TAX CHALLENGES ARISING FROM THE DIGITALISATION OF THE ECONOMY

ECONOMIC IMPACT ASSESSMENT

Webinar presentation
20 October 2020 – 16.00-17.00 (CEST)
Housekeeping

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Introduction

• **OECD Secretariat report**: released on 12 October 2020
  – Mandated by the Programme of Work, but not subject to approval by the Inclusive Framework (IF).
  – Assesses the revenue and investment effects of Pillar One and Pillar Two.
  – Presents global results and results for jurisdiction groups. No jurisdiction-specific data or results are included.
  – Utilised a flexible framework, with the focus being on assisting IF members understand the implications of various design decisions.
  – Involved extensive engagement with stakeholders, including delegates from IF jurisdictions and other key stakeholders.
Main caveats

• An ‘ex ante’ assessment based on illustrative assumptions on the design and parameters of Pillar One and Pillar Two. Results will ultimately depend on design and parameters to be decided by the IF.

• The methodology relies on a number of simplifying assumptions, for example on the design and the way MNEs and governments may react.

• The data underlying the analysis is the best available to the Secretariat, but they have limitations in terms of coverage, consistency and timeliness.
  – Combines various data sources: covering more than 200 jurisdictions and 27,000 MNE groups and has used four novel data “matrices”
  – Primarily 2016-17 data: pre-dating the implementation of the OECD/G20 BEPS project, the US Tax Cuts and Jobs Act and most importantly the COVID-19 crisis
Overview of main findings

- Pillar One and Pillar Two could increase global corporate income tax (CIT) revenues by about USD 50-80 billion per year. The combined effect of the reforms and the US GILTI could represent USD 60-100 billion per year (i.e. up to around 4% of global CIT).

- The reforms would lead to a more favourable environment for investment and growth than would likely be the case in the absence of a consensus-based solution.

- In the absence of consensus, there would likely be a proliferation of unilateral tax measures (e.g. digital service taxes) and an increase in tax and trade disputes, which could reduce global GDP by more than 1% in the worst case scenario.

- The COVID-19 crisis is likely to accelerate the trend towards the digitalisation of the economy and exacerbate the tax challenges arising from digitalisation in the absence of an agreement by the Inclusive Framework.
EFFECT OF THE PROPOSALS ON TAX REVENUES
Combined revenue effects of Pillar One and Pillar Two at the global level

<table>
<thead>
<tr>
<th>Estimated global tax revenue gains</th>
<th>In % of global CIT revenues</th>
<th>In USD billion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pillar One</strong></td>
<td></td>
<td></td>
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<tr>
<td>Direct revenue gains</td>
<td>0.2%-0.5%</td>
<td>5-12</td>
</tr>
<tr>
<td><strong>Pillar Two</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct revenue gains</td>
<td>0.9%-1.7%</td>
<td>23-42</td>
</tr>
<tr>
<td>Additional gains from reduced profit shifting</td>
<td>0.8%-1.1%</td>
<td>19-28</td>
</tr>
<tr>
<td><strong>Total Pillar Two</strong></td>
<td>1.7%-2.8%</td>
<td>42-70</td>
</tr>
<tr>
<td><strong>Total Pillar One and Pillar Two</strong></td>
<td>1.9%-3.2%</td>
<td>47-81</td>
</tr>
<tr>
<td><strong>US GILTI regime</strong></td>
<td>0.4%-0.8%</td>
<td>9-21</td>
</tr>
<tr>
<td><strong>Total, including GILTI</strong></td>
<td>2.3%-4.0%</td>
<td>56-102</td>
</tr>
</tbody>
</table>

**Note:** The estimates in this table are based on illustrative assumptions on the design and parameters of Pillar One and Pillar Two.
Combined revenue effects of Pillar One and Pillar Two
By jurisdiction groups

**Panel A: Revenue gains from Pillar 1**
In % of CIT revenues
- High income
- Middle income
- Low income

**Panel B: Revenue gains from Pillar 2**
- High income*
- Middle income
- Low income

**Note:** These estimates are based on illustrative assumptions on the design and parameters of Pillar 1 and Pillar 2. The United States is excluded from the group of high income jurisdictions in the Pillar 2 panel, reflecting the illustrative assumption that the US GILTI would co-exist with Pillar 2. Estimates for “investment hubs” are not included in these figures as they involve more uncertainty due notably to heterogeneity among investment hubs.
Pillar One would reallocate a percentage of residual profit to market jurisdictions

- **Amount A would involve significant changes** to current tax rules (e.g. going beyond physical presence)

- **Amount A could lead to a substantial reallocation of taxing rights** across jurisdictions (e.g. taxing rights on about USD 100 billion of profit could be reallocated)

