When AI Takes Our Jobs, It Should Also Pay Our Wages

The MOSAIC Model: A Rule-Based Negative Income Tax
Funded by the AI Dividend

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Executive Summary

AI can raise productivity while displacing labor. When workers are replaced by more productive capital, GDP rises even as labor's share falls—creating a large *capital windfall* ($\Delta\Pi$) available for redistribution. This windfall manifests through two channels: rising capital incomes and AI-driven deflation. The policy constraint is not affordability—the surplus exists—but capturing it at scale.

We propose the MOSAIC Model: a Negative Income Tax funded by two low-friction channels matched to these manifestations. *Dynamic VAT* indexes rates to AI deflation, keeping consumer prices stable while recapturing the deflation dividend. *Ring-fencing* earmarks corporate tax, capital gains tax, and government wage savings above pre-AI trends without raising statutory rates.

In an Israeli calibration, these channels finance a poverty-ending floor of approximately 6,750 NIS/month per adult-equivalent—roughly 14,000 NIS/month for a family of four, equivalent to today's 5th decile. The system remains budget-balanced by construction. The capital windfall far exceeds this cost (1,123B vs. 266B NIS under AGI), opening the possibility of a *third channel* (windfall levies, estate taxation, data dividends) to finance a Universal High Income, placing that same family in the top quartile.

The basic floor is guaranteed by default; higher floors reflect explicit democratic choices. Political feasibility is front-loaded: early adoption is critical before disruption peaks.

Replication materials: `https://github.com/Mosaic-AI-Policy-Institute/mosaic-model`
Interactive calculator: `https://mosaic-ai-policy-institute.github.io/mosaic-model/`

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1 Introduction

1.1 The Automation Paradox

Artificial intelligence is advancing rapidly, but its labor-market impact remains deeply uncertain. While forecasts vary widely, a non-trivial region of the space of possible futures includes scenarios in which AI substitutes for human labor at scale, potentially leading to widespread and persistent unemployment. Because the costs of under-preparing for such outcomes are large and difficult to reverse, prudence requires taking them seriously—even in the absence of consensus about their likelihood. This prospect has renewed interest in redistribution mechanisms, particularly universal basic income and negative income tax schemes, that could support displaced workers.

Yet redistribution proposals face an apparent affordability challenge: even strong economies cannot indefinitely pay a working-wage to large shares of the population. What seems unaffordable today appears even more so as unemployment rises: fewer workers implies lower income-tax receipts, weaker consumption-tax bases, and growing fiscal deficits. Governments can, of course, run deficits to smooth short-term shocks, but financing large-scale transfers against a shrinking revenue base cannot be sustained beyond a transitory period.

This paper argues that the paradox dissolves once we recognize how AI-driven displacement differs from classical unemployment. Consider a thought experiment: imagine sending a digital twin to work in your stead. This agent performs your tasks faster and cheaper than you could, increasing your firm's output. If you retain your wage while not working, you are better off (gaining leisure), the firm is better off (gaining productivity), and aggregate output rises. In classical unemployment, the worker leaves and output falls; in AI unemployment, the worker leaves but is substituted by a more productive capital asset, causing output to rise.

The key insight is that when employment falls ($\Delta L < 0$) but output rises ($\Delta Y > 0$), the tax base expands rather than contracts. The central economic challenge is not a lack of resources—the surplus exists—but the mechanism to capture and redistribute it. We call the increment to capital income under automation the *capital windfall* ($\Delta\Pi$), and this paper develops a framework for measuring, capturing, and distributing it.

1.2 The AGI Imperative

How much AI progress should policymakers plan for? This question has no assured answer. We therefore adopt a design philosophy that takes seriously the possibility of transformative AI while remaining robust under slower trajectories.

We analyze four scenarios spanning the uncertainty range (Table 1): a *Low Displacement* scenario with 40% TFP (Total Factor Productivity) growth and 6% unemployment; a *Strong Displacement* scenario with 60% TFP growth and 10% unemployment; an *AGI* (Artificial General Intelligence) scenario with 120% TFP growth and 40% unemployment; and an *ASI* (Artificial Super Intelligence) scenario with 200% TFP growth and 60% unemployment.

The four scenarios are defined as alternative equilibrium outcomes conditional on different levels of AI-driven productivity and labor displacement. They are not presented as stages along a common trajectory, and the analysis is deliberately agnostic about the time required for any given outcome to materialize.

AGI is our decision-relevant scenario because the costs of error are asymmetric. A redistribution system designed for limited displacement can scale down if AI progress is slower than expected: smaller surpluses simply finance smaller transfers. The reverse is not true. A system designed for mild disruption would fail catastrophically under AGI—revenues would fall short, coverage gaps would emerge, and political legitimacy would be lost precisely when it is most needed.

Israel serves as our decision-relevant exemplar. Israel is a technologically advanced, high-income economy with early exposure to automation, making AI-driven productivity gains and labor displacement particularly salient. At the same time, Israel combines high-quality administrative data with a relatively lean welfare state and flat tax architecture, making affordability claims conservative rather than inflated. Mechanisms that are fiscally viable in Israel are therefore likely to be at least as viable in larger or more redistributive OECD economies. For these reasons, Israel functions not as a special case, but as a demanding test case for the MOSAIC Model.

1.3 Our Contribution

This paper makes four linked contributions:

Affordability. We establish that automation generates sufficient surplus to fund universal transfers. Using a CES production framework calibrated to Israel, we show that GDP growth creates large capital windfalls ($\Delta\Pi$) across all scenarios—ranging from 420B to 1,652B NIS annually depending on AI intensity. These windfalls grow with automation such that the most disruptive scenarios are also the most fiscally abundant.

Collectibility. Affordability is necessary but not sufficient; the surplus must be captured through politically feasible tax instruments. We design a *two-channel architecture* that captures automation gains without requiring new tax categories or manifest rate increases:

- **Channel 1: Dynamic VAT.** AI raises productivity, production costs fall, exerting downward pressure on pre-tax prices. Dynamic VAT captures this deflation dividend by adjusting rates automatically to offset AI-driven price declines, keeping consumer prices stable while converting cost reductions into public revenue. In our calibration, this generates 72B NIS (Low Displacement) to 280B NIS (ASI), with the decision-relevant AGI scenario yielding 167B NIS—without raising shelf prices or requiring discretionary tax hikes.

- **Channel 2: Ring-fenced Income.** Corporate profits, capital gains, and government wage savings surge under automation as the capital share rises and public-sector efficiency improves. We propose earmarking a fixed percentage (75%) of AI-attributable growth in corporate tax, capital gains tax, and government wage savings for redistribution, generating 25–131B NIS across scenarios (Low Displacement to ASI), with the AGI scenario yielding 92B NIS. The proposal does not change tax rates, but rather earmarks over-trend revenues and automation-driven savings.

These two channels, supplemented by program consolidation, fund a revenue-constrained negative income tax that eliminates measured poverty across all scenarios.

Path to Universal High Income. The two-channel system funds transfers sufficient to eliminate poverty, but falls short of a *Universal High Income* (UHI) that would provide upper middle-class living standards to all. We quantify this gap and identify a *third channel*—estate taxation, sovereign wealth returns, data dividends, and other rent-capture mechanisms—that could bridge it. Unlike Channels 1–2, which operate automatically and are 'minimally invasive', Channel 3 requires explicit democratic authorization. We present it as a policy option, not a recommendation.

Political Timing. Redistribution systems face a collective action problem: those who would benefit from transfers are politically weak, while those who would fund them resist. We argue that the political window for automation-era redistribution is *front-loaded*. Early in the transition, AI creates visible disruption that generates political demand for response, while political coalitions around new wealth distributions have not yet solidified. Delay allows habituation to inequality and makes later reform more costly to negotiate.

1.4 Preview of Results

We calibrate the framework to the Israeli economy and simulate outcomes across scenarios. Key findings:

- **Poverty elimination.** All four scenarios eliminate decile-level poverty. The revenue-constrained NIT floors range from 4,073 NIS/month (Low Displacement) to 8,868 NIS/month (ASI), all exceeding the poverty line of 3,324 NIS/month. Under the decision-relevant AGI scenario, the floor reaches 6,751 NIS/month—more than double the poverty line, and comfortably above minimum wage.
- **Inequality reduction.** The Gini coefficient falls from 0.363 to 0.195 (Low Displacement), 0.167 (Strong), 0.112 (AGI), or 0.079 (ASI)—reductions of 46–78%.
- **Fiscal balance.** The system is revenue-constrained by construction. Total funding ranges from 105B NIS (Low Displacement) to 418B NIS (ASI), with the decision-relevant AGI scenario generating 266B NIS. Revenue is composed of dynamic VAT, ring-fenced income, and program consolidation.
- **Work incentives.** The NIT imposes no additional income tax—existing tax rates remain unchanged. The 55–68% effective marginal tax rate applies only to the *benefit phase-out*: each additional shekel of earnings reduces the NIT transfer by 0.5 NIS, but no household is worse off than without the program. This implicit tax on the benefit preserves labor supply incentives while ensuring the NIT is purely additive to disposable income.
- **UHI gap.** Achieving a Universal High Income floor of 15,000 NIS/month (requiring approximately 885B NIS annually) is feasible through third-channel mechanisms that capture capital windfall gains more broadly—program consolidation, estate taxation, data dividends, and international coordination. This represents 65–79% of the AGI capital windfall (45–54% under ASI), depending on whether one counts all funding sources or only those directly capturing automation returns.

1.5 Roadmap

Section 2 develops the theoretical framework: the CES production technology, output growth conditions, capital windfall quantification, and Pareto improvement conditions. Section 3 presents the negative income tax design, including floor determination, taper rates, and work incentive preservation. Section 4 details the two-channel funding architecture and its revenue components. Section 5 calibrates the model to Israeli data and presents simulation results across scenarios. Section 6 analyzes the third channel and path to Universal High Income. Section 7 addresses political feasibility and implementation timing. Section 8 concludes.

2 Theoretical Framework

This section develops the economic foundations for AI-funded redistribution. We establish conditions under which automation raises output despite falling employment, quantify the capital windfall available for redistribution, and derive conditions for Pareto-improving transfers.

2.1 Model Setup

Environment. Consider a two-period economy, $t \in \{0, 1\}$, representing pre- and post-automation eras. The economy comprises firms, heterogeneous households, and a government administering a negative income tax.

