

*Institute for Fiscal Studies · London · 14–15 May 2026*

# Input & Output

*The opportunity offered by tech wealth participation*

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Stock for Data & Creativity: Equity participation as a structural answer to the inter-generational asymmetry of the digital economy, supported by Capital Economics modelling.

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**Presented by Dr Heloise Greeff for Share Alliance**

Economic modelling: Capital Economics

## THE ARGUMENT

# If your data and creativity built a company worth trillions, you should own a piece of it.

**SITUATION****Trillions in tech wealth — built on individual contributions.**

Five firms now exceed US\$12 trillion in market capitalisation, with 35–50% of that value attributable to data<sup>1</sup> and over 90% of social-media revenue derived from personal information.

**COMPLICATION****The young are paying twice.**

Their data and creativity supply the inputs of the AI revolution; their early-career roles are the outputs being automated first.<sup>2</sup> Existing remedies treat data as a commodity to be priced, taxed or shared — none confers ownership.

**QUESTION****How should capital participation be structured for the digital era?**

Inter-generational rebalancing has succeeded in the family context. It has not yet been built into economic policy at scale.

**ANSWER****Stock for Data & Creativity.**

Issue tech-company equity to those whose data and creativity build it, tilted toward the generations most exposed to AI disruption. Capital Economics modelling shows this is feasible, impactful, and trade-off rich.

<sup>1</sup> WIPO Global Innovation Index, 2025. <sup>2</sup> Brynjolfsson, Chandar & Chen, Stanford Digital Economy Lab, 2025.

## ROADMAP

# Four sections, one argument.

<b>I.</b>	<b>The Asymmetry</b> <i>Why the structure of the platform economy demands a structural answer.</i>	5
<b>II.</b>	<b>The Proposal</b> <i>Stock for Data &amp; Creativity converts the data relationship into an ownership relationship.</i>	10
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SECTION

I.

# The Asymmetry

*Why the structure of the platform economy demands a structural answer.*

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*“Users have become the raw material of an unprecedented form of capital accumulation.”*

— Zuboff, *The Age of Surveillance Capitalism*, 2019

# The digital economy concentrates wealth at a rate without modern precedent.

*Tech capitalisation, data-revenue dependence and capital-return outperformance, 2014–2024.*

## US\$12T+

*Combined market capitalisation*

The top five US technology platforms now collectively exceed twelve trillion dollars in equity value.

*Source: Bloomberg, \*March 2026.*

## 35–50%

*Share of corporate value attributable to data*

Intangible-asset accounting suggests data accounts for between a third and a half of the value of major platforms.

*Source: WIPO Global Innovation Index, 2025; Corrado et al., NBER 2025.*

## 25% / 1%

*Capital vs labour returns, decade to 2024*

Compound annual return of top-five tech vs OECD median real-wage growth — a textbook expression of Piketty's  $r > g$ .

*Source: OECD Employment Outlook 2024; Piketty (2014).*

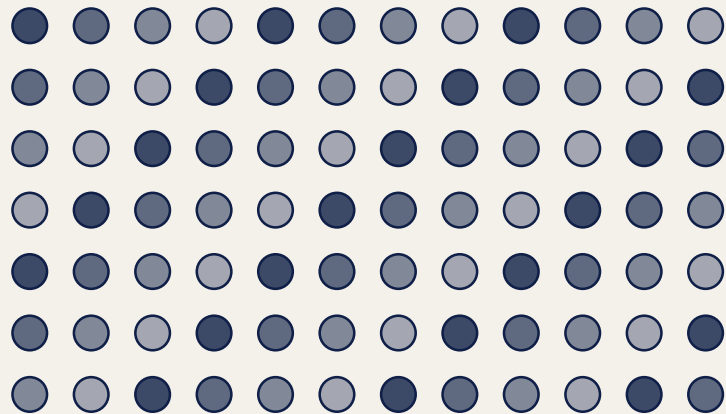
**TAKEAWAY** — *The asymmetry is not incidental: data is the productive asset, and the gap between capital and labour returns is the structural fact policy must address.*

# Value flows in one direction

*From billions of contributors to a handful of owners.*

## CONTRIBUTORS

# 3+ billion people



*Provide: searches, posts, location, purchases, creative work, voice, faces.*

Data & Creativity



\$0 returned

## OWNERS

# A handful of shareholders

Apple median worker pay (FY20): **\$57,800**

Amazon median worker pay (FY20): **\$29,000**

Top 1% share of US wealth: **30–40%**

Top-5 tech CAGR (2014–24): **~25% / yr**

*Capital returns compound. Wages stagnate.*

# The young are paying twice — supplying the inputs of the AI economy and losing its first outputs.

*Input intensity vs. early-career employment effect, AI-exposed roles.*

## INPUT

### They supply the most data and creativity.

- Heaviest users of search, social, e-commerce and AI.
- Disproportionate share of attention training algorithmic systems.
- Original content, code and creativity feed model training corpora.

## OUTPUT

### They face the sharpest squeeze on employment.

- AI is automating entry-level cognitive tasks first.
- US workers aged 22–25 saw a 16% relative fall in employment in AI-exposed roles, 2022–25.
- Older cohorts: employment unchanged or rising over the same period.

**TAKEAWAY** — *Any rebalancing instrument must address the same cohort on both sides of the ledger; otherwise the policy and the displacement run in opposite directions.*

# Four families of proposals — none converts data into ownership.

*Each treats data as a commodity to be priced, taxed, shared or replaced; none restructures the relationship.*

## Micropayments

*Lanier (2013); Acquisti, Taylor & Wagman (2016)*

Transaction costs swamp the value of individual data points; data only has value in aggregate.

## Data dividends

*Newsom (2019); Acemoglu, Makhdoumi, Malekian & Ozdaglar (2022)*

Tax-and-redistribute models depend on enforceable taxation; they convert ownership into welfare transfer.

## Data-as-labour

*Posner & Weyl (2018); Arrieta-Ibarra et al. (2018)*

Pays a wage for an activity users perform freely. Solves compensation, not governance.

## Universal basic (data) income

*Van Parijs & Vanderborght (2017); cf. Susskind (2020)*

Cushions displacement but does not address the ownership asymmetry; fiscally fragile at scale.

**TAKEAWAY — What is missing is the relationship itself: not a payment in cash, not access for competitors, but a stake in the productive asset.**

# II.

## The Proposal

*Stock for Data and Creativity converts the data relationship into an ownership relationship.*

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*“When  $r$  exceeds  $g$ , capital naturally concentrates. The remedy is not to dismantle capital, but to broaden who holds it.”*

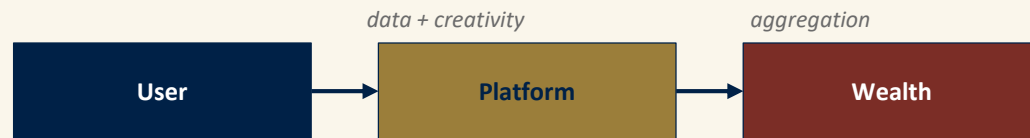
— after Piketty, *Capital in the Twenty-First Century* (2014)

# Stock for Data & Creativity converts the data relationship into an ownership relationship.

*Free services continue; in addition, contributors hold equity in the firms their data and creativity build.*

T O D A Y

## Data as extracted commodity.



*Value flows one way. The user receives only access to a service in exchange.*

U N D E R S T O C K F O R D A T A & C R E A T I V I T Y

## Data as ownership-generating asset.



*Value flows in both directions; the contributor becomes a structural participant.*

## FRAMEWORK

# The proposal rests on three pillars.

*Each addresses a structural deficit in the digital economy that compensation alone cannot reach.*

## I

### Data Equity

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*Consumer Empowerment*

Acknowledging the value personal data and creativity as ownership-generating assets as an extension of employee share-ownership logic to all contributors.

## II

### Technological Inclusivity

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*Corporate Responsibility*

Designing interfaces, education and custodial arrangements so that participation is genuinely universal, including through widespread share ownership and governance.

## III

### Economic Reform

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*Government Regulation*

Governance at scale, dilution management, and cross-border regulatory coordination as enabling conditions for the model to function.

