Cambridge Trust for New Thinking in Economics:
Policies to tackle the cost of living crisis

Macroeconomic implications of a basic income

Modelling basic income in the UK

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Overview

- Motivation
- Approach
- Results
- Conclusions

Motivation (1)

- Renewed interest in basic income
- UK analysis has tended to be distributional (microeconomic) in focus
  - re-engineering tax and benefits structure
  - static assessment
- Macroeconomic dynamics much less explored
  - implications of:
    - changes in (patterns of) household incomes
    - the (choice of) funding mechanism
  - impacts on GDP, employment, prices

Motivation (2)

- Macroeconomic dynamics much less explored
  - implications of:
    - changes in (patterns of) household incomes
    - the (choice of) funding mechanism
  - impacts on GDP, employment, prices
- In particular:
  - household income and expenditure effects
  - labour supply (incentives to work)

Approach (1)

- Simulation exercise using CE’s E3ME macroeconomic model:
  - comparisons between policy scenarios and a baseline (status quo / business as usual)
- E3ME:
  - sectorally disaggregated (especially relevant to automation)
  - econometric: behavioural responses rooted in historical experience
  - post-Keynesian: no presumption of full capacity; demand can spur investment

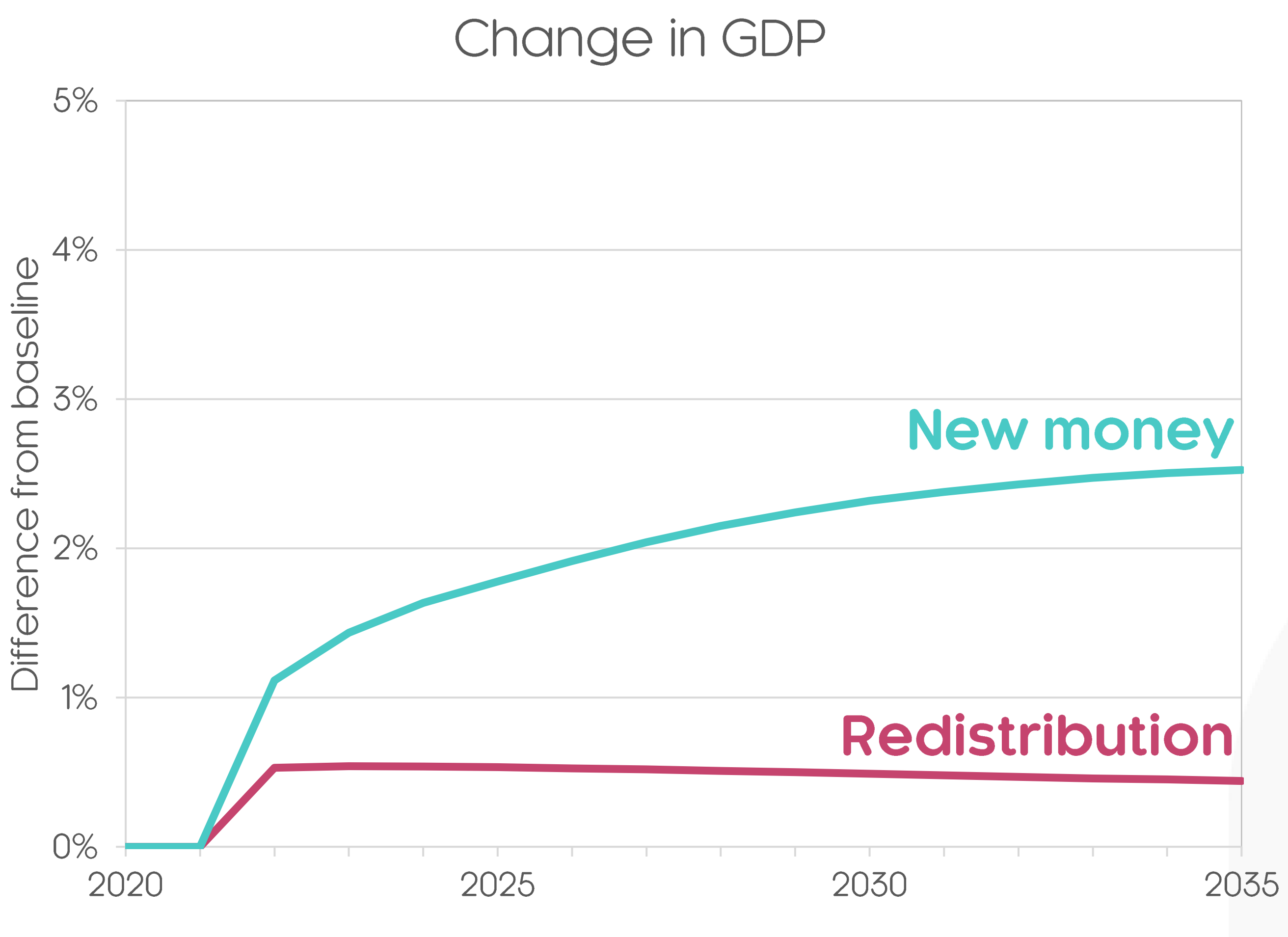
Approach (2)

