

# AMOUNT A: MEASUREMENT AND TAX IMPACTS

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# THE AMOUNT A JOURNEY: OCT 2020 to OCT 2021....

## OECD RELEASES BLUEPRINTS OCT 12, 2020

This collage features several key documents from the OECD/G20 Inclusive Framework on BEPS, released in October 2020. At the top left is the cover of the 'Report on the Pillar One Blueprint', which includes an 'Inclusive Framework on BEPS'. To its right is the cover of the 'Report on the Pillar Two Blueprint', also part of the 'Inclusive Framework on BEPS'. In the center is a 'HIGHLIGHTS' document titled 'Addressing the Tax Challenges Arising from the Digitalisation of the Economy'. Below these are a 'PUBLIC CONSULTATION DOCUMENT' for the 'Reports on the Pillar One and Pillar Two Blueprints' (dated 12 October 2020 – 14 December 2020) and an 'Economic Impact Assessment' titled 'TAX CHALLENGES ARISING FROM THE DIGITALISATION OF THE ECONOMY' (dated 20 October 2020 – 16.00-17.00 (CEST)). The bottom right of the collage includes the 'Tax Challenges Arising from Digitalisation – Economic Impact Assessment' report and a 'Webinar presentation' logo for the same assessment.

## OECD RELEASES TWO-PILLAR SOLUTION OCT 8, 2021

The cover of the 'Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy' report, dated October 2021. The cover features a futuristic cityscape with glowing skyscrapers and a bright sunburst effect. The text on the cover includes the title, the subtitle 'Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy', and the date 'OCTOBER 2021'. The OECD logo and the tagline 'BETTER POLICIES FOR BETTER LIVES' are visible in the bottom right corner.

# Research Questions

## Economic Impact Assessment (EIA) of Pillar One Amount A



1. Assess the estimates of Amount A in the EIA
2. Dissect the “simple analytics” of the Amount A formula
3. Provide finer grained estimates of winners and losers from Amount A than in the EIA
4. Explore the types and probabilities of “tax games” that Governments and MNEs could use to affect Amount A



# Amount A through the Lens of the EIA...One Year Later



1. Eden, Lorraine. 2020. **Leap of Faith**: The Economic Impact Assessment of the Pillar One and Pillar Two Blueprints. *Tax Management International Journal*, 49 (Dec. 11). [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3743054](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3743054)

2. Eden, Lorraine. 2020. **Winners and Losers**: The OECD's Economic Impact Assessment of Pillar One. *Tax Management International Journal*, 49 (Dec. 11). [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3743059](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3743059)

3. Eden, Lorraine. 2021. **Pillar One Tax Games**. *Tax Management International Journal*, 50 (Jan 4). [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3758671](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3758671)

4. Eden, Lorraine. 2021. **Canada and the United States: Winners or Losers** from Pillar One Amount A? *Tax Management International Journal*, 50.3 (March): 143-147. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3800026](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3800026)

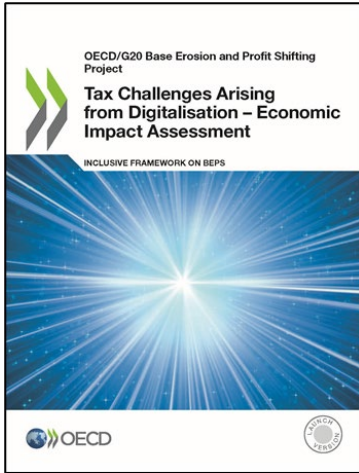
5. Eden, Lorraine. 2021. The **Simple Analytics** of Pillar One Amount A. *Tax Management International Journal*, 50.3 (March): 137-143. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3800017](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3800017)

6. Eden, Lorraine. 2021. **Winners and Losers: U.S. Country and Industry Estimates** of Pillar One Amount A. *Tax Management International Journal*, 50.5 (May): 222-243. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3841813](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3841813)

7. Eden, Lorraine. 2021. **Taxing the Top 100**: U.S. Estimates of Winners and Losers from Pillar One Amount A. *Tax Management International Journal*, 50.6 (June): 301-317. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3862062](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3862062)

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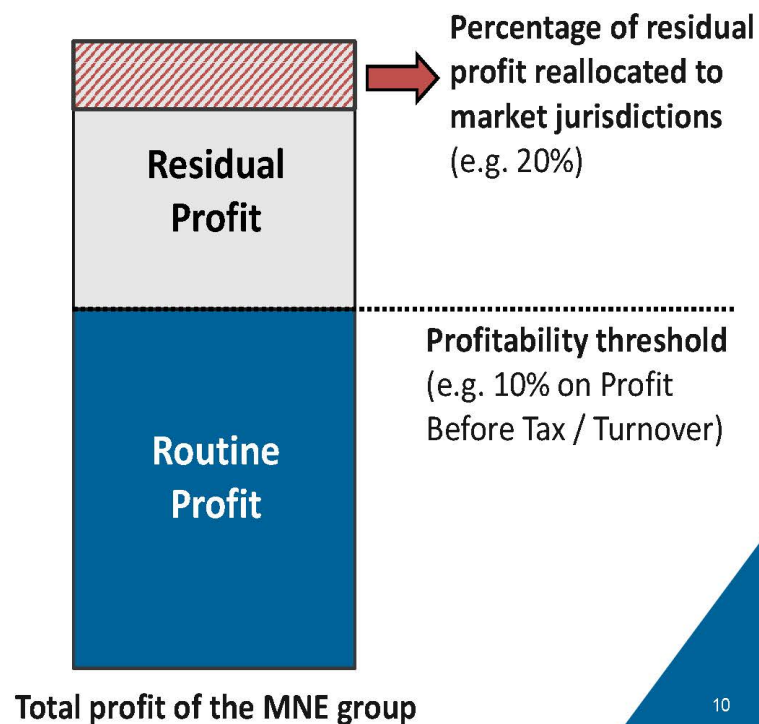
# Research Question 1

## How Did the EIA Estimate Amount A?



### 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



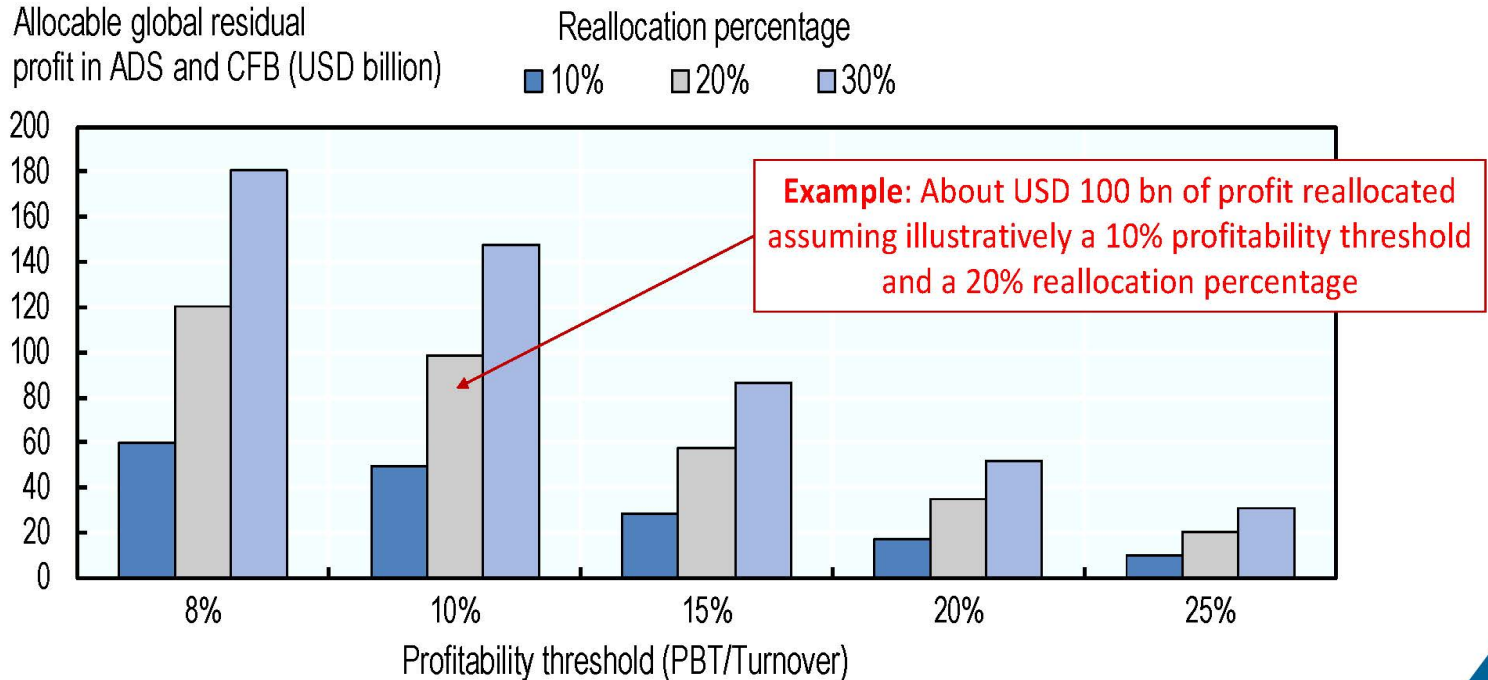
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Source: OECD EIA Webinar (Oct 20, 2020) p. 10

# EIA Estimate of Global Tax Base Reallocated by Amount A



## Taxing rights on about USD 100 billion of profit could be reallocated under Pillar One



**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

OECD EIA Webinar, Oct 20, 2020, p. 11

# OECD Summary of Pillar One Amount A



## Combined revenue effects of Pillar One and Pillar Two at the global level

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

**Note:** The estimates in this table are based on illustrative assumptions on the design and parameters of Pillar One and Pillar Two.