# Move the contributor from the labour side to the capital side of the equation.

*Egalitarian capitalism: market efficiency, distributive fairness, ownership as the connective mechanism.*

## DATA AS LABOUR

### Compensated through wages.

- Returns to platforms are exponential (r); returns to users are zero.
- Wage solutions tax the activity at income rates and require state administration.
- *Posner & Weyl (2018); Arrieta-Ibarra et al. (2018).*

## DATA AS CAPITAL

### Compensated through ownership.

- Contributor holds equity: dividends, capital appreciation, governance.
- Aligns the productive asset (data) with the form of return (capital gains).
- *Sadowski (2019, 2020) — data as capital, digital landlords; Pistor (2019) — the legal construction of capital; cf. Viljoen (2021) — relational data.*

## HISTORICAL DISTINCTION

# This is not the popular capitalism of the 1980s — and the differences are the point.

*Davies et al. (2018) identify three structural failures of share-owning democracy; Stock for Data & Creativity is designed against each.*

Dimension	Popular Capitalism (1980s)	Stock for Data & Creativity
<b>Basis of ownership</b>	One-off privatisation share sales	Continuous contribution of data & creativity
<b>Distribution outcome</b>	Concentrated among the already affluent	Targeted on populations most exposed
<b>Governance</b>	Largely absent for small shareholders	Embedded as design feature — voice on AI policy
<b>Time horizon</b>	Speculative trading; rapid sell-off	Structural ownership; holding-period rules
<b>Scope</b>	National (UK privatisations)	Global by design; cross-border coordination

# III.

## The Findings

*Capital Economics modelling and sensitivity testing*

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*“The model is a flexible tool that allows the design of the policy and specific assumptions to vary.”*

— Capital Economics, Stock for Data Model White Paper (26 March 2026)

## METHOD

# A scenario tool

Ten tech firms, twenty-one exemplar countries, four output dimensions, projected to 2050.

## 10 companies

Apple, Microsoft, Alphabet, Amazon, Meta, Alibaba, ByteDance, Duolingo, OpenAI, Revolut — across five categories, three regions.

## 21 countries

Exemplar markets spanning income levels; results in aggregate and by country.

## Four outputs

User benefit, shareholder dilution, company feasibility, inequality impact (Gini).

## Two allocations

User-based (only active users) or universal (all adults 18+); both stress-tested.

## 2025 → 2050

Long-run projections integrating UN population, interest-rate and revenue-growth assumptions.

## Flexible levers

% of market cap released, retroactive recognition, age weighting, share class, country variation.

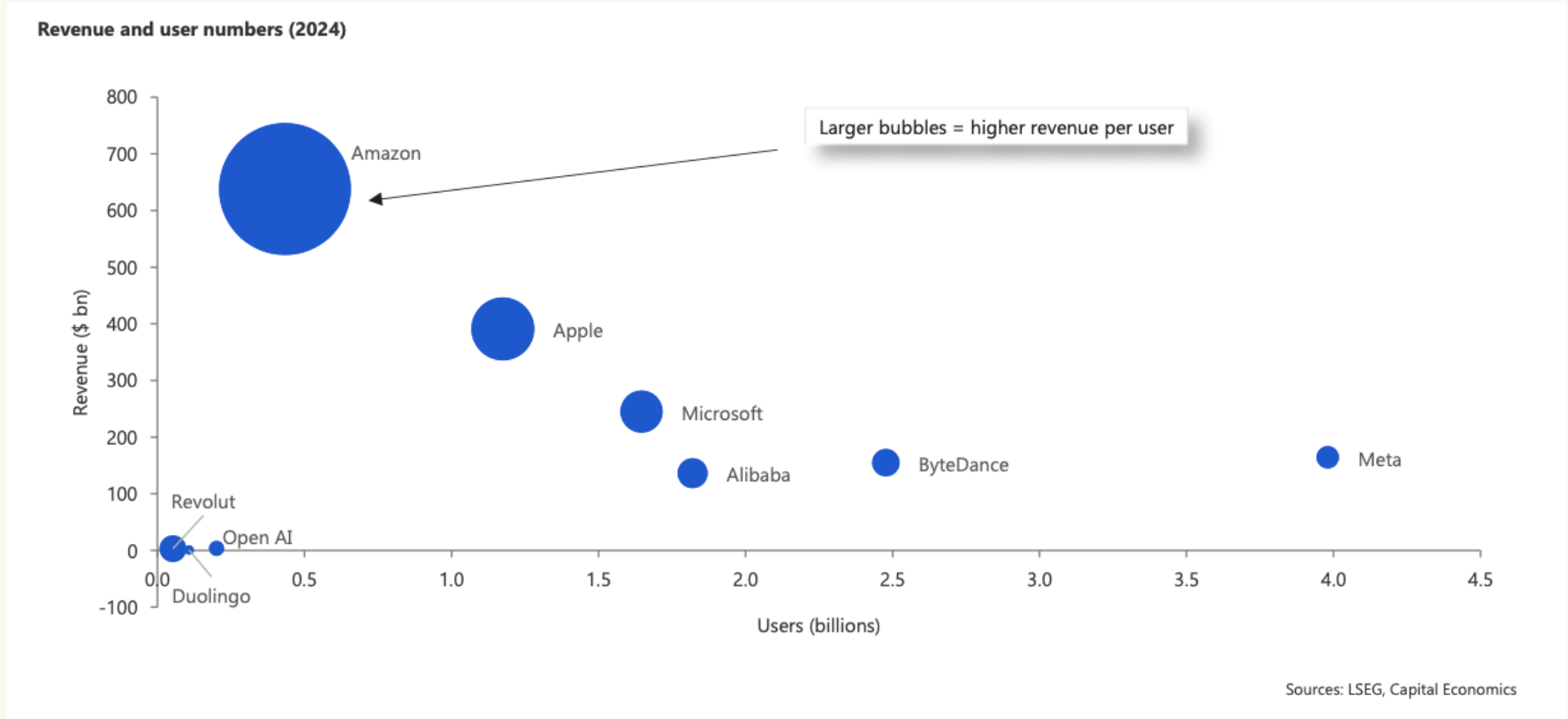
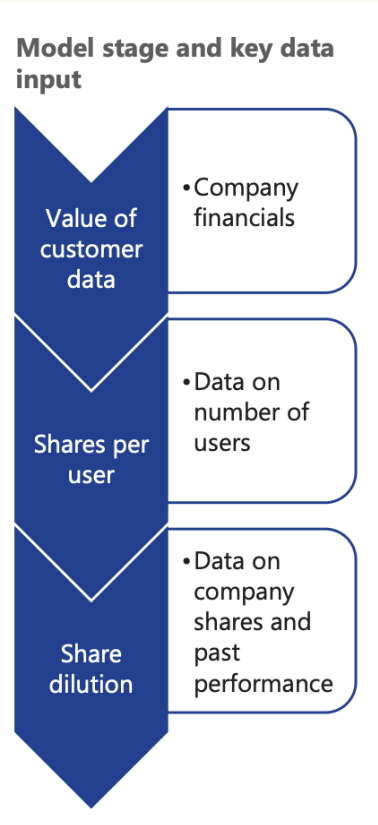
## METHODOLOGY

# The model as a policy simulator

*Five sequential decisions*

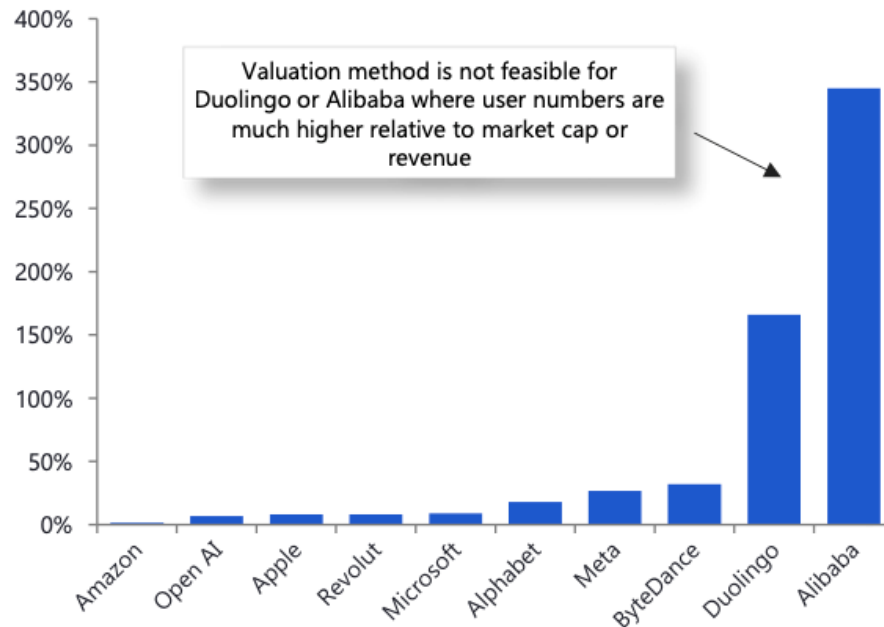
<b>01</b> VALUATION METHOD	<p><i>What share of company value is attributable to data?</i></p> <p><b>OPTIONS:</b> Revenue share · Market-cap share · Fixed data-income</p>	<p><b>BASE CASE</b></p> <p>Market capitalisation</p>
<b>02</b> SHARE OF VALUE	<p><i>What share of value is released per annum?</i></p> <p><b>SENSITIVITY:</b> 1% – 11% release rate (Meta feasibility envelope)</p>	<p>2% of market cap p.a.</p>
<b>03</b> ALLOCATION SPLIT	<p><i>How is the total value divided between equal-share and weighted top-up?</i></p> <p><b>SENSITIVITY:</b> 0 – 100% lump-sum (remainder by user type)</p>	<p>80% lump-sum, 20% top-up by user type</p>
<b>04</b> RECIPIENTS	<p><i>Who qualifies, and on what basis?</i></p> <p><b>OPTIONS:</b> Use intensity · Age · Creativity · Socioeconomic; user-based or universal</p>	<p>Active users; age-weighted</p>
<b>05</b> OUTCOMES	<p><i>What does the model report?</i></p> <p><b>REPORTED:</b> By company · country · age · user type; horizons 2035 and 2050</p>	<p><b>MEASURES</b></p> <p>Per-recipient NPV · Dilution · Feasibility · Gini change</p>

