Cheaper Goods, Thinner Budgets: Can Lower Prices and Tax-Financed Benefits Protect Workers Displaced by Automation?

Ido Parnas

Working paper, November 2026

Abstract

Two claims recur in the debate on AI and work: automation makes goods cheaper, so people on fixed incomes gain; and the gains from automation can be taxed and redistributed as a benefit. This paper examines the two claims together. I build a closed-accounting simulation of an economy with four household cohorts, firms and a government that cannot borrow, impose unemployment that rises to 20% over a 20-year path, and run 576 combinations of assumptions under seven corporate-financing variants. Each case is compared with a matched control path without automation. Three results emerge. First, preserving the consumption of displaced workers is possible but conditional: of 202 cases completed in every variant, both displaced cohorts kept at least 90% of their initial consumption in 75. Second, protecting the level does not protect relative position: in all 42 comparisons with a matched control, displaced workers ended below it, by about a fifth to a quarter at the median. Third, passing cost savings through to prices hurts renters and mortgage holders, whose housing payments are nominal, and shrinks the fiscal room that pays the benefit. Indexing the benefit to housing costs repairs the damage only where the budget has room at the unemployment peak. A partial calibration to Israel shows the damage concentrated in the bottom income decile and a corporate tax take below the model's lowest scenario. On the empirical side, firm AI adoption in 13 European countries shows a negative but non-significant association with employment in exposed occupations; in Israel, the most exposed occupation group did not become more over-represented among the unemployed after generative AI tools appeared. The model is uncalibrated and the counts are not probabilities. The design of the benefit and its source of finance matter at least as much as its size.

JEL codes: E62, H53, J65, O33, R21.

Keywords: automation, artificial intelligence, unemployment benefits, basic income, pass-through, debt deflation, housing, fiscal space, Israel.

Independent researcher, no institutional affiliation. Contact and materials: https://macrovisionresearch.com. *This is a working paper; comments are welcome. All numbers are model outputs or descriptive statistics, not forecasts.*

1 Introduction

Large language models and other generative tools have widened the range of tasks a machine can perform beyond the routine tasks at the centre of the previous computerisation wave (Autor, Levy and Murnane, 2003). Recent exposure indices place a large share of the workforce in occupations where part of the work is exposed. By the ILO's refined index, one worker in four worldwide is in an occupation with some exposure, and clerical occupations are the most exposed (Gmyrek et al., 2025); in the United States about 19% of workers may see at least half of their tasks exposed (Eloundou et al., 2024).

Exposure is not job loss, and the early evidence is mixed. Most studies find no significant aggregate effect on employment or earnings (Humlum and Vestergaard, 2025), while one finds a relative decline in employment of young workers in exposed occupations (Brynjolfsson, Chandar and Chen, 2025). The public debate nevertheless asks mainly how many jobs will disappear. This paper asks a different, conditional question: **if a large share of workers did lose their jobs, could the combination of lower prices and tax-financed benefits preserve their purchasing power, and under what conditions?**

The question comes from two claims that are usually made separately. The first is that automation lowers production costs, so households with fixed incomes benefit from falling prices. The second is that the returns to automation can be taxed and paid out as a benefit. Each has a literature: on the cost of a basic income (Hoynes and Rothstein, 2019), on taxing automation (Guerreiro, Rebelo and Teles, 2022), and on whether losers can be compensated (Korinek and Stiglitz, 2019). But the claims are not independent. Falling prices shrink the tax base from which the benefit is paid. Nominal debts, of households and of the government, do not fall with prices (Fisher, 1933). And those who own capital receive the return to automation while those who lose their jobs depend on the benefit (Moll, Rachel and Restrepo, 2022).

I study the two claims together in a closed-accounting simulation. Every unit of money has a defined source, the government cannot issue new debt, and unemployment rising to 20% is imposed as a scenario. The 20% path is a deliberate extreme: it assumes displacement without the reinstatement of new tasks that the task-based literature warns cannot be taken for granted (Acemoglu and Restrepo, 2019). The simulation is not calibrated and is not a forecast; its role is to isolate mechanisms and ask what must hold for the price and benefit claims to work.

The paper makes three contributions. First, it links the pass-through of productivity gains to prices, the financing of transfers, and nominal housing and debt payments in a single path, and shows that these channels interact. I have not found earlier work that studies price pass-through and the fiscal room for benefits together. Second, it distinguishes a benefit that protects the *level* of consumption from one that protects

relative position, and measures the gap inside the model. Third, it complements the simulation with descriptive evidence from Europe and Israel on whether exposed occupations already show employment effects.