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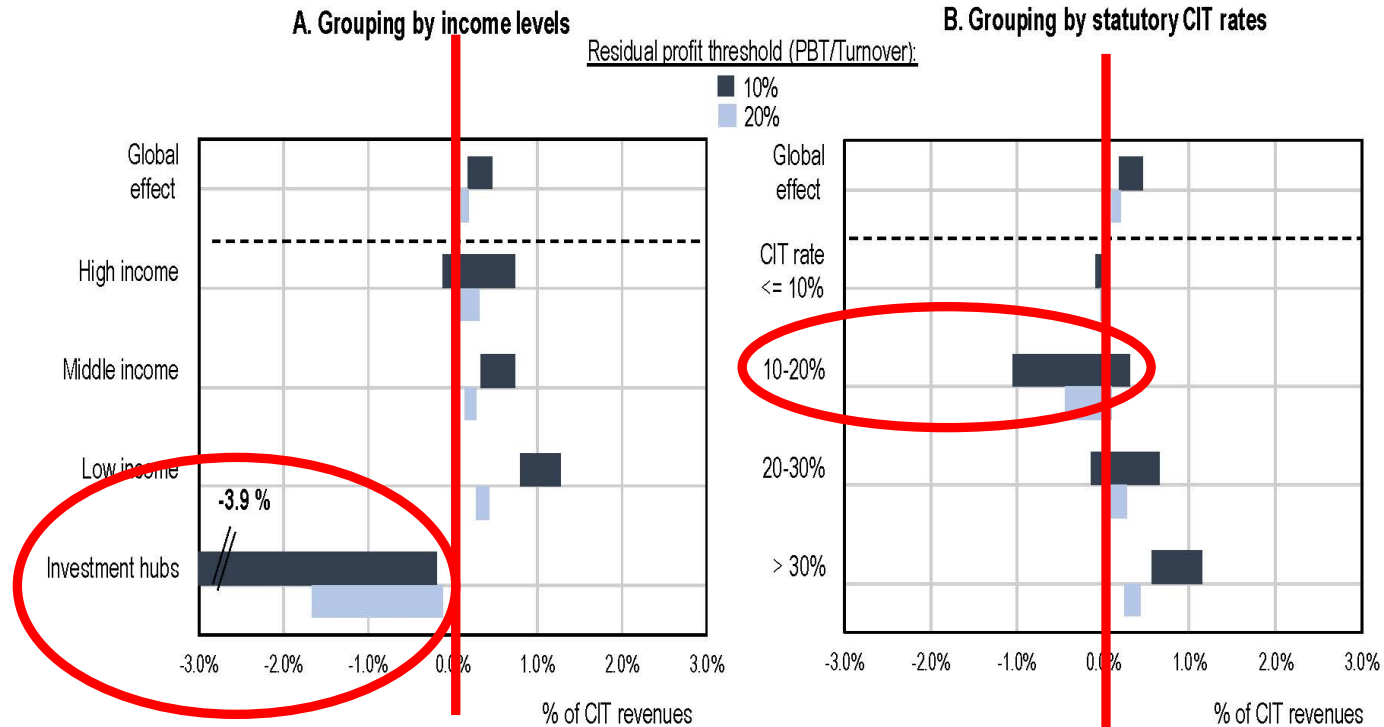
Source: OECD EIA Webinar (Oct 20, 2020) p. 8





# Pillar One estimated revenue effects

## By jurisdiction groups



**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.

# Economic Impact Assessment: A Leap of Faith

- **Herculean Task:** High-quality econometric analysis built on available data, guesstimates and extrapolations for missing observations and policies.
- **Data problems**
  - Estimates use one year - 2016 (pre-TCJA)
  - Data available for subset used to estimate all jurisdictions (e.g., CFB data for 16 used to estimate 222)
  - All jurisdictions assumed to have minimum number MNEs so GIDS (component C in formula) is positive
  - Outliers excluded from some GIDS calculations (e.g., Hong Kong, India)
  - Amount B left out of Amount A estimates.
- **Assumptions**
  - Excessively Optimistic re Amount A and Pessimistic re Alternative
  - All Market jurisdictions receive 100% tax relief on their share of Amount A
  - 100% compliance by all jurisdictions (no defections, no tax games)
  - No strategic responses by MNEs
  - Counterfactual is “worst case” scenario of proliferation of DSTs & international tax war

## Economic Impact Assessment: A Leap of Faith (cont'd)

- “[T]here was “no consensus over whether or not jurisdiction-specific estimates should be publicly released” (EIA, p. 19) so only aggregated results for 222 jurisdictions (HI, MI & LI Countries and Investment Hubs) were published. Nor were estimates published for firms or industries.
- Tax authorities that requested access to the figures were provided on a “confidential and bilateral basis” (i.e., OECD to tax authority) with *the country’s own* results, *not* all the data or empirical work or results. “Revenue estimation tools” where a tax authority could vary the percentages and “estimate the impact on tax revenues in their jurisdiction” were also provided (EIA, p. 21).
- Conclusion: Blueprints introduce huge change to international tax rules without a full impact analysis - either by jurisdiction or by industry – being released to policymakers. How can policymakers engage in successful evidence-based policymaking without the evidence?
- Conclusion: The EIA estimates, especially for Amount A, require a leap of faith.
- Question: Might there be a way to provide more fine-grained estimates?

# Research Questions

## Economic Impact Assessment (EIA) of Pillar One Amount A



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## Research Question 2:

# How Does the Amount A Formula Work?

1. **Pillar One Tax Games.**

[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3758671](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3758671)

2. The **Simple Analytics** of Pillar One Amount A.

[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3800017](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3800017)

3. Winners and Losers: **U.S. Country and Industry Estimates** of Pillar One Amount A.

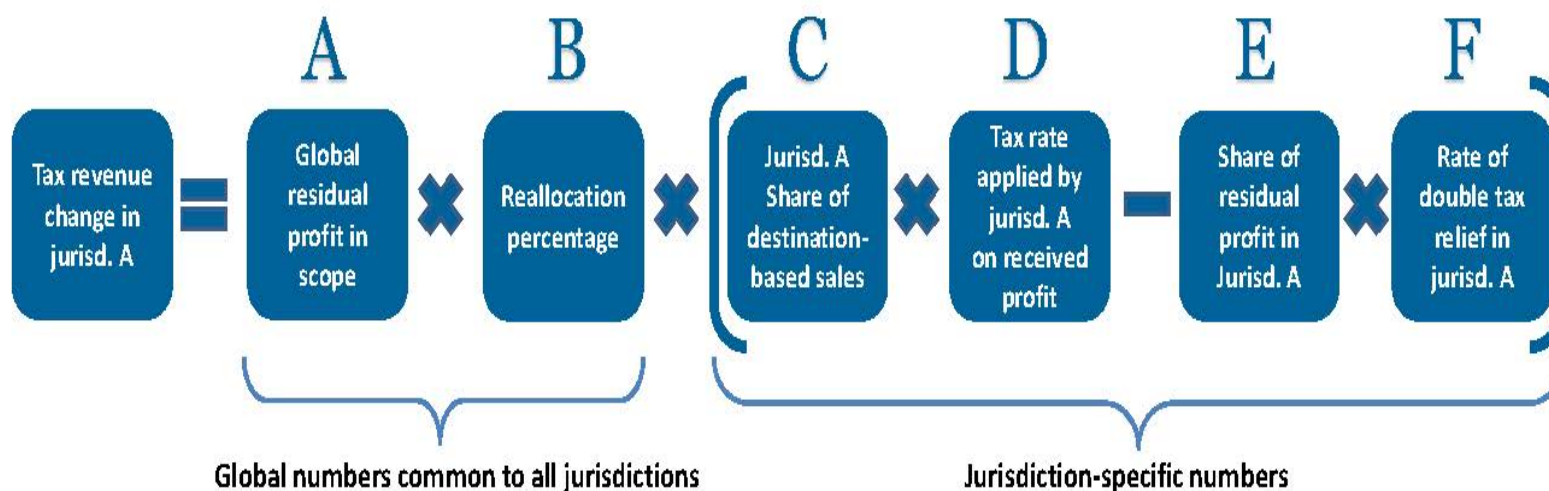
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3841813](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3841813)

4. **Taxing the Top 100:** U.S. Estimates of Winners and Losers from Pillar One Amount A. See the Appendix, pp. 17-18.

[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3862062](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3862062)

# Formula used by EIA to Estimate Amount A at Jurisdiction Level (Winners & Losers)

Figure 2.1. Simplified formula summarising the approach on Pillar One (Amount A)