# Divergence in revenue per user across the 10 tech companies

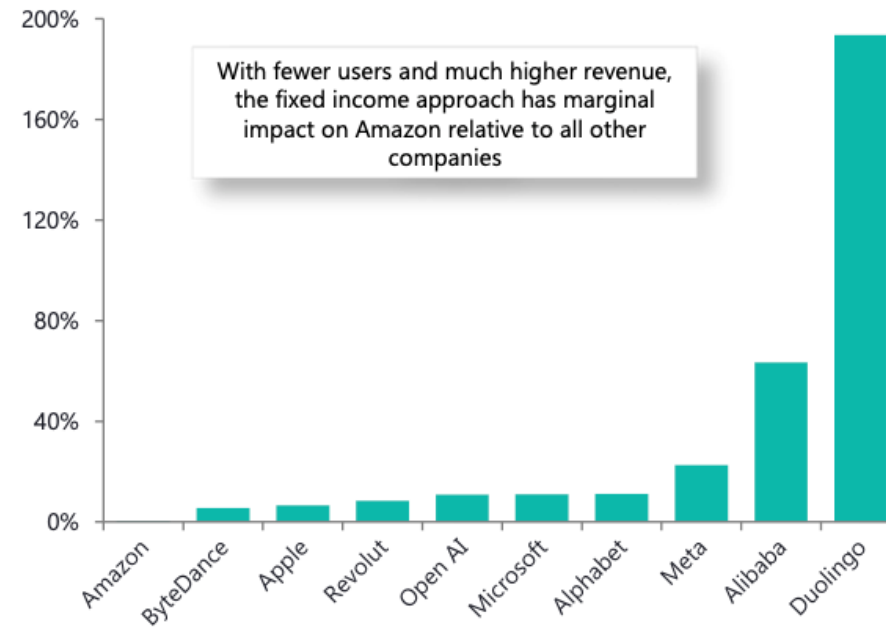


# Fixed income approach becomes unviable for those companies with higher user counts

Fixed income approach, cumulative amount allocated to users as a share of market capitalisation in 2035 (%)



Fixed income approach, cumulative amount allocated to users as a share of revenue in 2035 (%)

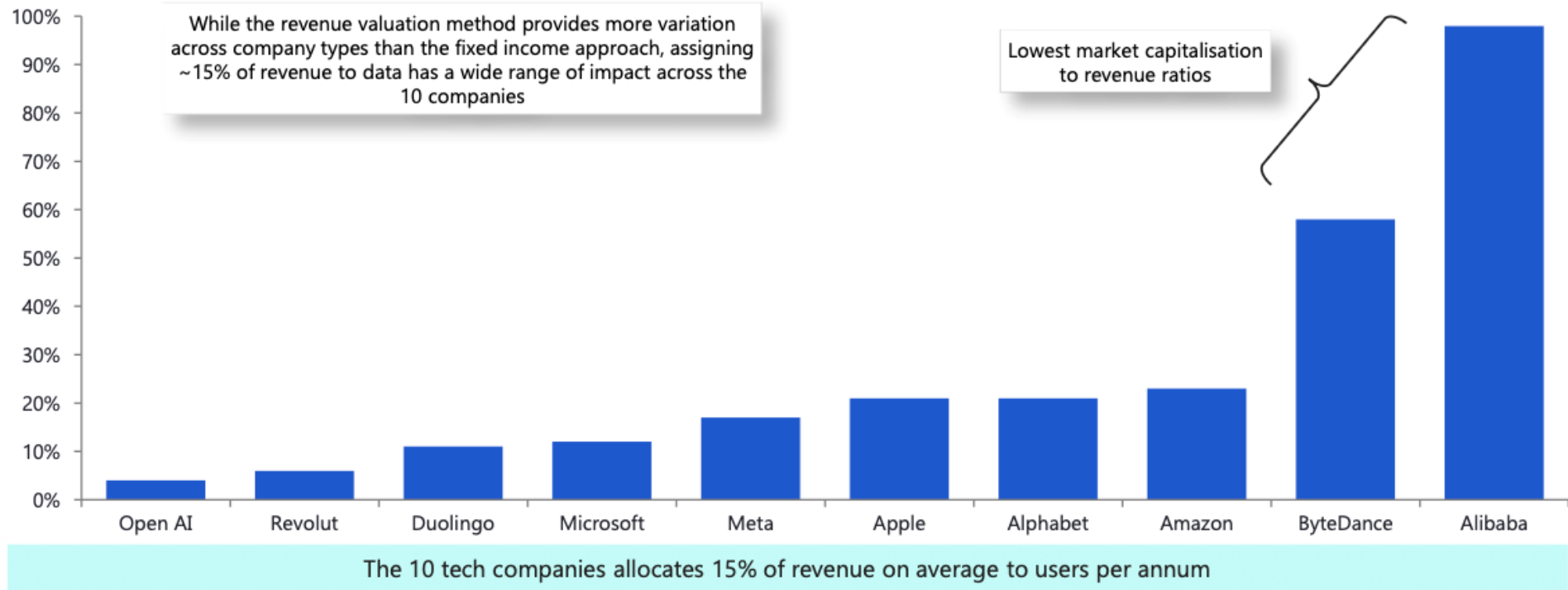


The 10 tech companies allocates \$20 to each user per annum

Sources: LSEG, Capital Economics

# Revenue valuation method hits companies with revenues relative to market cap.

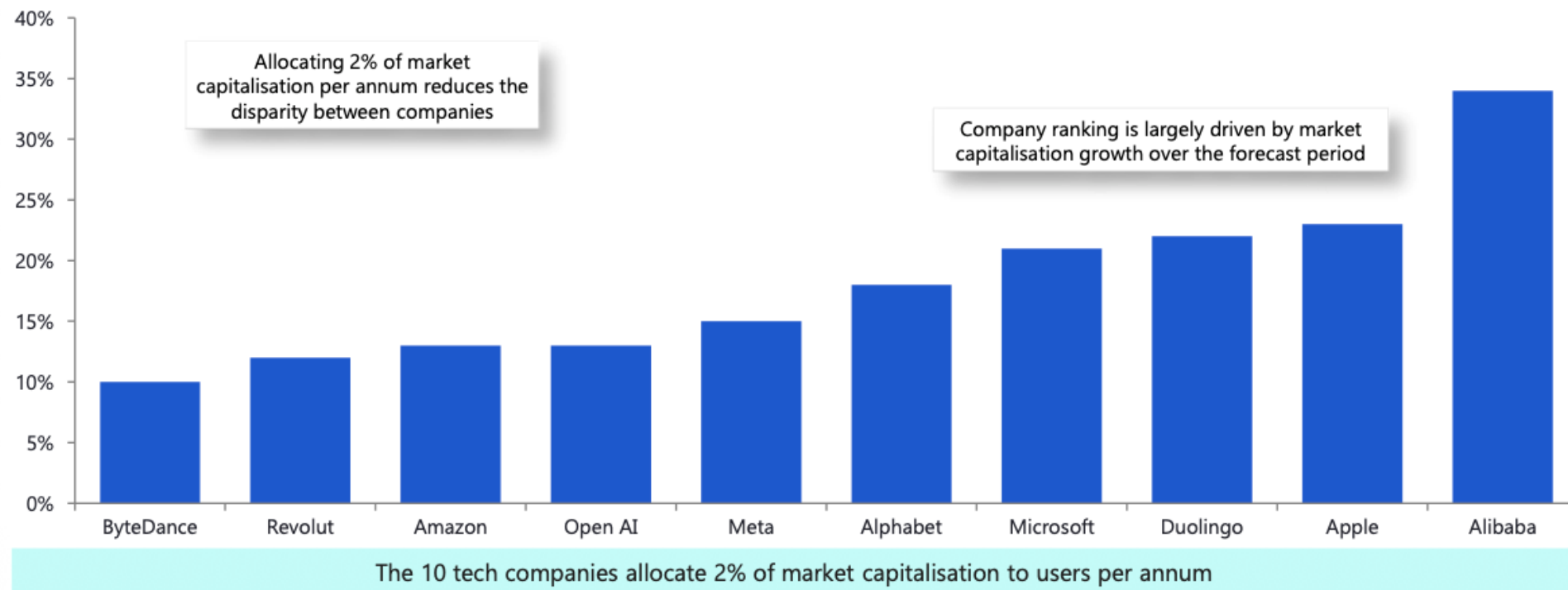
Revenue approach, cumulative amount allocated to users as a share of market capitalisation in 2035 (%)