Technology. Firms produce using a Constant Elasticity of Substitution (CES) technology:

$$Y_t = A_t \left[\beta K_t^\rho + (1-\beta) L_t^\rho\right]^{1/\rho} \tag{1}$$

where A_t is total factor productivity, $\beta \in (0,1)$ is the capital distribution parameter, and $\sigma = 1/(1-\rho)$ is the elasticity of substitution between capital and labor.

In period 0, the economy operates at baseline productivity A_0. In period 1, AI adoption raises TFP by factor $\alpha > 1$, so $A_1 = \alpha A_0$. We assume capital stock remains constant in the short run ($K_1 = K_0$), while employment adjusts to $L_1 = L_{\text{force}} \times (1 - u_1)$ where u_1 is the post-automation unemployment rate.

Factor Shares. Under competitive markets, factor shares are determined by marginal products. The labor share under CES production is:

$$s_L = \frac{(1-\beta)L^\rho}{\beta K^\rho + (1-\beta)L^\rho} \tag{2}$$

AI adoption shifts the labor share from s_L to $s'_L < s_L$. We model this as affecting not only aggregate productivity A, but also the effective structure of production. A Hicks-neutral productivity shock leaves the organization of tasks, factor substitutability, and income distribution unchanged up to scale. By contrast, AI plausibly reallocates tasks from labor to capital, increases the effective substitutability of capital for labor, alters bargaining power, and favors scale-intensive production (Acemoglu and Restrepo, 2020). These effects shift income toward capital in ways that are not well represented by a purely Hicks-neutral shock. Accordingly, we allow the post-automation production structure to differ from the pre-automation one, and treat the post-AI labor share s'_L as a scenario parameter reflecting the equilibrium of a structurally changed economy, rather than as a mechanical implication of fixed-parameter CES production.[1]

Households. Households supply labor with elasticity ε capturing behavioral responses to taxation.

2.2 Output Growth Despite Employment Decline

A central question is whether AI can raise GDP even as employment falls. The following lemma characterizes this condition.

[1] For any target s'_L, the implied post-automation distribution parameter is $\beta_1 = (1 - s'_L)\lambda^\rho / [s'_L + (1 - s'_L)\lambda^\rho]$ where $\lambda = L_1/L_0$. This differs from the period-0 calibrated $\beta_0 = 0.44$, confirming that the scenario labor shares imply structural change beyond Hicks-neutral TFP growth.

Lemma 1 (Output Growth Condition)**.** *With CES production and constant capital ($K_1 = K_0$), output grows despite falling employment ($Y_1 > Y_0$ with $L_1 < L_0$) if and only if:*

$$\alpha > [\beta + (1-\beta)(L_1/L_0)^\rho]^{-1/\rho} \tag{3}$$

Proof. See Appendix A.4.

The condition requires TFP growth (α) to exceed a threshold determined by the employment decline and the elasticity of substitution. With $\sigma = 1.5$,[2] even substantial employment declines can be offset by moderate TFP gains.

Calibrated Growth Rates. Using Israeli data ($Y_0 = 1{,}694$B NIS (Bank of Israel, 2024*b*), $K_0 = 4{,}708$B NIS (Feenstra, Inklaar and Timmer, 2023), $s_L = 0.56$ (Adva Center, 2024), $\sigma = 1.5$), we calibrate the CES function and compute post-automation GDP for four scenarios (Table 1).

Scenario	α	s'_L	u	Y_1 (B NIS)	g_Y
Low Displacement	1.4	0.50	6%	2,330	37.6%
Strong Displacement	1.6	0.42	10%	2,600	53.5%
AGI	2.2	0.35	40%	2,875	69.7%
ASI	3.0	0.25	60%	3,197	88.7%

Table 1. Scenario Parameters and Calibrated Outcomes

All scenarios satisfy the growth condition: GDP rises 38–89% despite employment declines of 3–57%.

2.3 The Capital Windfall

When AI raises productivity while displacing labor, GDP growth accrues disproportionately to capital. We define the *capital windfall* as the change in aggregate capital income.

Definition 1 (Capital Windfall)**.** *The capital windfall is the change in aggregate capital compensation:*

$$\Delta\Pi \equiv s'_K Y_1 - s_K Y_0 \tag{4}$$

where $s_K = 1 - s_L$ is the capital share of income.

Proposition 1 (Windfall Growth)**.** *The capital windfall increases with automation intensity. When output grows ($Y_1 > Y_0$) and the capital share rises ($s'_K > s_K$), the windfall is unambiguously positive:*

$$\Delta\Pi = \underbrace{s_K(Y_1 - Y_0)}_{\textit{growth effect}} + \underbrace{(s'_K - s_K)Y_1}_{\textit{share effect}} > 0 \tag{5}$$

Proof. Direct algebraic decomposition.

Calibrated Windfall. Table 2 presents the capital windfall for each scenario, alongside the change in labor income.

[2] While aggregate estimates of the capital-labor elasticity typically fall in the range 0.4–0.6, technology-specific capital (computers, software) exhibits higher substitutability, with estimates of 1.33–1.59 (Chirinko, 2008). For AI automation, $\sigma = 1.5$ may be conservative.

Scenario	$\Delta\Pi$ (Capital)	ΔS (Labor)	ΔY (GDP)
Low Displacement	+420B	+217B	+636B
Strong Displacement	+763B	+143B	+906B
AGI	+1,123B	+58B	+1,181B
ASI	+1,652B	−149B	+1,503B

Table 2. Capital Windfall and Labor Income Change by Scenario. The capital windfall ($\Delta\Pi$) grows with automation intensity, while labor income change ($\Delta S \equiv s'_L Y_1 - s_L Y_0$) shrinks and eventually turns negative.

A critical insight emerges: the capital windfall *increases* dramatically with automation intensity (from +420B to +1,652B NIS), while labor income change shrinks and eventually turns negative. This divergence is the central fiscal fact of the AI transition: the more disruptive the automation, the larger the surplus available for redistribution. The policy challenge is not affordability—it is capturing this windfall through appropriate tax instruments.

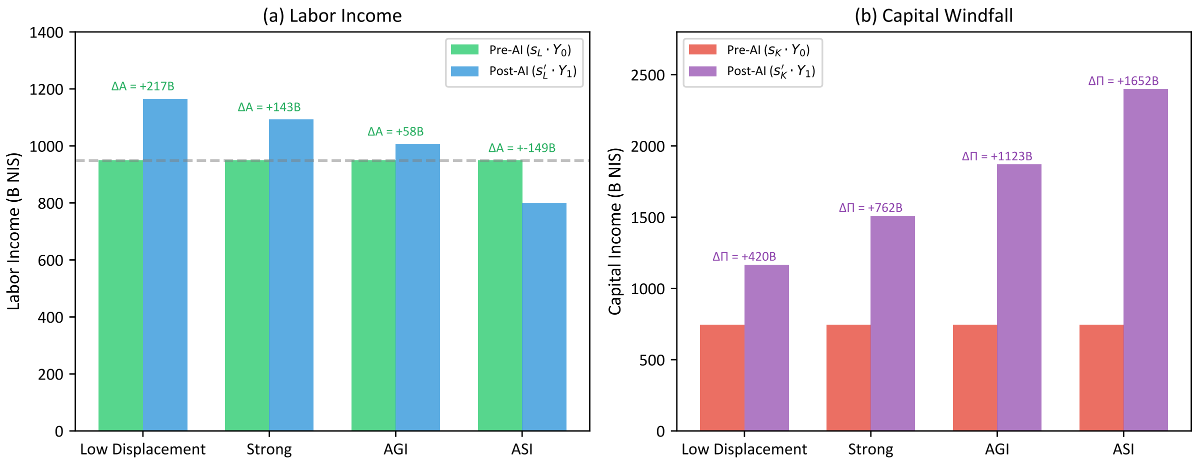

Figure 1. Capital Windfall and Labor Income by Scenario. Panel (a) shows labor income before and after AI adoption; the change (ΔS) shrinks and eventually turns negative as automation intensifies. Panel (b) shows the capital windfall ($\Delta\Pi$), which grows dramatically with automation intensity—the primary funding source for redistribution.

2.4 Conditions for Pareto Improvement

Proposition 2 (Pareto Improvement)**.** *A Pareto-improving tax-transfer scheme exists when net program cost* $(C - R)$ *satisfies:*

$$\Delta\Pi \geq C - R \geq \max\{0, -\Delta S\} \tag{6}$$

where $\Delta\Pi$ *is the capital windfall and* $\Delta S \equiv s'_L Y_1 - s_L Y_0$ *is the change in labor income.*

Proof. See Appendix A.4.

The upper bound ensures capital owners retain gains after funding the program. The lower bound ensures workers are compensated for any labor income loss. When $\Delta S > 0$ (Low Displacement through AGI scenarios), the lower bound is zero, and any program with $C - R \leq \Delta\Pi$ achieves Pareto improvement.

Negative labor income change. When $\Delta S < 0$ (ASI scenario), aggregate labor income falls despite output growth—workers as a class are worse off than before automation. This is the scenario that most concerns AI pessimists. Yet even here, Pareto improvement remains feasible because the capital windfall vastly exceeds the labor income loss. In the ASI scenario, closing the labor income gap requires only 9% of the capital windfall. The remaining 91% funds poverty-eliminating transfers *and* leaves capital owners with net gains. The fiscal constraint is not binding; the political constraint is.

3 NIT Design

Having established that a large capital windfall exists under automation, we turn to its distribution, and our tool of choice is a Negative Income Tax (NIT).

Across ideological and analytical traditions, a NIT has repeatedly emerged as the simplest and most robust way to guarantee a minimum income while preserving work incentives (Moffitt, 2003). Milton Friedman was a fan, arguing that a negative income tax "recommends itself on purely mechanical grounds," emphasizing administrative simplicity and transparency. From a liberal institutional perspective, Friedrich Hayek viewed a guaranteed minimum income as a legitimate protection compatible with a market order (Zwolinski, 2019). From modern optimal tax theory, James Mirrlees showed that approximately linear income tax schedules—of which the NIT is the canonical form—are strongly supported once incentive constraints are taken seriously.

These arguments take on renewed force under automation-driven, structural unemployment. When joblessness is persistent rather than cyclical, eligibility-based systems tied to job search or categorical status become increasingly brittle, administratively complex, and socially contested. Reflecting this logic, both the Kohelet Policy Forum and the National Insurance Institute of Israel (Kohelet Policy Forum, 2018; National Insurance Institute of Israel, 2016) have independently argued that NIT-style transfers are uniquely suited to long-term technological displacement, where a large share of individuals may cycle in and out of work—or not work at all—for extended periods.