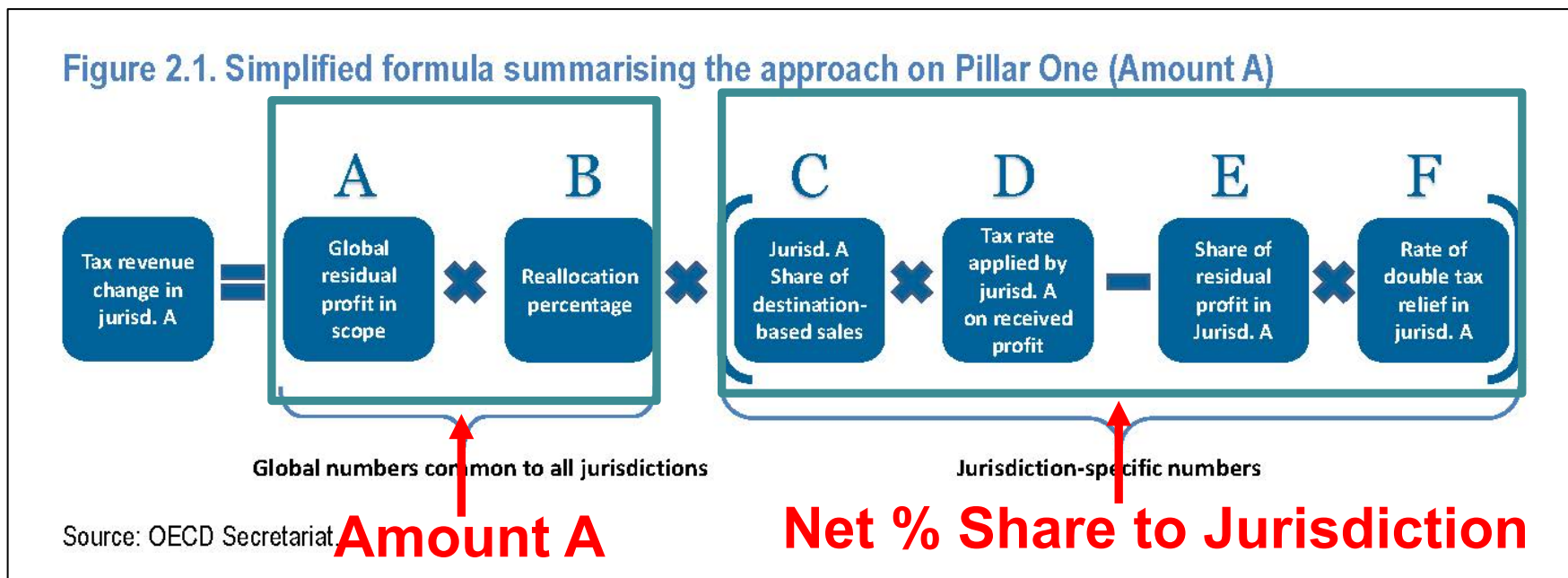
Source: OECD Secretariat.

Source: EIA Oct. 12, 2020, page 29) and OECD EIA Webinar (Oct 20, 2020, p.35).

# Pillar One Amount A Formula

Jurisdiction J's Net Tax Revenue Gain/Loss =

$$(A * B) * [(C * D) - (E * F)] \quad (1)$$

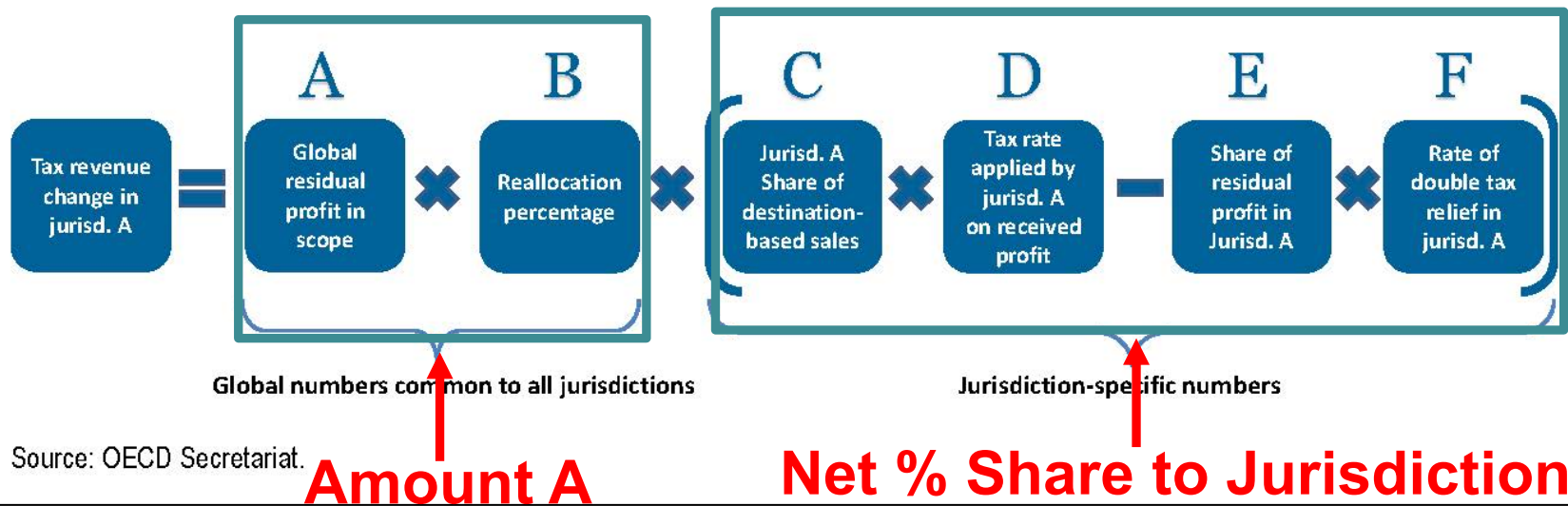


Components **A** and **B** in the formula are **global numbers** that are identical for all tax jurisdictions. Components **C**, **D**, **E**, and **F** are **jurisdiction-specific variables** that vary for each jurisdiction depending on its roles as a **Market jurisdiction (C x D)** and as a **Residence and/or Source jurisdiction (E x F)**.

# Insight #1: Raising/Lowering A or B Raises/Lowers Amount A

$$J's \text{ Net Tax Revenue Gain/Loss} = (A * B) * [ (C * D) - (E * F) ]$$

Figure 2.1. Simplified formula summarising the approach on Pillar One (Amount A)



**In-Scope? Global Profit? Residual Profit Threshold? Allocation Percent?**

Source: OECD *Economic Impact Assessment* (Oct. 12, 2020, page 29).

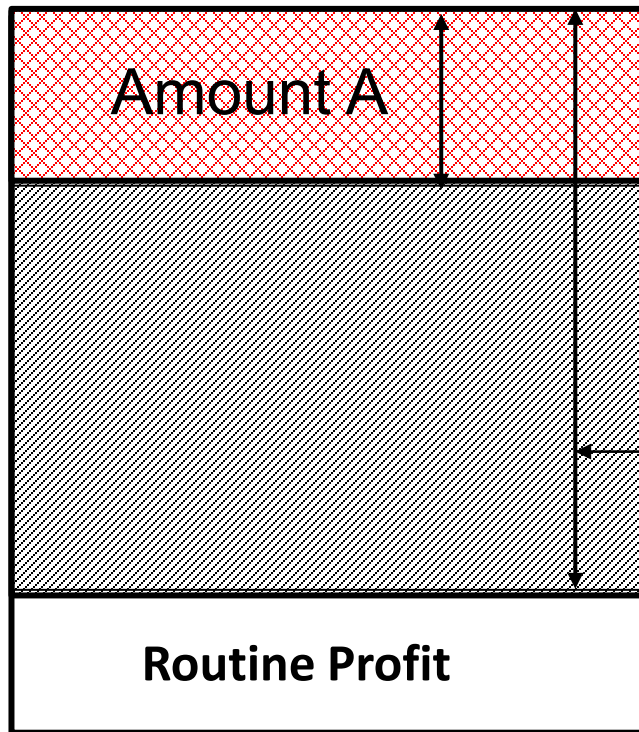


# Calculating Amount A = Component A \* Component B

- A = Global Residual In-scope Profit (GRIP) of the MNE group
- B = Reallocation Percentage



$$\text{Amount A} = A * B = [ \Sigma P * (1 - RPT) ] * B$$
 where  $\Sigma P = \text{Global In-Scope Profit}$



**B** (Reallocation Percentage, sets % of GRIP shifted to Market Jurisdictions, 10% or 20%, now 25%)

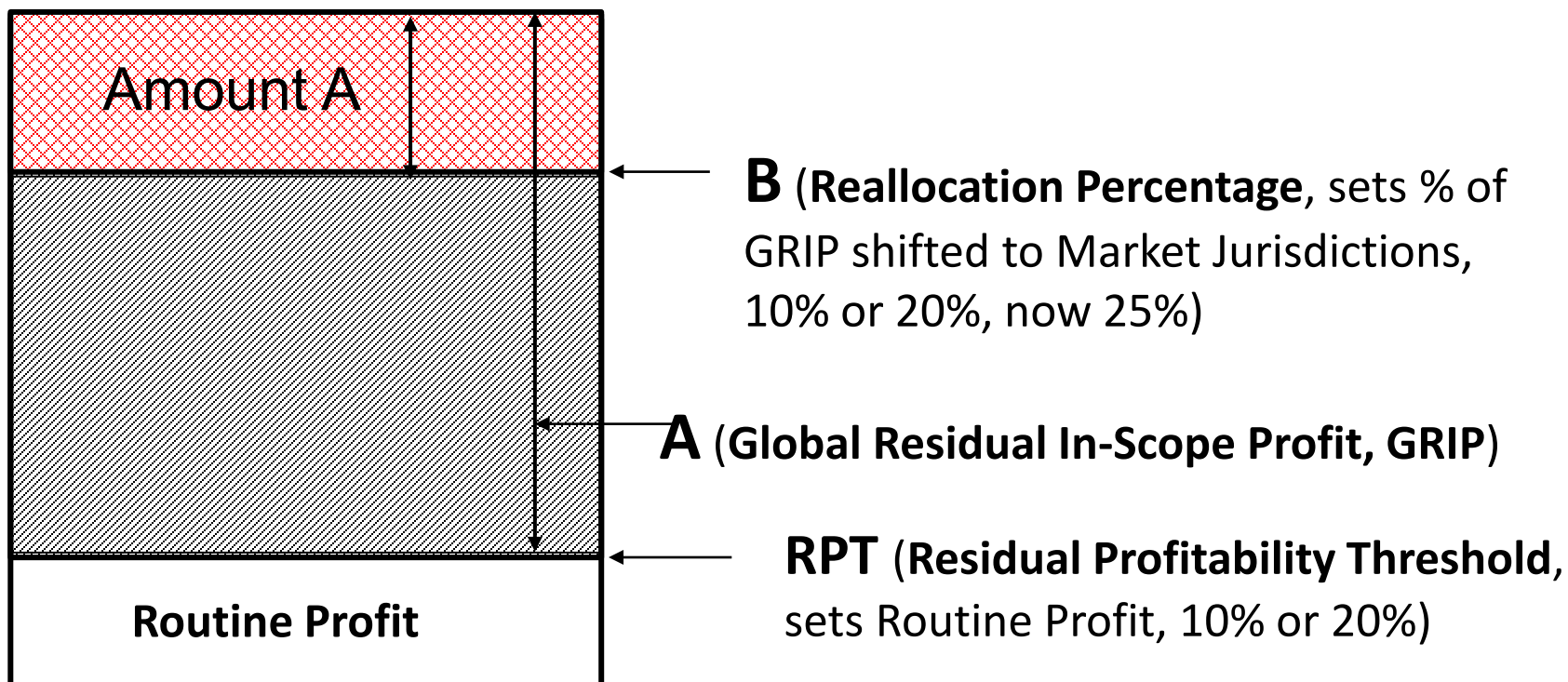
**A** (Global Residual In-Scope Profit, GRIP)

**RPT** (Residual Profitability Threshold, sets Routine Profit, 10% or 20%)

Global In-Scope Profit of the MNE Group

## Ways to Raise/Lower Amount A (the “New Taxing Right”)

- Definition of in-Scope? Definition of Global Profit?
- Raise/Lower Residual Profitability Threshold ?
- Raise/Lower Reallocation Percent?



