TAX CHALLENGES ARISING FROM THE DIGITALISATION OF THE ECONOMY

UPDATE ON THE ECONOMIC ANALYSIS & IMPACT ASSESSMENT

WEBCAST

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OECD
BETTER POLICIES FOR BETTER LIVES

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Overview

Introduction & Preliminary findings

Approach & caveats

Revenue Effects

- Pillar 1
- Pillar 2
- Combined revenue effects of Pillars 1 & 2

Investment effects

Next steps

INTRODUCTION

Introduction

Preliminary results of the Economic Analysis & Impact Assessment

PURPOSE

This analysis is undertaken to inform key decisions to be taken by Inclusive Framework members in negotiations underway at the OECD

ASSUMPTIONS

in this preliminary analysis are illustrative and do not pre-judge decisions of the IF

HIGH-LEVEL RESULTS

at the level of country groups (e.g. low-, middle- and high-income)

UPDATED RESULTS

as further decisions are taken by the IF on the design and parameters of the reform

Overall impact on global tax revenues would be significant

The combined effect of Pillars 1 & 2 would lead to a significant increase in global tax revenues

- Estimated global net revenue gain up to **4% of global CIT revenues** or **USD 100 billion annually**, depending on reform design

- The **revenue gains are broadly similar across high, middle and low-income economies**, as a share of corporate tax revenues

- The reforms are expected to lead to **a significant reduction in profit shifting**

Failure to reach a consensus-based solution would lead to further unilateral measures and greater uncertainty

APPROACH & CAVEATS

Approach to assess reform impact

Flexible analysis framework

To inform ongoing discussions on Pillar 1 and Pillar 2 design and parameters

Broad geographic and company coverage

With more than 200 jurisdictions (all members of the Inclusive Framework and a large number of developing countries) and more than 27,000 MNE groups

Combining data from a range of sources

Firm-level data wherever possible, combined with aggregate data

Extensive interactions with stakeholders
including delegates from Inclusive Framework jurisdictions and other key stakeholders

Main caveats

Results will depend on Pillar 1 & Pillar 2 design, which is still to be decided by the Inclusive Framework

- Further revisions will be made to reflect future design decisions
- Current estimates assume that Pillar 1 is not a "safe harbour" regime

Underlying data have limitations

- Due to gaps in coverage and time lags and the methodology inevitably involves simplifying assumptions

Refinements are still ongoing to improve data quality, in cooperation with Inclusive Framework members

Potential strategic reactions of MNEs & governments

- For Pillar 2, some of these reactions have been modelled in the assessment
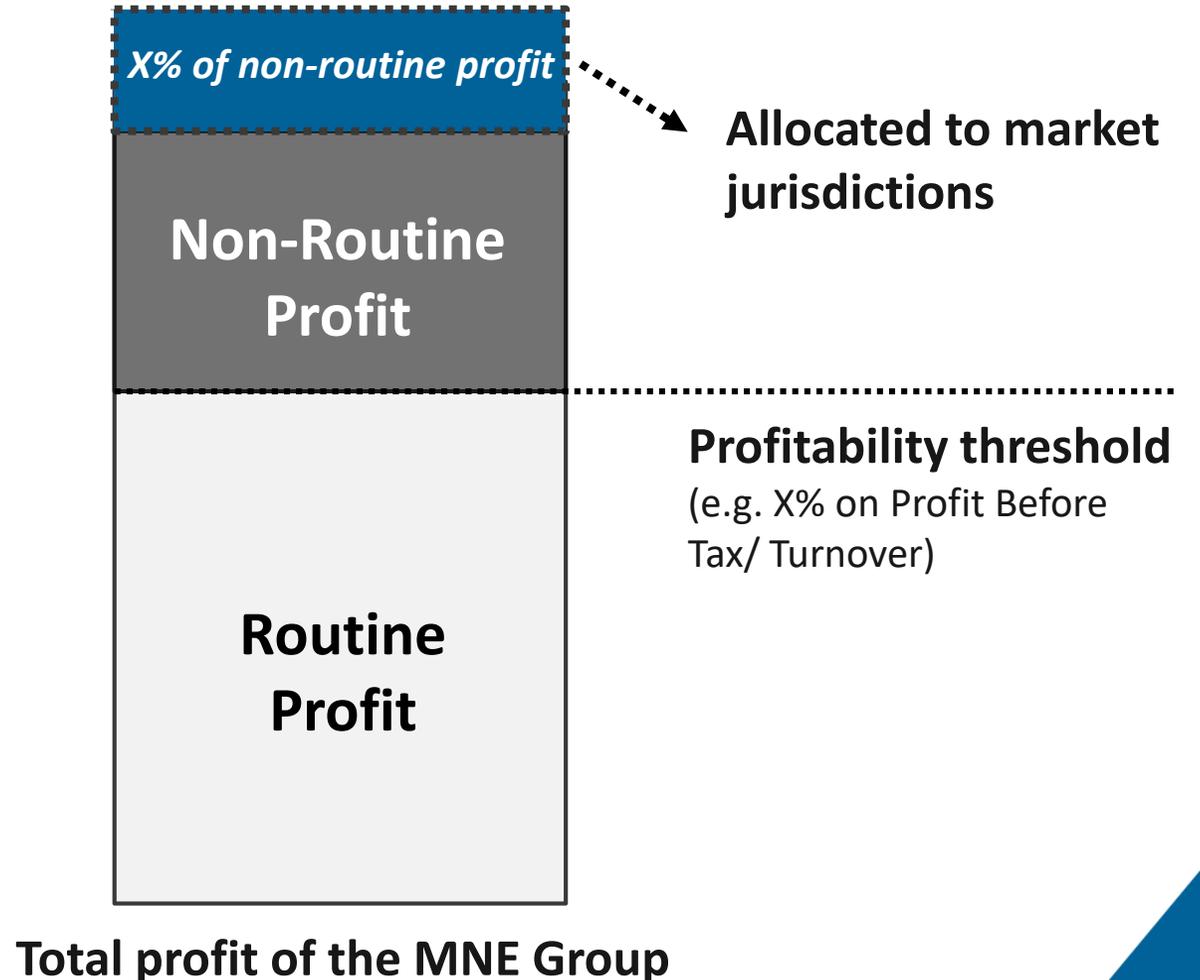- These reactions are difficult to anticipate with certainty