Sources: LSEG, Capital Economics

# Market capitalisation across companies appears the most effective, fair, and viable for redistributing value owed for data

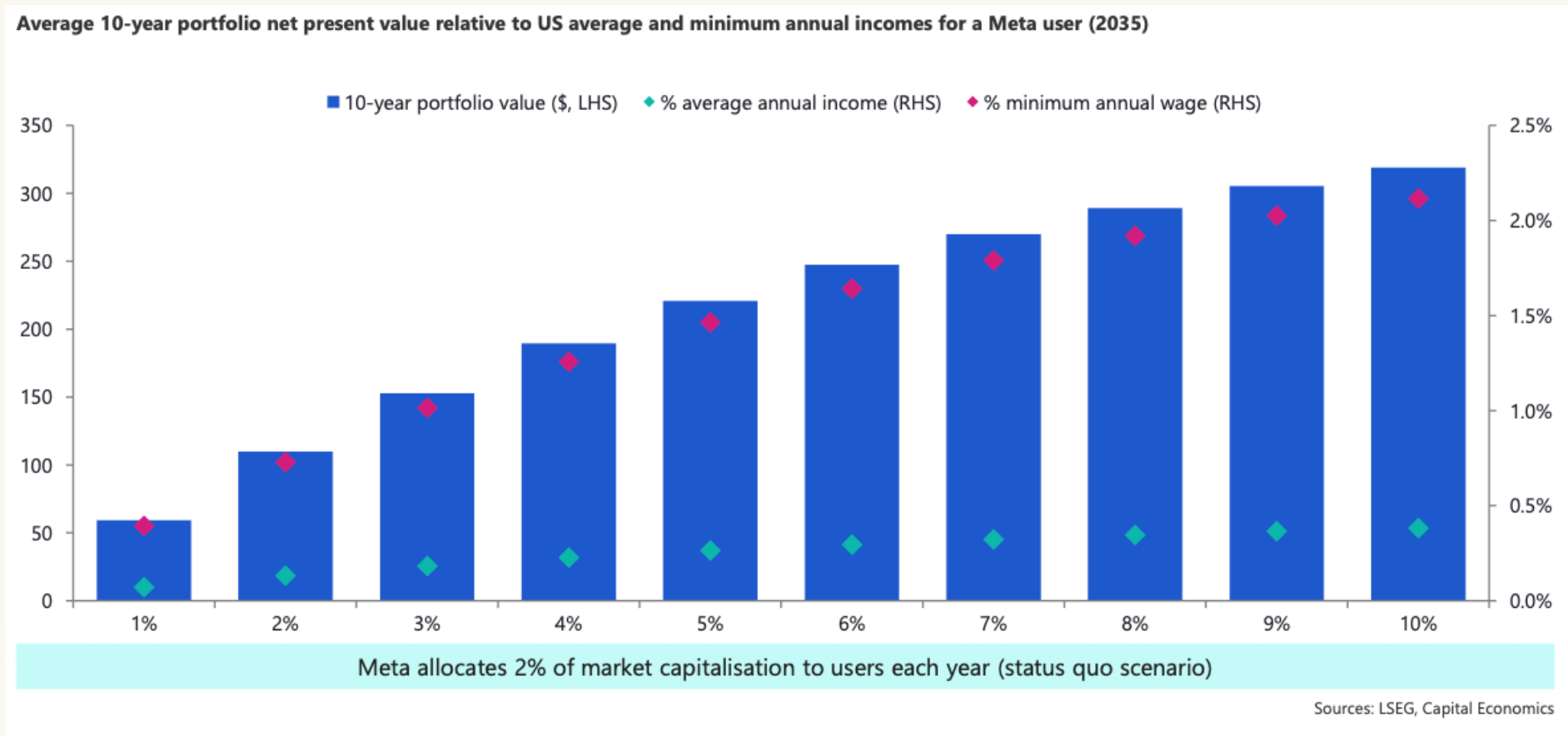
Market Capitalisation approach, cumulative amount allocated to users as a share of market capitalisation in 2035 (%)



Sources: LSEG, Capital Economics

# The Example of Meta

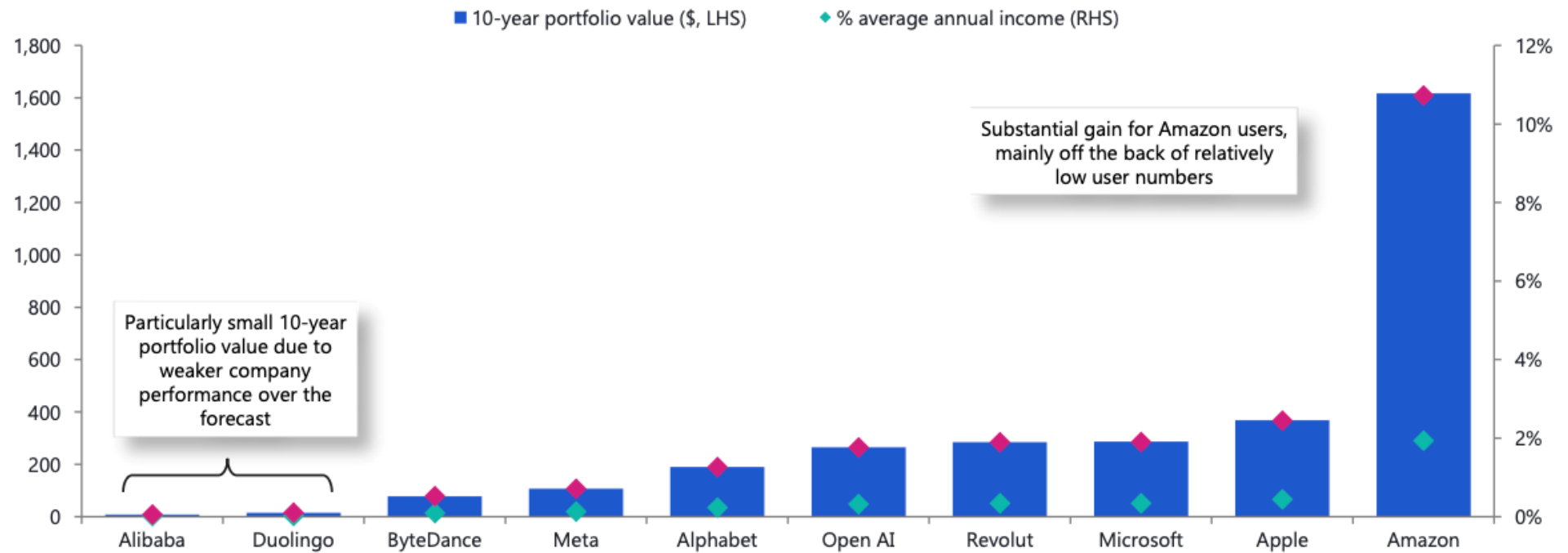
Alternative scenarios (1-11%) for Meta to establish a feasible level of value to be assigned to data.



