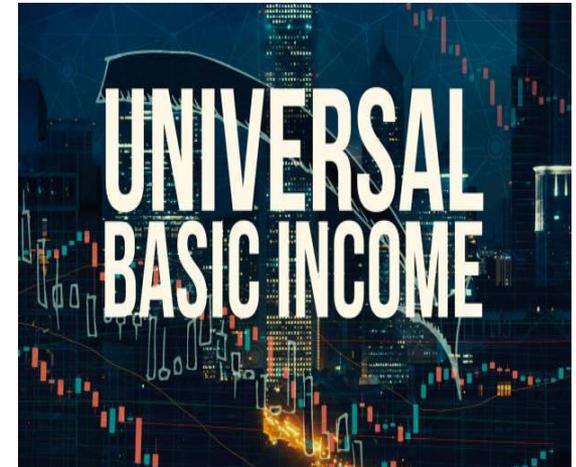


# WP4 Technological change and effects of participation and basic income related interventions

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# WP4-Reinventing the welfare state

**Main question: What are the (un)intended effects of Basic and Participation Income like scenarios on social inequalities against the background of technical change and which lessons can be drawn for public policy?**

- **D4.1. Which regime works best in Welfare: Comparison of eight Dutch local participation income experiments.**
- **D4.3. Comparison of (un)intended micro –and macro-economic effects of participation and basic income experiments in Europe**
  - **Experiments in non-European countries (Melline Somers)**
  - **Simulation studies and Experiments in Europe (Ruud Muffels)**
- **D7.2. Macro-simulation of extra earnings release and increase in minimum-wage level for employment in some selected Technical Change scenarios for the Netherlands**
- **2022 Volume on “Welfare States and Technical Change: What Can we Learn from Comparison of Basic and Participation Income Experiments in Europe?”**



# Outline

1. Intended and unintended micro and macro-economic effects of BI/PI
2. RCT Field experiments UBI/NIT outside Europe
3. Simulation studies and European Field Experiments on BI/PI: ideas and outcomes
4. Conclusions and discussion



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# Methodology

- **Definition UBI according to Van Parijs (2004): 1) paid periodically, 2) paid in cash, 3) paid to individuals, 4) universal, 5) unconditional**
- **Inclusion criteria:**
  - **Intervention:** meeting at least criteria 1, 2, and 5 → “UBI-like programmes”
  - **Population:** general population, low income groups, unemployed
  - **Countries:** high-income only, unless countries experiment with a full UBI
  - **Outcomes:** employment, non-employment outcomes, health, (financial) well-being, social outcomes
  - **Methods:** (Quasi-)experimental, descriptive, simulation studies
  - **Document type:** peer-reviewed papers, but also working papers
- **Exclusion criteria**
  - **Interventions:** lump-sum cash payments and conditional transfers
  - **Population:** specific vulnerable groups