REVENUE EFFECTS PILLAR 1

Pillar 1 changes the way countries carve up the 'tax pie'
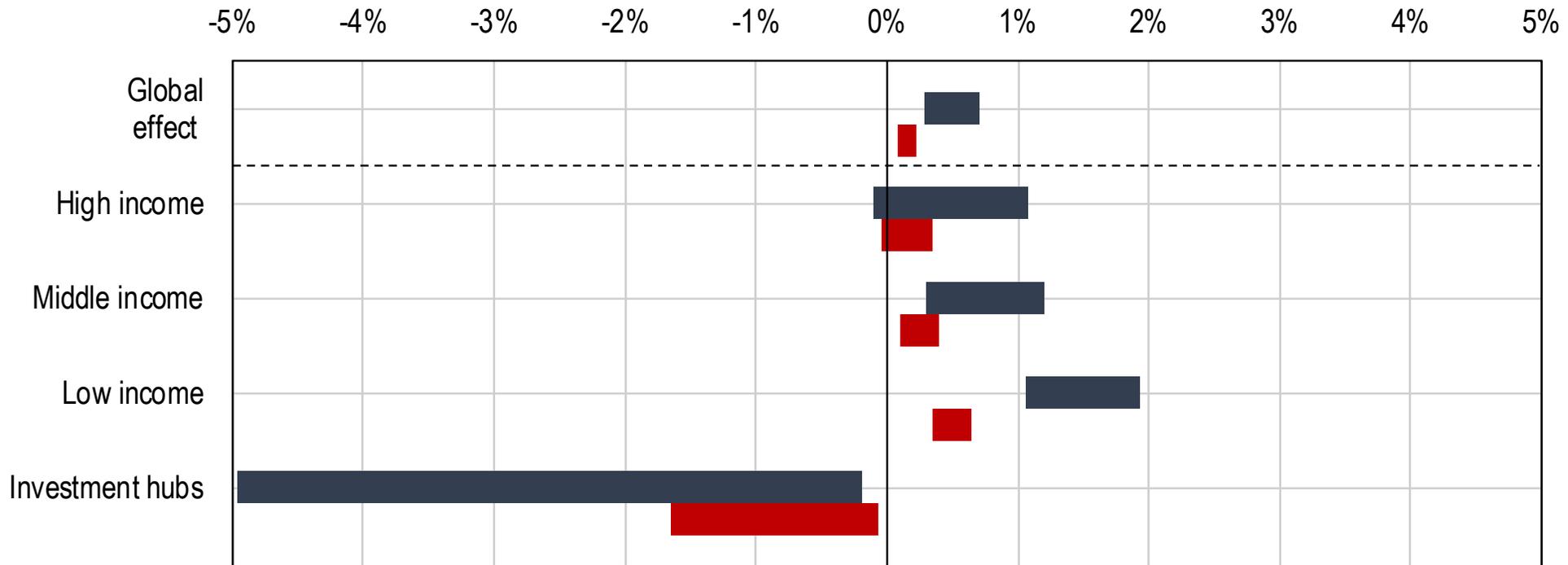
Pillar 1: Amount A

- **Substantial reallocation of taxing rights** across jurisdictions

- **Going beyond physical presence** to determine taxing rights

- **Considers MNE groups as a whole** rather than entity-by-entity

- **Allocates some tax base to market jurisdictions based on a formula**

X% of non-routine profit → **Allocated to market jurisdictions**

Non-Routine Profit

Profitability threshold
(e.g. X% on Profit Before Tax/ Turnover)