- **Only Amount A was modelled.** The effect of Amount B and the Tax certainty component of Pillar One is expected to be small at the global level, but it could be significant in some jurisdictions
Taxing rights on about USD 100 billion of profit could be reallocated under Pillar One

Example: About USD 100 bn of profit reallocated assuming illustratively a 10% profitability threshold and a 20% reallocation percentage

Note: These estimates assume the estimates assume illustratively a global revenue threshold of EUR 750 million and focus only on MNE groups with a primary activity in the ADS and CFB sectors.
Pillar One estimated revenue effects
By jurisdiction groups

A. Grouping by income levels

Residual profit threshold (PBT/Turnover):

-3.0% -2.0% -1.0% 0.0% 1.0% 2.0% 3.0%

Global effect
High income
Middle income
Low income
Investment hubs

B. Grouping by statutory CIT rates

Global effect
CIT rate <= 10%
10-20%
20-30%
> 30%

Residual profit threshold (PBT/Turnover):

-3.0% -2.0% -1.0% 0.0% 1.0% 2.0% 3.0%

Global effect

Note: These estimates assume illustratively a EUR 750 million global revenue threshold, a profitability threshold (based on PBT to turnover) of 10% or 20%, a reallocation of 20% of residual profit to market jurisdictions, a EUR 1 million nexus revenue threshold for ADS and a EUR 3 million nexus revenue threshold for CFB. Groups of jurisdictions (high, middle and low income) are based on the World Bank classification. Investment hubs are defined as jurisdictions with a total inward FDI position above 150% of GDP.
Pillar Two comprises a number of interlocking rules that would operate as a minimum tax rate

- Pillar Two would give countries the right to ‘tax back’ profit that is currently taxed below the minimum rate
- It would essentially operate as a ‘top-up’ tax, up to the minimum rate
- The impact assessment assumes that it applies jurisdiction-by-jurisdiction (i.e. jurisdictional blending)
- It could involve a substance-based ‘carve-out’ (i.e. subtract from profit a fixed percentage of payroll and depreciation expenses)
- The US GILTI regime is assumed to coexist with Pillar Two
Stylised scenarios on strategic reactions of MNEs & governments to Pillar Two

Scenario 1
Static scenario (no behavioural reaction)

Scenario 2
Interaction with Pillar One

Scenario 3
MNEs reduce their profit shifting intensity

Scenario 4
Some low-tax jurisdictions increase their ETR

Note: Other behavioural reactions to Pillar Two are also possible, but they are not modelled in this chapter. These non-modelled reactions include for example changes in MNE ‘real’ investment location (with potential implications for CIT revenues but also for revenues from other tax bases) as well as policy changes in jurisdictions with an average ETR above the minimum rate. These potential reactions are discussed in Chapter 4 of the report.
Global estimated revenue effects of Pillar Two

Note: These estimates assume illustratively a 12.5% minimum tax rate and a 10% carve-out on payroll and tangible asset depreciation. Consistent with the assumption that GILTI would coexist with Pillar Two, the estimates in these figures exclude revenues gains related to MNEs with an ultimate parent in the United States.
Note: These estimates assume illustratively a 12.5% minimum tax rate and a 10% carve-out on payroll and tangible asset depreciation. The United States is excluded from the group of high income jurisdictions in the Pillar 2 panel, reflecting the illustrative assumption that the US GILTI would co-exist with Pillar 2.
EFFECT OF THE PROPOSALS ON INVESTMENT AND ECONOMIC ACTIVITY
Main findings on investment effects

• Both pillars would lead to a relatively small increase in MNE investment costs
  – The negative effect on global investment would be less than 0.1% of GDP, as the proposals would mostly affect highly profitable MNEs whose investment is less sensitive to taxes
  – The effect could be lower if MNE groups reallocate investment in response to cost increases

• Pillar One and Pillar Two could support global investment and growth through indirect channels that are significant, although less quantifiable by:
  – Increasing the relevance of non-tax factors and improving global capital allocation
  – Increasing tax certainty and reducing the need to raise revenues through other (potentially more distortive) tax measures

• In the absence of consensus, there would likely be a proliferation of unilateral tax measures (e.g. digital service taxes) and an increase in tax and trade disputes, which could reduce global GDP by more than 1% in the worst case scenario
The analysis builds on the forward-looking effective tax rates framework and incorporates:

- The profit shifting behaviour of MNEs
- A stylised version of Pillar One (Amount A) and Pillar Two

Covering over 70 jurisdictions, the model is calibrated to account for the location of MNE activities and assets across jurisdictions.

The effect of Pillar One and Pillar Two is assessed by comparing average and marginal ETRs pre- and post-reform.

Effects on the global GDP-weighted EATR (0.3 pp) and EMTR (1.4 pp) would be relatively small.