**Global In-Scope Profit of the MNE Group**

# Changing RPT with Reallocation Percentage = 10%

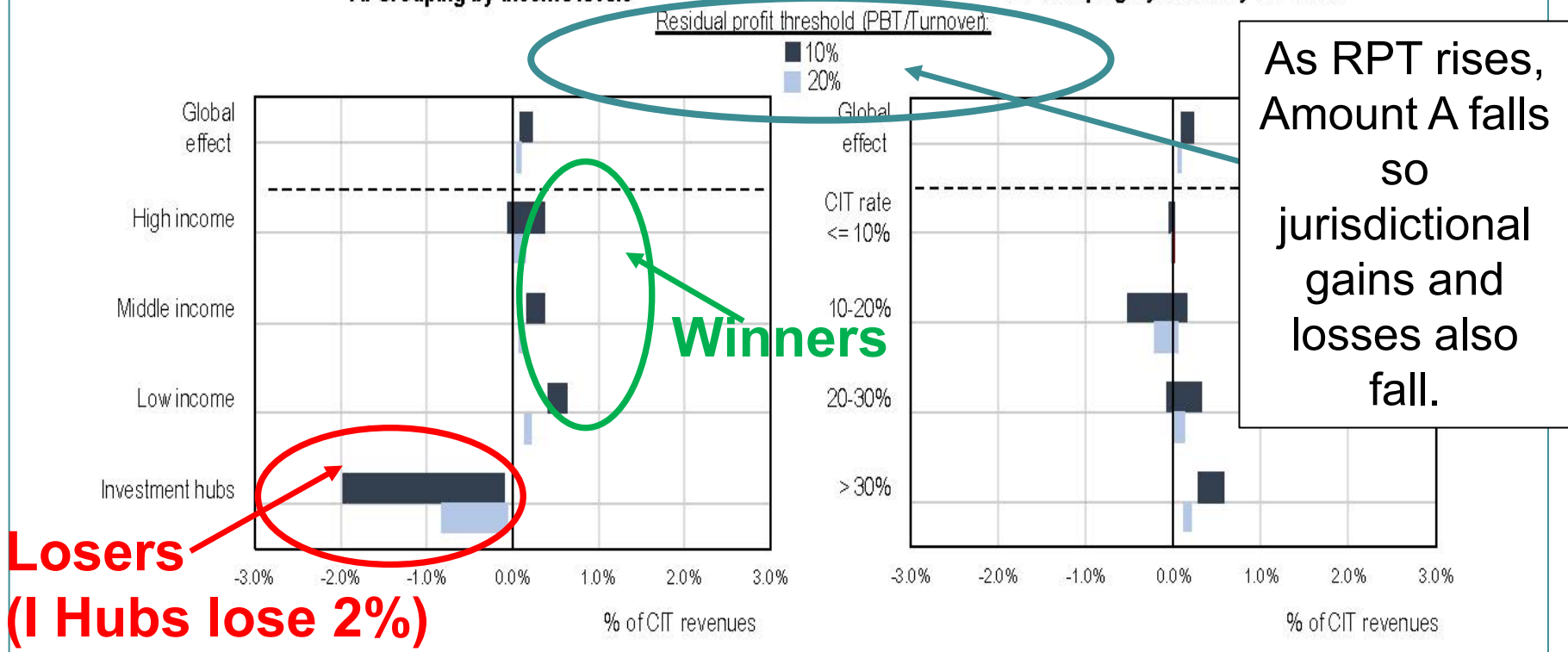
Figure 2.14. Estimated effect of Pillar One on tax revenues, by jurisdiction groups

**Panel A: 10% reallocation to market**

**← Component B = 10%**

A. Grouping by income levels

B. Grouping by statutory CIT rates



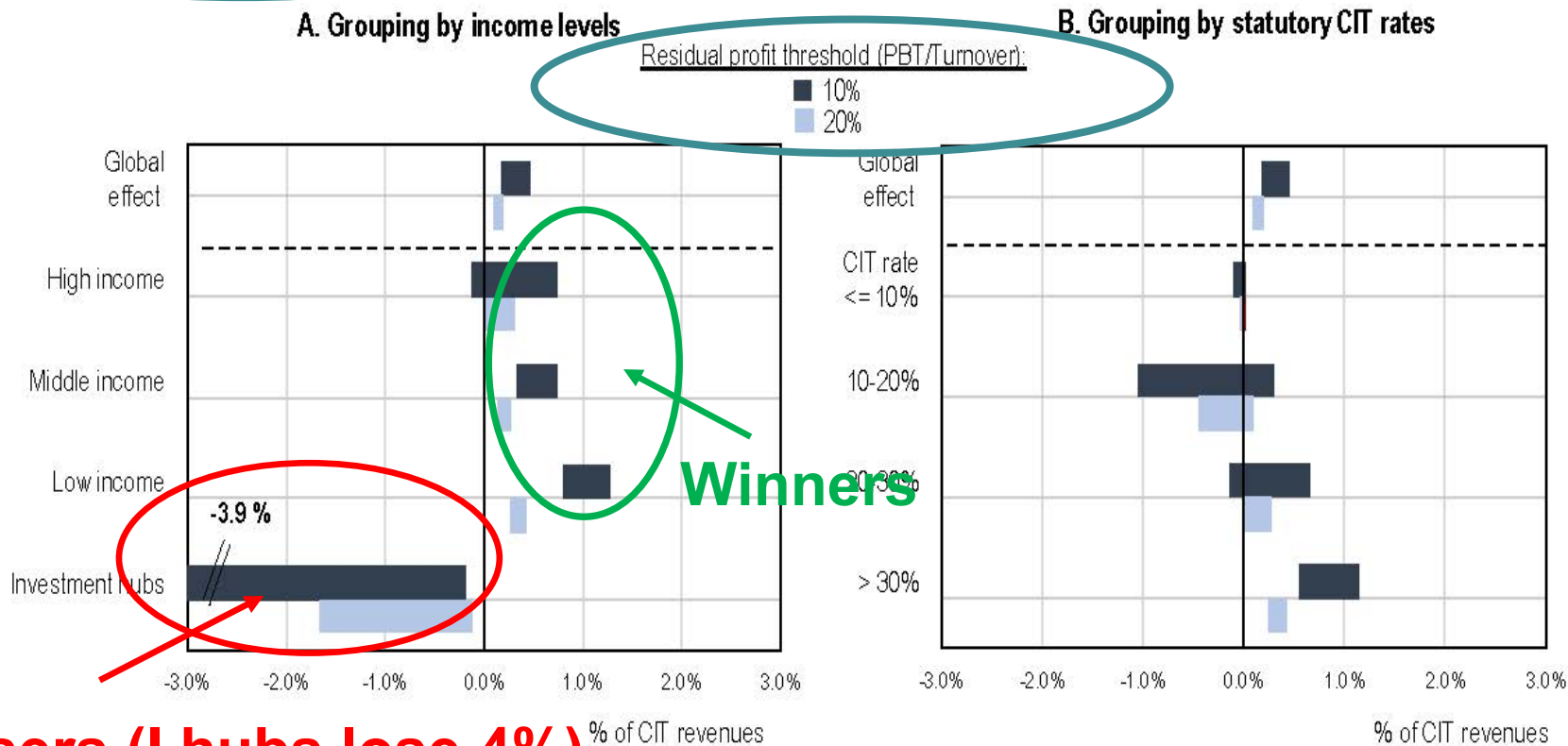
As RPT rises,  
 Amount A falls  
 so  
 jurisdictional  
 gains and  
 losses also  
 fall.

Source: OECD *Economic Impact Assessment* (Oct. 12, 2020, page 61).

# Changing RPT with Reallocation Percentage = 20%

Panel B: 20% reallocation to market

Component B = 20%



Winners

Losers (I hubs lose 4%)

Source: OECD *Economic Impact Assessment* (Oct. 12, 2020, page 62).

A higher Reallocation Percentage (10% → 20%) increases jurisdictional gains and losses.

## Insight #2: The C- E Gap Matters Most for Jurisdictions

Assume J's CIT rate (component D) on "received" tax base is the same rate (component F) that J provides on "relieved" tax base so  $D = F = t$ , equation (1) becomes:

$$\begin{aligned} \text{J's Net Revenue Gain/Loss} &= [A * B] * t * [C - E] \\ = \textcircled{[A * B]} * t * \textcircled{[C - E]} & \quad (2) \end{aligned}$$

**Amount A**                      **J's Net Gain/Loss Tax Base**

Whether J gains or loses from Amount A depends on its C-E gap; that is, its share of GIDS relative to its share of GRIP. To determine who wins/loses from Amount A, look at the sign and size of the jurisdiction's C - E gap.