Routine Profit

Total profit of the MNE Group

Most jurisdictions gain tax revenues, except investment hubs

Pillar 1 estimated effect on CIT revenues (% of CIT revenues)

Illustrative assumption on residual profit threshold (based on profit-before-tax to turnover ratio):

■ 10%   ■ 20%

Note: Illustrative scenarios of Pillar 1 (Amount A only), where residual profit is defined with a 10% or 20% threshold on profit-before-tax to turnover, assuming a 20% reallocation of residual profit to market jurisdictions, with commodities and financial sectors excluded from scope. High, middle and low income jurisdictions are defined based on the World Bank classification. Investment hubs are jurisdictions with inward FDI above 150% of GDP.

In addition to reallocating taxing rights, Pillar 1 would slightly increase tax revenues

- **Global tax revenues would slightly increase** as some taxing rights shift from low-tax jurisdictions to higher-tax jurisdictions

- **Most economies** would experience a **small tax revenue gain**

- On average, **low and middle-income economies would gain relatively more revenue than advanced economies**

- **Investment hubs** would experience **some loss in tax revenues**

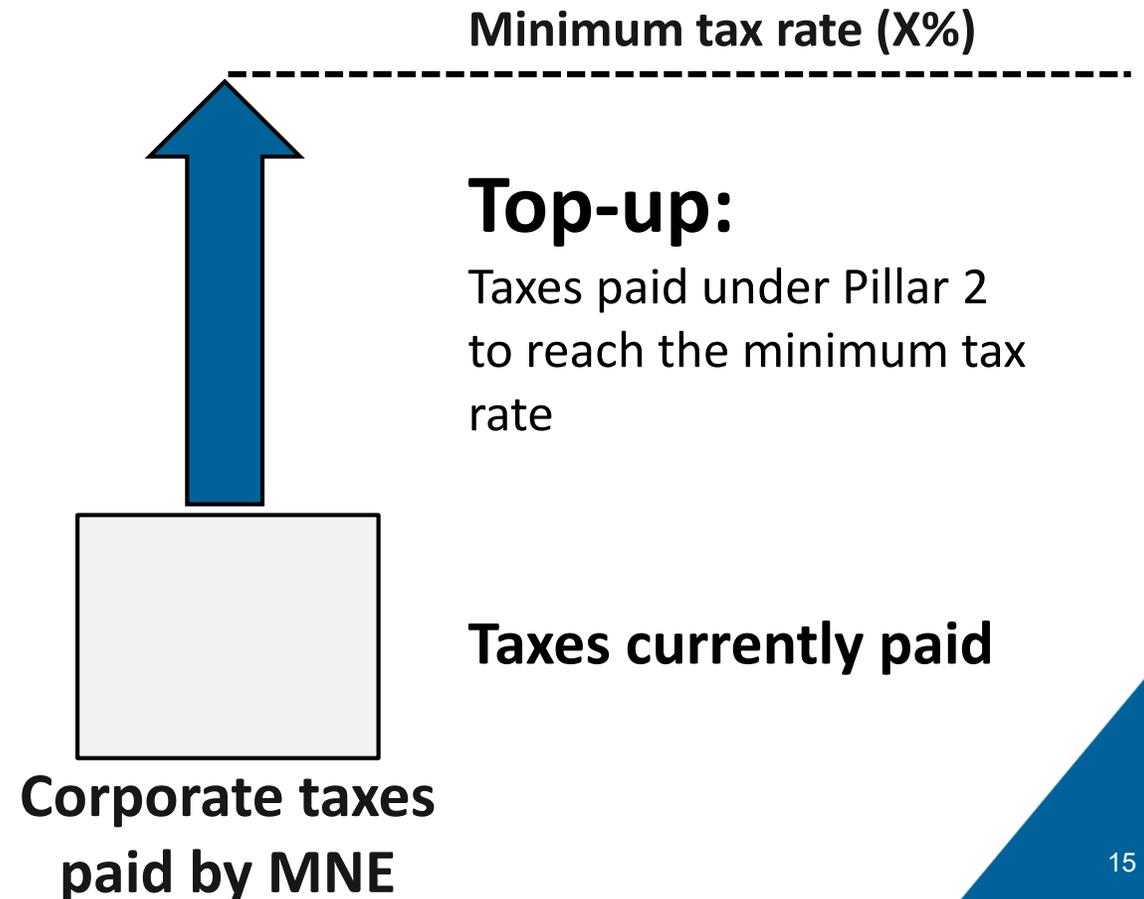- **More than half of the profit reallocated** comes from **100 MNE groups**