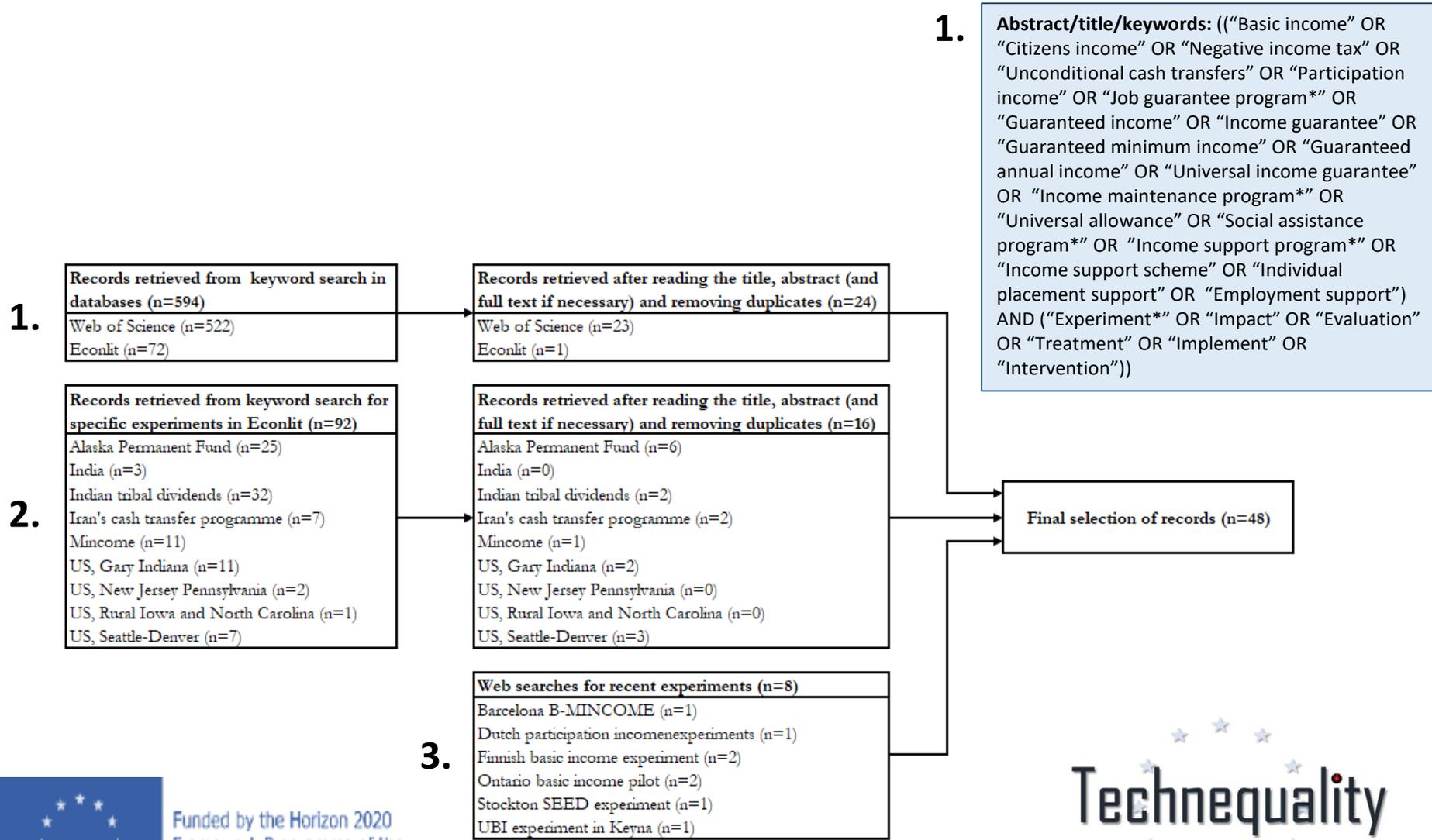


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# Methodology



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# Intended and Unintended effects

## (28 field experiment/policy reforms outside Europe)

Results BI dividend experiments	Full UBI experiments		Partial UBI field experime	BI dividends (reforms)		
	India	Kenga	Stockton	Alaska	Indian casii	Iran
• Working hours and employment						
- Increase in working hours / employment				-		+/ns
- Increase self-employment, risk taking (entrepreneurial activity)				+		
- Employment-to-population ratio				ns		
- Full-time employment			+			
- Part-time employment				+		
- Wage employment		-/ns				
- Self-employment in agricultural enterprise		ns				
- Self-employment in non-agricultural enterprise		+				
- Income from wage employment		-/ns				
- Income from agricultural enterprise		+				
- Income from non-agricultural enterprise		ns				
- Per capita income					+	
• Poverty and inequality						
- Reducing financial stress (income volatility, ability to spend money on unexpected expenses)			+			
- Inequality						-
- Poverty				-	-	-
• Health and subjective wellbeing						
- Improved (mental) health	+/ns	+	+			
- Improved subjective wellbeing (less hunger, less depression)		+				
- Less health care use, less hospitalisation	ns	+				
- Short-term mortality				+		
• Social outcomes						
- Reduced crime (substance abuse, police assistance, property crime, violence)				+/-/ns		



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# Intended and Unintended effects

## (28 field experiment/policy reforms outside Europe)

Results BI dividend experiments	NIT			
	Gary-Indiana	Seattle-Denver	Mincome	Ontario
<b>• Working hours and employment</b>				
• Increase in working hours / employment	-	-	-/ns	-
• Increase self-employment, risk taking (entrepreneurial activity)				+
• Median hourly wage (for job opening, new hires)			+/ns	
<b>• Non-employment activities</b>				
• Leave employment (family, job conditions, did not want to work, education, self-employment, ill)			+ / + / + / + / -	na/na/na/+/na/na
• Volunteering				+
<b>• Poverty and inequality</b>				
• Poverty	-			
<b>• Health and subjective wellbeing</b>				
• Improved (mental) health				+
• Improved subjective wellbeing (less hunger, less depression)				+
• Less health care use, less hospitalisation			+	+
<b>• Social outcomes</b>				
• Reduced crime (substance abuse, police assistance, property crime, violence)				+
• Socializing				+
• Feeling less marginalized, more dignity				+