3.1 Benefit Structure

Benefit Formula. The NIT provides a guaranteed floor M that phases out gradually with earnings:

$$B(y) = \max\{0, M - \tau \cdot \max(0, y - D)\} \tag{7}$$

where y is monthly gross labor income (pre-tax), M is the floor (guaranteed minimum per standard person), τ is the taper rate, and D is the disregard (earnings exempt from taper).

Break-even Income. Benefits phase out completely at the break-even income:

$$y^* = D + \frac{M}{\tau} \tag{8}$$

Household Floors. Using the modified OECD equivalence scale (OECD, 2013), the household floor is:

$$F_h = M \times (1 + 0.5(A - 1) + 0.3K) + \psi \cdot \mathbf{1}_{\text{single parent}} \tag{9}$$

where A is the number of adults, K is the number of children, and ψ is the single-parent top-up.

3.2 Optimal Taper Rate

Following Saez (2001), the revenue-maximizing taper rate balances efficiency costs against redistribution capacity:

$$\frac{\tau}{1-\tau} = \frac{1}{\varepsilon} \cdot \frac{\bar{y}}{y^*} \cdot \frac{1-F(y^*)}{F(y^*)} \tag{10}$$

where ε is the labor supply elasticity, $\bar{y}$ is mean income below break-even, and $F(y^*)$ is the CDF at break-even.

Israeli Calibration. Using wage distribution data from National Insurance Institute of Israel (2025):

- Reference floor: $M = 6{,}350$ NIS/month (used to calibrate τ; actual floors vary by scenario)
- Break-even income: $y^* = D + M/\tau = 1{,}000 + 6{,}350/0.5 = 13{,}700$ NIS/month
- CDF at break-even: $F(y^*) = 0.621$ (62.1% earn below y^*)
- Mean income below y^*: $\bar{y} = 6{,}791$ NIS/month
- Labor supply elasticity: $\varepsilon = 0.39$ (intensive $\varepsilon_h = 0.51$, extensive $\varepsilon_p = 0.28$) (Taub Center for Social Policy Studies in Israel, 2024)

Substituting yields $\tau^* \approx 0.44$. We implement $\tau = 0.50$ for robustness across plausible elasticities and administrative simplicity (see Appendix B for sensitivity analysis). Crucially, this taper rate is *not* an income tax—it determines how quickly the NIT benefit phases out as earnings rise. Combined with existing income taxation (5–16% effective rates by decile), this yields effective marginal tax rates of approximately 55–65% in the phase-out region. However, since the NIT adds a benefit rather than a tax, no household faces higher taxes than before: the EMTR (effective marginal tax rate) measures the rate at which *additional benefits* are foregone, not the rate at which income is confiscated.

3.3 Revenue-Constrained Floor Mechanism

In this framework, the floor is *endogenously determined* by available revenue. Rather than setting a fixed floor and hoping revenues cover costs, we set the floor to the maximum level sustainable by the funding channels.

Budget Balance Condition. The floor M is set where program cost equals available revenue:

$$C(M) = R \tag{11}$$

where $C(M)$ is the total annual NIT cost and R is total revenue from the funding mechanisms.

Cost Function. Annual program cost is:

$$C(M) = 12 \sum_{d=1}^{10} \bar{B}_d^{hh}(M) \cdot H_d \tag{12}$$

where $\bar{B}_d^{hh}(M)$ is the average monthly benefit per household in decile d and H_d is the number of households. We compute $\bar{B}_d^{hh}$ via microsimulation: for each decile, we generate 1,000 synthetic households with incomes drawn from a Beta distribution (concentration $c = 2.16$) and household sizes from a Gamma distribution (shape $a = 85.12$), calculate each household's benefit individually, and average across the sample. This captures within-decile variation—some households above the break-even receive no benefit, while others receive more than the decile mean would suggest. See Appendix E.2 for methodology.

This mechanism ensures fiscal sustainability by construction: the system cannot promise more than it can fund. As automation proceeds and revenues grow, floors rise automatically; if revenues fall short, floors adjust downward rather than creating deficits. The floor is recalibrated annually based on updated revenue projections from the funding channels.

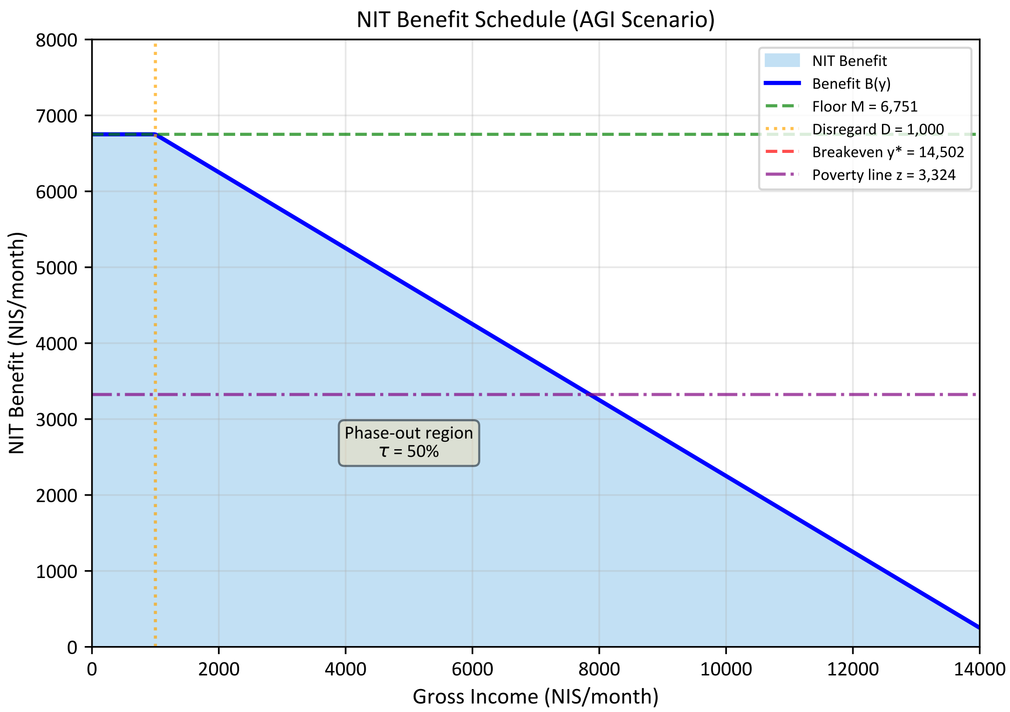

Figure 2. NIT Benefit Schedule (AGI Scenario). The benefit starts at the floor $M = 6{,}751$ for zero income, remains flat until the disregard $D = 1{,}000$, then tapers at rate $\tau = 50\%$ until the break-even $y^* = 14{,}502$. The poverty line ($z = 3{,}324$) is exceeded by the floor, guaranteeing poverty elimination.

4 Funding Mechanisms

The NIT is funded through two primary channels that capture AI-generated value at its source, plus one supplementary mechanism.

4.1 Revenue Architecture

AI creates capturable value through multiple channels:

1. **Dynamic VAT** captures deflation—when AI lowers production costs, VAT rates adjust to harvest price declines without raising consumer prices.

2. **Ring-fencing** captures above-trend gains through three routes: corporate tax receipts, capital gains tax receipts, and government wage savings from public-sector automation.

3. **Program Consolidation** captures administrative efficiency from merging legacy transfers.

4.2 Dynamic VAT

Mechanism. When AI reduces pre-tax prices by deflation δ, adjust the VAT rate to maintain constant consumer prices:

$$v_1 = \frac{1 + v_0}{1 - \delta} - 1 \tag{13}$$

Of note, price stability is desirable in its own right. Because wages, debts, and many contracts are set in nominal terms, broad movements in the price level—whether inflationary or deflationary—create real distortions and arbitrary redistribution. Even productivity-driven deflation can raise real debt burdens, complicate contracting, and weaken demand through expectations effects. Maintaining a stable consumer price level therefore preserves allocative efficiency and macroeconomic stability by allowing relative prices to adjust without imposing economy-wide nominal shocks.

Deflation Derivation. Deflation is derived from the TFP multiplier (α) and the AI-exposed share of consumption:

$$\delta = \delta_{\text{BLS}} \times \left[1 + \theta \cdot \frac{\alpha - \alpha_{\text{BLS}}}{\alpha_{\text{BLS}} - 1}\right] \tag{14}$$

where $\delta_{\text{BLS}} = 5\%$ is the historical software deflation rate (Bureau of Labor Statistics, 2025), $\alpha_{\text{BLS}} = 1.4$ is the Low Displacement TFP multiplier (representing normal technological improvement), and $\theta = 0.40$ is a conservative estimate of the AI-exposed share of consumption.[3] For scenarios with higher TFP multipliers, deflation scales proportionally with excess productivity growth.

Revenue Formula. Additional VAT revenue is:

$$R_{\text{VAT}} = C \times \Delta v \times \beta \tag{15}$$

where $C = c_{\text{share}} \times Y_1$ is private consumption (53.9% of GDP (CEIC Data, 2025)), $\Delta v = v_1 - v_0$ is the rate increase, and $\beta = 0.92$ is the pass-through rate.

Pass-through Estimation. We estimate VAT pass-through from Israeli data using event study methodology on post-1995 VAT increases. Mean pass-through for increases is 92% ($n = 4$); we adopt $\beta = 0.92$. See Appendix C for details. Pass-through is an empirical object rather than a theoretical constant. If market power limits pass-through, AI rents shift from prices to profits, reducing Dynamic VAT headroom; because ring-fencing captures only a limited share of incremental profits at prevailing statutory rates, high-markup outcomes may require broader capital-income capture, or lower NIT levels, to close the capture gap.

Calibrated Revenue. Table 3 presents Dynamic VAT revenue by scenario.

[3] OECD estimates show 50–80% task exposure in high-exposure sectors (Finance, ICT, Professional services) and 10–30% in low-exposure sectors (Agriculture, Mining, Construction) (OECD, 2025). Our 40% aggregate assumption is deliberately conservative.

Scenario	δ	v_1	Δv	C (B)	β	Revenue (B)
Low Displacement	5%	24.2%	6.2pp	1,256	92%	72
Strong	6%	25.5%	7.5pp	1,401	92%	97
AGI	9%	29.7%	11.7pp	1,550	92%	167
ASI	13%	35.6%	17.6pp	1,723	92%	280

Table 3. Dynamic VAT Revenue by Scenario

4.3 Ring-Fencing

Mechanism. Ring-fencing captures above-trend gains through three routes: corporate tax receipts, capital gains tax receipts, and government wage savings from public-sector automation. For each route, a fixed percentage ($\rho = 75\%$) of AI-attributable growth is earmarked for the NIT fund.