REVENUE EFFECTS PILLAR 2

Pillar 2 would operate as a minimum tax rate

Pillar 2: GloBE

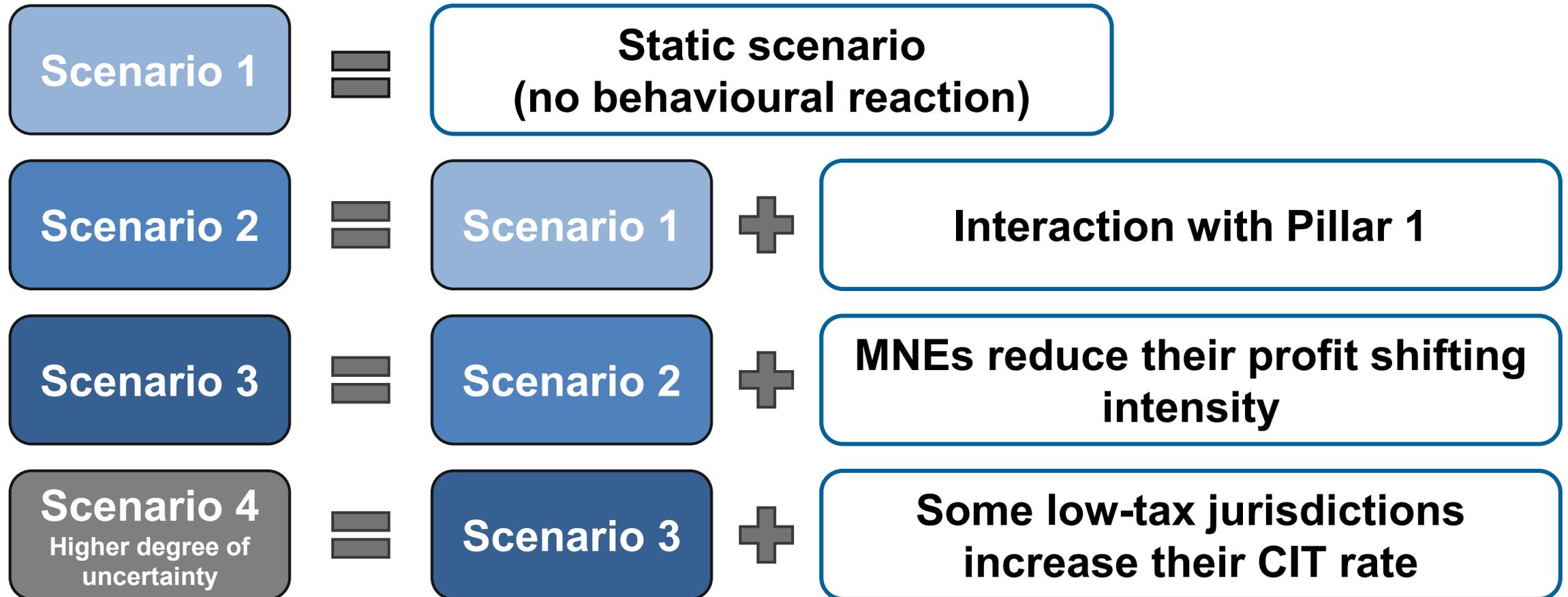- **GloBE gives countries the right to 'tax back' profit** that is currently taxed below the minimum rate

- **It would operate as a 'top-up' tax,** up to the minimum rate

- It could be applied either on **global MNE profit or jurisdiction-by-jurisdiction**

Minimum tax rate (X%)

Top-up:
Taxes paid under Pillar 2 to reach the minimum tax rate

Taxes currently paid

Corporate taxes paid by MNE

Main stylised scenarios on strategic reactions of MNEs & governments

Scenario 1 = **Static scenario (no behavioural reaction)**

Scenario 2 = **Scenario 1** + **Interaction with Pillar 1**

Scenario 3 = **Scenario 2** + **MNEs reduce their profit shifting intensity**

Scenario 4 Higher degree of uncertainty = **Scenario 3** + **Some low-tax jurisdictions increase their CIT rate**

