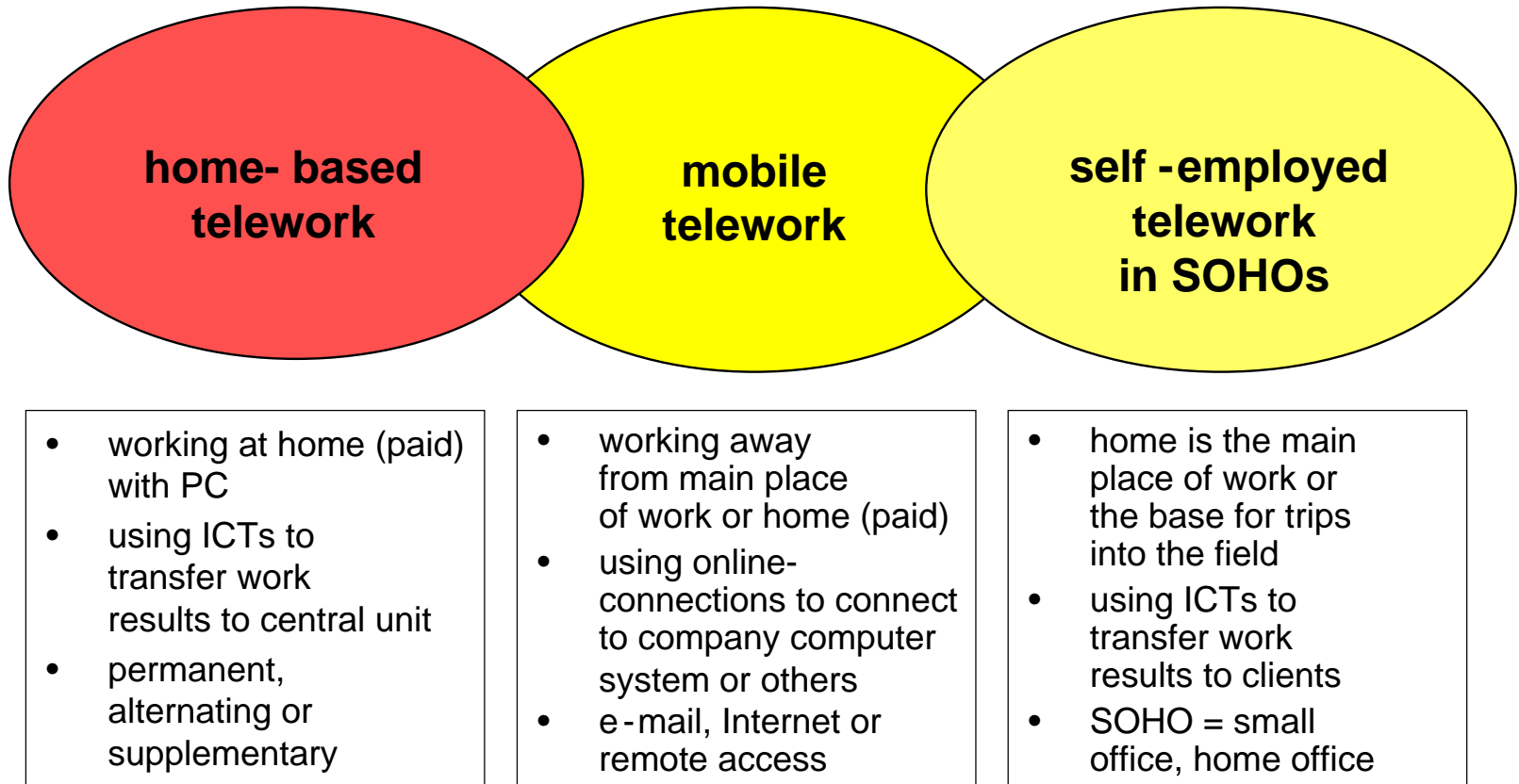
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Structure of the presentation

- **Telework**
 - Spread of telework in Europe today
 - Development dynamics
- **From telework to eWork**
 - Telework as multi-locational eWork
 - Tele-collaboration as uni-locational eWork
 - Typology of eWork
- **Determinants of eWork uptake at level of the individual**
 - Multi-variate regression analysis
 - Separating out the country influence
- **Discussion**
 - Main findings
 - Need for further research