## Insight #3: Pillar One Tax Games Are Likely

$$J's \text{ Tax Base Change} = [A * B] * [(C * D) - (E * F)]$$

Assuming  $D = F = t$  then

➤ J gains tax base if  $C > E$  (tax base receiving)

→ **J's Goal: maximize its tax base gains from Amount A**

➤ J loses tax base if  $C < E$  (tax base relieving)

→ **J's Goal: minimize its tax base losses from Amount A**

## Insight #4: Amount A = Sales-Based Global Formulary Apportionment (GFA)

To estimate the dollar value of the gain or loss in each jurisdiction's corporate income tax (CIT) base under Amount A, I rewrite Component C as " $S/\sum S$ " where " $\sum S$ " is GIDS, and Component E as " $P/\sum P$ " where " $\sum P$ " is GRIP. Amount A now is:

- **Net gain/loss in J's CIT revenues =  $t * [ B * S * (\sum P / \sum S - P / S) ]$**
- The greater the **deviation of J's ROS from the world average ROS**, the larger (in absolute value terms) is J's tax base gain or loss.
- **Winners: stagnant economies (low P/S)** are tax base receiving.
- **Losers: dynamic jurisdictions (high P/S)** are tax base relieving.
- Large winners are countries where S is large but no nexus (no PE) so profits are recorded elsewhere (e.g., ADS).
- Large losers are jurisdictions with very high profits relative to in-country sales so P/S approaches infinity. Even where S is low, these jurisdictions (e.g., investment hubs) are likely targets to provide tax base relief under Amount A.

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# Research Question 3

## Who Wins and Loses from Amount A?

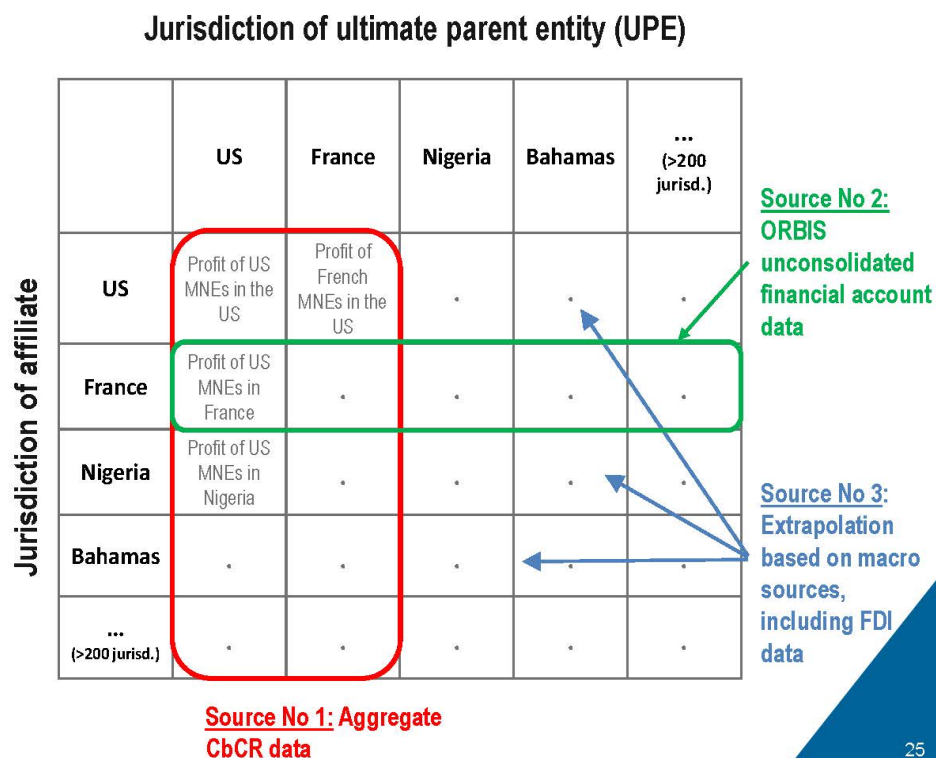
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# EIA Uses Profit and Turnover Matrices for GIDS and GRIP



## 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.



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Source: OECD EIA Webinar (Oct 20, 2020) p. 25

# EIA Matrices Available for Income Groups and Regions

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## Annex 5.D. Matrices aggregated by broad income groups and regions

Annex Table 5.D.1. Matrices aggregated by broad income groups and regions

Panel A: The profit matrix

In USD billion	A. Americas - High income	B. Europe & Central Asia - High income	C. East Asia & Pacific - High income	D. Middle East & North Africa - High income	E. Latin America & Caribb. - Middle and low income	F. Europe & Central Asia - Middle and low income	G. East Asia & Pacific - Middle and low income	H. Middle East & North Africa - Middle and low income	I. South Asia - Middle and low income	J. Sub-Saharan - High and middle income	K. Sub-Saharan - Low income	L. Americas invest. hubs	M. Europe invest. hubs	N. Other invest. hubs	Total
A. Americas - High income	1527	126	53	4	12	1	5	0	3	1	0	5	52	2	1791
B. Europe & Central Asia - High income	158	884	34	5	2	3	4	1	3	1	0	11	74	3	1184
C. East Asia & Pacific - High income	63	28	605	2	1	0	3	0	0	0	0	2	10	4	720
D. Middle East & North Africa - High income	14	7	2	56	0	1	1	1	1	0	0	0	5	1	89
E. Latin America & Caribbean - Middle and low income	49	33	4	0	110	1	1	0	0	0	0	3	18	1	221
F. Europe & Central Asia - Middle and low income	10	27	3	2	1	109	1	0	1	0	0	6	42	1	203
G. East Asia & Pacific - Middle and low income	52	37	89	1	0	2	472	0	2	1	0	49	11	21	736
H. Middle East & North Africa - Middle and low income	5	8	0	2	0	0	0	15	0	0	0	0	1	0	31
I. South Asia - Middle and low income	15	8	3	1	0	0	1	0	80	0	0	0	3	3	114
J. Sub-Saharan - High and middle income	8	10	1	0	0	0	1	0	0	24	0	2	4	1	52
K. Sub-Saharan - Low income	0	0	0	0	0	0	0	0	0	1	2	0	0	0	4
L. Americas Investment hubs	115	11	2	0	5	1	0	0	1	0	0	31	19	10	196
M. European Investment hubs	265	115	14	4	3	6	2	0	1	1	0	4	136	7	558
N. Other Investment hubs	78	28	18	2	5	3	39	0	2	1	0	34	16	56	281
Total	2358	1322	829	78	140	128	529	17	94	30	2	150	391	112	6181

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## Calculating the C- E Gap at the Jurisdictional Level

Assume J's CIT rate (component D) on "received" tax base is the same rate (component F) that J provides on "relieved" tax base so  $D = F = t$ , equation (1) becomes:

$$\begin{aligned} \text{J's Net Revenue Gain/Loss} &= [A * B] * t * [C - E] \\ = [A \times B] * t * [C - E] & \quad (2) \end{aligned}$$

**Amount A**                      **J's Net Gain/Loss Tax Base**

Whether J gains or loses from Amount A depends on its C-E gap; that is, its share of GIDS relative to its share of GRIP.

To determine who wins/loses from Amount A, look at the sign and size of the jurisdiction's C – E gap.

# My First Estimate of Amount A Winners and Losers (USD Billion)

	Jurisdiction Group	Component C	Component E & Thresholds		(C - E) Gap & Thresholds	
			10%	20%	10%	20%
Jurisdiction of Ultimate Parent (Residence)	High Income (64)	44,875	414	149	NA	NA
	Middle Income (105)	12,424	34	10		
	Low Income (29)	80	0	0		
	Investment Hubs (24)	5,996	45	15		
	Total (222)	63,375	493	174		
	<b>% share, High Income (64)</b>	70.8%	83.8%	85.7%	<b>-13.0%</b>	<b>-14.8%</b>
	<b>% share, Middle Income (105)</b>	19.6%	7.0%	5.5%	<b>12.7%</b>	<b>14.1%</b>
	% share, Low Income (29)	0.1%	0.0%	0.0%	0.1%	0.1%
% share, Investment Hubs (24)	9.5%	9.2%	8.8%	0.3%	0.6%	
Jurisdiction of Foreign Affiliates (Source)	High Income (64)	40,599	288	90	NA	NA
	Middle Income (105)	17,580	59	15		
	Low Income (29)	130	0	0		
	Investment Hubs (24)	5,066	146	70		
	Total (222)	63,375	493	174		
	<b>% share, High Income (64)</b>	64.1%	58.4%	51.4%	<b>5.6%</b>	<b>12.7%</b>
	<b>% share, Middle Income (105)</b>	27.7%	11.9%	8.5%	<b>15.9%</b>	<b>19.2%</b>
	% share, Low Income (29)	0.2%	0.0%	0.0%	0.2%	0.2%
<b>% share, Investment Hubs (24)</b>	8.0%	29.7%	40.1%	<b>-21.7%</b>	<b>-32.1%</b>	

# Estimates for Investment Hubs (USD Billion)

	Jurisdiction Group	Component C	Component E & Thresholds		(C - E) Gap & Thresholds	
			10%	20%	10%	20%
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	<b>% share, High Income (64)</b>	70.8%	83.8%	85.7%	<b>-13.0%</b>	<b>-14.8%</b>
	<b>% share, Middle Income (105)</b>	19.6%	7.0%	5.5%	<b>12.7%</b>	<b>14.1%</b>
	% share, Low Income (29)	0.1%	0.0%	0.0%	0.1%	0.1%
	% share, Investment Hubs (24)	9.5%	9.2%	8.8%	0.3%	0.6%
Jurisdiction of Foreign Affiliates (Source)	High Income (64)	40,599	288	90	NA	NA
	Middle Income (105)	17,580	59	15		
	Low Income (29)	130	0	0		
	Investment Hubs (24)	5,066	146	70		
	Total (222)	63,375	493	174		
	<b>% share, High Income (64)</b>	64.1%	58.4%	51.4%	<b>5.6%</b>	<b>12.7%</b>
	<b>% share, Middle Income (105)</b>	27.7%	11.9%	8.5%	<b>15.9%</b>	<b>19.2%</b>
	% share, Low Income (29)	0.2%	0.0%	0.0%	0.2%	0.2%
	<b>% share, Investment Hubs (24)</b>	8.0%	29.7%	40.1%	<b>-21.7%</b>	<b>-32.1%</b>