Global tax revenue gains could be up to 4% of global CIT revenues

Illustrative scenario on Pillar 1 and 2 design
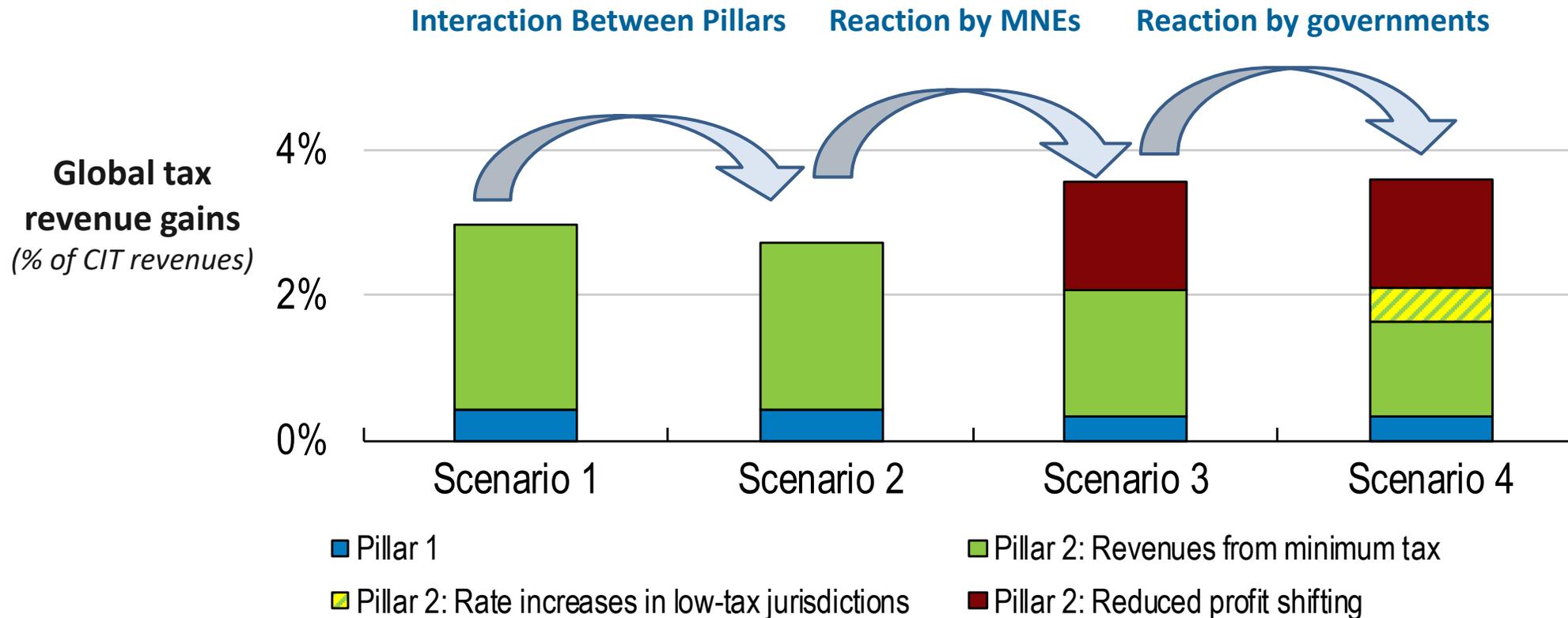
Note: Pillar 1 (Amount A only) estimates are based on an illustrative scenario where residual profit is defined with a 10% threshold on profit-before-tax to turnover, assuming a 20% reallocation of residual profit to market jurisdictions, with commodities and financial sectors excluded from scope. Pillar 2 estimates are based on an illustrative scenario with jurisdiction blending and a 12.5% minimum tax rate.

Pillar 2 would raise significant tax revenues and reduce profit shifting

Pillar 2 would raise a significant amount of additional tax revenues

- The amount will depend on the rate and the design

The reform would reduce profit shifting

- Pillar 2 would reduce tax rate differentials between jurisdictions and reduce the incentives for MNEs to shift profit
- This will be important for developing economies as they tend to be more adversely affected by profit shifting than high-income economies
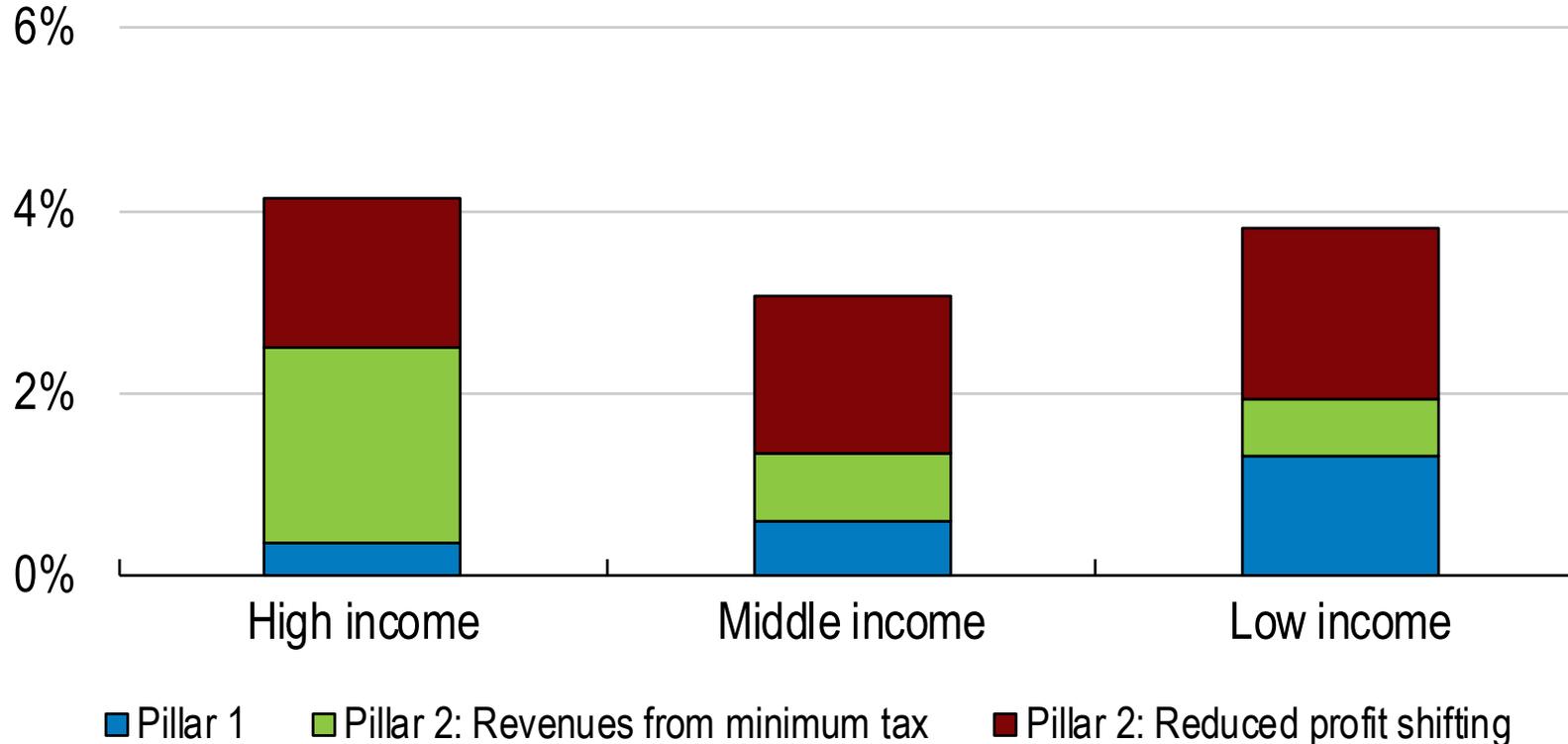
COMBINED REVENUE EFFECTS OF PILLARS 1 & 2