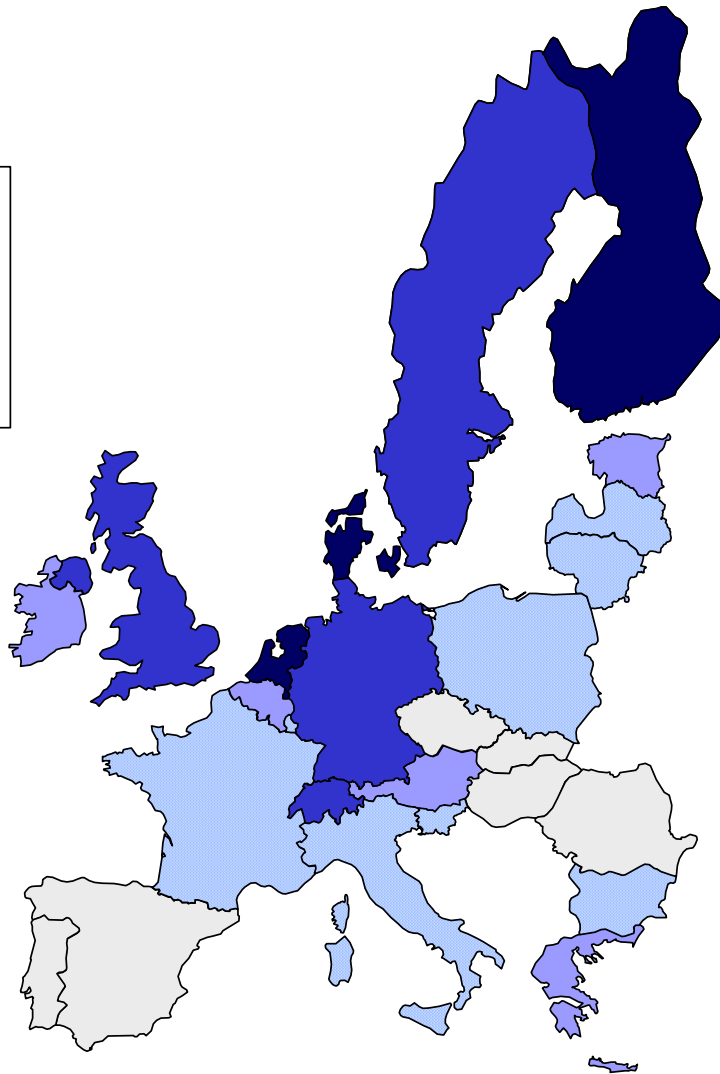
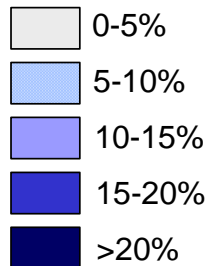
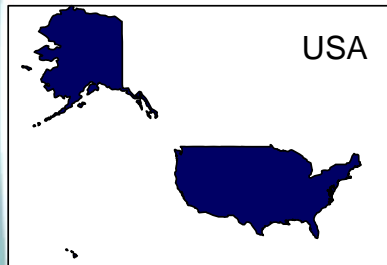
Types of telework



Data source: SIBIS Population Survey

- **Target population: resident population (15+) in private households**
- **Topics: ICT usage, telework, eGovernment, eHealth**
- **Coverage**
 - EU + CH + USA (April – May 2002)
 - New Accession Countries (excl. CY,MT) (January - March 2003)
- **Sample size 500-1,000 per country**
- **Computer aided telephone interviews (CATI)**
- **Master language: English**
- **Translation into EU languages using group of bi-lingual national experts**