Section 2 reviews related work. Section 3 describes the model and Section 4 the simulation design. Section 5 presents the simulation results and a partial calibration to Israel. Section 6 presents the empirical evidence. Section 7 discusses implications and Section 8 limitations.

2 Related literature

Automation and employment. The task-based approach analyses technology through the tasks it moves from workers to machines. Computerisation substitutes for routine tasks that follow explicit rules and complements problem-solving and complex communication (Autor, Levy and Murnane, 2003). Automation has a displacement effect that always lowers the labour share of value added and a reinstatement effect through new tasks; slower US employment growth over three decades reflected faster displacement and weaker reinstatement (Acemoglu and Restrepo, 2019). One more industrial robot per thousand workers lowered the employment-to-population ratio by 0.2 percentage points and wages by 0.42% in US local labour markets (Acemoglu and Restrepo, 2020). The model here imposes displacement and assumes no reinstatement, which is why it is presented as an extreme scenario.

Measuring exposure. Ability-based (Felten, Raj and Seamans, 2021) and task-based indices for language models (Eloundou et al., 2024) measure technical potential, not job loss, and do not distinguish augmentation from substitution. The empirical section uses the ILO 2025 index, built from about 30,000 tasks, a worker survey and expert validation (Gmyrek et al., 2025).

Early evidence. Linked survey and administrative data for Denmark yield precise zeros for earnings and hours two years after chatbot adoption (Humlum and Vestergaard, 2025). US payroll data show a 16% relative decline in employment of workers aged 22–25 in exposed occupations (Brynjolfsson, Chandar and Chen, 2025). Exposed establishments reduce hiring into non-AI positions, but the aggregate effect is too small to detect (Acemoglu, Autor, Hazell and Restrepo, 2022). In Israel, the Bank of Israel (2025) estimates that about a fifth of employees are in substitutable occupations; the Taub Center finds about 23% of workers in jobs that may be harmed (Debowy et al., 2024) and a rise in the share of exposed occupations among the unemployed from 14–16% in 2019–2022 to 20–25% in 2025, only a modest part of which the authors attribute to AI (Debowy, Epstein and Weiss, 2026).

Distribution and finance. Automation can raise inequality by raising the return

to wealth (Moll, Rachel and Restrepo, 2022). Under reasonable conditions non-distortionary taxes can compensate losers (Korinek and Stiglitz, 2019). A basic income large enough to raise transfers to low-income families is very costly (Hoynes and Rothstein, 2019). Robots should be taxed only while the current generation of routine workers is still working (Guerreiro, Rebelo and Teles, 2022). When prices fall, the real burden of nominal debt rises (Fisher, 1933). This paper connects these links in one accounting path with explicit budget constraints.

3 The model

All quantities are in normalised units: base-year nominal output is 100, the workforce is 1 and the base price level is 1. They are not currency amounts and do not describe a calibrated country.

3.1 Production, prices and the government

The horizon is 20 years with a 10-year transition. Automation progresses as $a_t = \min(1, t/10)$ and unemployment is imposed as $u_t = 0.2\,a_t$. Efficiency is $e_t = 1 + g\,a_t$, where g is the productivity gain, and the nominal wage per employed worker is constant. Real output is $Y_t^r = e_t(1 - u_t)$. The price index passes a share π of the unit-labour-cost saving into prices:

$$P_t = 1 - \pi \cdot 0.6 \cdot \left(1 - \frac{1}{e_t}\right),$$

so that with $g = 1$ and full pass-through ($\pi = 1$) the price level ends at 0.7. Nominal output is $Y_t = 100\,P_t\,Y_t^r$, the wage bill $W_t = 60(1 - u_t)$ and profits $\Pi_t = Y_t - W_t$.

Revenue is a 20% wage tax plus a profit tax, $T_t^{\pi} = \tau_t\,\kappa_t \max(0, \Pi_t)$, where the statutory rate τ and the share of profits within reach of the tax κ move linearly from their base values (25% and 1) to the scenario values over the transition. Existing government purchases are fixed in real terms and interest of 3% is paid on an initial nominal debt of 60. **The government cannot issue new debt.** Fiscal room is

$$\text{avail}_t = R_t - G_t - 0.03 \cdot \text{bonds}_t,$$

and if the required benefits exceed it, every benefit is scaled down by the same fraction. A surplus redeems bonds; a negative treasury balance stops the path.