The revenue gains are broadly similar across income groups

Illustrative scenario on Pillar 1 and 2 design

Average tax revenue gains across income groups, Scenario 3 *(% of CIT revenues)*

Legend:
- ■ Pillar 1
- ■ Pillar 2: Revenues from minimum tax
- ■ Pillar 2: Reduced profit shifting

Note: Pillar 1 (Amount A only) estimates are based on an illustrative scenario where residual profit is defined with a 10% threshold on profit-before-tax to turnover, assuming a 20% reallocation of residual profit to market jurisdictions, with commodities and financial sectors excluded from scope. Pillar 2 estimates are based on an illustrative scenario with jurisdiction blending and a 12.5% minimum tax rate. High, middle and low income jurisdictions are defined based on the World Bank classification. Excludes investment hubs, which are jurisdictions with inward FDI above 150% of GDP.

INVESTMENT EFFECTS

Investment impacts are assessed in a stylised, standard framework

Use of the Effective Tax Rates (ETR) framework

- To assess the impact of the proposals on a stylised investment project
- The methodology incorporates the profit shifting behaviour of MNEs and the underlying data is consistent with the revenue estimation

Impact of ETRs on investment may vary across firms

- A firm-level analysis is being undertaken

Assessment of the counterfactual scenario with no agreement and more unilateral measures