Telework in Europe today

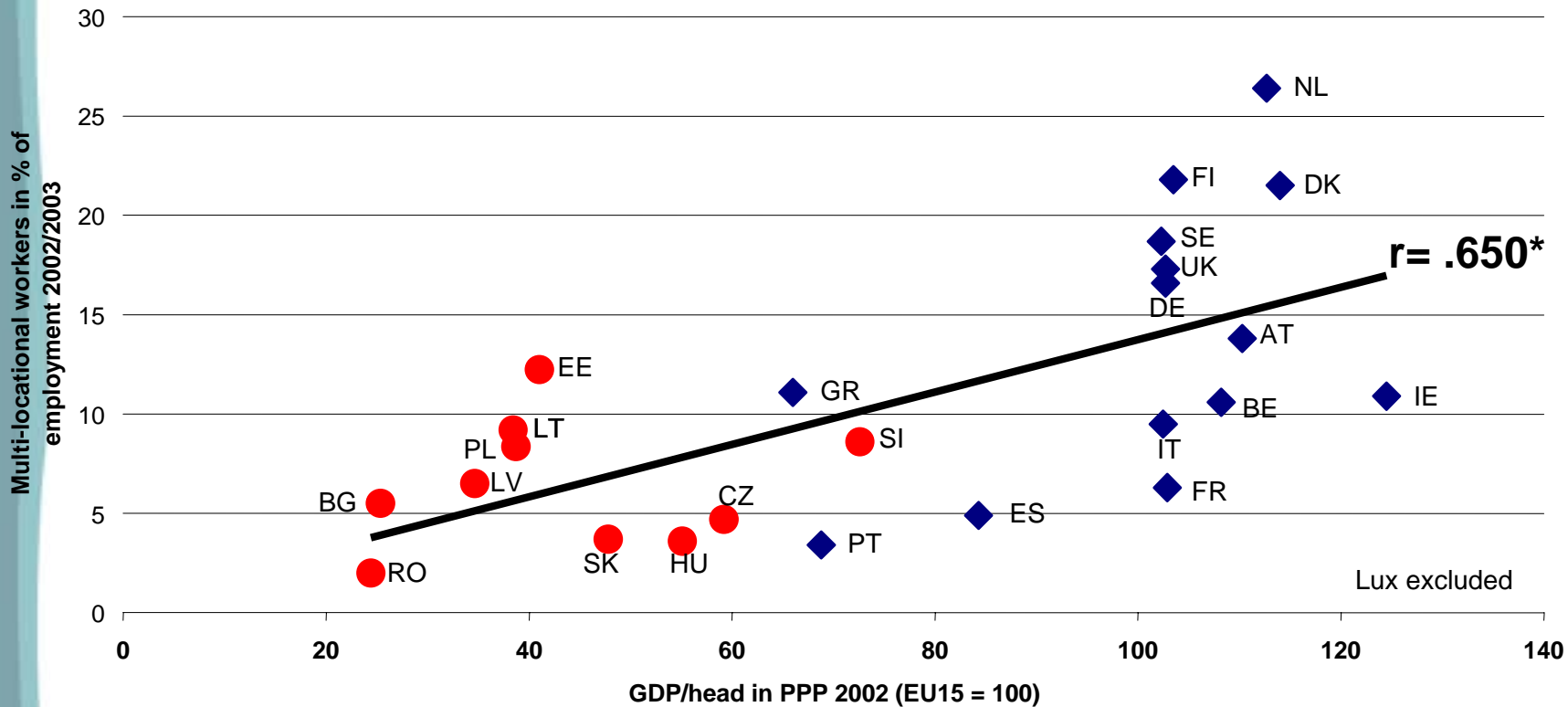


- **European average: 13.0%**
- **Leading are the Netherlands (26.4%), Finland (21.8%), Denmark (21.5%) and Sweden (18.7%)**
- **North-South divide**

Data source: SIBIS 2002/3

Telework in Europe today

Multi-locational work and income (GDP/head)