For tax receipts, we establish a pre-AI revenue trend and ring-fence above-trend receipts:

$$R_{\text{tax}} = (T_1 - T_0) \times \kappa \times \rho \tag{16}$$

where $T_1 = T_0 \times (1 + g_Y)$ is projected post-AI receipts, T_0 is the baseline trend, $\kappa = 1$ is the AI attribution coefficient, and $\rho = 0.75$ is the ring-fence rate.

For government wages, verified savings from public-sector automation are credited to the NIT fund:

$$R_{\text{gov}} = W \times u \times \rho \tag{17}$$

where $W = 203$B NIS is public sector wages (Ministry of Finance, Israel, 2024) and u is the scenario-specific unemployment rate (a proxy for AI labor displacement intensity).

Corporate Tax. Using 2015–2019 data (pre-COVID, pre-AI), we establish a baseline trend of 50.3B NIS via midpoint of linear extrapolation and GDP-linked methods.

Capital Gains Tax. Using 2012–2019 data (excluding 2017 outlier), we establish a baseline trend of 8.6B NIS.

Government Wages. Public sector wages totaled 203B NIS in 2024 (Ministry of Finance, Israel, 2024). The unemployment rate serves as a proxy for AI labor displacement intensity; applying the 75% ring-fence rate yields 9–91B NIS across scenarios.

The government wages estimate is conservative, capturing only direct salary savings. Greater efficiency gains, reduced fraud, and improved planning from AI-assisted administration could substantially increase this channel, though we do not model these effects.

Table 4 presents ring-fenced revenue by route and scenario.

Route	Scenario	Baseline (B)	Above-trend (B)	ρ	Revenue (B)
Corporate Tax	Low Displacement	50.3	19	75%	14
	Strong	50.3	27	75%	20
	AGI	50.3	35	75%	26
	ASI	50.3	45	75%	34
Capital Gains Tax	Low Displacement	8.6	3	75%	2
	Strong	8.6	5	75%	3
	AGI	8.6	6	75%	5
	ASI	8.6	8	75%	6
Government Wages	Low Displacement	203	12	75%	9
	Strong	203	20	75%	15
	AGI	203	81	75%	61
	ASI	203	122	75%	91
Ring-fencing Subtotal					
	Low Displacement				25
	Strong				38
	AGI				92
	ASI				131

Table 4. Ring-fenced Revenue by Route and Scenario

4.4 Program Consolidation

Legacy transfer programs are consolidated into the NIT, capturing administrative savings:

- Income Support (*havtachat hachnasa*): 1.6B NIS (National Insurance Institute of Israel, 2024*a*)
- Unemployment Benefits: 5.6B NIS (National Insurance Institute of Israel, 2024*a*)
- Administrative savings (3%): 0.2B NIS

Total consolidation revenue: **7.4B NIS** (rounded to 7B).

4.5 Total Revenue by Scenario

Channel	Low Displacement	Strong	**AGI**	ASI
Dynamic VAT	72	97	167	280
Ring-fenced Corporate	14	20	26	34
Ring-fenced Capital Gains	2	3	5	6
Ring-fenced Government	9	15	61	91
Ring-fencing Subtotal	*25*	*38*	*92*	*131*
Consolidation	7	7	7	7
Total	**105**	**144**	**266**	**418**

Table 5. Total NIT Revenue by Funding Channel (B NIS)

5 Israeli Calibration and Results

This section calibrates the model to Israeli data and presents simulation results. The central finding is that the two-channel funding architecture can sustain a poverty-ending basic floor while maintaining fiscal balance by construction.

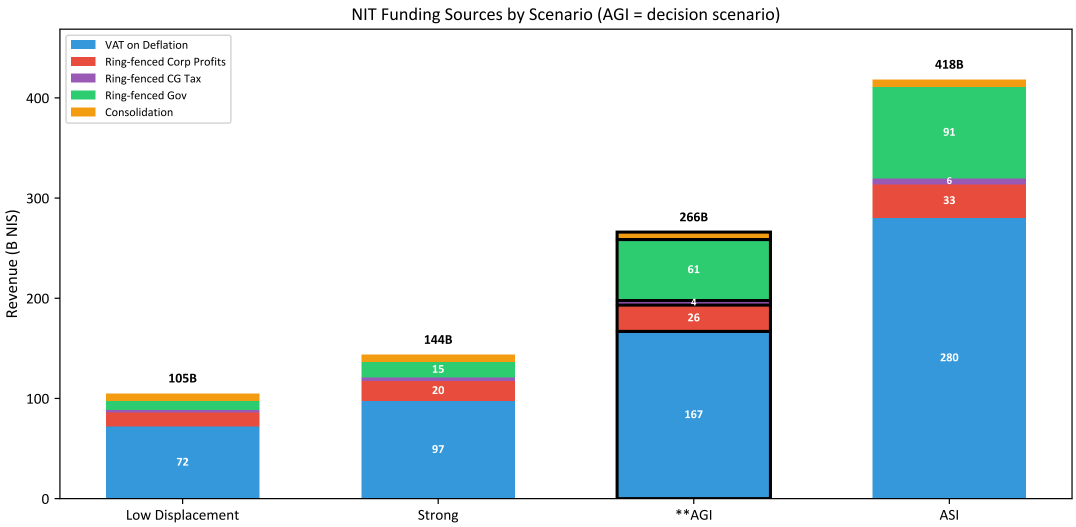

Figure 3. NIT Funding Sources by Scenario. Dynamic VAT (capturing deflation gains) is the primary revenue source, growing from 72B (Low Displacement) to 280B (ASI), with the decision-relevant AGI scenario at 167B. Ring-fenced income (corporate tax, capital gains, government wages) provides supplementary funding that scales with AI adoption.

5.1 Baseline Parameters

Parameter	Description	Value	Source
Macroeconomic			
Y_0	Initial GDP	1,694B NIS	Bank of Israel (2024*b*)
K_0	Capital stock	4,708B NIS	Feenstra, Inklaar and Timmer (2023)
s_L	Labor share	0.56	Adva Center (2024)
L_{force}	Labor force	4.5M	Bank of Israel (2024*a*)
u_0	Natural unemployment	3.0%	Bank of Israel (2024*a*)
σ	Elasticity of substitution	1.5	Chirinko (2008)
NIT Design			
τ	Taper rate	0.50	Implemented
D	Disregard	1,000 NIS/mo	Design
ψ	Single-parent top-up	900 NIS/mo	Design
Income Distribution			
Median wage		10,586 NIS/mo	National Insurance Institute of Israel (2025)
Poverty line z		3,324 NIS/mo	National Insurance Institute of Israel (2024*b*)
Poverty rate		20.7%	National Insurance Institute of Israel (2024*b*)
Gini coefficient		0.363	National Insurance Institute of Israel (2024*b*)

Table 6. Calibration Parameters

5.2 CES Calibration

We calibrate the CES production function to match period-0 observables. Given Y_0, L_0, s_L, σ, and K_0, we solve for TFP (A_0) and the distribution parameter (β).

From the labor share condition (2):

$$\beta = \frac{s_K \cdot L_0^\rho}{s_L \cdot K_0^\rho + s_K \cdot L_0^\rho} \tag{18}$$

With $L_0 = 4.5 \times (1 - 0.03) = 4.37$M workers and $\rho = 1 - 1/1.5 = 0.333$:

$$\beta = 0.071 \tag{19}$$

$$A_0 = 85.0 \tag{20}$$

These parameters exactly reproduce the baseline economy ($Y_0 = 1{,}694$B, $s_L = 0.56$).

5.3 Revenue-Constrained Floors

We simulate the NIT using CBS 2022 household income data by decile (Central Bureau of Statistics, 2025*b*). Using the budget balance condition (11), we solve for the floor M where $C(M) = R$ for each scenario. Table 7 presents the results. The revenue-constrained floor mechanism yields several insights:

- **Fiscal balance by construction**: Cost equals revenue in all scenarios.
- **Floors scale with automation**: As AI revenues grow, sustainable floors rise from 4,073 to 8,868 NIS/month.
- **Poverty threshold comparison**: All floors exceed the poverty line ($z = 3{,}324$), guaranteeing poverty elimination (see Section 5.5).

Take-up Assumptions. We assume 85% take-up of eligible households, consistent with international EITC experience (Tax Policy Center, 2024). Floors are calibrated so that Cost@85% = Revenue. A fiscal buffer of 3% of post-AI GDP is reserved for potential higher take-up, ensuring the system remains solvent even at 100% participation. Under AGI, this buffer equals 86B NIS, and full take-up remains within the combined revenue plus buffer.

Scenario	Revenue (B)	Floor M	Break-even y^*	M/z
Low Displacement	105	4,073	9,146	1.23
Strong	144	4,798	10,596	1.44
AGI	266	6,751	14,502	2.03
ASI	418	8,868	18,736	2.67

Table 7. Revenue-Constrained Floors by Scenario

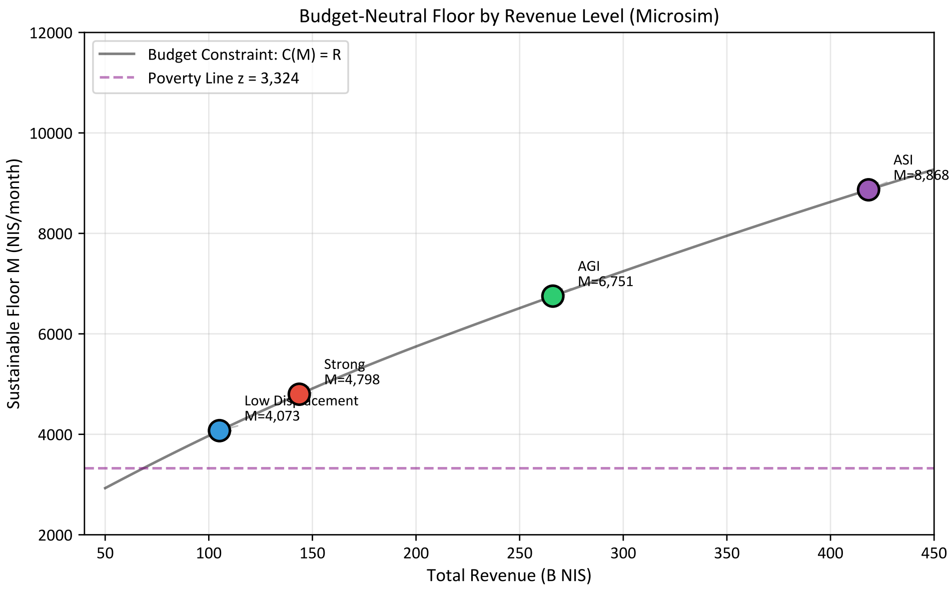

Figure 4. Budget-Neutral Floor by Revenue Level. The sustainable floor M rises with available revenue R following the budget constraint $C(M) = R$. As automation proceeds and revenue grows (Low Displacement $\rightarrow$ Strong $\rightarrow$ AGI $\rightarrow$ ASI), all floors remain well above the poverty line.