Changes in Effective Marginal Tax Rates due to Pillar One and Pillar Two (percentage points)

Note: These estimates are based on the same illustrative assumptions on the design and parameters of the proposals as set out in slides 12 and 15.

Source: Hanappi and González Cabral (2020)
Firm sensitivity to corporate tax depends on profitability at the MNE group level

• Higher corporate taxes tend to have a negative effect on MNE investment, however, tax sensitivity varies across MNE groups.

• New OECD analysis suggests that highly profitable MNE groups are less sensitive to corporate taxation: relying on a panel of MNE entities in 17 OECD countries (using data from ORBIS).

• Various channels can explain this result:
  – Liquidity constraints
  – Market power and economic rents
  – Tax planning behaviour

Change in investment rate after a 1 percentage point increase in EMTR (percentage points)

Investment of non-profitable and highly profitable firms tends to be less affected by effective tax rates

Profitability at the MNE group-level (PBT / Turnover)

Source: Millot et al. (2020)
Indirect effects: hard to quantify, but could partly (or even fully) offset the effect of cost increases

- **Fiscal space**: revenue increases support public finances, which is especially important for domestic resource mobilisation in developing countries.

- **Tax competition**: a lower intensity of tax competition between jurisdictions would further support public finances in the longer term.

- **Tax incentives for innovation**: effectiveness of tax incentives could be affected, but less so if there is a substance-based carve-out, and policy mixes may need to be adapted.

- **Tax incentives for development**: the bargaining position of developing countries wanting to reduce costly and potentially inefficient tax incentives could be strengthened.

- **Compliance costs**: likely to be an increase in filing requirements leading to additional costs for MNEs and governments, but will depend on final design and simplification measures.

- **Firm competition**: competition dynamics among firms could be affected as taxes on large, profitable and profit-shifting MNEs are increased.
The consensus & no-consensus scenarios

Stylised scenarios: estimated effect on global GDP

* The proposals would also have positive impacts on GDP through indirect channels (e.g. increased tax certainty, reduced need to increase other distortive taxes) which are not quantified in this figure.
DATA UNDERLYING THE ANALYSIS
### The impact assessment mobilises a large variety of data sources

<table>
<thead>
<tr>
<th></th>
<th>Main data</th>
<th>Examples of use</th>
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</thead>
<tbody>
<tr>
<td><strong>Firm-level data</strong></td>
<td>Orbis database (consolidated and unconsolidated accounts), Worldscope</td>
<td>Level of residual profit under Pillar One</td>
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<tr>
<td></td>
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<td>Location of profit and economic activity</td>
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<td></td>
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<td>Relationship between firm-level and aggregated data</td>
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<tr>
<td><strong>Aggregated data on MNE activity</strong></td>
<td>Anonymised and aggregated CbCR data, AMNE/FATS, Analytical AMNE, FDI data</td>
<td>Location of CFB destination-based sales</td>
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<tr>
<td></td>
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<td>Location of profit and economic activity</td>
</tr>
<tr>
<td><strong>Statutory and effective tax rates</strong></td>
<td>OECD Corporate Tax Statistics, estimates from Torslov et al. (2018), CbCR data, US BEA data</td>
<td>Revenue effect of the reallocation of taxing rights under Pillar One</td>
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<td>Location and amount of profit subject to Pillar Two</td>
</tr>
<tr>
<td><strong>Macroeconomic and other jurisdiction-level data</strong></td>
<td>GDP, GDP per capita, consumption, trade openness, number of internet users, remittances</td>
<td>Extrapolations when other data are missing</td>
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<td></td>
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<td>Distribution of ADS sales (internet users)</td>
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</table>
Data “matrices” to map the economic activity of MNEs underlie the impact assessment

- Data on MNE activity is combined in “matrices” to obtain a global geographic coverage.
- Four matrices have been constructed: profit, turnover, tangible assets, and payroll.
- Different sources have different coverage.
- Extrapolations are used when no hard data is available.
- Extensive benchmarking has been done when multiple sources are available for a cell.

<table>
<thead>
<tr>
<th>Jurisdiction of ultimate parent entity (UPE)</th>
<th>US</th>
<th>France</th>
<th>Nigeria</th>
<th>Bahamas</th>
<th>(... (&gt;200 jurisd.)</th>
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<tbody>
<tr>
<td>US</td>
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<td>France</td>
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<td>Bahamas</td>
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<tr>
<td>Source No 2: ORBIS unconsolidated financial account data</td>
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<tr>
<td>Source No 3: Extrapolation based on macro sources, including FDI data</td>
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<tr>
<td>Source No 1: Aggregate CbCR data</td>
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</table>

