Online Appendices: Bibliometric Analysis

This research follows a similar approach to that of **?** in a survey assessment of recent developments in open economy economics. The research began by collating all Scopus and Google Scholar records for the existing literature on UBI and unconditional cash transfers. A list of UBI experiments and their results was compiled from the literature identified and is presented in Table 1. After the experiments were identified, literature analysis of each experiment's results was undertaken using NVIVO by assigning nodes, which act as labels and keywords applied to selected areas of text, to distinct categories such as health and education. Collation of the data from the literature was performed by selecting each node to display all the selected text assigned to that node across every piece of literature. The findings were then presented under the relevant categories and summarised in the key findings table, Table 2.

We use bibliometric mapping diagrams that visualise the co-occurrence of keywords from Scopus searches using VosViewer software based on the methodology used by **?** and **?**. Figure 1 displays the co-occurrence of keywords resulting from a Scopus search for 'UBI'. A heavy density of results occurs for the keywords 'poverty' and 'UBI', with the most prominent keyword being 'COVID-19'. The COVID-19 pandemic has increased interest in UBI as a way of providing financial security to those adversely affected, which explains the strong prevalence of the keyword. The weakest occurrence of results is clustered around several different themes, shown in the diagrams in different colours. These keywords include 'welfare', 'climate change', 'epidemiology', 'health policy', 'resilience', 'stress', and several countries, including 'Mexico', 'Brazil' and 'Nigeria'. These keywords are less prevalent in the results returned from the Scopus search but still occur at least several times.

Insert Figures 1 and 2 about here

In Figure 2, we display the co-occurrence of keywords resulting from a Scopus search for 'Unconditional Cash Transfer'. The strongest keyword observed is 'cash transfers', which, as a term, encompasses both conditional and unconditional cash transfers and is, therefore, expected to have a strong prevalence. There is little differentiation between the frequency of occurrence of the remaining keywords, which include 'health', 'schooling', 'sub-Saharan Africa', 'Kenya', 'children' and 'education'. The presence of these keywords is expected as they encompass several categories affected by the implementation of unconditional cash transfers and the locations of several existing experiments. Figure 3 displays the co-occurrence of keywords resulting from a Scopus search for 'UBI'. As shown in the diagram, 'UBI' is the keyword with the strongest prevalence, which is expected as it is a commonly used interchangeable term for UBI. Figure 3 shows weaker links to other

interesting keywords such as 'negative income tax' and 'guaranteed minimum income', alternative forms of social security payment, and 'automation'. One of the drivers behind UBI in developed countries is increased automation of the labour market, which explains why the keyword appears in Figure 3.

Insert Figures 3 and 4 about here

Finally, Figure 4 visualises the co-authorship of publication authors linked to **?** article using AI-assisted abstract search data from Dimensions. Two authors, Roos and Walld, observe the strongest occurrence, whilst the remaining authors share similar prevalence levels. From Scopus searches based on the works of both Roos and Walld, it is established that the former has a research focus on child and maternal health outcomes and poverty, and the latter has a research focus on medical conditions and links to social and parental factors.

Figure 1: Co-occurrence of keywords in 'Basic Income'

Note: The above figure is prepared using VOSviewer which is a software tool for constructing and visualising bibliometric networks.
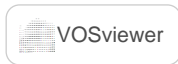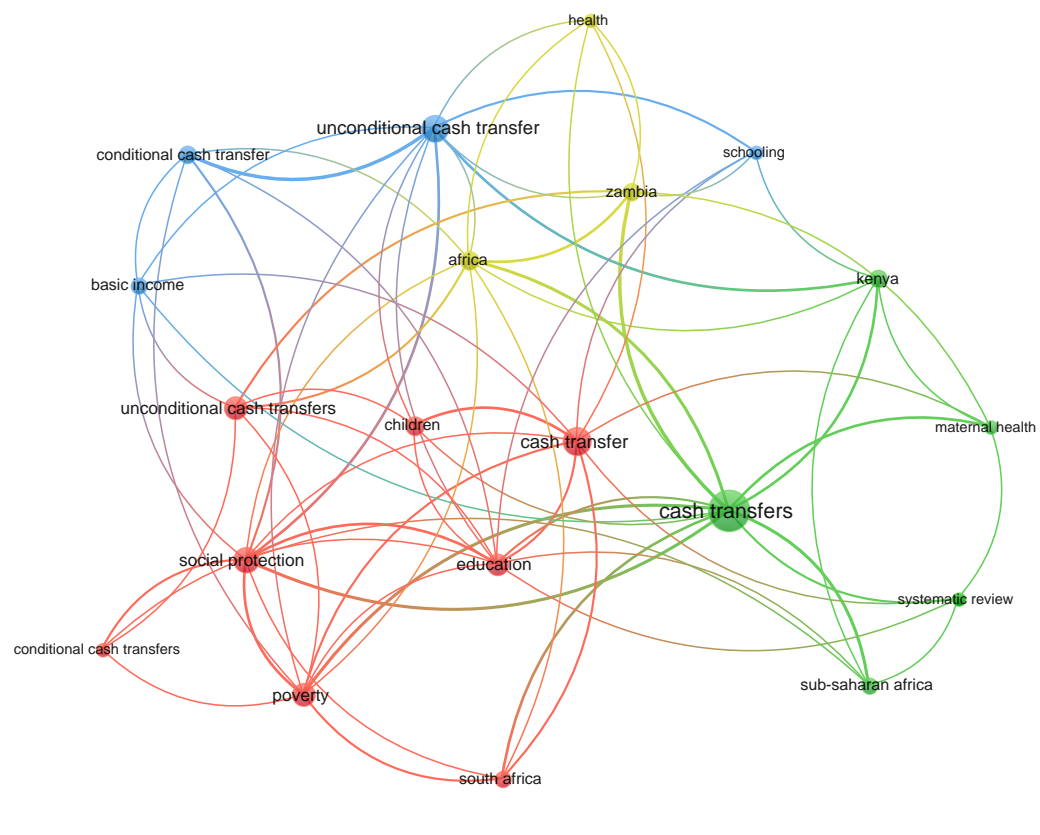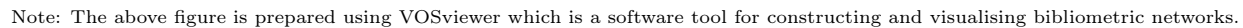
Figure 2: Co-occurrence of keywords in 'Unconditional Cash Transfer'