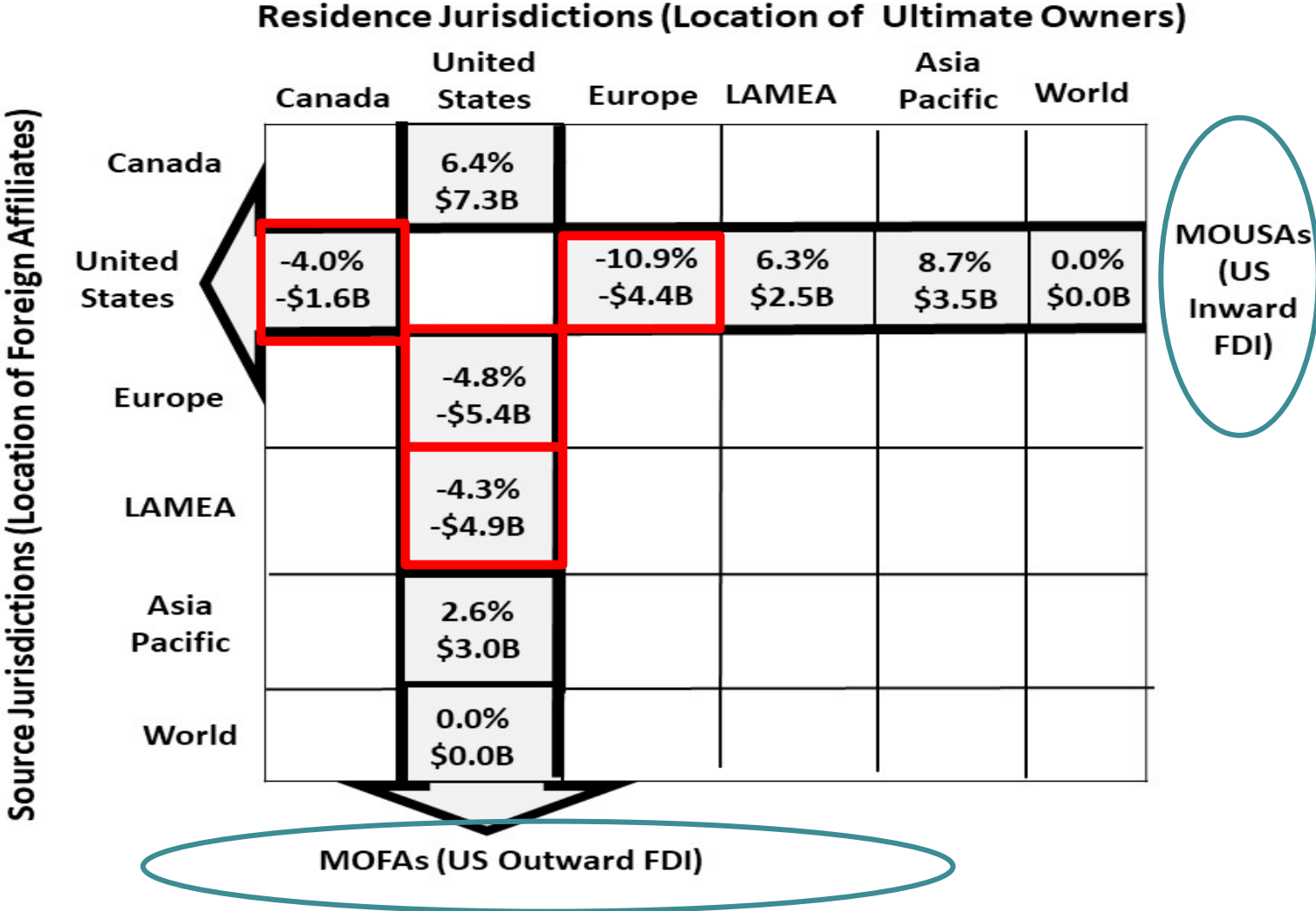
# Estimates for High-Income (HI) Jurisdictions as Proxy for Canada & USA (Two-Arrow Approach)

## Residence Jurisdictions (Location of Ultimate Owners)

Source Jurisdictions (Location of Foreign Affiliates)

	HI Americas	HI Europe & Central Asia	HI East Asia & Pacific	HI M. East & N. Africa	Relative to HI Group	Relative to All Jurisdictions
HI Americas	HI Americas as Residence				-3.8%	-1.1%
HI Europe & Central Asia					1.4%	1.8%
HI East Asia & Pacific					2.7%	2.3%
HI M. East & N. Africa					-0.3%	-0.1%
Relative to HI Group	-8.1%	0.8%	7.0%	0.4%	0.0%	2.8%
Relative to All Jurisdictions	-7.5%	-0.4%	4.3%	0.2%	-3.4%	0.0%

# US Country Impacts Using BEA Data on MOFAs and MOUSAs (US v ROW), % and USD Billions





## US Industry Impacts (US vs ROW), USD Millions

	Sales (\$M)	Profit (\$M)	ROS	C	E	C – E	Impact (\$M)
<b>MOFAs (U.S. Direct Investment Abroad)</b>							
<b>Mining</b>	112,327	57,219	50.9%	3.0%	10.0%	<b>-7.1%</b>	<b>-8,042.3</b>
<b>MFG</b>	1,530,926	220,919	14.4%	40.7%	38.8%	1.9%	2,175.5
<b>Wholesale</b>	789,998	67,813	8.6%	21.0%	11.9%	9.1%	10,360.0
<b>Retail</b>	356,329	18,148	5.1%	9.5%	3.2%	6.3%	7,160.7
<b>INFO/ADS</b>	164,562	55,354	33.6%	4.4%	9.7%	<b>-5.3%</b>	<b>-6,087.6</b>
<b>FIN&amp;INS</b>	204,664	102,201	49.9%	5.4%	17.9%	<b>-12.5%</b>	<b>-14,242.6</b>
<b>Services</b>	230,560	39,433	17.1%	6.1%	6.9%	-0.8%	-904.8
<b>OTHER</b>	375,602 <sup>3</sup>	8,965	2.4%	10.0%	1.6%	8.4%	9,580.9
<b>ALL IND</b>	3,764,968	570,051	15.1%	100.0%	100.0%	0.0%	0.0
<b>MOUSAs (Foreign Direct Investment in the United States)</b>							
<b>MFG</b>	1,798,267	104,061	5.8%	40.0%	51.8%	<b>-11.8%</b>	<b>-4,742.3</b>
<b>Wholesale</b>	1,123,180	24,528	2.2%	25.0%	12.2%	12.8%	5,131.5
<b>Retail</b>	246,545	2,731	1.1%	5.5%	1.4%	4.1%	1,657.0
<b>INFO/ADS</b>	188,996	3,448	1.8%	4.2%	1.7%	2.5%	999.3
<b>FIN&amp;INS</b>	485,050	47,805	9.9%	10.8%	23.8%	<b>-13.0%</b>	<b>-5,226.4</b>
<b>Services</b>	159,036	2,175	1.4%	3.5%	1.1%	2.5%	986.2
<b>OTHER</b>	455,526	16,225	3.6%	10.1%	8.1%	2.1%	825.7
<b>ALL IND</b>	4,497,890	200,973	4.5%	100.0%	100.0%	0.0%	0.0

# Research Questions

## Economic Impact Assessment (EIA) of Pillar One Amount A



1. Assess the estimates of Amount A in the EIA
2. Dissect the “simple analytics” of the Amount A formula
3. Provide finer grained estimates of winners and losers from Amount A than in the EIA