- Profit of US MNEs in the US
- Profit of French MNEs in the US
- Profit of US MNEs in France
- Profit of US MNEs in Nigeria
ENGAGEMENT WITH COUNTRIES AND EXTERNAL STAKEHOLDERS
**Engagement**

- **Jurisdictions**: A key goal has been to assist all jurisdictions to understand the impact of the two pillars for their jurisdiction and to inform their decision making.
  - **Revenue estimation tools**: Pillar One and Pillar Two tools have been circulated bilaterally to 115 countries (out of 137 IF members).
  - **Briefing of delegates**: through various working groups and regular zoom meetings, e.g. Working Party No.2 (WP2), WP2 Bureau, Working Party No.1 (Economic Policy Committee), Task Force on Digital Economy, IF and the IF Steering Group.
  - **Ongoing bilateral discussions**: direct bilateral discussions with delegates.

- **International and regional organisations**: including IMF, EU, ATAF and ADB.

- **Academics and civil society groups**: through three workshops that were held with them and with jurisdiction delegates last year.
IMPLICATIONS OF THE COVID-19 CRISIS AND CONCLUSION
Implications of the COVID-19 crisis

• The full impact of the COVID-19 crisis remains highly uncertain at this stage

• The COVID-19 crisis is likely to reduce the expected revenue gains from both pillars, at least in the short run, as the crisis weighs on the profitability of many MNEs
  – Although some digital-intensive MNEs have sustained or increased their profitability

• The COVID-19 crisis has accelerated the trend towards the digitalisation of the economy
  – This highlights the importance of the reforms and will likely increase the relative importance of ADS in the scope of Pillar One

• Accelerated digitalisation, fiscal pressures and growing public dissatisfaction with tax avoidance are likely to reinforce the prospect of further unilateral tax measures in the absence of a consensus-based solution
Summary of main conclusions

• Pillar One and Pillar Two could increase global corporate income tax (CIT) revenues by about USD 50-80 billion per year. The combined effect of the reforms and the US GILTI could represent USD 60-100 billion per year (i.e. up to around 4% of global CIT revenues).

• The reforms would lead to a more favourable environment for investment and growth than would likely be the case in the absence of a consensus-based solution.

• In the absence of consensus, there would likely be a proliferation of unilateral tax measures (e.g. digital service taxes) and an increase in tax and trade disputes, which could reduce global GDP by up to 1% in the worst case scenario.

• The COVID-19 crisis is likely to accelerate the trend towards the digitalisation of the economy and exacerbate the tax challenges arising from digitalisation in the absence of an agreement by the Inclusive Framework.
Q&A
How to submit questions

• Via Zoom: Use the Q&A function at the bottom of your screen

• Via OECD TV: E-mail ctp.contact@oecd.org
References


- **Additional background**, including Pillar One and Pillar Two Blueprint reports: [https://www.oecd.org/tax/beps/beps-actions/action1/](https://www.oecd.org/tax/beps/beps-actions/action1/)
Simplified formula to assess the effect of Pillar One on tax revenues

\[
\text{Tax revenue change in jurisd. A} = \text{Global residual profit in scope} \times \text{Reallocation percentage} \times \text{Jurisd. A Share of destination-based sales} \times \text{Tax rate applied by jurisd. A on received profit} \times \text{Share of residual profit in Jurisd. A} \times \text{Rate of double tax relief in jurisd. A}
\]

Global numbers common to all jurisdictions

Jurisdiction-specific numbers

Note: See Chapter 2 of the report for more details
Simplified formula to assess the effect of Pillar Two on tax revenues

Revenue gain for Jurisd. A = Global low-taxed profit × Effect of substance-based carve-out × Minimum tax rate - Current effective rate on low-taxed profit × Share of revenues from minimum tax accruing to Jurisd. A

Top-up on current tax rate

Note: See Chapter 3 of the report for more details
The intermediate results on MNE profit shifting are broadly consistent with the economic literature.

<table>
<thead>
<tr>
<th>Estimated amount of shifted MNE profit at the global level</th>
<th>Baseline estimate ('normal' profitability: 7.9%)</th>
<th>Robustness check ('normal' profitability: 5%)</th>
<th>Robustness check ('normal' profitability: 10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In USD bn</td>
<td>727</td>
<td>837</td>
<td>662</td>
</tr>
<tr>
<td>In % of global MNE profit</td>
<td>11.3%</td>
<td>13.5%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Share of shifted profits in total observed profit</td>
<td>In zero-tax “profit destination” jurisdictions</td>
<td>90.8%</td>
<td>94.1%</td>
</tr>
<tr>
<td></td>
<td>In other “profit destination” jurisdictions</td>
<td>61.7%</td>
<td>73.7%</td>
</tr>
</tbody>
</table>

Note: See Chapter 3 of the report for more details on the methodology to assess profit shifting.