Note: The above figure is prepared using VOSviewer which is a software tool for constructing and visualising bibliometric networks.
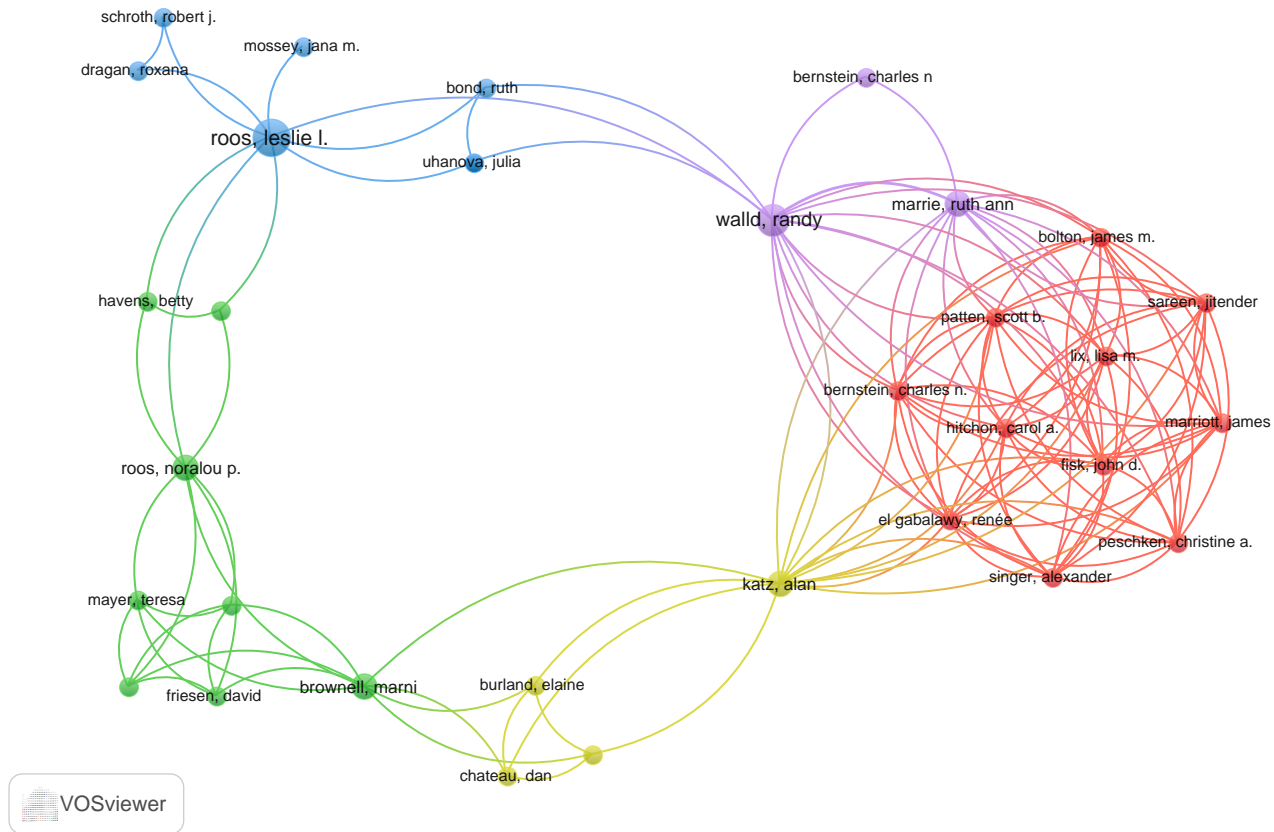
Figure 3: Co-occurrence of keywords in 'Universal Basic Income'

Note: The above figure is prepared using VOSviewer which is a software tool for constructing and visualising bibliometric networks.