5.4 Household Floor Examples

Using the OECD equivalence scale (9), Table 8 presents household-specific floors under the AGI scenario.

Household Type	Scale	Floor (NIS/mo)	Break-even
Single adult	1.0	6,751	14,502
Couple	1.5	10,127	21,254
Couple + 2 children	2.1	14,177	29,354
Single parent + 2 children	1.6 + ψ	11,702	24,404

Table 8. Household Floors Under AGI Scenario ($M = 6{,}751$ NIS/mo)

5.5 Distributional Outcomes

Poverty Elimination. A key finding is that all scenarios eliminate poverty at the decile level. For the AGI scenario, with floor $M = 6{,}751$ and the lowest decile having equivalized gross income $y_1 = 1{,}877$ NIS/month:

$$\begin{aligned} B &= M - \tau \cdot \mathsf{max}\{0, y_1 - D\} \\ &= 6{,}751 - 0.5 \times (1{,}877 - 1{,}000) = 6{,}313 \text{ NIS/month} \end{aligned} \tag{21}$$

Post-NIT disposable income: $1{,}877 + 6{,}313 = 8{,}190$ NIS/month.

All floors exceed the poverty line ($M_{\text{Low}} = 4{,}073 > z = 3{,}324$), guaranteeing poverty elimination across all scenarios. Note that our data consists of average income by decile rather than individual household records, which limits finer-grained poverty analysis.

Inequality Reduction. Table 9 presents Gini coefficients before and after NIT.

Scenario	Floor	Pre-NIT Gini	Post-NIT Gini	Δ Gini
Low Displacement	4,073	0.363	0.195	-0.168
Strong	4,798	0.363	0.167	-0.196
AGI	6,751	0.363	0.112	-0.251
ASI	8,868	0.363	0.079	-0.284

Table 9. Inequality Outcomes by Scenario

The Gini coefficient falls by 0.17–0.28 points, representing a 46–78% reduction in inequality.

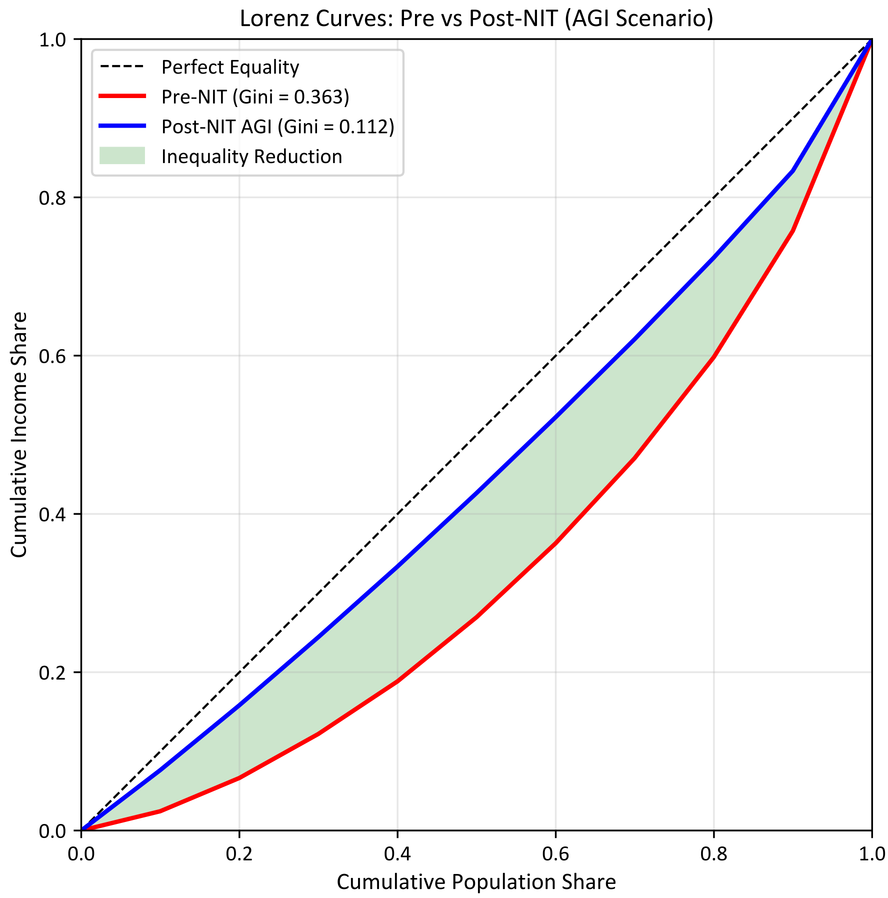

Figure 5. Lorenz Curves Pre- and Post-NIT (AGI Scenario). The NIT shifts the Lorenz curve toward the line of perfect equality, reducing the Gini coefficient from 0.363 to 0.112—a 69% reduction in inequality.

Decile Analysis (AGI Scenario). Table 10 shows the NIT benefit distribution under AGI.

Decile	Equiv Inc	Std Pers	Households	Benefit/HH	EMTR	Cost (B)
D1	1,877	3.30	291,600	20,693	55.5%	61.5
D2	3,263	3.00	292,300	16,848	56.4%	50.2
D3	4,358	2.60	291,100	13,080	57.0%	38.8
D4	5,291	2.70	293,000	11,959	58.7%	35.7
D5	6,622	2.60	292,000	9,778	60.9%	29.1
D6	7,812	2.60	292,200	8,014	63.0%	23.9
D7	9,278	2.60	291,800	5,785	65.6%	17.2
D8	11,244	2.50	292,100	3,173	67.5%	9.5
D9	14,586	2.30	291,900	—	—	—
D10	23,974	2.30	292,700	—	—	—
Total						**266.0**

Table 10. NIT Benefits by Income Decile (**AGI** Scenario, 85% take-up)

Deciles 1–8 receive benefits (gross income below break-even of 14,502 NIS). The bottom decile receives the largest benefit per household (20,693 NIS/month). At 85% take-up, total cost (266B) matches revenue by construction. While the table displays decile averages, costs are computed via microsimulation using estimated within-decile income distributions (Beta, concentration $c = 2.16$) rather than assuming uniform incomes; see Appendix E.2 for methodology.

6 Third Channel: Path to Universal High Income

The two-channel funding architecture (Dynamic VAT + Ring-fencing) sustains a basic NIT floor that ends poverty. However, the capital windfall available for redistribution far exceeds the cost of this basic floor. This section sketches additional capture mechanisms that could raise the floor to a "universal high income" (UHI) level.

6.1 The Capture Gap

Table 11 summarizes the relationship between automation gains and basic NIT costs. The basic NIT captures only 24% of the capital windfall. The remaining 857B NIS represents the "capture gap"—the fiscal space available for raising floors to UHI levels if society chooses additional rent-capture mechanisms.

Component	Amount (B NIS)
Capital windfall $\Delta\Pi$	1,123
Labor income change ΔS	58
Basic NIT cost	266
Two-channel revenue	266
Uncaptured capital windfall	**857**

Table 11. Capital Windfall vs. Basic NIT Costs (AGI Scenario)

6.2 Potential Third-Channel Mechanisms

The following architecture is *illustrative*—grounded in Israeli data and established methodologies, but actual implementation could deviate substantially. The purpose is not precise forecasting but demonstrating *feasibility*: the capital windfall is large enough to fund ambitious redistribution through multiple channels, reducing dependence on any single instrument. Additional revenue streams (larger and smaller) could supplement or substitute for those presented here.

Target. Consider a UHI floor of 15,000 NIS/month per adult-equivalent (couples: 22,500 NIS/month)—approximately 142% of median wage, placing recipients at the 9th decile of the income distribution (top quartile). This target requires approximately 885B NIS annually. Table 12 presents one configuration achieving this target.

Figure 6 visualizes this relationship across all four scenarios. The capital windfall from automation ($\Delta\Pi$) grows substantially with displacement intensity, while basic NIT costs (blue) remain modest. In the AGI and ASI scenarios, $\Delta\Pi$ exceeds the UHI target (885B), leaving surplus even after full UHI implementation.

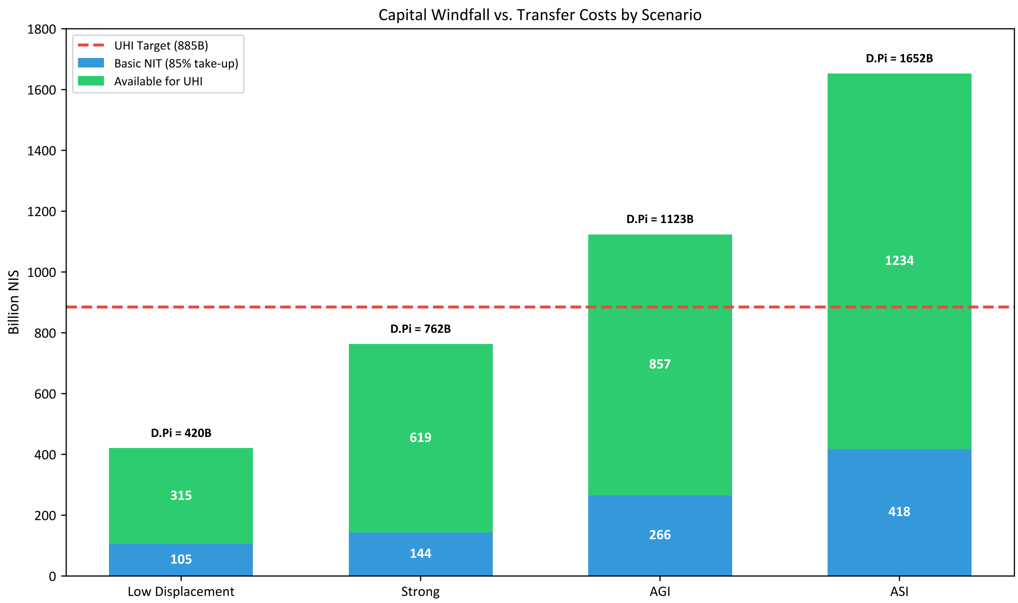

Figure 6. Capital Windfall vs. Transfer Costs by Scenario

Extended consolidation. The Kohelet Policy Forum's detailed proposal (Kohelet Policy Forum, 2018) (121B NIS total) cancels overlapping benefits—old-age supplements, categorical allowances, income support—and raises the income tax floor to 25%. The National Insurance Institute has also proposed a similar consolidation framework (National Insurance Institute of Israel, 2016). These changes become administratively straightforward once universal NIT replaces fragmented transfers.