Development 1999 - 2002

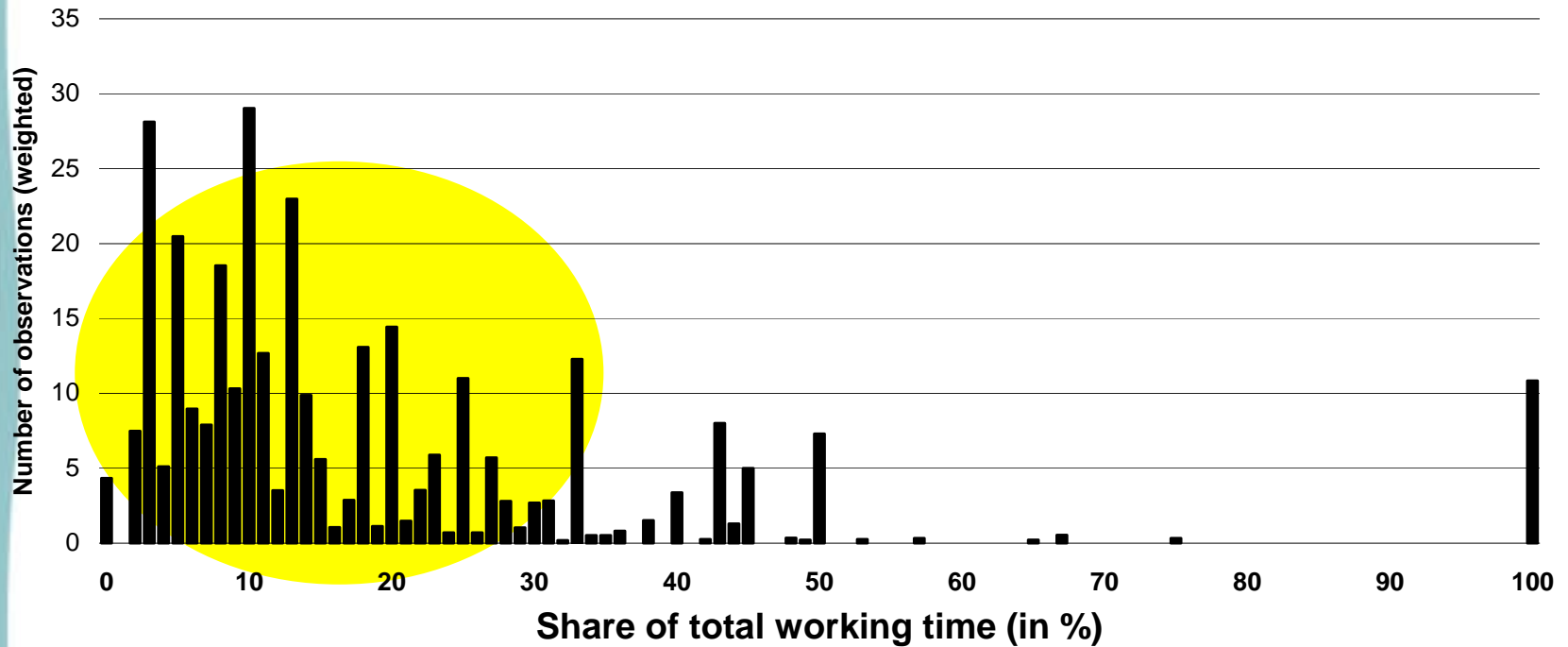
Spread of Telework in EU15		
	1999	2002
home-based telework > = 1 day per week	2.0%	2.1%
home-based telework < 1 day per week	2.0%	5.3%
mobile telework	1.6%	4.0%
self-employed in SOHOs	0.9%	3.4%
all types	6.1%	13.0%

Data source: ECaTT 1999; SIBIS 2002

Intensity of teleworking at home

Home-based telework: Intensity

Share of total working time (absolute numbers)



Locations used for teleworking

Percent of persons teleworking at one location who also telework at an other location

Teleworking at different locations					
	at home or the same grounds	in another office	at customers/clients	at a hotel/meeting venue	on the move
at home or the same grounds	100.0	40.4	42.2	39.1	42.5
in another office	11.5	100.0	52.5	57.4	55.6
at customers/clients	17.4	76.0	100.0	64.6	71.9
at a hotel/meeting venue	9.2	47.4	36.9	100.0	50.1
on the move	14.2	65.2	58.3	71.0	100.0

Data: BISER RPS 2003

Multi-locational eWork

“Telework” → Multi-locational eWork



Conclusions on telework

- **Home-based telework with whole working days spent at home stagnating**
- **Supplementary home-based and mobile telework growing fast**
- **Overall growing variety and flexibility in the use of work settings and locations**
- **Central office seems to remain the main working location**
- **Telework is being implemented in ways which maximise productivity and adaptability from companies' viewpoint, while retaining high degree of control**

From telework to eWork

Main differences

- **Not only individualised changes of work location, but also remote work in shared office premises**
 - Examples remote back offices, call-centres, etc.