3.2 Households

There are four cohorts: retained workers (mass 0.7), productive capital owners (0.1), displaced workers without initial consumer debt (0.1) and displaced workers with consumer debt (0.1). Displaced cohorts lose employment in step with u_t and are fully unemployed at 20% unemployment. Capital ownership is either concentrated (owners hold all equity) or broad (equity in proportion to cohort mass). The consumer loan is nominal and interest-only at 4%, so its real burden rises when prices fall.

The required benefit for a displaced cohort replaces its price-indexed reference disposable income, net of its own dividends, plus current contractual interest for debtors. In the baseline rule the benefit is indexed to the price of goods only. Households consume 90% of spendable income after housing payments, sell equity to cover shortfalls and invest surpluses above a cash buffer.

Housing tenure takes four forms: outright owners, fixed-rate mortgage holders, rate-reset mortgage holders and renters. Rent, mortgage payments and maintenance are **nominal**. In the reference calibration rent is 12 against a reference disposable income of 48 (concentrated ownership) or 78 (broad), that is 25% or 15%, and a mortgage of 150 at 4% over 25 years implies a payment of 9.6, about 20% or 12% of reference income. A stress setting raises rates and housing costs.

3.3 Firms and corporate finance

Firms pay out distributable profits as dividends, invest from retained cash and, depending on the variant, can draw on corporate credit lines or convert unpaid debt into equity after one, two or three years of non-payment. A capital-feedback rule links investment to profitability without changing imposed unemployment. A path is *completed* if neither firms nor the government run out of cash over the 20 years.

3.4 Outcome and the matched control

The outcome is non-housing real consumption, normalised to each cohort's initial level. A cohort is **preserved** if it keeps at least 90% of its initial level in every year of a completed path; the threshold is a research choice, not an estimated welfare line. Each case has a **matched control** that removes displacement and the productivity gain but keeps policy and housing schedules, so that the automation scenario can be compared with the same economy without automation.

4 Simulation design

The grid crosses six factors, giving 576 cases:

- pass-through of cost savings to prices $\pi \in \{0, 0.5, 1\}$;

- productivity gain $g \in \{0.25, 0.5, 1\}$;
- profit-tax rate $\tau \in \{25\%, 35\%\}$ and share of profits within reach of the tax $\kappa \in \{0.5, 1\}$;
- capital ownership (concentrated or broad);
- housing tenure (four forms) and housing and interest-rate conditions (stable or stressed).

Each case runs under seven corporate-financing variants: no credit, three credit-line sizes, and three debt-to-equity workouts. Cases are compared **within themselves** across all seven variants, to avoid comparing different subsets of successful paths. The grid is not a representative sample of possible worlds, so counts of cases are descriptive and are not probabilities. All runs pass automated accounting checks: every flow has a counterpart and stocks reconcile each year.

5 Simulation results

5.1 Result 1: preservation is possible but conditional

Of the 576 cases, 202 complete in all seven variants. In those, retained workers and owners are preserved in every case, but both displaced cohorts are preserved in only 75 (Table 1). Most of the remaining cases stop because firm or government cash runs out; a stop is a property of the model's accounting, not an economic collapse, and conveys neither success nor failure.

Table 1: Preservation among the 202 cases completed in every financing variant.

Cohort	Preserved in all 7 variants	Below the threshold in all 7
Retained workers	202	0
Productive capital owners	202	0
Displaced, no consumer debt	83	119
Displaced, with consumer debt	75	127

The conditional conclusion does not depend on the threshold, though the count does: both displaced cohorts are preserved in 95 cases at an 80% threshold, 87 at 85%, 75 at 90% and 51 at 95%. Robustness across the seven variants is largely mechanical, because in these 202 paths corporate credit is not drawn.

5.2 Result 2: protecting the level does not protect relative position

In all 42 cases that also have a complete matched control, and in all seven variants, final consumption of both displaced cohorts is below the control (Table 2). At the

median, displaced workers end about a quarter (no consumer debt) or a fifth (with debt) below the control, while retained workers end about a sixth above it.

Table 2: Final non-housing real consumption relative to the matched control, 42 cases.