Figure 4: Co-authorship of authors in **?**

Note: The above figure is based on the co-authorship of authors in **?**, New questions, new data, old interventions: The health effects of a guaranteed annual income' paper from Dimensions publications data. The above figure is prepared using VOSviewer which is a software tool for constructing and visualising bibliometric networks.

Table 1: Outline of basic income experiments

Name	Country	Date	Duration	Transfer value	Frequency	Eligibility criteria	Treatment group
Alaska Permanent Fund Dividend	US	1982	Ongoing	Variable dependent on the value of the fund. 2019 value = $1,600	Annual	Alaskan residents	631,552 **[No Control Group]**
Eastern Band of Cherokees Casino Dividend	US	1997	Ongoing	Variable dependent on the value of the fund. Usually between $4,000 and $6,000	Bi-annual	Native of the Eastern Band of Cherokee Indians	15,414 (Eastern Band of Cherokee Indians, 2018) **[No Control Group]**
Manitoba Basic Annual Income Experiment (Mincome)	Canada	1974	4 years	Provided recipients with a guaranteed annual household income equivalent to $19,500 (four-person family)	Annual	Over 18, reside in Dauphin, and have a household income under $13,000	10,000 (Saturation site population) **[Control Group Used]** (Forget, 2013)
'Finland Experiment'	Finland	2017	2 years	€ 560	Monthly	Aged between 25 and 58 and receiving the lowest level of unemployment insurance	2,000 **[Control Group Used]**
Madhya Pradesh Unconditional Cash Transfer Pilot (General Pilot)	India	2011	17 months	Adult R200 and Child R100. After 12 months, values increased to R300 and R150 respectively	Monthly	Village resident	3,670 **[Control Group Used]**
Tribal Village Unconditional Cash Transfer Pilot	India	2012	12 months	Adult R300 and Child R150	Monthly	Village resident	756 **[Control Group Used]**
'Iran Experiment'	Iran	2011	Ongoing	Deposits of 28% of median household income. Approximately $90 PPP per person	Monthly	Iranian nationals	82.8 million **[No Control Group]** (World Bank, 2021)
GiveDirectly UCT Program Long-term	Kenya	2017	12 years	$0.75 per day	Monthly	Poor households. Identified by living in a house with a thatched roof via census data.	4966 (44 villages) **[Control Group Used]**

Note: The above table represents an overview of the key basic income experiments outlined in this research. Further details are available from the authors upon request.

Table 1: Outline of basic income experiments (continued)

Name	Country	Date	Duration	Transfer value	Frequency	Eligibility criteria	Treatment group
GiveDirectly UCT Program Short-term	Kenya	2017	2 years	$0.75 per day	Monthly	Poor households. Identified by living in a house with a thatched roof via census data.	7333 (80 villages) **[Control Group Used]**
GiveDirectly UCT Program Lump Sum	Kenya	2017	N/A	$547.50	Single lump sum	Poor households. Identified by living in a house with a thatched roof via census data.	8548 (71 villages) **[Control Group Used]**
Basic Income Grant (BIG) Pilot Project	Namibia	2008	2 years	N$100	Monthly	Under 60 and registered as living in the area in July 2007. Every villager in an area where over 20% were diagnosed with HIV/Aids and 25% with TB	930 **[No Control Group]**
B-MINCOME	Spain	2017	2 years	Max transfer of €1,675	Monthly	Resident in an Eix Besòs neighbourhood since 2015, have an open social services file, and at least one household member must be aged between 25 and 60	1000 households **[Control Group Used]**
Stockton Economic Empowerment Demonstration	United States	2019	2 years	$500	Monthly	At least 18 years old, reside in Stockton and live in a neighbourhood with a median income at or below $46,033	125 **[Control Group Used]**

Note: The above table represents an overview of the key basic income experiments outlined in this research. Further details are available from the authors upon request.