Small increase in ETRs, with the biggest effect on investment hubs

Illustrative scenario on Pillar 1 and 2 design
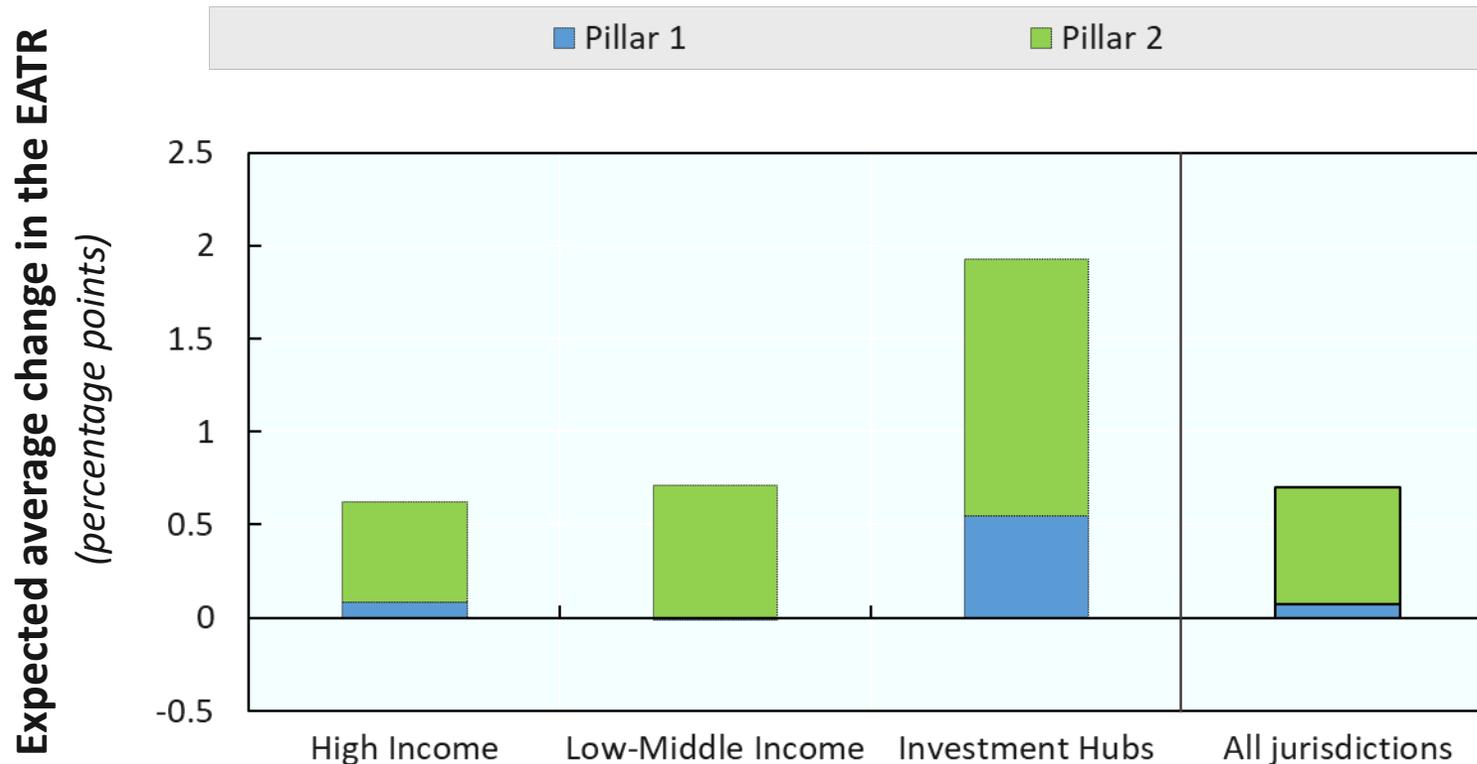
Note: Pillar 1 (Amount A only) considers a 10% threshold on Profit/Turnover, 20% reallocation to market and a carve-out for Finance and Commodities. Pillar 2 considers a 12.5% rate with jurisdiction blending. The impact on zero-tax jurisdictions is not accounted for in this graph. The combined effect does not include interaction effects of both pillars. The number of jurisdiction is restricted to those available in Corporate Tax Statistics due to data limitations.

Small effects on investment costs, with the potential for improved tax certainty

The direct effect on investment costs is expected to be small in most countries

- **Many firms will be unaffected by the proposals**, which target firms with high levels of profitability and low effective tax rates

The reforms would reduce the influence of corporate taxes on investment location

- **Investment could be driven more** by other factors (e.g. infrastructure, education levels or labour costs)
- This could channel more investment to jurisdictions where it would be **more productive**, which would **support global growth**

The failure to achieve a consensus-based solution would lead to more unilateral measures, uncertainty and trade disputes

NEXT STEPS

Next steps

Timeline

2020					End of 2020

29-30 January	22-23 February	1-2 July	18-19 July	21- 22 November
Inclusive Framework **Meeting** Paris, France	**G20 Finance Ministers** **Meeting** Riyadh, Saudi Arabia Endorsement of progress made	**Inclusive Framework** **Meeting** Berlin, Germany "agreement on the key policy features of a solution"	**G20 Finance Ministers** **Meeting** Jeddah, Saudi Arabia	**G20 Leaders** **Summit** Riyadh, Saudi Arabia

ANNEX: METHODOLOGY AND DATA

Jurisdiction groups for which results are presented

Results are presented at the aggregate global level, as well as for the following jurisdiction groups:

High-income jurisdictions	GDP per capita above USD 12,000
Middle-income jurisdictions	GDP per capita between USD 1,000 and USD 12,000
Low-income jurisdictions	GDP per capita below USD 1,000
Investment hubs	Inward FDI to GDP ratio above 150%

Note: Income groups are based on World Bank classification

Pillar 1 revenue effects:
Overview of methodology and data sources

Tax revenue change for Country A $=$ Global residual profit allocated $\times$ (Country A Share of MNE sales $-$ Country A Share of residual profit) $\times$ Country A Corporate tax rate

Global residual profit is computed based on the accounts of more than 27,000 MNE groups. A fraction of global residual profit is assumed to be allocated to markets (e.g. 20%)

Key data sources: Orbis, Worldscope and other sources

Countries receive residual profit in proportion to MNE sales in the country (including digital sales)

Key data source: OECD Analytical Activities of Multinational Enterprises (AMNE) Database