Cohort	Median	Interquartile range	Full range
Retained workers	+16.5%	+14.0% to +26.3%	+6.3% to +36.9%
Productive capital owners	+8.9%	−6.9% to +36.8%	−21.6% to +54.1%
Displaced, no consumer debt	−25.3%	−41.8% to −21.7%	−66.1% to −13.8%
Displaced, with consumer debt	−20.7%	−45.9% to −16.0%	−85.9% to −6.4%

Figure 1. Consumption paths in the median-gap paired case (no-credit variant)

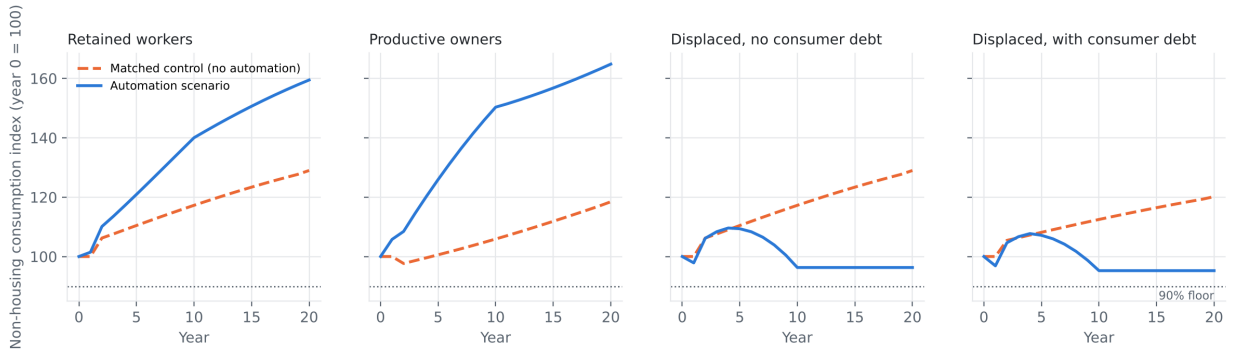
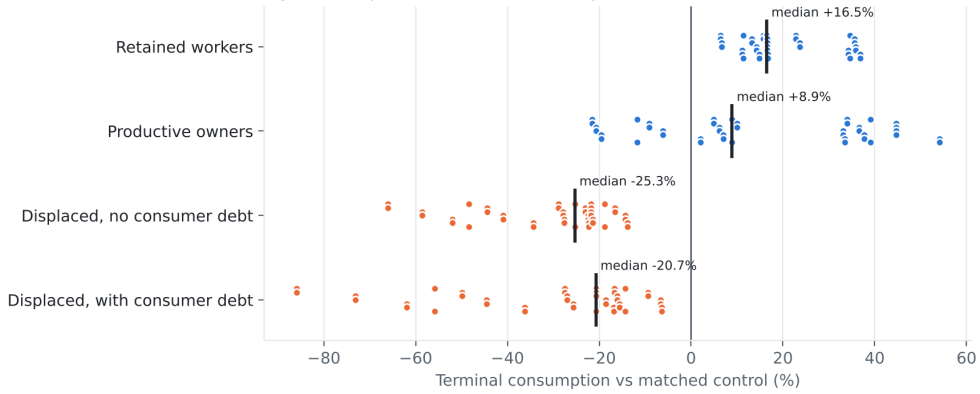


Figure 2. Gap to matched control, 42 paired cases (each dot = one case)



Two questions are at stake: whether a household keeps its own level (an absolute floor), and whether it falls behind a growing economy (a relative comparison). A benefit defined against today's living standard protects against the first but not the second; anyone on a fixed real income in a growing economy falls behind by construction. These are 42 comparisons, not 42 independent observations: they share the model's price, tax and behavioural assumptions.

A benefit defined as a constant share of output instead of a constant real level narrows the gap. In the same 42 comparisons, displaced workers reach or exceed the control