- Two lines of enquiry:
  1. Examine typical (small-scale) basic income schemes: Extend the existing literature to examine macroeconomic outcomes
  2. Automation and basic income, funded by debt-free sovereign money (DFSM), as a policy response: Role of basic income as a tool to sustain household incomes

Results: Small-scale basic income (1)

- Small-scale schemes:
  - fiscally neutral scheme: redistribution
    - annual payments by age band:
      - 0-15: £2,609
      - 15-64: £4,174
      - 65+ £9,392
    - funded by withdrawing various benefits and raising taxes (income and/or employers' NICs)
  - DFSM: new money
    - £1,224 per year
    - equivalent to the level of income support provided in the pandemic (and implicitly funded by new money), of £82bn

Results: Small-scale basic income (1)

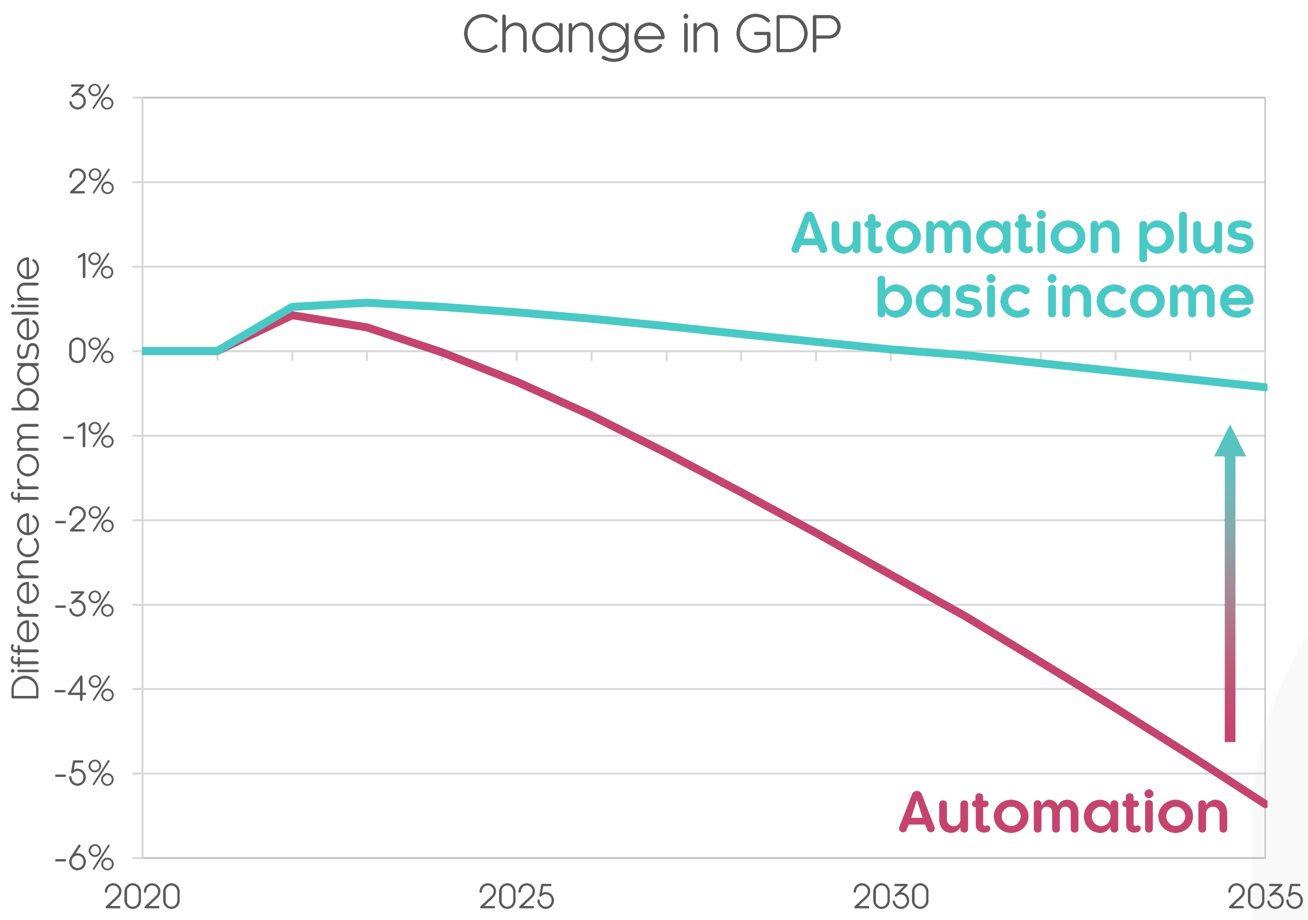


- Neutral GDP impacts
  - (some) more spending
  - (some) more jobs
- Redistribution to lower-income households
- New money → new income
- Inflation can be mild (scheme design matters)

Results: Automation and DFSM basic income (1)