4. Explore the types and probabilities of “tax games” that Governments and MNEs could use to affect Amount A

## Research Question 4

# How Can MNEs & Governments Affect Amount A?

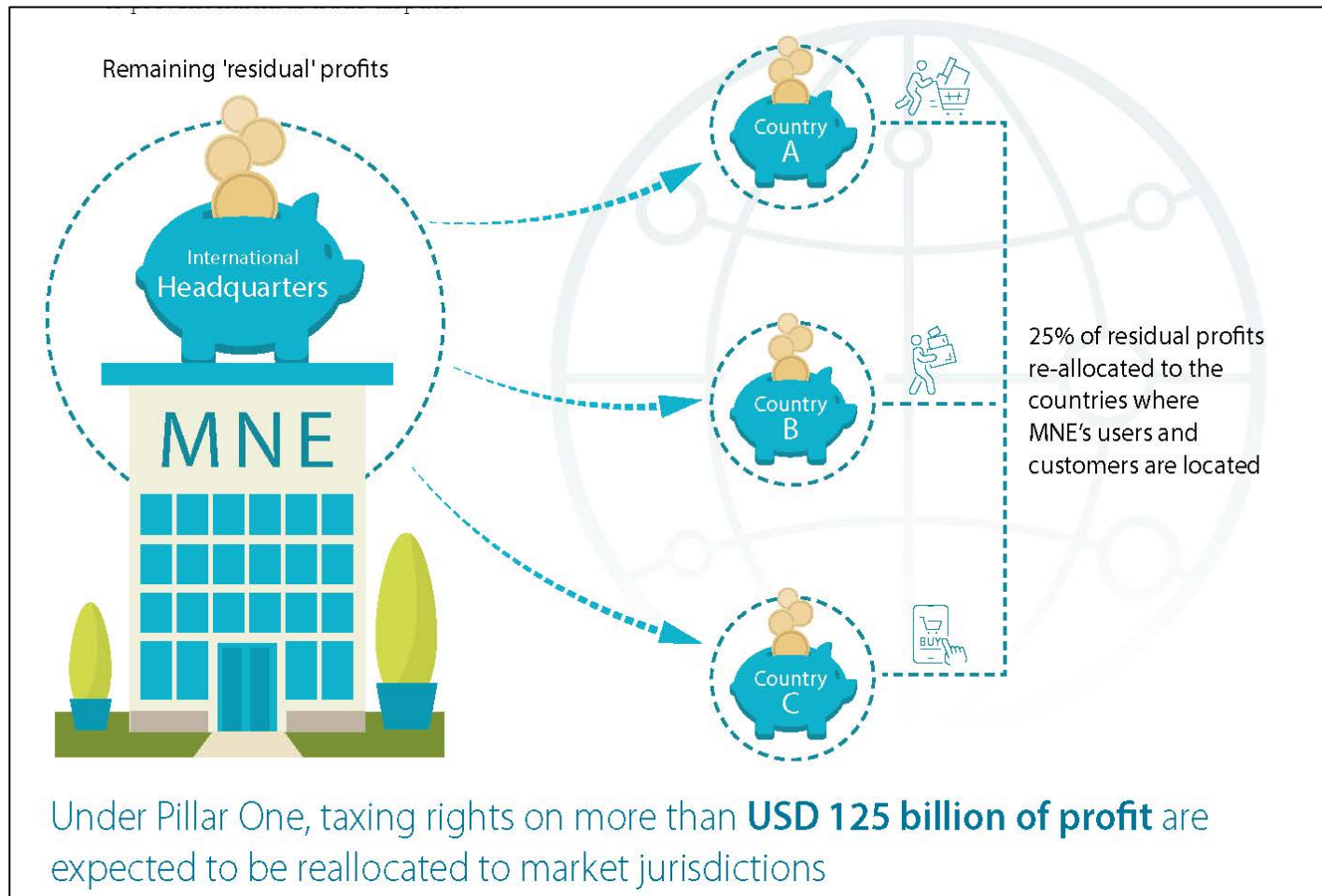
### 1. Pillar One Tax Games.

[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3758671](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3758671)

2. Winners and Losers: **U.S. Country and Industry Estimates** of Pillar One Amount A. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3841813](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3841813)

3. **Taxing the Top 100**: U.S. Estimates of Winners and Losers from Pillar One Amount A. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3862062](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3862062)

# Tax Base Receiving → Who Provides Tax Base Relief?



**OECD. Oct 2021. Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy, page14.**

# Who are the “Tax Relieving” Jurisdictions?

Source: OECD *Pillar One Blueprint* (Oct. 12, 2020, Chapter 7, pp. 139-159 and 227-230).

## Four-Step Tax-Relieving Process

1. **Activities** – entities performing nonroutine activities that make material and sustained contribution to the group’s ability to generate residual profit (i.e., functions/assets/risks & DEMPE).
  2. **Profitability** – exclude entities that make only routine profits or losses
  3. **Market Connection Priority** – activities should be connected to the market jurisdiction
  4. **Back-Stop (Pro-Rata Allocation)** – Last resort: allocate tax liability among group entities pro-rata until entity earns only routine profits. **(waterfall?)**
- Four-step process → Tax Base Relief provided by Residence and Source jurisdictions with MNE Parents, Principals & Full-Fledged Entities. What about investment hubs and tax havens?
  - **Fuzziness of four-step process encourages Pillar One Tax Games (“Pass the Buck”, “I Can’t Pay the Rent”).**
  - **Decentralized MNEs encourage Tax Games by both MNEs & Governments.**

## Pillar One Tax Games: Governments

$$J's \text{ Tax Base Change} = [A * B] * [(C * D) - (E * F)]$$

Assuming  $D = F = t$  then

- J gains tax base if  $C > E$  (tax base receiving)
  - J's Goal: maximize its tax base gains from Amount A
  - Tax Games by Market jurisdictions designed to increase their tax base gains from Amount A.
  
- J loses tax base if  $C < E$  (tax base relieving)
  - J's Goal: minimize its tax base losses from Amount A
  - Tax Games by Residence and Source jurisdictions designed to reduce their tax base losses from Amount A.

# Pillar One Tax Games: Governments

J's Tax Base Change =  $A * B * [C * D - E * F]$

J can affect the size of its gain from Amount A by:

- Increasing its share of GIDS (component C)
  - Playing with definitions:  $G + I + D + S$
- Reducing its share of GRIP (component E)
  - Playing with definitions:  $G + R + I + P$
  - No nexus so  $E = 0$  (no Perm Est, Commissionaires, ADS sales)
- Tax rates (components D and F)
  - Setting a higher tax rate on “found” tax base than on “lost” tax base ( $D > F$ )
  - **Refusal to provide tax relief on its share of GRIP that has been reallocated to Market jurisdictions (sets  $F = \text{zero}$ )**

**→ Who provides tax base relief matters!**

# Tax Base Receiving & Relieving in Centralized MNE

ENTITY	Parent	LRD	LRD	LRD	LRD	MNE Group
COUNTRY	H	J1	J2	J3	J4	World
<b>ALLOCATION OF MNE GROUP TAX BASE UNDER STATUS QUO ALP RULES</b>						
Revenue	15,000	2,000	4,000	3,500	1,250	20,750
Third-party revenue	10,000	2,000	4,000	3,500	1,250	
Intragroup revenue	5000	0	0	0	0	
Costs (COGS + OE)	10,000	1,940	3,880	3,395	1,212	15,427
Profit before tax (PBT) (under ALP status quo)	5000	60	120	105	38	5,323
Profit margin (PBT/Revenue), %	33%	3%	3%	3%	3%	26%
<b>TAX BASE RE-ALLOCATION UNDER AMOUNT A (BEFORE DOUBLE TAX RELIEF)</b>						
Amount A (before double tax relief)	313	63	125	110	39	650
PBT under ALP + Amount A (before DT relief)	5,313	123	245	215	77	5,973
% change in PBT due to Amount A	6.26%	105.00%	104.17%	104.76%	102.63%	12.21%
<i>Potential double counting</i>	313	0	0	0	0	313
<b>TAX BASE RE-ALLOCATION UNDER AMOUNT A (FULL DOUBLE TAX RELIEF BY JURISDICTION H)</b>						
Netting-off of profits under DT relief	-650	0	0	0	0	-650
PBT under Amount A after DT relief	4,663	123	245	215	77	5,323
Net Change in PBT due to Amount A (after DT relief)	-337	63	125	110	39	0
% change in PBT due to Amount A (after DT relief)	-6.74%	105.00%	104.17%	104.76%	102.63%	0.00%

## Who receives?

Entities with third-party revenues (all 5 entities)

## Who pays?

4-step criteria (Parent)

## Who doesn't pay?

Entities with routine returns or losses (LRDs)

## Who does netting-off?

4-step criteria (Parent)

**Winners: LRDs**

**Losers: Parent**

**NET IMPACT OF AMOUNT A IS ZERO**

Source: OECD *Pillar One Blueprint* (Oct. 12, 2020, pp. 227-228) and Eden (2021) adaptation.



# Tax Base Receiving & Relieving in Decentralized MNE

ENTITY	Parent	FFD	LRD	FFD	LRD	MNE Group
COUNTRY	H	J1	J2	J3	J4	World
<b>ALLOCATION OF MNE TAX BASE UNDER STATUS QUO ALP RULES</b>						
Revenue	2,000	4,000	2,000	3,000	3,000	12,000
Third-party revenue	0	4,000	2,000	3,000	3,000	
Intragroup revenue	2,000	0	0	0	0	
Costs (COGS + OE)	1,250	3,250	1,900	2,450	2,700	9,550
Profit before tax (PBT) under ALP status quo	750	750	100	550	300	2,450
Profit margin (PBT/Revenue), %	38%	19%	5%	18%	10%	20%
<b>TAX BASE ALLOCATION UNDER AMOUNT A (BEFORE DOUBLE TAX RELIEF)</b>						
Amount A before double tax (DT) relief	0	82	42	63	63	250
PBT under ALP + Amount A (before DT relief)	750	832	142	613	363	2,700
% change in PBT due to Amount A	0.00%	10.93%	42.00%	11.45%	21.00%	10.20%
Potential double counting of PBT	0	82	0	63	0	145
<b>SCENARIO #1: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	-105	-82	0	-63	0	-250
PBT under Amount A after DT relief	645	750	142	550	363	2,450
Net Change in PBT due to Amount A	-105	0	42	0	63	0
% change in PBT due to Amount A	-14.00%	0.00%	42.00%	0.00%	21.00%	0.00%
<b>SCENARIO #2: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	-168	-82	0	0	0	-250
PBT under Amount A after DT relief	582	750	142	613	363	2,450
Net Change in PBT due to Amount A	-168	0	42	63	63	0
% change in PBT due to Amount A	-22.40%	0.00%	42.00%	11.45%	21.00%	0.00%
<b>SCENARIO #3: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	0	0	0	0	0	0
PBT under Amount A after DT relief	750	832	142	613	363	2,700
Net Change in PBT due to Amount A	0	82	42	63	63	250
% change in PBT due to Amount A	0.00%	10.93%	42.00%	11.45%	21.00%	10.20%

## Scenario #2 (J3 – no tax relief)

### Who receives?

J1, J2, J3, J4 (2 LRDs & 2 FFDs)

### Who pays? H (Parent) & J1 (1 FFD)

### Who doesn't pay?

J2 & J4 (2 LRDs); J3 (1 FFD, doesn't play by the rules)

### Who does netting-off?

H (Parent) and J1 (1 FFD)

**Winners: J2 & J4 (2 LRDs); J3 (FFD)**

**Losers: H (Parent – backstop role)**

**No Change: J1 (FFD)**

# NET IMPACT OF AMOUNT A IS ZERO

Source: OECD *Pillar One Blueprint* (Oct. 12, 2020, pp. 228-230) and Eden (2021) adaptation.