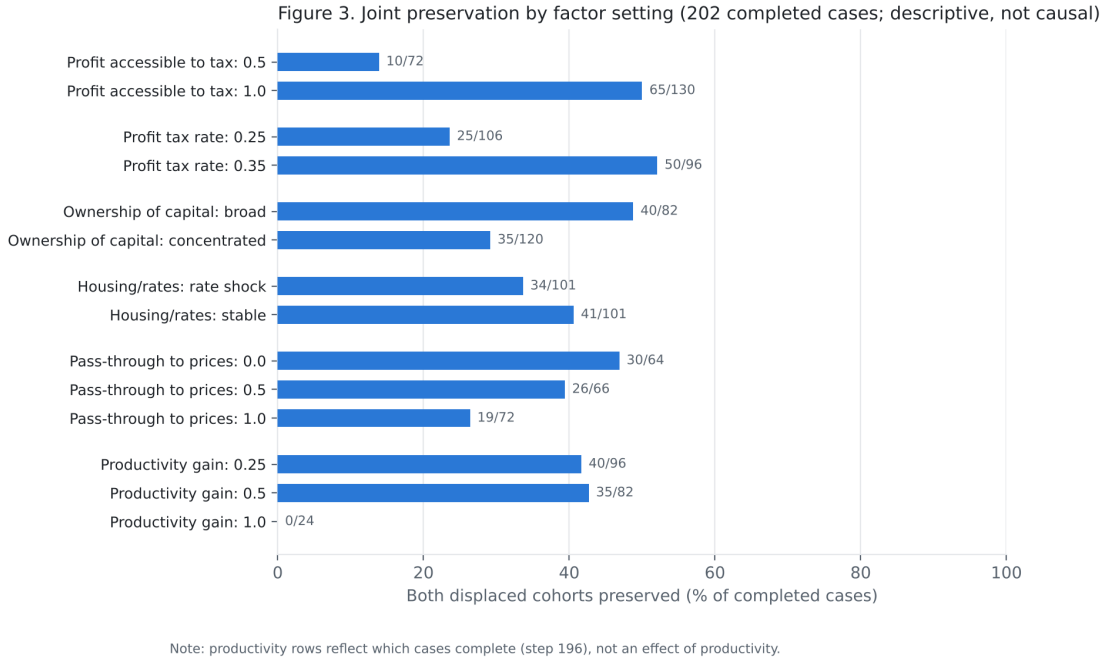
in 18 cases instead of none, and in every case where the budget has room. But in all 42 cases the budget binds at the unemployment peak, so the median gap stays large (−20% instead of −25% for displaced workers without debt).

5.3 Result 3: what distinguishes the paths

Preservation of the displaced is associated above all with how much profit reaches the public budget (Table 3, Figure 3). These are counts conditional on completion, not causal estimates.

Table 3: Joint preservation of the displaced by factor value, 202 completed cases.

Factor and value	Completed	Both displaced preserved	Share
All profit within reach of tax ($\kappa = 1$)	130	65	50%
Half of profit within reach ($\kappa = 0.5$)	72	10	14%
Profit-tax rate 35%	96	50	52%
Profit-tax rate 25%	106	25	24%
Broad capital ownership	82	40	49%
Concentrated ownership	120	35	29%
Stable housing and rates	101	41	41%
Housing and rate stress	101	34	34%
Pass-through 0	64	30	47%
Pass-through 0.5	66	26	39%
Full pass-through	72	19	26%



Two patterns look surprising: more productivity and more pass-through do not improve the outcome. They have different explanations.

Productivity: selection. The 0 of 24 at the highest productivity gain is not evidence that productivity harms the displaced. At $g = 1$, no path with full tax reach completes, so all 24 completed paths have partial reach, the group with the lowest preservation rate. Within partial reach, the remaining difference (10 of 48 at $g = 0.5$ against 0 of 24 at $g = 1$) rests on 24 cases and is not established.

Pass-through: two channels. Here composition does not explain the pattern; full pass-through shows the lowest preservation within each level of tax reach. In 64 pairs of cases that differ only in pass-through (0 against 1), at year 10:

Table 4: Fiscal effects of full pass-through, 64 matched pairs, year 10.

Real measure	Median change under full pass-through	Interquartile range
Government revenue	−1.2%	−3.0% to +1.2%
Room for benefits after existing spending and interest	−12.6%	−14.3% to −6.1%
Benefits actually paid	−3.2%	−11.7% to +3.3%

Savings move from corporate profits, which are a tax base, to consumers; interest on existing nominal public debt does not fall with prices; and existing spending comes first. A small fall in revenue therefore becomes a large cut in what can be paid.

The household channel is housing. Splitting preservation by tenure shows the fall concentrated among renters and mortgage holders:

Table 5: Cases where both displaced cohorts are preserved / completed cases, by tenure and pass-through.