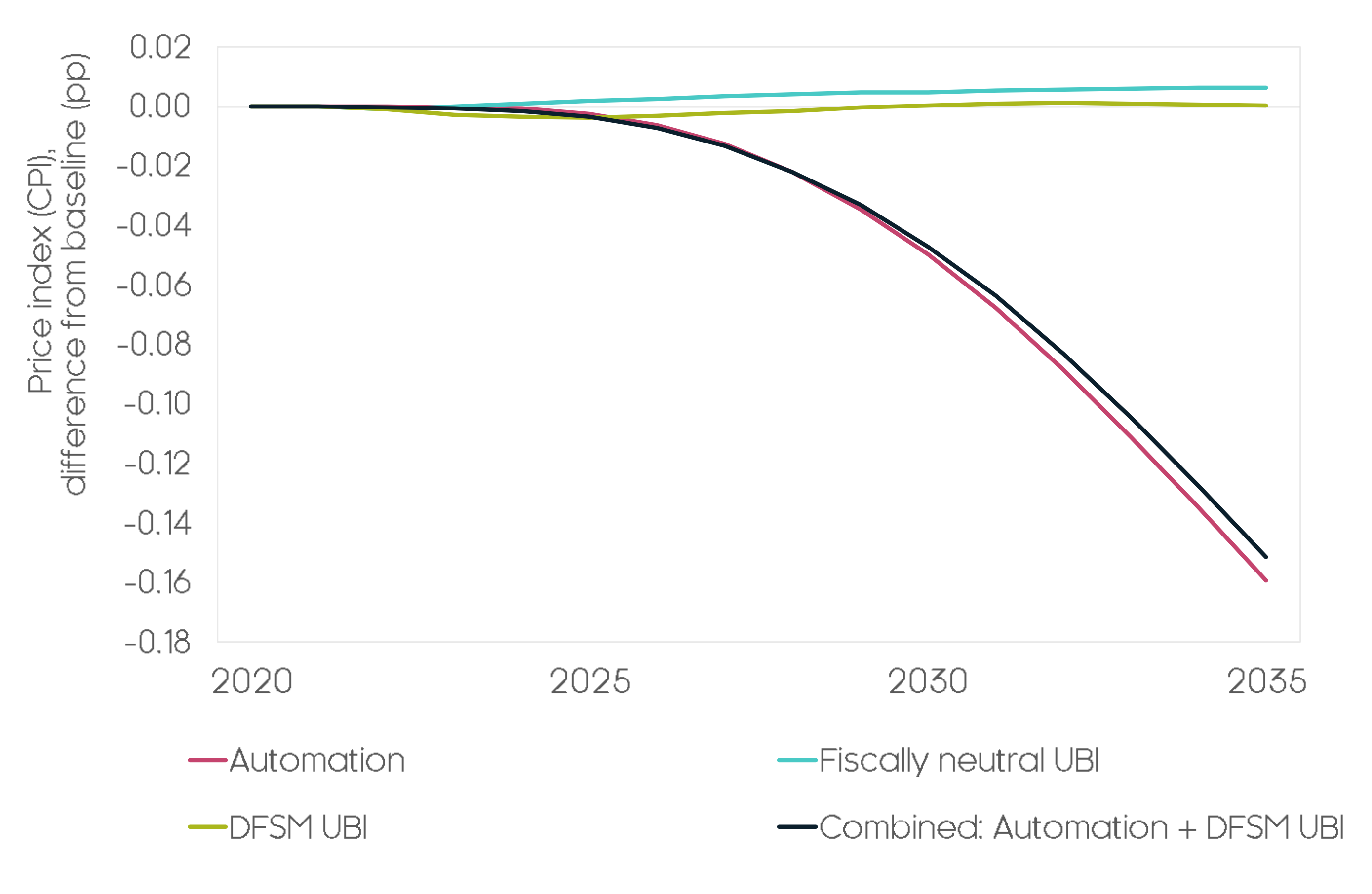
- Automation
  - sectors invest in higher-productivity automation technologies that replace workers
  - job losses by 2035 of around 15%, varying by sector and following PwC (2017 and 2018)
- Automation + DFSM UBI
  - introduce basic income to return household incomes to baseline levels

Results: Automation and DFSM basic income (2)



- An adverse automation future
  - high automation
  - lost jobs (and income)
- Basic income to fill the gap
- Mild inflation (automation matters more)

Results: Inflationary impacts of UBI appear mild



- UBI schemes increase prices mildly
  - short-run: shock is absorbed by higher capacity utilisation
  - long-run: productive capacity expands to match demand
- Automation has a strong negative impact, by increasing productive capacity and substantially lowering labour costs
- In the combined scenario DFSM UBI does slightly raise prices but the effect of automation dominates

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Limitations

- Uncertainty as to future wage bargaining/setting behaviour under a basic income
- No explicit assessment of exchange rate effects
  - though results also suggest no obvious need for interest rate interventions
- No consideration of wider basic income responses such as:
  - role of education and training in driving future productivity
  - health and wellbeing

Conclusions

- Small-scale basic income:
  - no obvious deleterious effects for an economy operating below capacity
  - design of the basic income *scheme* matters, though
- Automation:
  - in the high-automation future considered, automation erodes household incomes, leading to deficient demand
  - basic income (as modelled) appears able to sustain household incomes
    - an external funding source (here, DFSM) appears stable in real-economy terms
- Results rest on the presence of spare capacity in the economy
  - extra spending can be inflationary at full capacity
  - assumptions / the model matters

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