# Impact on Users

There are large disparities between the portfolio value of an average user across the 10 companies, providing some users with a much larger boost to incomes

Average 10-year portfolio net present value relative to US average and minimum annual incomes for a given user (2035)



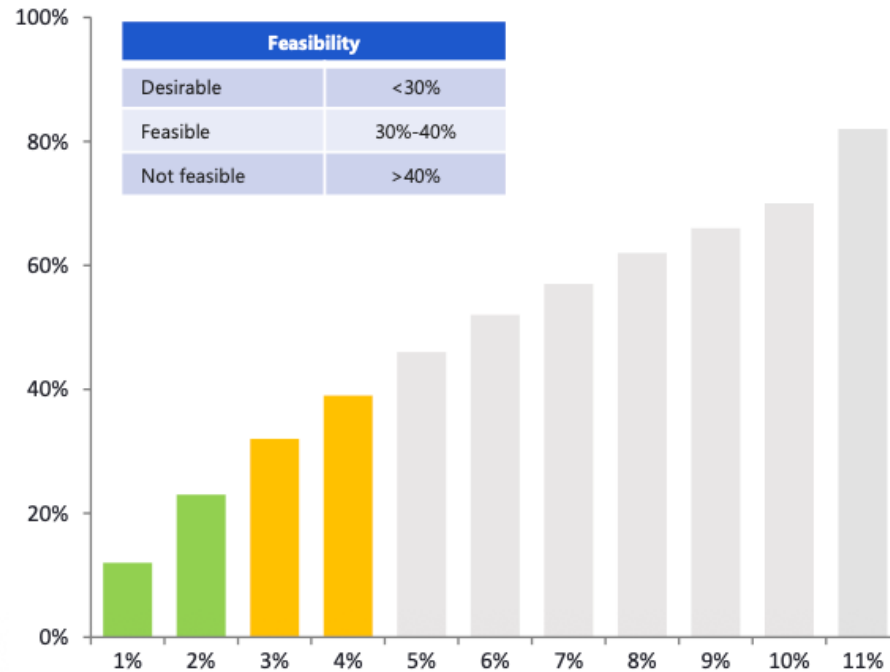
The 10 tech companies allocate 2% of market capitalisation to users each year (status quo scenario)

Sources: LSEG, Capital Economics

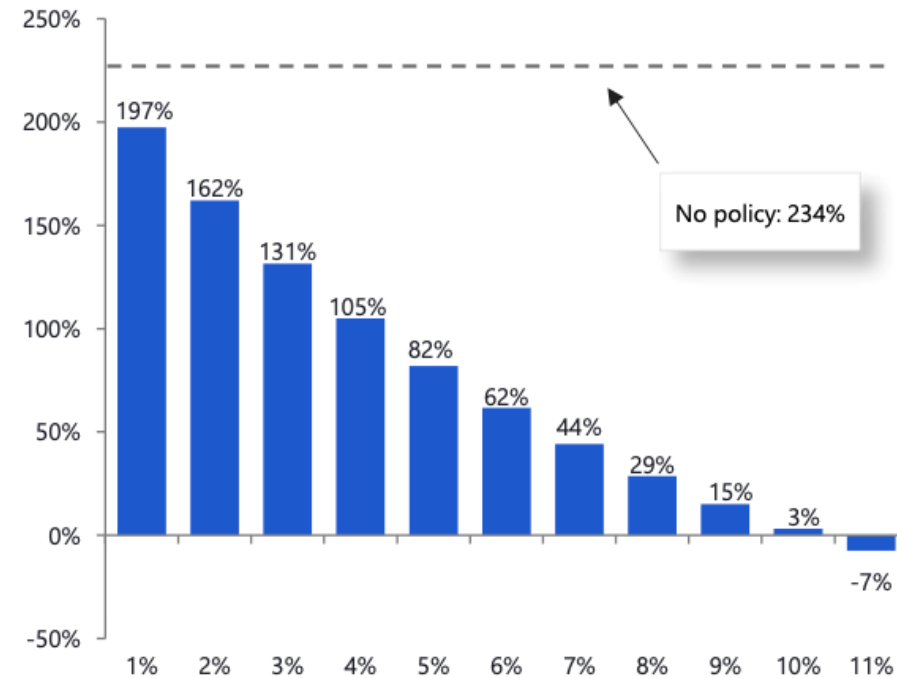
# Impact on Company and Shareholders

Dilution of shares and the knock-on effect from falling share prices on existing shareholders suggest allocating 2-3% of market cap seems most feasible

**Dilution of Meta shares by 2035 (new shares as a share of total) by market capitalisation scenarios**



**Existing Meta shareholder\* portfolio value by market capitalisation scenarios (% change, 2025-2035)**



Sources: LSEG, Capital Economic  
\*Example shareholder portfolio: 5,000 shares

## Allocation by Age Group

*Of the 2% of market cap, we can assume some share will be distributed evenly amongst users, and the remaining share will be a “top-up”, distributed based on age.*

1.	<b>Valuation method</b>	2% of market cap per annum
2.	<b>Share of which is lump-sum, remaining is based on user type</b>	80% of total lump sum, 20% top-up
3.	<b>Lump sum distribution</b>	Lump sum amount distributed equally between all users
4.	<b>“Top-up” by user type</b>	Apply ratios to top-sum amount to distribute amongst users E.g., The value allocated per user for age 18-25 group is 1.6X the value of users age 46+

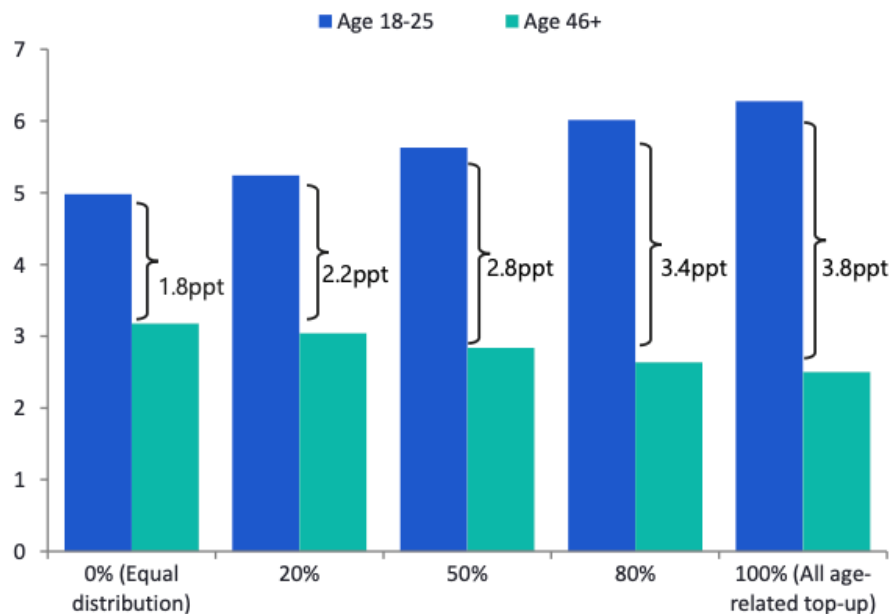
Note: the dilution impact and shareholder impacts will be the same as if we did not apply these ratios. This is simply a redistribution of the same overall value of data that is to be allocated to users.

# Allocation by Age Group

Helps close the gap between generational wealth, with age-related “top-ups” exacerbating the impact.