Estate taxation. A 30% rate with high exemption threshold (5M NIS+) affects only the top 5–10% of estates while capturing most value (29B NIS). Israel abolished inheritance tax in 1981; reintroduction would exceed the OECD average (0.1% of GDP OECD 2024*b*) but remains below historical norms, justified by Israel's wealth concentration (50% of household wealth in the top decile (Berl Institute for Economic Research, 2020)).

Data dividend. Treating personal data as a collective resource—similar to Alaska's oil royalties—yields 4B NIS at 0.10 NIS/GB (at 1 TB/month per household by 2030 (Jerusalem Post, 2025)), approximately 2.5$\times$ the natural gas benchmark rate (Israeli Natural Gas Trade Association and BDO, 2024).

International coordination. The Pillar Two expansion (19B NIS) merits caution. Israel adopted the OECD global minimum tax (QDMTT) effective 2026 (Government of Israel, 2025), but at the agreed 15% floor (Bank of Israel, 2024*c*)—below Israel's headline corporate rate of 23%. The figures above assume expansion to 23%, requiring global coordination that does not currently exist. Not all OECD members accept even the 15% minimum; expanding it faces considerable obstacles. This item illustrates *potential* rather than immediately available revenue.

Yozma 2.0. The original Yozma program (1993–1998) catalyzed Israel's venture capital industry through government co-investment. Its successor, Yozma 2.0, already exists (OECD, 2024*a*). Expanding the fund to 50B NIS with AI-focused mandates and instituting a 5% dividend on accumulated profits would yield approximately 3B NIS annually, based on the Israeli VC sector's historical 17.5% gross IRR. Unlike taxation, this channel gives citizens direct equity participation in the automation economy.

The windfall levy. The largest source (443B NIS, representing 39% of the total capital income change $\Delta\Pi$) directly taxes automation windfalls without touching pre-automation returns. The specific instrument is a policy choice: options include a dedicated capital gains surcharge, an automation attribution tax similar to ring-fencing, or expansion of existing corporate levies. What matters is the *quantum*—39% of incremental capital income—not the particular mechanism.

Source	B NIS	Mechanism
Existing mechanisms (Section 4)		
VAT + Ring-fencing + Consolidation	266	Automatic
Extended consolidation (Kohelet)		
Program cancellation (6 programs)	43	Replacement
Income tax reform (25% floor)	78	Base broadening
New instruments		
Estate tax (30%, high exemption)	29	Wealth transfer
Data dividend	4	Resource royalty
Pillar Two expansion*	19	Global min. tax
Yozma 2.0 (govt. VC)	3	Equity returns
Direct windfall capture		
AI windfall levy (39% of $\Delta\Pi$)	443	Capital tax
Total	**885**	

*Requires global coordination; see text.

Table 12. Illustrative UHI Funding Architecture (AGI Scenario)

The tally above is one of many configurations. Other revenue streams—land value taxation, mark-to-market capital gains, platform levies—could substitute for or supplement these sources. The key insight: the capital windfall ($\Delta\Pi$ = 1,123B NIS under AGI) provides ample fiscal space. The policy question is not whether funding exists, but how to capture it.

The 885B NIS target represents between 65% and 79% of the capital windfall under AGI. The upper bound treats all funding sources as windfall-derived; the lower bound excludes instruments—such as program consolidation (Kohelet) and estate taxation—that do not directly capture automation-generated returns. The true figure lies within this range, depending on how strictly one defines “windfall-derived” revenue. Under ASI, where the windfall reaches 1,652B NIS, the same target represents only 45–54% of the windfall.

6.3 Democratic Choice Framing

The MOSAIC Model is intentionally designed so that:

1. The **basic floor is guaranteed by default**—the two-channel funding ensures poverty elimination without changing prices for consumers, or tax rates for corporations.
2. **Higher floors reflect explicit democratic choices**—moving from basic income to high income requires society to deliberately adopt additional capture mechanisms.

This framing separates the “affordability question” (can we fund basic income?) from the “distribution question” (how much of the capital windfall should we redistribute?). The answer to the first is yes; the answer to the second is a political choice.

7 Political Feasibility

The preceding sections established economic feasibility: the capital windfall funds a basic NIT floor through two automatic channels (Sections 4–5), while a third channel could extend benefits to Universal High Income levels (Section 6). This section addresses *political* feasibility—the conditions under which economically optimal reforms actually pass.

7.1 The Implementation Paradox

Section 2 established that the NIT satisfies the Pareto improvement condition—economic optimality. However, economic optimality does not guarantee political feasibility.

The gap between optimality and adoption. The political economy literature identifies three mechanisms that can prevent beneficial reforms from passing:

1. **Status quo bias** (Fernandez and Rodrik, 1991): When individuals face uncertainty about whether they personally will gain or lose from reform, majorities may vote against changes that would benefit them *ex post*. Crucially, this result does not rely on risk aversion—the model assumes risk-neutral agents. The bias arises from *individual-specific uncertainty*: even when aggregate gains are known and positive, if a majority expects to be among the losers, they will oppose reform.
2. **Concentrated opposition** (Olson, 1965): Small groups with large per-capita stakes organize more easily than large groups with diffuse benefits. Those bearing concentrated costs have strong incentives to coordinate; those receiving diffuse benefits face collective action problems.
3. **Electoral timing** (Alesina et al., 2024): Reforms impose short-term costs while benefits accrue with a lag (up to four years). Politicians facing elections prefer delay, as voters punish incumbents for election-year reforms—particularly when implemented during economic contractions. Reforms during expansions are generally not punished and sometimes rewarded.

Application to NIT. The basic NIT largely avoids the first two obstacles: Section 2 established Pareto improvement—all households gain from redistributing part of the capital windfall, eliminating individual-specific uncertainty. The two-channel funding (Dynamic VAT + ring-fencing) captures only incremental profits, leaving pre-automation returns untouched, which limits concentrated opposition.

The *Third Channel* mechanisms for UHI (Section 6) may face greater resistance, as estate taxes and windfall levies concentrate costs on specific groups with stronger lobbying capacity. Electoral timing remains relevant for legislative passage, though Israel's current economic expansion—according to Alesina's findings—should mitigate rather than amplify electoral costs.

7.2 Electoral Costs of Reform

Alesina et al. (2024) analyze over 2,300 structural reforms across 90 countries, estimating electoral consequences. Their findings provide an empirical foundation for timing decisions.

Factor	Effect	Mechanism
Pre-election timing	−1.5 pp (avg)	Benefits not yet visible
Economic contraction	−2 pp	Blame attribution
Economic expansion	No penalty (sometimes reward)	Growth masks transition costs
Inequality-increasing (financial)	−3.7 pp	Rising inequality punished

Table 13. Electoral Costs of Reform (Alesina et al. 2024)

Notably, the largest penalty (−3.7 pp) applies to reforms that *increase* inequality. NIT, being explicitly inequality-reducing, avoids this trap—and may even benefit from voter preferences for redistribution during periods of rising automation-driven inequality.

Why not wait for crisis?. Conventional wisdom suggests crises create reform windows. Drazen and Easterly (2001) test this hypothesis and find mixed evidence: extreme crises (hyperinflation) sometimes enable reform, but moderate crises (recession, budget deficits) do not reliably do so. Moreover, Alesina's findings create a paradox: crises may increase *demand* for reform but also increase *electoral costs* (reforms during contraction are punished). The "crisis hypothesis" is not a dependable strategy.

Application to Israel (2026). Israeli elections are expected in late 2026. While this places potential legislation in the pre-election window, economic conditions strongly favor reform: post-war recovery has resumed and growth projections are positive. According to Alesina's findings, reforms during expansion are not punished—and sometimes rewarded. The combination of expansion plus demonstrated Pareto improvement creates unusually favorable political conditions.

Moreover, *planning and preparation* do not incur electoral costs regardless of timing. A phased approach—commissioning feasibility studies and launching pilots now, with full legislation early in the next electoral term—captures first-mover advantages while maximizing political runway.

The case for urgency. The window for action is narrow. Acting now—during economic expansion, before a crisis, and before political coalitions around new wealth distributions solidify—is crucial. Each delay erodes political feasibility: economic conditions may deteriorate (increasing electoral costs), AI-displaced workers may organize around different policy demands, and negotiating a new social contract becomes more costly as positions entrench. The political economy literature suggests that reforms are easiest to pass when beneficiaries are diffuse and stakeholder positions remain fluid. That window exists today but will not remain open indefinitely.

7.3 Implementation Roadmap

The following phased approach addresses the electoral timing problem: substantive preparation occurs during the current term, while legislation passes post-election when the new government has maximum runway.

Phase	Timeline	Activities
1. Feasibility Study	Months 0–6	MOF/BOI/CBS commission validates revenue projections, designs pilot
2. Pilot Program	Months 6–18	2–3 regions, 50,000 households Full NIT, rigorous evaluation
3. Coalition Building	Months 12–24	Stakeholder engagement, public support via “AI dividend” framing
4. Legislation	Months 24–36	Parliamentary passage, nationwide rollout, automatic rules codified

Table 14. Implementation Roadmap

This sequencing addresses the electoral timing constraint: legislative passage (Phase 4) occurs in months 24–36, well into the *next* electoral term, avoiding the pre-election penalty identified by Alesina. The pilot phase is critical—it must demonstrate labor supply resilience, the key empirical uncertainty. Framing matters: “AI dividend” rather than welfare. Finally, automatic adjustment rules should be codified in legislation to prevent future political manipulation of floor levels.

7.4 Unilateral Feasibility

Section 6 noted that Pillar Two expansion requires international coordination. Does this mean Israel cannot act alone? No. Unilateral adoption is feasible despite three concerns:

Tax competition. Ring-fencing preserves Israel’s headline corporate rate (23%), earmarking only *incremental* profits attributable to automation. The effective rate on pre-automation business remains competitive. OECD Pillar Two already coordinates base rates at 15%, limiting race-to-the-bottom dynamics.