# Tax Base Receiving & Relieving in Decentralized MNE

ENTITY	Parent	FFD	LRD	FFD	LRD	MNE Group
COUNTRY	H	J1	J2	J3	J4	World
<b>ALLOCATION OF MNE TAX BASE UNDER STATUS QUO ALP RULES</b>						
Revenue	2,000	4,000	2,000	3,000	3,000	12,000
Third-party revenue	0	4,000	2,000	3,000	3,000	
Intragroup revenue	2,000	0	0	0	0	
Costs (COGS + OE)	1,250	3,250	1,900	2,450	2,700	9,550
Profit before tax (PBT) under ALP status quo	750	750	100	550	300	2,450
Profit margin (PBT/Revenue), %	38%	19%	5%	18%	10%	20%
<b>TAX BASE ALLOCATION UNDER AMOUNT A (BEFORE DOUBLE TAX RELIEF)</b>						
Amount A before double tax (DT) relief	0	82	42	63	63	250
PBT under ALP + Amount A (before DT relief)	750	832	142	613	363	2,700
% change in PBT due to Amount A	0.00%	10.93%	42.00%	11.45%	21.00%	10.20%
Potential double counting of PBT	0	82	0	63	0	145
<b>SCENARIO #1: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	-105	-82	0	-63	0	-250
PBT under Amount A after DT relief	645	750	142	550	363	2,450
Net Change in PBT due to Amount A	-105	0	42	0	63	0
% change in PBT due to Amount A	-14.00%	0.00%	42.00%	0.00%	21.00%	0.00%
<b>SCENARIO #2: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	-168	-82	0	0	0	-250
PBT under Amount A after DT relief	582	750	142	613	363	2,450
Net Change in PBT due to Amount A	-168	0	42	63	63	0
% change in PBT due to Amount A	-22.40%	0.00%	42.00%	11.45%	21.00%	0.00%
<b>SCENARIO #3: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	0	0	0	0	0	0
PBT under Amount A after DT relief	750	832	142	613	363	2,700
Net Change in PBT due to Amount A	0	82	42	63	63	250
% change in PBT due to Amount A	0.00%	10.93%	42.00%	11.45%	21.00%	10.20%

## Scenario #3 (GVT tax games)

### Who receives?

J1, J2, J3, J4 (2 LRDs & 2 FFDs)

### Who pays?

H, J1 and J3 should pay but choose not to

### Who doesn't have to pay?

J2 and J4 (2 LRDS)

### Who does netting-off?

H, J1 and J3 should but choose not to

**Winners: J1-J4 (all gain tax revenue)**

**Losers: none**

**No Change: H (parent)**

**NET IMPACT: MNE GLOBAL TAX BASE RISES BY AMOUNT A.**

Source: OECD Pillar One Blueprint (Oct. 12, 2020, pp. 228-230) and Eden (2021) adaptation.

# “Who Pays the Rent?” Pillar One Tax Games

- > **Amount A ignores Territorial Tax Systems**
  - > **Residence Jurisdictions exempt Foreign Source Income from outward FDI. (“I already paid the rent!”)**
  - > **Source countries receive CIT Base – the FSI earned by foreign MNEs abroad (inward FDI).**
- > **Source Jurisdictions with high-profit foreign MNEs (e.g., US MOFAs in Europe) won’t give up tax base and want to tax foreign MNEs (“I won’t pay the rent!”)**
- > **Large players engage in tit-for-tat retaliation. (“If you won’t pay the rent, I won’t pay the rent!”)**
- > **Prospect Theory** → Source countries already taxing foreign MNEs - giving up tax base is more costly than receiving (“I can’t lose the rent!”).
- > **Small jurisdictions get side swiped (“We never get the rent!”).**

# Pillar One Tax Games - Multinationals

An MNE can affect its global CIT taxes paid under Amount A, by :

- Being excluded from Pillar One by not being in-scope (finance & insurance, extractive industries, state owned multinationals).
- Reducing the amount of its GRIP (global residual in-scope profit) in Tax Base Relieving Jurisdictions ( $C < E$ )
  - Reducing its residual profit by raising its routine profit (affects RPT)
  - Shifting its business lines into out-of-scope activities (definition of “in-scope” and activity tests)
  - Change mode of entry if doing so reduces GRIP
- Reducing its share of GIDS (global in-scope destination-based sales) in Tax Base Receiving Jurisdictions ( $C > E$ )
  - Change the Mode of Entry (e.g., wholly owned vs franchise) or where sales are booked (e.g., regional marketing hub) if doing so reduces GIDS
  - Shift out of Market jurisdictions where GIDS is low and not likely to grow
- **Note: Transfer pricing would still be driven by tax differentials → MNE’s goal is to maximize worldwide profits after Pillar One Tax.**

# Tax Base Receiving & Relieving in Decentralized MNE

ENTITY	Parent	FFD	LRD	FFD	LRD	MNE Group
COUNTRY	H	J1	J2	J3	J4	World
<b>ALLOCATION OF MN TAX BASE UNDER STATUS QUO ALP RULES</b>						
Revenue	2,000	4,000	2,000	3,000	3,000	12,000
Third-party revenue	0	4,000	2,000	3,000	3,000	
Intragroup revenue	2,000	0	0	0	0	
Costs (COGS + OE)	1,250	3,250	1,900	2,450	2,700	9,550
Profit before tax (PBT) under ALP status quo	750	750	100	550	300	2,450
Profit margin (PBT/Revenue), %	38%	19%	5%	18%	10%	20%
<b>TAX BASE ALLOCATION UNDER AMOUNT A (BEFORE DOUBLE TAX RELIEF)</b>						
Amount A before double tax (DT) relief	0	82	42	63	63	250
PBT under ALP + Amount A (before DT relief)	750	832	142	613	363	2,700
% change in PBT due to Amount A	0.00%	10.93%	42.00%	11.45%	21.00%	10.20%
Potential double counting of PBT	0	82	0	63	0	145
<b>SCENARIO #1: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	-105	-82	0	-63	0	-250
PBT under Amount A after DT relief	645	750	142	550	363	2,450
Net Change in PBT due to Amount A	-105	0	42	0	63	0
% change in PBT due to Amount A	-14.00%	0.00%	42.00%	0.00%	21.00%	0.00%
<b>SCENARIO #2: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	-168	-82	0	0	0	-250
PBT under Amount A after DT relief	582	750	142	613	363	2,450
Net Change in PBT due to Amount A	-168	0	42	63	63	0
% change in PBT due to Amount A	-22.40%	0.00%	42.00%	11.45%	21.00%	0.00%
<b>SCENARIO #3: TAX BASE REALLOCATION UNDER AMOUNT A (AFTER DOUBLE TAX RELIEF)</b>						
Netting-off of profits under DT relief	0	0	0	0	0	0
PBT under Amount A after DT relief	750	832	142	613	363	2,700
Net Change in PBT due to Amount A	0	82	42	63	63	250
% change in PBT due to Amount A	0.00%	10.93%	42.00%	11.45%	21.00%	10.20%

## Scenario #4 (MNE tax games)

### Who receives?

J1, J2, J3, J4 (2 LRDs & 2 FFDs)

### Who should pay under 4-step process?

Parent and FFDs should pay

### Who doesn't have to pay?

LRDs earn baseline ROS so exempt

### How can MNE manipulate Amount A?

- Parent goal: Max GRIP net of Amount A
- Exits jurisdictions with low GIDS and high tax rates
- Uses TP to reduce FFDs to LRDs
- Pays Amount A from FFD in jurisdictions with CIT rates > than market jurisdiction

Source: OECD Pillar One Blueprint (Oct. 12, 2020, pp. 228-230) and Eden (2021) adaptation.

# Updating to October 8, 2021

1. **In-Scope MNEs** = “largest and most profitable” (global turnover = GT > 20 billion euros and PBT/GT > 10%); GT floor falls to 10 billion euros in 7 years)
2. **Reallocation Percentage** increased from 10%-20% to 25%
3. **Nexus threshold** for claiming Amount A is 1 USD Million revenue (GIDS); GIDS falls to USD 250,000 for countries with GDB below 40 billion euros.
4. Where MNE has MKTG or DIST Affiliate in Market Jurisdiction, Safe Harbor caps GRIP allocated to that jurisdiction. (Amount B?)
5. Amount A New Taxing Right estimated at **\$125 USD Billion (up 25%)**
6. **New Multilateral Convention (MLC)** to implement Amount A
7. In-scope MNEs can manage Amount A through a **single entity**
8. **Mandatory binding arbitration**; elective option for low-capacity countries
9. “Simplified application of arm’s length principle in specific circumstances with focus on low-capacity countries for in-country baseline marketing and distribution activities” [Pillar One Amount B?]
10. **Removal of DSTs** and similar measures

# Conclusions

- Amount A introduces formulary apportionment of MNE profits at global level.
- New Taxing Right for Market Jurisdictions would create a two-layer system: existing Intl Tax Regime + Pillar One → double taxation.
- Taxing Top 100 MNEs has little to do with taxing the digital economy.
- Both Governments and MNEs will play Pillar One Tax Games; likely outcome is MNEs will “pay the rent” in higher worldwide taxes.
- With FIN/INS, Nat Resources & State-owned MNEs out, majority of Amount A costs fall on US MNEs in the ADS and Manufacturing sectors.
- **There are better ways to tax MNEs in the digital economy.**



**Thank-you!**  
**Please share your comments and questions with me at [leden@tamu.edu](mailto:leden@tamu.edu)**