Remote work in shared office environments



From telework to eWork

Main differences

- **Not only individualised changes of work location, but also remote work in shared office premises**
 - Examples remote back offices, call-centres, etc.
- **Also includes telemediated work forms carried out by workers being located in traditional office environments**
 - Collaboration which stretches across the boundaries of single organisations ...
 - ... and, by implication, mostly also across sites, regions and even countries

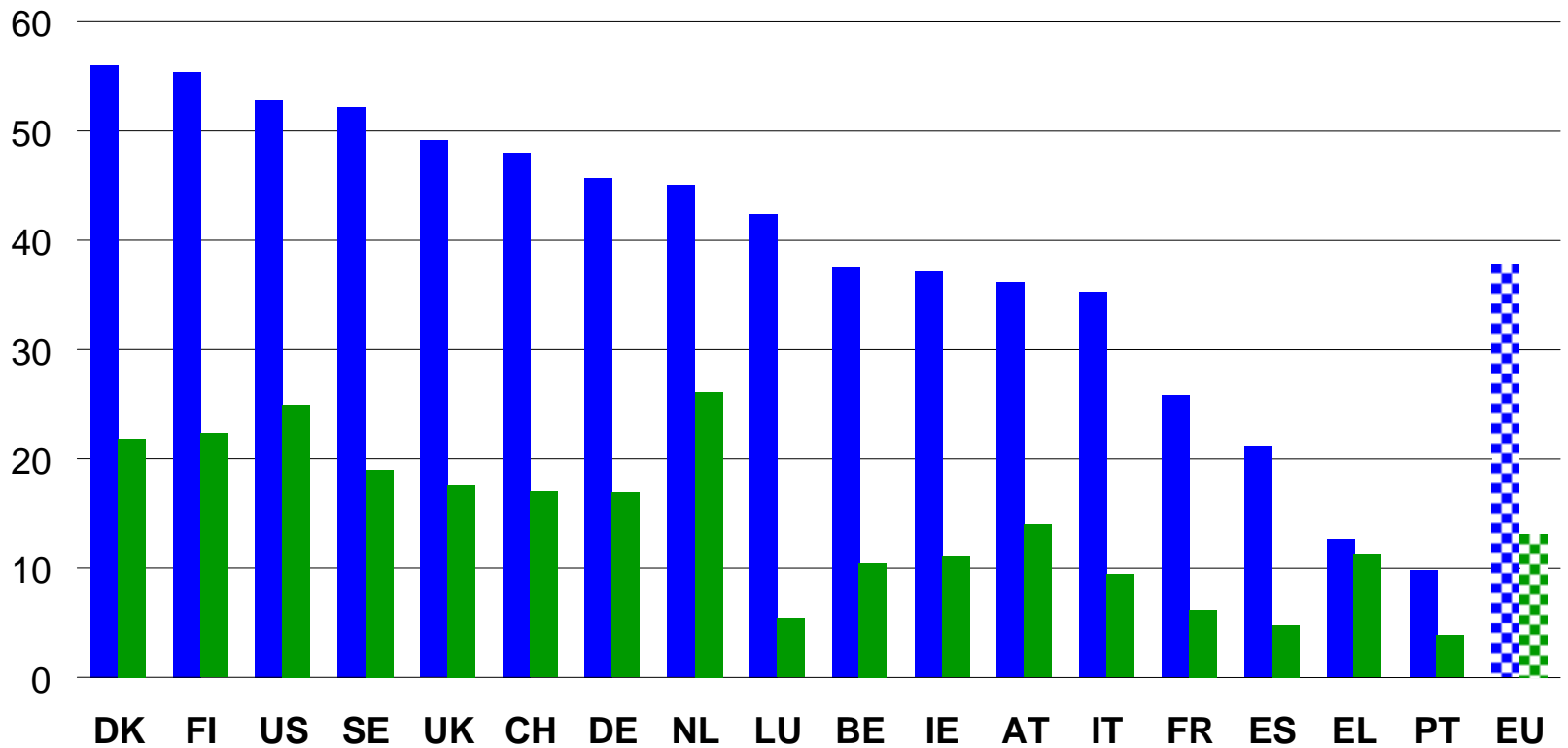
Tele-collaboration

- **Contrast to telework: Work location does not change, but working modes and contents**
- **Flexible configurations of human capital without moving people from one place to another**
- **Boost to productivity and adaptability in companies**
- **Possible definition:**
 - Workers who are located remotely from each other and who work together to create or achieve the same thing, and in which interaction takes place exclusively or almost exclusively via telemediation
 - An explicit (e.g. written, but not necessary legally binding) agreement about common aims has been made
- **SIBIS operationalisation: Work contacts across boundaries of establishments by means of ICTs (e-mail, Internet, joint network)**

Telework and tele-cooperation

Telework and Tele-cooperation (in %)

Base: Total employment



EMERGENCE eWork typology

		Contractual basis	
		Internal / employees	External / outsourced
Type of workplace	Individualised (away from “office” premises)	<ul style="list-style-type: none"> • Employed tele- homeworkers • Mobile employees 	<ul style="list-style-type: none"> • Freelance teleworkers or mobile workers
	On shared “office” premises	<ul style="list-style-type: none"> • Remote back offices / call centres • Employees working in telecottages or other, third party premises 	<ul style="list-style-type: none"> • Specialist business service supply companies • Outsourced call centres

Source: Huws & O’Regan 2001:5

Modified eWork typology

Involved actors

		Principal/agent		Collaboration	
		intra-organisational	inter-organisational	intra-organisational	inter-organisational
Type of workplace	Individualised (away from office premises)	<ul style="list-style-type: none"> • Employed home-based telework • Mobile telework 	<ul style="list-style-type: none"> • Freelance teleworkers (mostly in SOHOs) 	---	<ul style="list-style-type: none"> • Virtual teams made up of self-employed teleworkers