Platform enforcement. Dynamic VAT applies at the point of sale, treating domestic and foreign sellers identically. Israel already collects VAT on digital services from foreign platforms under existing regulations; the dynamic adjustment mechanism requires no additional cross-border enforcement.

Historical precedent. Israel has demonstrated major unilateral reform capacity before. The 1985 Stabilization Plan reduced inflation from over 400 percent to 20 percent within three years through coordinated fiscal adjustment, wage-price agreements, and exchange rate policy—with minimal international coordination (Liviatan, 1988). A National Unity Government neutralized partisan pressures, enabling painful adjustment that would otherwise be politically impossible. The same institutional capacity exists today.

7.5 Sequenced International Approach

Unilateral action need not preclude eventual coordination. A sequenced approach:

Phase	Timeline	Activities
Immediate	2025–27	Israeli unilateral adoption
Near-term	2027–29	OECD promotion, technical assistance
Medium-term	2029–32	Bilateral coordination (platforms, rates)
Long-term	2032+	OECD-wide framework

Table 15. International Sequencing

Rationale. Unilateral pioneers create existence proofs. Successful Israeli implementation generates positive spillovers: demonstration effects show feasibility, competitive pressure encourages adoption elsewhere, knowledge sharing reduces other countries' transition costs. Coordination improves efficiency but isn't a prerequisite for action.

8 Conclusion

8.1 Summary

This paper addresses a central question of the AI transition: can societies fund adequate redistribution when automation displaces labor but expands output? We answer affirmatively, demonstrating that AI-driven growth creates sufficient surplus for poverty-ending transfers—provided appropriate capture mechanisms are in place.

The key insight is that as automation intensifies, labor income change ($\Delta S \equiv s'_L Y_1 - s_L Y_0$) actually *shrinks* from +217B to -149B NIS, eventually turning negative as labor's share falls faster than output grows. Yet the *capital windfall* ($\Delta \Pi \equiv s'_K Y_1 - s_K Y_0$) *explodes* from +420B to +1,652B NIS. The more disruptive the automation, the larger the surplus available for redistribution. The fiscal challenge is not affordability—the windfall exists—but collectibility: channeling AI-era rents into public revenue.

We propose a two-channel capture architecture designed for administrative simplicity and political legibility:

1. **Dynamic VAT**: A VAT-rate adjustment tied to verified AI-driven deflation, capturing cost reductions at the point of consumption.
2. **Ring-fencing**: Earmarking above-trend corporate tax, capital gains tax, and government wage savings for the NIT fund, capturing profit concentration and public-sector efficiency gains without raising headline rates.

These channels, supplemented by consolidation of overlapping transfers, generate 105–418B NIS annually across scenarios (Low Displacement to ASI), with the decision-relevant AGI scenario yielding 266B NIS—sufficient to fund a poverty-ending floor of 6,751 NIS/month (AGI) while maintaining fiscal balance by construction.

Beyond the basic floor, a *third channel* could extend redistribution toward Universal High Income (UHI) levels. The AGI scenario's capital windfall (1,123B NIS) far exceeds basic NIT costs (266B), leaving 857B NIS in uncaptured fiscal space. We sketch illustrative mechanisms—estate taxation, data dividends, Pillar Two expansion, sovereign wealth fund dividends, and direct windfall levies—that could collectively fund a UHI floor of 15,000 NIS/month (885B annually). These third-channel instruments are not required for poverty elimination; they represent a democratic choice to capture a larger share of AI-era rents for broader redistribution. Where rents evade the verified bases of the two primary channels, such instruments translate the remaining windfall into higher floors.

8.2 Contributions

Theoretical. We formalize the capital windfall ($\Delta\Pi$) under AI-driven structural transformation, deriving conditions for Pareto-improving redistribution when employment falls but output rises. The framework clarifies why AI-driven unemployment differs fundamentally from classical unemployment: when $\Delta L < 0$ but $\Delta Y > 0$, the tax base expands rather than contracts.

Methodological. We distinguish *affordability* (whether sufficient surplus exists) from *collectibility* (whether mechanisms exist to capture it). The two-channel revenue framework addresses collectibility through instruments tied to observable AI effects—deflation and above-trend profits—while expressing any remaining funding requirement as a share of AI-era rents outside the verified bases.

Empirical. The Israeli calibration demonstrates a poverty-ending basic floor under conservative assumptions. All four scenarios eliminate poverty at the decile level, with Gini coefficients falling from 0.363 to 0.195–0.079 (46–78% reduction). The AGI scenario's basic NIT captures only 24% of the capital windfall, leaving 857B NIS in fiscal space for higher floors if society chooses additional capture mechanisms.

8.3 Policy Implications

Implementation timing. The political economy analysis suggests that acting early—during economic expansion, before crisis, and before concentrated opposition mobilizes—is critical. Each delay erodes feasibility: economic conditions may deteriorate, displaced workers may organize against perceived inadequacy, and capital owners may coordinate to block rent-capture mechanisms. The window exists today but will not remain open indefinitely.

Self-regulating design. Linking transfers to realized AI-era rents creates a partially self-regulating system. When deflation and measurable rents rise, captured revenues rise automatically; floors adjust upward without legislative action. Conversely, if AI adoption slows, revenues and floors adjust downward, preventing fiscal imbalance. This automatic adjustment ties generosity to disruption, supporting long-term sustainability.

Democratic choice framing. The architecture separates the "affordability question" (can we fund basic income?) from the "distribution question" (how much of the capital windfall should we redistribute?). The answer to the first is yes—the two-channel funding ensures poverty elimination without requiring additional legislative action. The answer to the second is a political choice: moving from basic NIT (266B) to Universal High Income (885B) requires society to deliberately adopt third-channel mechanisms such as estate taxation, windfall levies, or expanded profit capture.

Unilateral feasibility. Israel can implement without waiting for global coordination. The two primary channels (Dynamic VAT and ring-fencing) operate entirely within domestic jurisdiction. Successful implementation would generate demonstration effects, template legislation, and evidence on labor supply responses valuable for other countries considering adoption.

8.4 Limitations and Future Research

Several limitations warrant acknowledgment. First, this is a single-country calibration; replication across diverse economies is needed for generalization. Second, we treat human capital statically; dynamic effects of AI on skill acquisition, job transitions, and lifetime earnings trajectories are left for future work. Third, substantial uncertainty surrounds AGI trajectories; we address this through scenario analysis, and the design appears robust within the calibration envelope. Fourth, this paper focuses on economic mechanisms and does not address the broader social or psychological implications of a society where traditional employment is no longer the primary source of income or meaning.

Future research should pursue cross-country replication (substituting national accounts data and re-calibrating AI intensity indices), dynamic models incorporating human capital adjustment, and analysis of alternative revenue mechanisms beyond those considered here.

8.5 Cross-Country Applicability

While calibrated to Israel, the framework applies broadly to developed economies facing AI disruption. Israel serves as a natural test case for three reasons: comprehensive income distribution statistics enabling well-calibrated simulation; a tech-intensive, high-income economy resembling other early-AI adopters; and a relatively modest welfare state that emphasizes fiscal feasibility over institutional path-dependence.

The mechanism generalizes because the key accounting identities are not Israel-specific. The capital windfall $\Delta\Pi \equiv s'_K Y_1 - s_K Y_0$ applies wherever factor shares shift under automation. Dynamic VAT targeting AI-sensitive sectors can be implemented wherever CPI data exists. Over-trend ring-fencing requires only tax-receipt time series. The automatic adjustment triggers—unemployment and labor share—are published regularly in all OECD economies.

Replication would be straightforward: substitute national accounts data for Y_0, L_0, s_L; re-calibrate sector-specific AI intensity using existing occupation-level indices; adjust the floor to local median income; and scale revenue estimates to GDP. AI-driven labor displacement will not be confined to any single economy—it is a global phenomenon that will confront all developed nations within the coming decades. This shared challenge presents an opportunity for coordinated action: countries can learn from each other's implementations, harmonize capture mechanisms to prevent regulatory arbitrage, and collectively ensure that the gains from automation are broadly shared.

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APPENDICES

A CES Production Function Details

A.1 Calibration Method

Given observables $\{Y_0, L_0, s_L, K_0, \sigma\}$, we calibrate CES parameters $\{A_0, \beta\}$ as follows.

From the labor share condition:

$$s_L = \frac{(1-\beta)L_0^\rho}{\beta K_0^\rho + (1-\beta)L_0^\rho}$$

Solving for β:

$$\beta = \frac{s_K \cdot L_0^\rho}{s_L \cdot K_0^\rho + s_K \cdot L_0^\rho}$$

where $s_K = 1 - s_L$ and $\rho = 1 - 1/\sigma$.

From the production function:

$$A_0 = \frac{Y_0}{[\beta K_0^\rho + (1-\beta)L_0^\rho]^{1/\rho}}$$

A.2 Israeli Calibration Values

Parameter	Value	Method
Y_0	1,694B NIS	Bank of Israel (2024*b*)
K_0	4,708.1B NIS	Feenstra, Inklaar and Timmer (2023)
L_0	4.369M workers	$L_{\text{force}} \times (1-u_0)$
s_L	0.56	Adva Center (2024)
σ	1.5	Chirinko (2008)
ρ	0.333	$1 - 1/\sigma$
β	0.0712	Calibrated
A_0	84.97	Calibrated

A.3 Verification

The calibrated parameters reproduce the target values:

- $Y(A_0, K_0, L_0) = 1{,}694$B NIS ✓
- $s_L(K_0, L_0) = 0.560$ ✓

A.4 Proofs of Main Results

Proof of Lemma 1 (Output Growth Condition). From the CES production function:

$$Y_t = A_t \left[\beta K_t^\rho + (1-\beta)L_t^\rho\right]^{1/\rho}$$

With $K_1 = K_0 = K$ and $A_1 = \alpha A_0$, the condition $Y_1 > Y_0$ requires:

$$\alpha A_0 \left[\beta K^\rho + (1-\beta)L_1^\rho\right]^{1/\rho} > A_0 \left[\beta K^\rho + (1-\beta)L_0^\rho\right]^{1/\rho}$$

Dividing both sides by A_0 and raising to the power ρ:

$$\alpha^\rho \left[\beta K^\rho + (1-\beta)L_1^\rho\right] > \beta K^\rho + (1-\beta)L_0^\rho$$