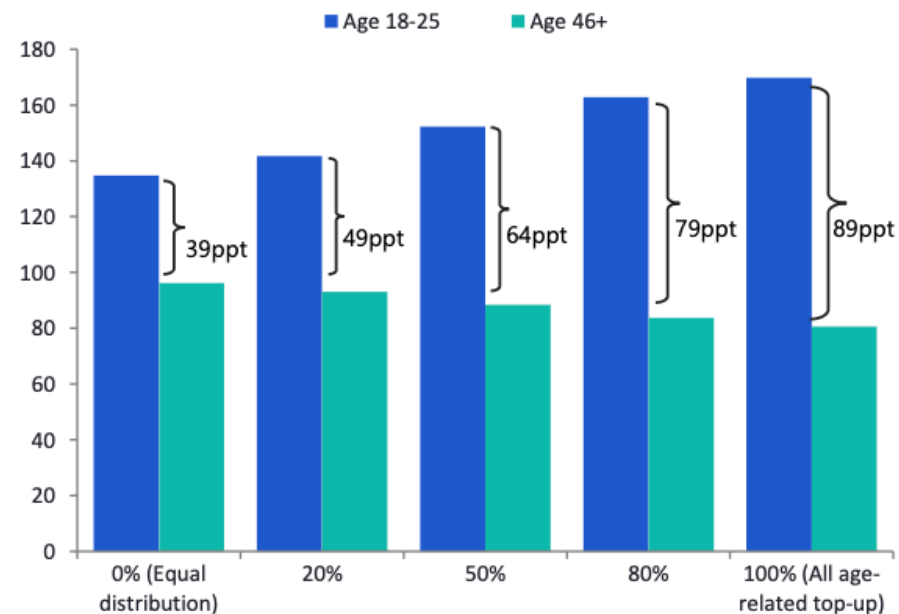
**Boost to income by age group from 2035 portfolio value in the United States**

Estimates assume the user has average income for their age group and is a user across all ten companies (percentage change)



**Boost to income by age group from 2035 portfolio value in Bangladesh**

Estimates assume the user has average income for their age group and is a user across all ten companies (percentage change)



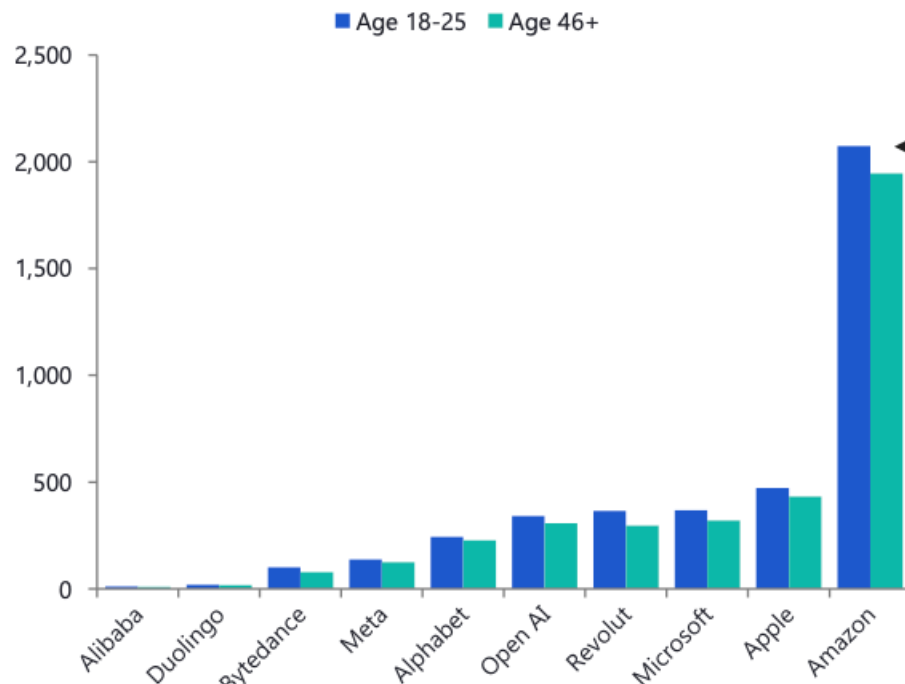
Total value to allocate is 2% of market cap per year. Horizontal axis then shows variation in the share of this value that is an age-related top-up.

Sources: Capital Economics  
\*Note: ppt is percentage-points

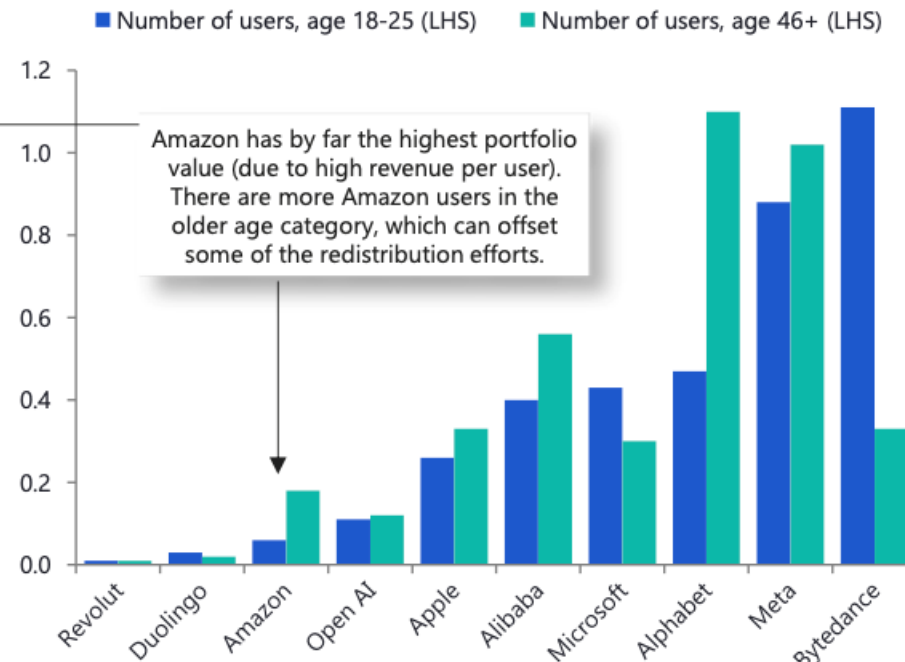
# Allocation by Age Group

Returns on portfolio vary significantly by company, making the user demographics an important driver of the impact on whole age groups

Portfolio value per user in 2035 by age category (Nominal US\$)



Global number of users age 18-25 (millions) and share of total (%) in 2025, by tech company



Amazon has by far the highest portfolio value (due to high revenue per user). There are more Amazon users in the older age category, which can offset some of the redistribution efforts.

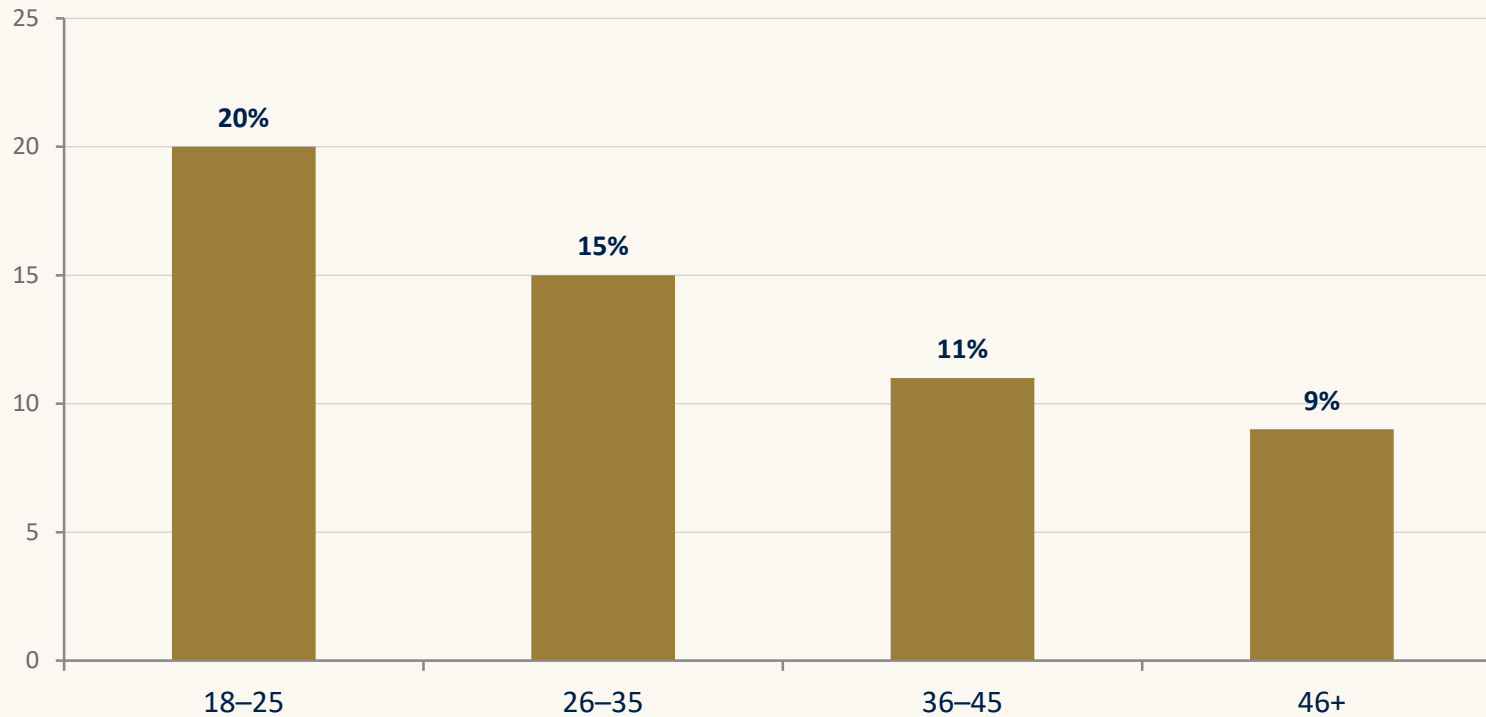
Uses value to allocate to users as 2% of market capitalisation per year, with 80% lump sum and 20% age-related top-up

Source: Capital Economics

# Age-weighted allocation lifts US 18–25 cohort incomes by 20% — and narrows the inter-generational income gap by 11%.

User-based allocation; 80% of value allocated by age bracket, 20% equal; ten companies; 2050 NPV.