Tenure	$\pi = 0$	$\pi = 0.5$	$\pi = 1$	Median change in final index (points)
Outright owners	8/16	8/16	8/18	−1.48
Fixed-rate mortgage	8/16	6/16	6/18	−9.94
Rate-reset mortgage	6/16	4/16	3/18	−11.25
Renters	8/16	8/18	2/18	−11.31

The mechanism follows from an assumption: rent, mortgage payments and maintenance are nominal, while the benefit is indexed to the price of goods. When prices

fall, the benefit shrinks and housing costs do not, and the difference comes out of non-housing consumption. This is Fisher's debt-deflation logic in two versions, a private one in housing and a fiscal one in public debt. The nominal consumer loan explains only about a quarter of the loss for indebted displaced workers.

Does indexing the benefit to housing costs fix it? Re-running the grid with a benefit whose housing component tracks actual housing costs, every path in which the budget has room at year 10 preserves the displaced (64 of 64, against 61 of 71 under the goods-only rule). But renters under full pass-through stay at 2 of 18: in 16 of them the budget binds at the unemployment peak and the benefit is rationed, so a higher entitlement only reallocates a fixed amount. The fiscal channel is secondary in explaining the gap between tenures but is the binding constraint on repairing it.

5.4 A partial calibration to Israel

Two blocks of inputs were set from Israeli data, leaving the rest of the model as in the grid.

Housing. In the Central Bureau of Statistics' 2024 household expenditure survey, 62.5% of households own their dwelling and 32.7% rent; in the bottom income decile 56.5% rent. Mean rent is about 17% of net household income on average and about 45% in the bottom decile. The share of owners with a mortgage (39.3%) comes from an older CBS figure and is varied from 30% to 50%; the average mortgage payment-to-income ratio is set at 29%.

Table 6: Share of grid paths in which both displaced cohorts are preserved, Israeli tenure mix and housing burdens.

Population	Benefit indexed to	$\pi = 0$	$\pi = 0.5$	$\pi = 1$
All households	goods	43.6%	42.8%	26.4%
All households	goods and housing	45.3%	39.5%	32.3%
Bottom decile	goods	32.2%	18.7%	15.3%
Bottom decile	goods and housing	33.2%	22.4%	34.0%

These shares are reweightings of grid counts, not probabilities; their value is in the comparison across rows. For the average Israeli household the full pass-through rate equals that of the uncalibrated grid. In the bottom decile, where most households rent and rent is a large share of income, it falls by about two fifths, and indexing the benefit to housing costs more than doubles it. At a rent burden of 45%, no renter path is preserved when half of the productivity gain passes into prices, and only 4 of 16 even without pass-through.

Two sensitivities test the nominal-rent assumption. If rent fell one-for-one with goods prices, renters under full pass-through would be preserved in 6 of 18 paths, still

below outright owners (8 of 18); rigidity of rent explains only part of the damage, the rest is the fiscal channel. If landlords captured 30–60% of benefit spending through higher rents, the damage would deepen: at 60%, renters are hurt even without pass-through (4 of 16 instead of 8) and no path survives full pass-through.

Corporate tax. Israel's statutory corporate tax is 23% and corporate tax revenue was 3.6–4.4% of GDP in 2021–2024. Holding the model's profit share, this corresponds to about 42% of profits within reach of the tax and a tax take of about 3.9% of output, below the lowest corner of the grid (5%).

Table 7: Re-running the other factors at Israeli corporate-tax values (no-credit variant).

Setting	τ	κ	Tax / output	Completed (of 144)	Displaced preserved
Israel, low	23%	0.39	3.6%	44	22
Israel, central	23%	0.42	3.9%	44	18
Israel, high	23%	0.48	4.4%	32	7
Grid corner	25%	0.5	5%	24	0
Grid corner	35%	0.5	7%	48	10
Grid corner	25%	1	10%	82	25
Grid corner	35%	1	14%	48	40

The results form a narrow corridor: for each level of tax take, only one range of productivity gains lets paths complete. With a low take the government cannot finance existing commitments in cash unless productivity rises a great deal; with a high take, a large productivity gain ends in a corporate liquidity failure. At Israeli values all paths with a 25% or 50% productivity gain fail, and only when productivity doubles do 44 of 144 paths complete, 18 of them preserving both displaced cohorts. In the model, financing rather than prices is the first constraint Israel would meet.