Let $\lambda = L_1/L_0 < 1$. Dividing by $\beta K^\rho + (1-\beta)L_0^\rho$:

$$\alpha^\rho > \frac{\beta K^\rho + (1-\beta)L_0^\rho}{\beta K^\rho + (1-\beta)L_1^\rho} = \frac{\beta K^\rho + (1-\beta)L_0^\rho}{\beta K^\rho + (1-\beta)\lambda^\rho L_0^\rho}$$

Factoring out L_0^ρ from numerator and denominator:

$$\alpha^\rho > \frac{\beta (K/L_0)^\rho + (1-\beta)}{\beta (K/L_0)^\rho + (1-\beta)\lambda^\rho}$$

Normalizing units so that $K = L_0$ (equivalently, $K/L_0 = 1$):

$$\alpha^\rho > \frac{\beta + (1-\beta)}{\beta + (1-\beta)\lambda^\rho} = \frac{1}{\beta + (1-\beta)\lambda^\rho}$$

Taking the $(-1/\rho)$ power of both sides:

$$\alpha > \left[\beta + (1-\beta)(L_1/L_0)^\rho\right]^{-1/\rho}$$

□

Proof of Proposition 1 (Windfall Growth). By definition, the capital windfall is:

$$\Delta\Pi \equiv s'_K Y_1 - s_K Y_0$$

We can decompose this as:

$$\Delta\Pi = s_K(Y_1 - Y_0) + (s'_K - s_K)Y_1$$

The first term is capital's share of GDP growth (positive when $Y_1 > Y_0$). The second term is the gain from an increased capital share (positive when $s'_K > s_K$). Under automation, both terms are positive, so $\Delta\Pi > 0$ unambiguously. □

Proof of Proposition 2 (Pareto Improvement). A Pareto improvement requires that no agent is worse off after the policy intervention. Consider two groups: workers (receiving labor income) and capital owners (receiving capital income).

Capital owners: Pre-automation capital income is $s_K Y_0$; post-automation it is $s'_K Y_1$. If they fund net program cost $(C - R)$, their post-policy income is $s'_K Y_1 - (C - R)$. For capital owners not to be worse off:

$$s'_K Y_1 - (C - R) \geq s_K Y_0$$

$$C - R \leq s'_K Y_1 - s_K Y_0 = \Delta\Pi$$

This gives the upper bound.

Workers: Pre-automation labor income is $s_L Y_0$; post-automation it is $s'_L Y_1$. Workers receive transfers from the NIT program. For workers not to be worse off, aggregate transfers must at least compensate for any labor income loss:

$$s'_L Y_1 + (C - R) \geq s_L Y_0$$

$$C - R \geq s_L Y_0 - s'_L Y_1 = -\Delta S$$

When $\Delta S > 0$, this constraint is $C - R \geq -\Delta S < 0$, which is satisfied for any non-negative net cost. When $\Delta S < 0$, the constraint binds: $C - R \geq |\Delta S|$.

Combining: $\max\{0, -\Delta S\} \leq C - R \leq \Delta\Pi$. □

B Saez Optimal Taper Derivation

B.1 Formula

Following Saez (2001), the revenue-maximizing taper rate satisfies:

$$\frac{\tau}{1-\tau} = \frac{1}{\varepsilon} \cdot \frac{\bar{y}}{y^*} \cdot \frac{1 - F(y^*)}{F(y^*)}$$

B.2 Israeli Calibration

We calibrate using a target floor of $M = 6{,}350$ NIS/month—slightly above the gross income of the bottom decile (6,193 NIS/month)—as a reference point for optimal taper calculation. Using wage distribution data from National Insurance Institute of Israel (2025):

Component	Value	Source
Break-even y^*	13,700 NIS/mo	$D + M/\tau$
CDF $F(y^*)$	0.621	National Insurance Institute of Israel (2025)
Mean below $\bar{y}$	6,791 NIS/mo	National Insurance Institute of Israel (2025)
Elasticity ε	0.39	Taub Center for Social Policy Studies in Israel (2024)

Saez RHS:

$$\text{RHS} = \frac{1}{0.39} \times \frac{6{,}791}{13{,}700} \times \frac{0.379}{0.621} = 2.56 \times 0.496 \times 0.610 = 0.78$$

Optimal taper:

$$\tau^* = \frac{0.78}{1 + 0.78} = 0.435 \approx 0.44$$

B.3 Sensitivity Analysis

Elasticity ε	Optimal Taper τ^*
0.30	0.50
0.35	0.46
0.39	0.44
0.45	0.40

The implemented rate $\tau = 0.50$ equals the optimum for $\varepsilon = 0.30$ and provides a 6 percentage point margin at the Taub estimate ($\varepsilon = 0.39$).

C VAT Pass-through Estimation

C.1 Data

We use Israeli VAT reforms and monthly CPI data from Central Bureau of Statistics (2025*a*). Post-1995 (stable inflation period), there were four non-outlier VAT increases: June 2002 (+1pp), July 2009 (+1pp), September 2012 (+1pp), and June 2013 (+1pp).

C.2 Specification

Event study comparing CPI changes around VAT reforms:

$$\hat{\beta} = \frac{\Delta \ln P}{\Delta\tau/(1+\tau_{\text{old}})}$$

where $\Delta \ln P$ is the log price change from month before to month of VAT change, and the denominator adjusts for VAT-inclusive pricing.

C.3 Results

Event	VAT Change	CPI Change	Pass-through
2002-06	+1.0pp	+1.31%	154%
2009-07	+1.0pp	+1.06%	123%
2012-09	+1.0pp	+0.00%	0%
2013-06	+1.0pp	+0.79%	93%
Mean (increases)			**92%**

We adopt $\beta = 0.92$. Note: VAT decreases show asymmetrically lower pass-through (mean 24%), consistent with “rockets and feathers” pricing.

D Profit Trend Calculation

D.1 Data

Corporate tax revenue 2015–2019 from Knesset Research and Information Center (2021):

Year	Corp Tax (B NIS)	GDP (B NIS)
2015	32.8	1,179
2016	35.8	1,236
2017	39.8	1,290
2018	40.8	1,354
2019	39.9	1,428

D.2 Linear Extrapolation

Regression: Revenue$_t = \alpha + \beta \cdot t$
Results: $\hat{\alpha} = -3{,}831$, $\hat{\beta} = 1.92$, $R^2 = 0.79$
Extrapolation to 2024: $-3{,}831 + 1.92 \times 2024 = 51.2$B NIS

D.3 GDP-Linked Method

Average tax/GDP ratio: $\bar{r} = 2.91\%$
Applied to current GDP: $0.0291 \times 1{,}694 = 49.3$B NIS

D.4 Baseline

Midpoint: $(51.2 + 49.3)/2 = 50.3$B NIS

E Simulation Methodology

E.1 Data Source

CBS 2022 Statistical Yearbook household income by decile (Central Bureau of Statistics, 2025*b*). Data provides:

- Gross money income per household by decile
- Net money income per household by decile
- Average standard persons per household (OECD scale)
- Number of households per decile

Effective tax rates are calculated from the difference between gross and net income.

E.2 NIT Cost Calculation

Primary Method: Microsimulation. The microsimulation generates 1,000 synthetic households per decile to capture within-decile income variation. Distribution parameters are estimated from cross-decile variance:

- **Income distribution:** Beta with concentration $c = 2.16$, scaled to decile bounds
- **Household size distribution:** Gamma with shape $a = 85.12$, scaled to decile mean

For each synthetic household, benefits are calculated individually and averaged to yield decile costs. This approach captures the fact that not all households within a decile have the same income—some above the break-even threshold receive no benefit, while others receive more than the decile-average would suggest.

Post-NIT disposable income (for poverty/inequality comparisons) is computed as $\text{Net}_d + B_d^{hh}$, where B_d^{hh} is the average benefit per household in decile d.

E.3 Floor Solver

The revenue-constrained floor is found using Brent's method to solve:

$$C(M) - R = 0$$

searching over $M \in [100, 50{,}000]$ NIS/month.

E.4 Gini Calculation

Gini coefficient computed from post-NIT decile data using the trapezoid rule on the Lorenz curve:

$$G = 1 - 2 \times \text{Area under Lorenz curve}$$

E.5 Effective Marginal Tax Rates

Figure 7 shows the EMTR by decile for households receiving NIT benefits. The EMTR combines existing income taxation with the NIT taper rate. Importantly, the NIT does not raise anyoneś taxes—it adds a benefit that phases out with income. The EMTR measures the rate at which this benefit is withdrawn, not a tax increase.

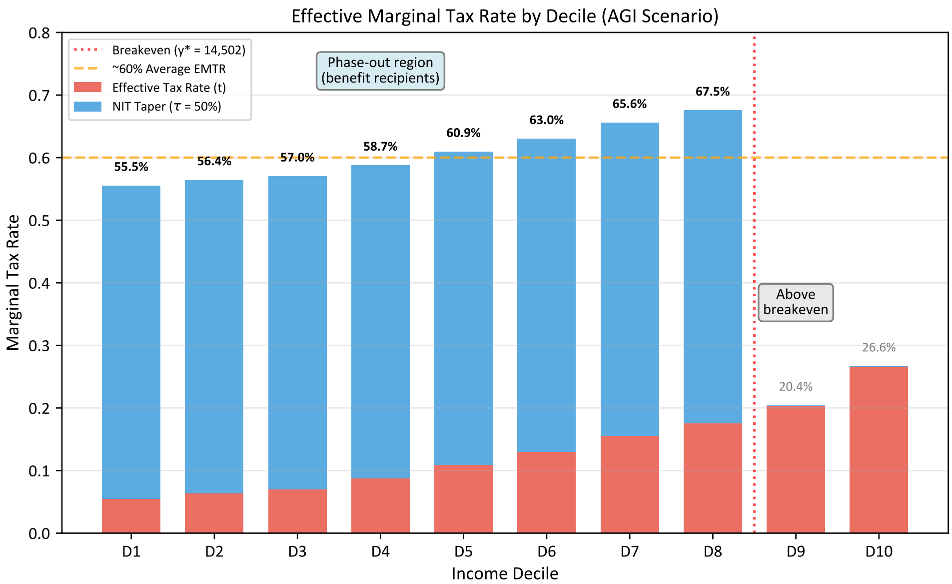

Figure 7. Effective Marginal Tax Rate by Decile. For households receiving NIT benefits, EMTR combines existing income taxation (t) with the NIT taper ($\tau = 50\%$). EMTRs range from 55.5% (D1) to 67.5% (D8). Deciles 9–10 are above the break-even threshold and face only standard income tax rates, unchanged by the NIT.