Income boost in the US, 2050, by age group



The cohort most exposed to AI displacement receives the largest relative gain.

## WHY THIS MATTERS

An 18–25-year-old user receives **twice** the income boost of someone aged 46+ — without taxing either of them.

Universality alone cannot achieve this: it spreads value evenly. Age-weighting links allocation to exposure.

SECTION

# IV.

## The Way Forward

*Levers, conditions, and the open questions*

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*“Without a formal mechanism for representation, users are subjects rather than citizens of the digital polity.”*

— Lehdonvirta, *Cloud Empires* (2022)

## DESIGN CHOICES

# Six levers the modelling show we need to set deliberately.

01

## Share of value released

Headline parameter. Base-case 2% of market cap p.a. is conservative; higher rates accelerate impact but bind on dilution.

02

## Eligibility regime

User-based, universal, or a hybrid. Determines per-recipient value and the geometry of redistribution.

03

## Age weighting

Strength of the tilt toward those most exposed to AI displacement. The decisive lever for inter-generational rebalancing.

04

## Retroactive recognition

How far back, and over what phase-in horizon. Affects perceived legitimacy and market reaction.

05

## Share class issued

Voting vs non-voting; relation to incumbent dual-class structures. Determines whether governance is real or nominal.

06

## Cross-country variation

Differentiate allocations by income level and tech exposure, or apply one global rule. Political vs technical question.

## IMPLEMENTATION CONDITIONS

# Five conditions take Stock for Data & Creativity from concept to practice.

*A market-compatible reform that is structurally egalitarian — not nationalisation, not welfare, not philanthropy.*

**01****Simulation evidence**

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Continue stress-testing through Capital Economics modelling: allocation, dilution, sensitivities, dual-class scenarios.

**02****Regulatory engagement**

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Translate the proposal into regulatory language; engage the Digital Markets Act, OECD coordination, national securities regulators.

**03****Corporate dialogue**

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Begin with the most visibly data-dependent firms; build voluntary pathways before mandates arrive.

**04****Public understanding**

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Plain-language education on ownership, dividends and governance — especially in markets with limited capital-markets exposure.

**05****Political coalition**

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Cross-party: market-compatible enough for the centre-right, redistributive enough for the centre-left. Frame as the digital extension of property-owning democracy.

## FOR DEBATE AT THIS CONFERENCE

## Six open questions the evidence does not settle.

**Q1****What is the appropriate share of value to release annually?**

*2% is conservative; 5% transforms impact but tests dilution thresholds. Where should the line sit?*

**Q2****User-based, universal, or hybrid?**

*Optimal for per-recipient value vs. optimal for inequality reduction are not the same instrument.*

**Q3****How strongly should we weight by age?**

*The 18–25 income-boost result depends on it. Is the inter-generational tilt politically viable in high-income countries?*

**Q4****Voting or non-voting shares?**

*Dual-class structures concentrate founder control. Should the policy address share-class reform or accept it as a constraint?*

**Q5****Which jurisdiction starts?**

*EU under Digital Markets Act, UK as policy laboratory, or a multilateral coordination move? The first mover sets the design.*

**Q6****Pilot company, pilot country?**

*Voluntary uptake by a data-dependent firm, vs national mandate. Where is the path of least resistance?*

If your data and creativity helped build a company worth trillions,  
**you should own a piece of it.**

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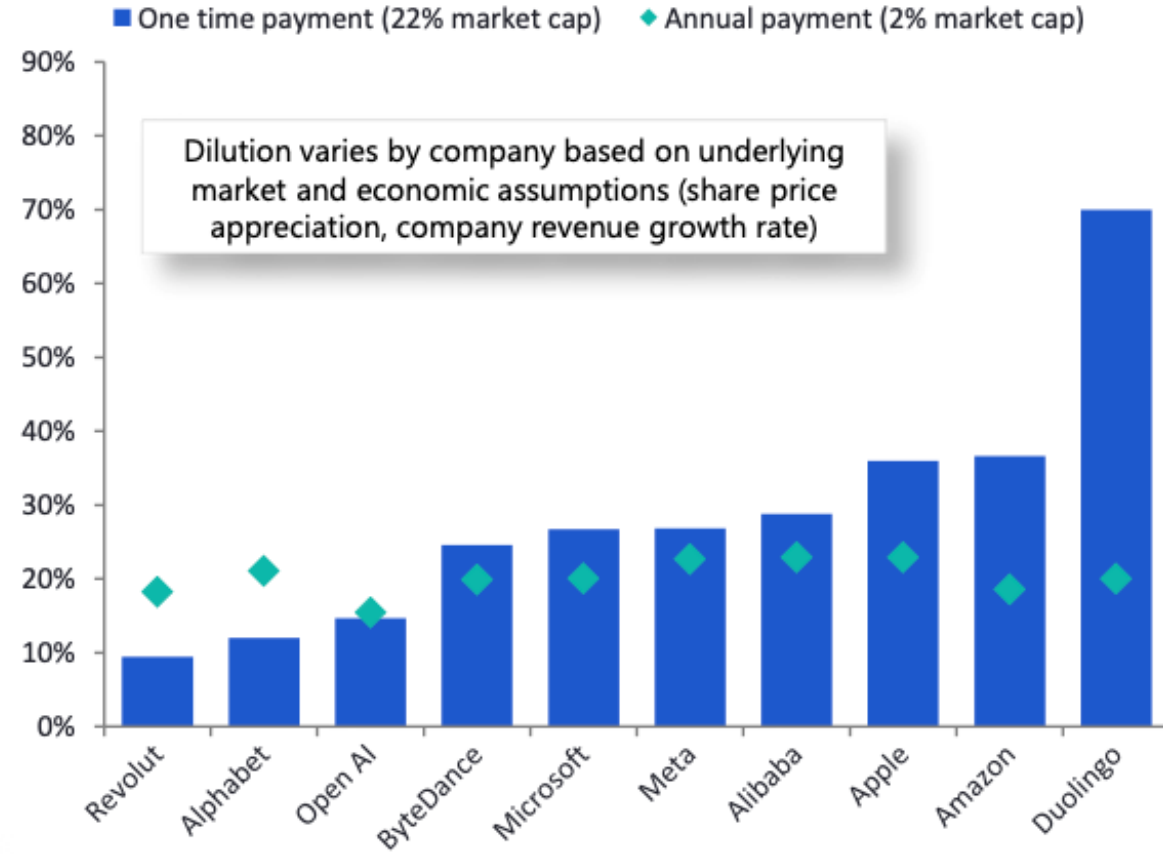
Not welfare. Not taxation. Not nationalisation.