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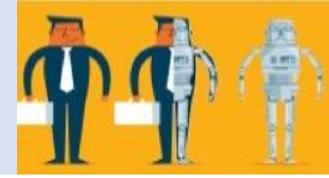
# Main conclusions and observations:

## Non-European field experiments

- In the UBI experiments, wage employment is reduced in favour of self-employment. In the partial BI experiments/dividends, increased employment or no effect. In the NIT experiments, small negative effects. Original strong negative effects much lower after correcting for selection, attrition, underreporting in surveys, non-parametric estimation and for duration and combination of treatments.
- In NIT experiments, workers left employment because they did not want to or could not work, because other reasons were considered more important: e.g. family, education, job conditions, self-employment.
- Financial stress reduces. According to the BI dividends and NIT experiments, inequality and poverty reduces.
- In all experiments, improved health outcomes and well-being. However, short-term mortality is increased in Alaska. In Urban areas, this is not offset in later periods.
- GMI has positive social effects (socializing, feeling less marginalized), but also some negative effects (more substance abuse).



# European field experiments + simulations: ideas



- **Benchmark current welfare systems = Workfare based on strict monitoring and control, plus sanctions on non-compliance behaviour (distrust)**
  - **BI/PI: Motivational Psychology and Behavioural Economics**
  - **Alternative: Guaranteed MI (BI/NIT-PI) based on autonomy, trust, rewarding work, intrinsic motivation, reducing stress and poverty-inequality, self-regulation, positive reciprocity, wellbeing**
  - **Simulations UBI-NIT, PI/CBI + European RCT GMI Experiments in Netherlands, Finland and Spain?**
- Ideas used to set-up experiments in Europe but not in US/Canada (poverty)
  - Testing in European experiments of alternative regimes with more freedom, extra support, rewarding work
  - Simulation studies on employment, poverty and inequality plus social welfare effects?
  - Link with technical change mostly absent except for few studies?



# Intended and Unintended effects

(17 simulation studies + 3 field experiment studies Europe)

Results simulation studies and 3 European field experiments	Simulation studies			European Experiments		
	UBI	NIT	PI/CBI	Fin-UBI	DU-PI Exp	ES-B-MIN
<b>• Working hours and employment</b>						
• Increase in working hours / employment	0/--	0/-	0/-	0/+	+/0	0/-
• Waiting time and better job matches (sustainable employment)	na	na	na	na	na	na
• Increase self-employment, risk taking	na	na	na	na	na	na
<b>• Poverty and inequality</b>						
• Reducing financial stress, reducing poverty (incidence, intensity) / inequality	++/++/-	++/++	+/+	++	na	++
• Social welfare gains for lower incomes / no welfare dependency	+/-	+/0	+/0	0/-	na	na
<b>• Health and subjective wellbeing</b>						
• Improved (mental) health / less stress	na	na	na	+/+	0/0	+/+
• Improved subjective wellbeing	na	na	na	+	0	+
• Less health care use, less hospitalisation	na	na	na	na	na	na
<b>• Social outcomes</b>						
• Low marginal social costs / revenue neutral - flat-tax	--/0	-/0	-	-	na	na
• Autonomy (self-efficacy) and time for education and re-skilling	na	na	na	+	0+	0/+
• Room for caring and volunteering (social participation)	na	na	na	na	na	na
• Reduced crime (substance abuse, violence, burglary etc.)	+/-	na	na	na	na	na
• Increasing social trust / institutional trust	na	na	na	+/+	0+/0+	na