Table 2: Key findings from UBI experiments

Type	Key findings
Full UBI	**Alaska Permanent Dividend Fund, United States** - Increase in part-time work of 17% in response to dividend payments [?] - An additional $1,000 of income increased birth weights by 17.7g and decreased the likelihood of a low birth weight by 0.7% [?] - An additional $1,000 decreased the probability of being obese as a child by 4.5% [?] - Net of federal taxes, approximately a third of dividend income was spent on saving and debt reduction [?] - In the three months post dividend distribution, there was an increase in consumption of between 22 and 24 cents for each dividend dollar [?]
Full UBI	**Eastern Band of Cherokees Casino Cash Dividend, United States** - Higher school attendance, grades and test scores in children of transfer recipient households [?] - An additional $4,000 given to the poorest households increased educational attainment by a year [?] - Improved mental health amongst transfer recipients [?] - Children in transfer recipient households had more positive interactions with their parents [?]
Alt. UBI (negative income tax)	**Mincome, Canada** - Reduction in labour market participation of 11.3% [?] - Students in the catchment for Mincome were more likely to enrol in high school compared with the control population [?] - Fall in hospital admissions of 8.5% for the Mincome period [?]
Partial UBI	**'Finland Experiment', Finland** - Treatment group spent on average 0.5 days more in employment than the control group [?] - The treatment group had higher satisfaction with life value than the control, 7.32/10 to 6.76/10 [?]
Full UBI	**Madhya Pradesh Unconditional Cash Transfer Pilot (General Village Pilot), India** - 20% reduction in child wage-labour compared with a 5 % reduction in the control village [?] - Treatment group households were 32% more likely to work more hours than those households not receiving payment - 25% improvement in girls with the normal weight for age in the treatment group - Borrowing for hospitalisation and medical treatment fell to 46 % in treatment villages compared with 55% in control villages
Full UBI	**Tribal Village Unconditional Cash Transfer Pilot, India** - 9.5% increase in recipients' monthly days of work from 43.5% to 52% - Female participation in the labour market increased by 16 per cent in treatment villages - Expenditure on female education in treatment villages increased by almost 88% - 73% of recipients reported a reduction in their debts 12 months into the intervention

Note: SEWA Bharat, 2014 is entitled 'A Little More, How Much it is...: Piloting Basic Income Transfers in Madhya Pradesh, India' and is available here. Ajuntament de Barcelona, 2019, Report on the preliminary results of the B-MINCOME project (2017-2018) [Online]. Available from here. SEED, 2021, Preliminary Analysis: SEED's First Year is available here.

Table 2: Key findings from UBI experiments (continued)

Type	Key findings
Full UBI	**Unconditional Cash Transfer Pilot, India − Overall Results** - 30% increase in female secondary school attendance to 66% in treatment villages [?] - Reported increase in food sufficiency after 6 months of the intervention - Increased gender-equity in household expenditure decisions. 54 % of women reported that household income was shared equally, compared with 39% in control villages - Transfers increased the rate of home upgrades with 43% of treatment households making improvements compared with 28% in the control group
Partial UBI	**'Iran Experiment', Iran** - Increase in employment of 10.2% and participation of 6.7% 12 months into the intervention [?] - Female labour force mobility was much higher than male. 24 per cent of new entrants to the market were women compared with 3% of men [?] - Households in the richest quintile increased their savings by 11.31 million rials ($268.61 in 2021) whilst poorer households reduced their savings by 0.62 million rials ($14.73) [?]
Full UBI	**GiveDirectly UCT Trial, Kenya − Overall Results** - Treatment households experienced a significant increase in school expenditure of $1 PPP - Treatment groups experienced a 1.2% reduction in scores on the CES-D mental health questionnaire [?] - Increase in the value of the durable goods owned by 25% ($53 PPP), relative to a control mean of $207 PPP [?]
Full UBI	**Basic Income Grant (BIG) Pilot Project, Namibia** - Increase in employment of 11% since introduction, from 44% to 55% - Reduction in unemployment of 15%, from 60 per cent to 45% - Mean income, excluding income from BIG, increase by 29% in 12 months - School dropout rates fell from 40% in November 2007 to almost 0% 12 months after the intervention - Reduction in food poverty from over 70% to 16%, amongst households not affected by in-migration - 6 months into the intervention, recipients reported an increase in savings of 21% - Grant money gives women bodily autonomy and releases them from pressures to engage in transactional sex
Partial UBI	**B-MINCOME, Spain** - Treatment group a reduction in financial uncertainty of 1.2% - Transfer recipients across all modalities and groups reported increased enjoyment of social leisure activities of between 0.15 and 0.2 % - Average increase in life satisfaction of 27.97% a year into the intervention across the treatment groups
Full UBI	**Stockton Economic Empowerment Demonstration (SEED), United States** - Full-time employment had risen by 22% from 28 % to 40% after 12 months of the intervention - The treatment group reported lower symptoms of anxiety and depression than the control group - Increase in food expenditure of 5.65% from 36.11% to 41.76% amongst transfer recipients - Parents in the treatment group reported feeling more engaged and having a better relationship with their children