*Ownership — in proportion to contribution, weighted toward the generations most exposed to the AI transition.*

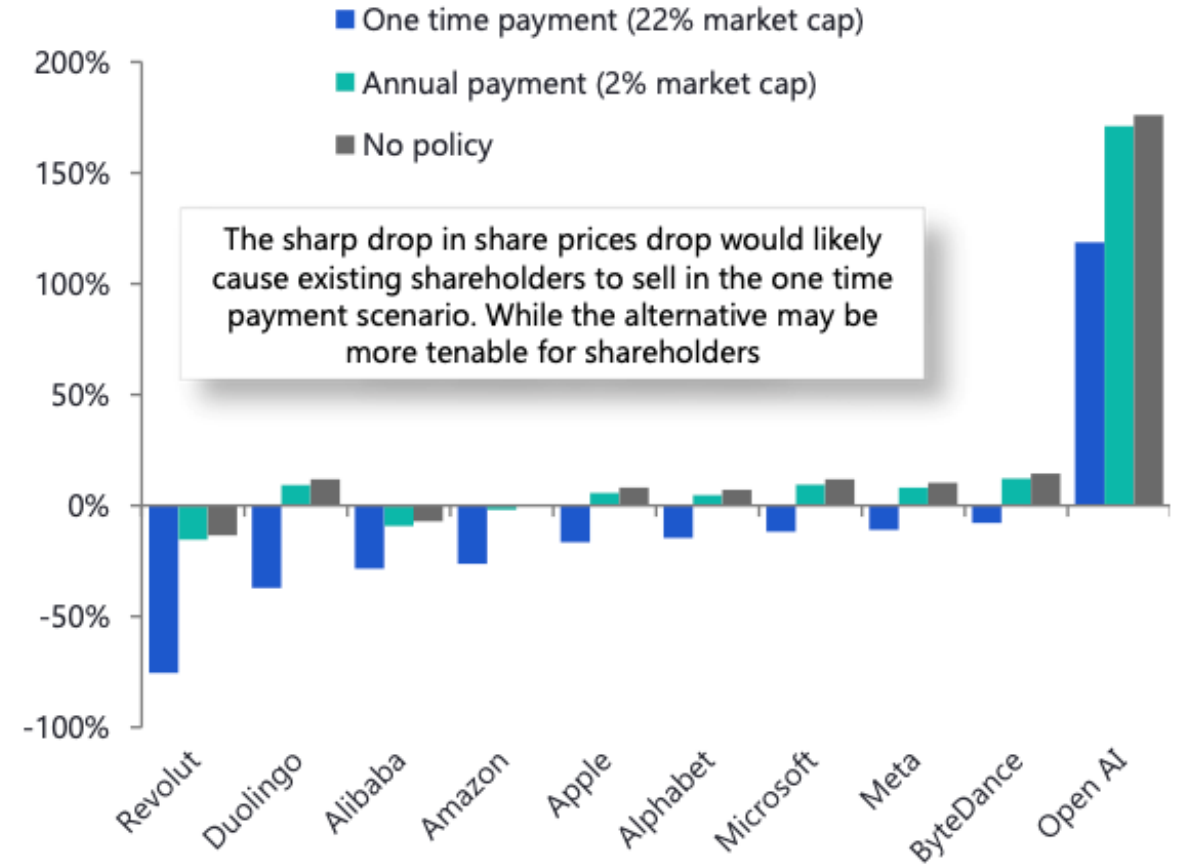
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# A one-off payment would cause a sharp drop in share prices, which could be exacerbated by reactions from existing shareholders

Dilution of shares by 2035 (new shares as a share of total)



Share price (% change, 2024-2025)

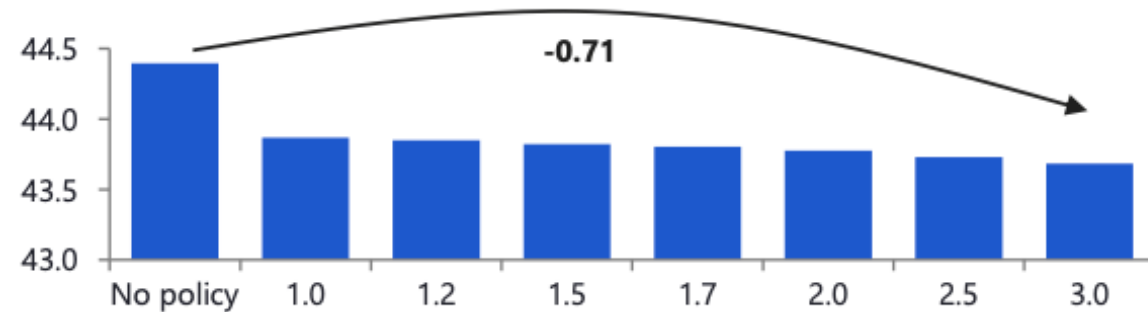


The 10 tech companies allocate 22% of market capitalisation to users in the first year

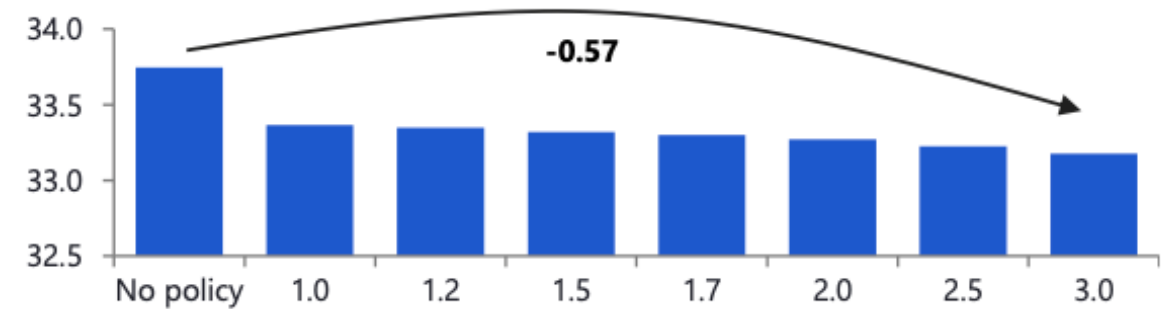
Sources: LSEG, Capital Economics

## Reduction in Gini coefficient as a result of policy, particularly in Bangladesh, even if there is no top-up based on socioeconomic status

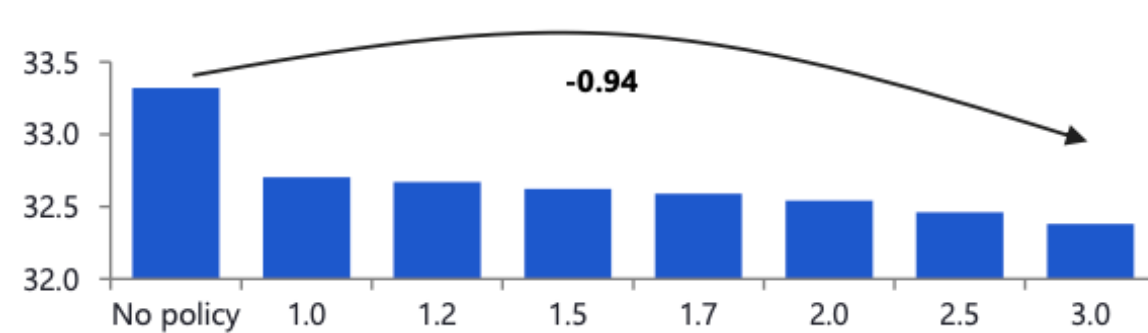
United States current Gini coefficient and with 2035 portfolio net present value (100: total inequality, 0: perfect equality)



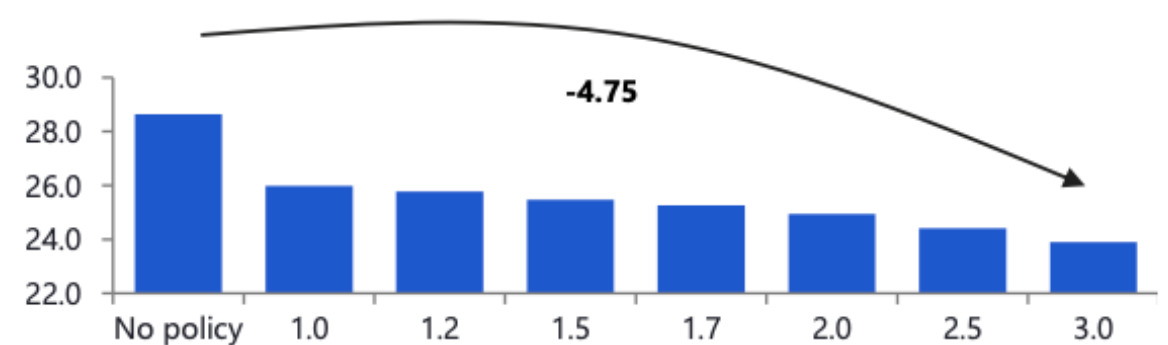
United Kingdom current Gini coefficient and with 2035 portfolio net present value (100: total inequality, 0: perfect equality)



China current Gini coefficient and with 2035 portfolio net present value (100: total inequality, 0: perfect equality)



Bangladesh current Gini coefficient and with 2035 portfolio net present value (100: total inequality, 0: perfect equality)



Uses value to allocate to users as 2% of market capitalisation per year, with 80% lump sum and 20% socioeconomic top-up. Horizontal axis shows adjustment in the ratio of lump sum allocated to the bottom 40% of the income distribution compared to the top 60%.

Source: Capital Economics