Countries relieve residual profit in proportion to the amount of residual profit located in the country (illustrative assumption)

Key data sources: Country-by-Country Reports (CbCR) data, Orbis, AMNE, National Accounts and FDI data

The corporate tax rate is applied to the change in tax base (note: the rate can differ between received and relieved profit)

Key data source: OECD Tax Statistics

Pillar 2 revenue effects:
Overview of methodology and data sources

Global revenue gain from Pillar 2

| **Tax revenue change for Country A** | = | **Global low-taxed profit** | × | (| **Minimum tax rate** | − | **Current effective tax rate on low-taxed profit** |) | × | **Country A Share of revenues from Pillar 2** |

Global low-taxed profit is computed for two options on "blending" rules: global or jurisdiction blending

Key data sources: Orbis, Worldscope and other sources (global blending), CbCR data, Orbis, AMNE, National Accounts and FDI statistics (jurisdiction blending)

The minimum tax rate will be decided by the Inclusive Framework. A variety of rates is explored in the analysis

Several sources are used to estimate the effective tax rate on MNE profit

Key data sources: Orbis, Worldscope and other sources (global blending); OECD Tax Statistics, Torslov et al. (2018), US BEA data, CbCR data (jurisdiction blending)

These shares will depend on Pillar 2 design and reactions by MNEs and governments

→ Reactions are modelled under stylised scenarios

Modelling the effect of Pillar 2 on profit shifting intensity: main assumptions

- Profit shifting incentives are assumed to depend on tax rate differentials between jurisdictions

- The amount of profit currently shifted is estimated (on a bilateral basis) based on the 'profit matrix':

  - Profit is assumed to be shifted when it is located in jurisdictions with: (i) relatively high FDI; and (ii) relatively low ETRs: and (iii) it exceeds a certain profitability rate

  - The estimated average tax sensitivity of profit and amount of profit in low-tax jurisdictions are in line with previous estimates (e.g. Torslov et al., 2018, Beer et al., 2018, Johansson et al., 2016)

- Pillar 2 is assumed to reduce profit shifting intensity to the extent that it reduces tax rate differentials vis-à-vis jurisdictions below the minimum rate

  - The effect of Pillar 2 on profit shifting is modelled by comparing tax rate differentials *before* and *after* the application of Pillar 2

The 'profit matrix' to combine data sources on profit location for Pillar 1 and 2 analysis: Stylised illustration

Jurisdiction of headquarters

	US	France	Nigeria	Bahamas	... (200+ jurisd.)
US	Profit of US MNEs in the US	Profit of French MNEs in the US	.	.	.
France	Profit of US MNEs in France	.	.	.	.
Nigeria	.	.	.	.	.
Bahamas	.	.	.	.	.
... (200+ jurisd.)	.	.	.	.	.

Jurisdiction of affiliate

Source 3: OECD Activities of Multinational Enterprises (AMNE) database, coverage mainly for OECD countries as affiliate jurisdictions

Source 2: ORBIS unconsolidated firm-level data: coverage sufficiently good for about 25 jurisdictions of affiliate (mainly in Europe)

Source 1: Aggregate Country-by-Country reporting data: data shared with the OECD on a confidential basis by 24 jurisdictions of headquarters)

Source 4: Extrapolation based on macro sources, including FDI data (for cells not covered in other data sources)

ETR analysis of investment effects: main assumptions

- Analysis based on the standard model for forward-looking ETRs (Devereux & Griffith, 2003; Hanappi, 2018; CTS, 2018)

- Estimates the effects on investment incentives by comparing ETRs on a hypothetical investment project before and after the implementation of Pillar 1 and 2

  - Considers a simplified MNE structure where profit shifting occurs: The empirical calibration accounts for profit shifting based on weights derived from the profit matrix

  - Accounts for differences in the tax base across countries collected on OECD Corporate Tax Statistics

  - Abstracts from personal income and withholding taxes, assuming full equity finance; and behavioural responses by MNEs and governments

- Results give indications on how Pillars 1 and 2 change the impact of taxation on the scale and location of investment

- However, overall investment effects will also be affected by other factors such as, e.g., tax certainty

ETR analysis of investment effects: empirical calibration

- Modelling assumptions taken on a without prejudice basis

- Pillar 1 considers Amount A only, with a 10% threshold on profit / turnover, 20% reallocation to market and a carve-out for finance and commodities

  - Reallocation occurs proportionally from where it is currently located, either in the jurisdiction where investments take place or where profits have been shifted to

  - The tax rate on reallocated profits is determined as a weighted average using destination-based sales based on the profit matrix (~26%)

  - Results are weighted across firms above and below the profitability threshold

- Pillar 2 considers a 12.5% rate with jurisdiction blending

  - Zero-tax jurisdictions lack the administrative infrastructure to operate a full-fledged CIT system; introduction of such a system is outside the scope of the analysis

- The combined impact of both pillars does not include interaction effects