6 Empirical evidence

6.1 Europe: AI adoption and employment in exposed occupations

I combine firm AI adoption by country and year (Eurostat, isoc_eb_ai), the ILO 2025 exposure index averaged to ISCO-08 two-digit groups, and employment by country, occupation and year from the EU Labour Force Survey (lfsa_egai2d). The sample has 848 observations: 13 countries, 39 occupation groups and annual changes ending in 2024 and 2025. The dependent variable is annual employment growth in percentage points; the regressor of interest is exposure (0 to 1) times the change in adoption (percentage points), with country-year and occupation fixed effects and standard errors clustered by occupation.

The interaction coefficient is $\widehat{\beta} = -0.545$ (95% confidence interval −1.61 to 0.52, $p = 0.315$). For a typical rise in adoption of about 7.6 points in a year and an exposure gap of 0.52 between the most and least exposed groups, the point estimate corresponds to employment growth about 2.1 points a year slower in the exposed group, with a confidence interval running from 6.4 points slower to 2.1 points faster. The data therefore do not rule out a large negative effect. The sign is negative in all 54 robustness checks and none is significant at 5%: in matched cells $\widehat{\beta} = -0.686$ ($p = 0.473$), and dropping one country or one occupation at a time gives estimates between −0.84 and −0.20. Because of this null, the 20% unemployment scenario remains an assumption rather than an estimate, and the coefficient is not carried into the model.

6.2 Israel: the unemployed by last occupation

The CBS Labour Force Survey reports the unemployed who worked in the previous 12 months by the occupation of their last job (table 5.3). I compare each group's share of the unemployed with its share of employment (relative risk, RR) for 2017, 2018, 2021, 2022, 2023 and 2024.

Table 8: Relative risk of unemployment by occupation of last job, Israel.

Occupation group (most exposed first)	ILO exposure	RR 2017–18	RR 2021–22	RR 2023–24
Clerical support workers	0.549	1.35	1.60	1.34
Professionals	0.400	0.62	0.60	0.78
Managers	0.362	0.82	0.74	0.73
Technicians and associate professionals	0.351	0.97	1.01	0.93
Service and sales workers	0.238	1.34	1.28	1.17
Skilled trades and operators	0.198	0.97	1.17	1.11
Elementary occupations	0.152	1.68	1.64	1.68

Clerical workers, the most exposed group, were over-represented among the unemployed before generative AI tools, but their over-representation did not grow afterwards (RR 1.60 in 2021–22, 1.34 in 2023–24). The clearer change is among professionals, the second most exposed group, which includes software developers: their share of the unemployed rose from 16% in 2017 to 27% in 2024 and their RR from about 0.6 to 0.78. There is no exposure gradient in the change, and the unemployed remain slightly less exposed than the employed. This is consistent with the Taub Center's findings, but 2023–2024 include the war, and two years in seven occupation groups are not a test.

7 Discussion and policy implications

The answer to the conditional question is that lower prices and benefits can protect the consumption level of displaced workers but not their relative position, and only when there is budget to pay the benefit at the unemployment peak. Four implications follow, all conditional on the model's assumptions:

1. **Index the benefit to a basket that includes housing.** Indexing to goods prices alone shifts the cost of deflation onto renters and mortgage holders.
2. **Build fiscal room for the unemployment peak.** Without it, a better indexation rule only reallocates a fixed amount.
3. **Widen the share of profits within reach of the tax before raising the rate.** In the counts, tax reach is associated with a larger difference than the pass-through rate; the central question is institutional as much as technological.
4. **Decide what the benefit preserves:** a constant living standard or a constant share of what the economy produces. The second narrows the relative gap, but only when the budget can pay it.

The empirical null is neither a reason for complacency nor for alarm. It points to the need for adoption data by occupation and annual monitoring of who becomes unemployed.

8 Limitations

- **Uncalibrated model.** Productivity, pass-through, tax rules and household behaviour are hypothetical; counts show mechanisms, not probabilities. The Israeli calibration covers only housing and corporate tax.
- **Imposed unemployment.** The 20% path is a scenario, and employment of the displaced is fixed.
- **Incomplete paths.** Many cases stop when firm or government cash runs out. Nothing is inferred from them, and all counts are conditional on completion.
- **Partial controls.** The control removes displacement and productivity but keeps policy and housing, so only 42 cases are fully paired.
- **Nominal channels built in.** In the baseline, rent does not respond to prices or local demand; the two sensitivities above were run separately, not jointly.
- **Early empirical evidence.** Two annual changes, adoption measured by country rather than occupation, unweighted exposure, and endogeneity between adoption and employment. The Israeli evidence is descriptive, at seven occupation groups.