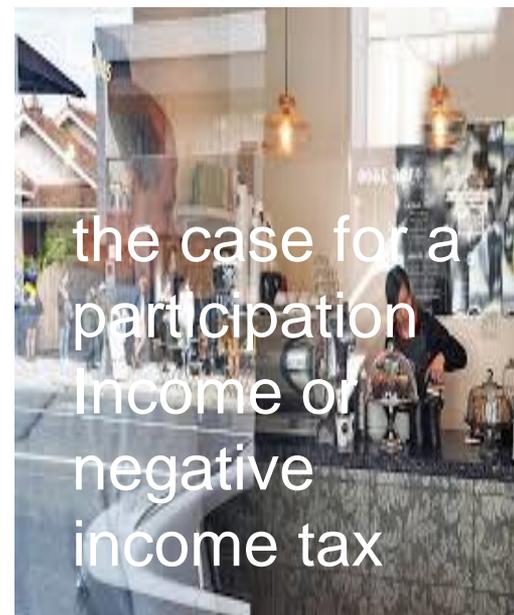
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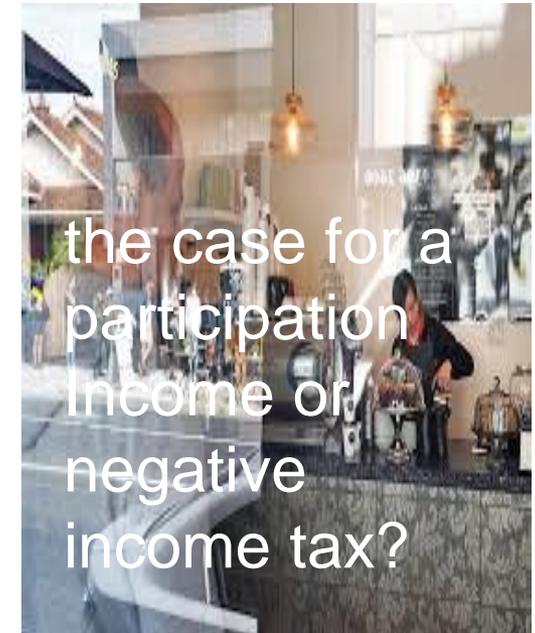
# Main conclusions and observations: simulation studies

- Inconclusive mixed evidence on labour supply effects of UBI and NIT simulations, while dependent on method (individual versus family labour supply model and social welfare function).
- Revenue neutral funding of full UBI and NIT (100%) leads to high marginal taxes and reduced incentives, high social costs.
- Positive effects on reducing poverty and income inequality but mostly based on static micro-simulations. Small net positive effects on reducing crime.
- Partial NIT and PI (50%) schemes best in balancing efficiency and equity goals due to work incentives, reducing poverty and welfare gains.
- Contextual or community effects on wages, labour demand, growth and social networks are hardly studied.



# Main conclusions and observations: European field experiments

- Insignificant, positive or small negative labour supply effects in UBI/PI/Unconditional treats.
- Attrition, underreporting, selection and experiment effects should be prevented because they impact the estimated effects.
- Positive labour supply effects of earnings release and active support conditions
- Insignificant or positive effects on mental health and subjective wellbeing and on self-regulation and social and institutional trust
- **Challenging overall question on what the effects are of or on technical change is not dealt with! Except for one study: investments in robots through wage savings increase growth and reduce inequality compared to UBI financed with capital tax rate.**



*“An ounce of prevention is worth a pound of cure.”*

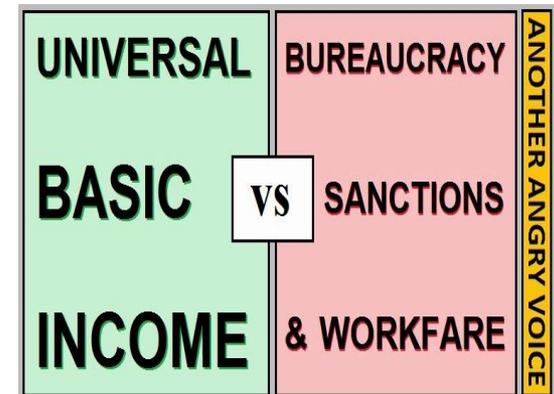
*[Benjamin Franklin](#)*

*For: Health, crime, risk-taking, self-respect, happiness.*



# General conclusions on research and policy

- **Experimenting with different policy reforms in RCT-field experiments is challenging and provide new behavioural evidence and avenues to Welfare State policies.**
- Micro-macro simulations of policy reforms needs an integrated behavioural approach to study inequality, labour supply and social welfare effects simultaneously.
- Effects strongly affected by sampling, attrition and underreporting in surveys, design of RCT experiment, selection and experiment effects and should be prevented or corrected for.
- More research needed on the effects on **social outcomes** but also on **contextual effects** on wages, labour demand, job matches and self-employment also with a view to **technical change scenarios** of job displacement and job creation.
- Partial NIT and PI reforms perform best with respect to labour supply and for reducing inequality and poverty but due to technological change alternative policy designs for promoting employment and growth and reducing inequality should be simulated and experimented with.



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