	On shared office premises	<ul style="list-style-type: none"> • Other sites of same company (e.g. remote back offices) • Employees working on third party premises 	<ul style="list-style-type: none"> • Outsourcing to specialist business service supply companies 	<ul style="list-style-type: none"> • Virtual teams composed of employees from a single company 	<ul style="list-style-type: none"> • Virtual teams composed of employees from different companies

Determinants of eWork uptake

- **Statistical analysis of SIBIS data (2002/2003)**
- **Logistic multivariate regression model (LOGIT)**
- **Separately for multi-locational eWork (= telework) and uni-locational eWork (= tele-collaboration)**
- **Variables included in the model:**
 - Gender, age, type of household (young children y/n)
 - Educational attainment
 - Employment contract, occupation, working hours
 - Company size, sector (public/private)
 - Income dynamics
 - Long standing illness
 - Size of residential locality
 - Country (reference: Germany)

Some findings

- **Women are less likely to do telework, but equally likely to do tele-cooperation than men**
 - Locational flexibility offered by ICTs unequally distributed across genders?
- **Some evidence suggesting disadvantaged parts of the labour force benefit from telework**
 - “Older” workers
 - Workers living in small cities and rural areas
 - Workers in SMEs
- **Working in public sector means smaller likelihood of teleworking**
 - Tele-cooperation is as widespread in the public sector as in the private sector
 - Telework is much less likely to take place in the latter

Some findings: the country effect

- **In Italy and Luxembourg, the likelihood of telework is significantly lower**
 - ... but not so for tele-cooperation
 - This suggests country-specific regulatory and/or cultural factors hinder, in particular, multi-locational eWork
- **In France, Greece, Portugal and Spain, both telework and tele-cooperation are low**
- **All New Member States and Accession Countries show negative country influence**
 - Exceptions are Estonia (telework) and Slovenia (tele-cooperation)
- **Comparison with indices of labour market regulation and risk aversion show that these may partly explain country findings**

Need for further research

- **Holistic models of eWork diffusion in a given national context**
- **Representative and consistent data on all aspects of eWork**
- **Definition of tele-collaboration, and operationalisation for survey research**
- **Influence of gender on telework uptake**
- **Distribution of flexibility effects of eWork between employer and worker**

Thank you for your attention!

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Data sources:



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