Further work includes completing the Israeli calibration (the tenure of workers in exposed occupations, a current mortgage share, the wage tax and the profit share), following the composition of the Israeli unemployed into 2025 at the two-digit level,

letting rent respond jointly to prices, benefits and local demand, and updating the European design when 2026 data and occupation-level adoption become available.

9 Data and code availability

The model, data pipeline, tests and archived outputs for every number in this paper are maintained by the author with automated accounting and regression tests. Archived results, the full Hebrew thesis draft and interactive tools are available at https://macrovisionresearch.com; code and data are available from the author on request.

References

Acemoglu, D., Autor, D., Hazell, J., & Restrepo, P. (2022). Artificial intelligence and jobs: Evidence from online vacancies. *Journal of Labor Economics*, 40(S1), S293–S340. https://doi.org/10.1086/718327

Acemoglu, D., & Restrepo, P. (2019). Automation and new tasks: How technology displaces and reinstates labor. *Journal of Economic Perspectives*, 33(2), 3–30. https://doi.org/10.1257/jep.33.2.3

Acemoglu, D., & Restrepo, P. (2020). Robots and jobs: Evidence from US labor markets. *Journal of Political Economy*, 128(6), 2188–2244. https://doi.org/10.1086/705716

Autor, D. H., Levy, F., & Murnane, R. J. (2003). The skill content of recent technological change: An empirical exploration. *Quarterly Journal of Economics*, 118(4), 1279–1333. https://doi.org/10.1162/003355303322552801

Bank of Israel (2025). The expected impact of generative artificial intelligence on workers: Implications for labour market policy. Box in the Bank of Israel Annual Report 2024 (Hebrew).

Brynjolfsson, E., Chandar, B., & Chen, R. (2025). Canaries in the coal mine? Six facts about the recent employment effects of artificial intelligence. Stanford Digital Economy Lab.

Debowy, M., Epstein, G. S., Bental, B., Weiss, A., & Weinreb, A. (2024). Artificial intelligence and the Israeli labor market. Taub Center Policy Paper 06.2024.

Debowy, M., Epstein, G. S., & Weiss, A. (2026). How artificial intelligence changed the composition of the unemployed in Israel. Taub Center for Social Policy Studies in Israel.

Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2024). GPTs are GPTs: Labor market impact potential of LLMs. *Science*. https://doi.org/10.1126/science.adj0998

Felten, E., Raj, M., & Seamans, R. (2021). Occupational, industry, and geographic exposure to artificial intelligence. *Strategic Management Journal*, 42(12), 2195–2217. https://doi.org/10.1002/smj.3286

Fisher, I. (1933). The debt-deflation theory of great depressions. *Econometrica*, 1(4), 337–357.

Gmyrek, P., Berg, J., et al. (2025). Generative AI and jobs: A refined global index of occupational exposure. ILO Working Paper 140. https://doi.org/10.54394/HETP0387

Guerreiro, J., Rebelo, S., & Teles, P. (2022). Should robots be taxed? *Review of Economic Studies*, 89(1), 279–311. https://doi.org/10.1093/restud/rdab019

Hoynes, H., & Rothstein, J. (2019). Universal basic income in the United States and advanced countries. *Annual Review of Economics*, 11, 929–958. https://doi.org/10.1146/annurev-economics-080218-030237

Humlum, A., & Vestergaard, E. (2025). Large language models, small labor market effects. NBER Working Paper 33777.

Korinek, A., & Stiglitz, J. E. (2019). Artificial intelligence and its implications for income distribution and unemployment. In *The Economics of Artificial Intelligence: An Agenda*. University of Chicago Press.

Moll, B., Rachel, L., & Restrepo, P. (2022). Uneven growth: Automation's impact on income and wealth inequality. *Econometrica*, 90(6), 2645–2683. https://doi.org/10.3982/ECTA19417

Data. Central Bureau of Statistics (Israel), Household Expenditure Survey 2024, first findings (release 315/2026); Labour Force Survey annual publications, table 5.3 (2017–2024 editions). Eurostat, isoc_eb_ai and lfsa_egai2d. ILO, ILOSTAT employment by occupation; ILO 2025 generative AI exposure index. OECD revenue statistics.