# Taxing the Extractives Industry: Formulary Apportionment as the Panacea?

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# Extractives Industry: Exclusion from Pillar 1

*Report on Pillar One Blueprint:* two specific industry exclusions from scope that also pose difficulties when applying the traditional transfer pricing regime with its arm's length standard: the extractives industry and the regulated financial services industry.

Does Formulary Apportionment offer a solution?

If so, what would it look like?

# 3 questions

1. Whether the extractives industry should be subject to an industry specific formula that varies from any standard design and takes into account the significant contribution of the source country in terms of product;
2. if an industry specific formula is to be adopted, whether it should contain the three standard allocation keys with different weightings or a fourth ‘resource rents’ factor should be included;
3. if a ‘resource rent’ factor is included as part of the allocation of income for the purposes of the corporate income tax regime, it is appropriate to maintain a complementary but separate rent tax.

All three questions address the overarching issue of whether the corporate income tax regime should capture a greater proportion of income from the extractives industry.

# What is the issue with the extractives industry?

- Dominated by large, often foreign owned, vertically integrated firms;
- Exploitation of natural resources (eg, oil, gas and hard minerals) is often key to the economic development of many developing countries;
- Tax focus has been on levies with a shift from volume based to profit based taxes;
- States often seek to tax the rent in addition to CIT;
- Product is often considered a national asset and state owned.

# What does an industry specific formula do?

An industry specific approach has the ability to recognise the unique nature of that industry

Particular industries have unique products, services, and/or value-chains

National regimes are often varied according to different weighted factors or a special formula

# Subnational Regimes

- Canada:
  - applies a two-factor formula of sales and payroll with each weighted equally
  - 9 industry specific formulas but EI is not one of them

- US:
  - Alaska CIT:
    - mining sector apportionment follows the general three-factor formula of sales, property and payroll
    - oil, gas and pipeline sector tax base is apportioned by a formula based on sales (including tariffs), property and an extraction factor, consisting of total production of barrels of oil plus ⅙ Mcf of natural gas

CIT is generally much lower than EI levies. FA is used for CIT with a tax base aggregation. EI levies are restricted to source jurisdiction

# Moving towards Industry Specific FA

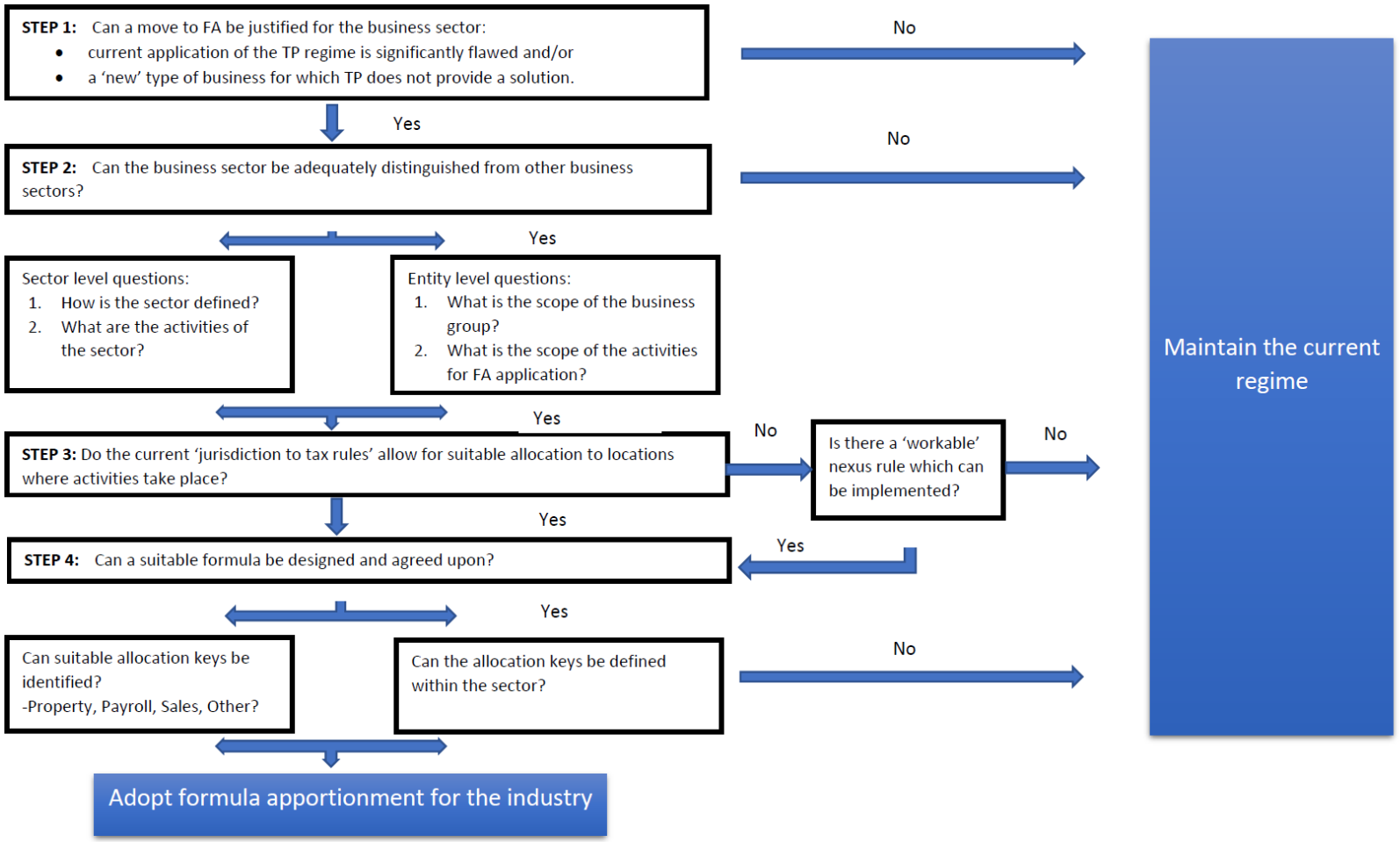
Moving to a formula apportionment model for specific industries requires a framework to be developed to determine the scope and application of the model.

A change from the current regime to formula apportionment model requires an in-principle agreement with the technicalities to be dealt with as a secondary issue.

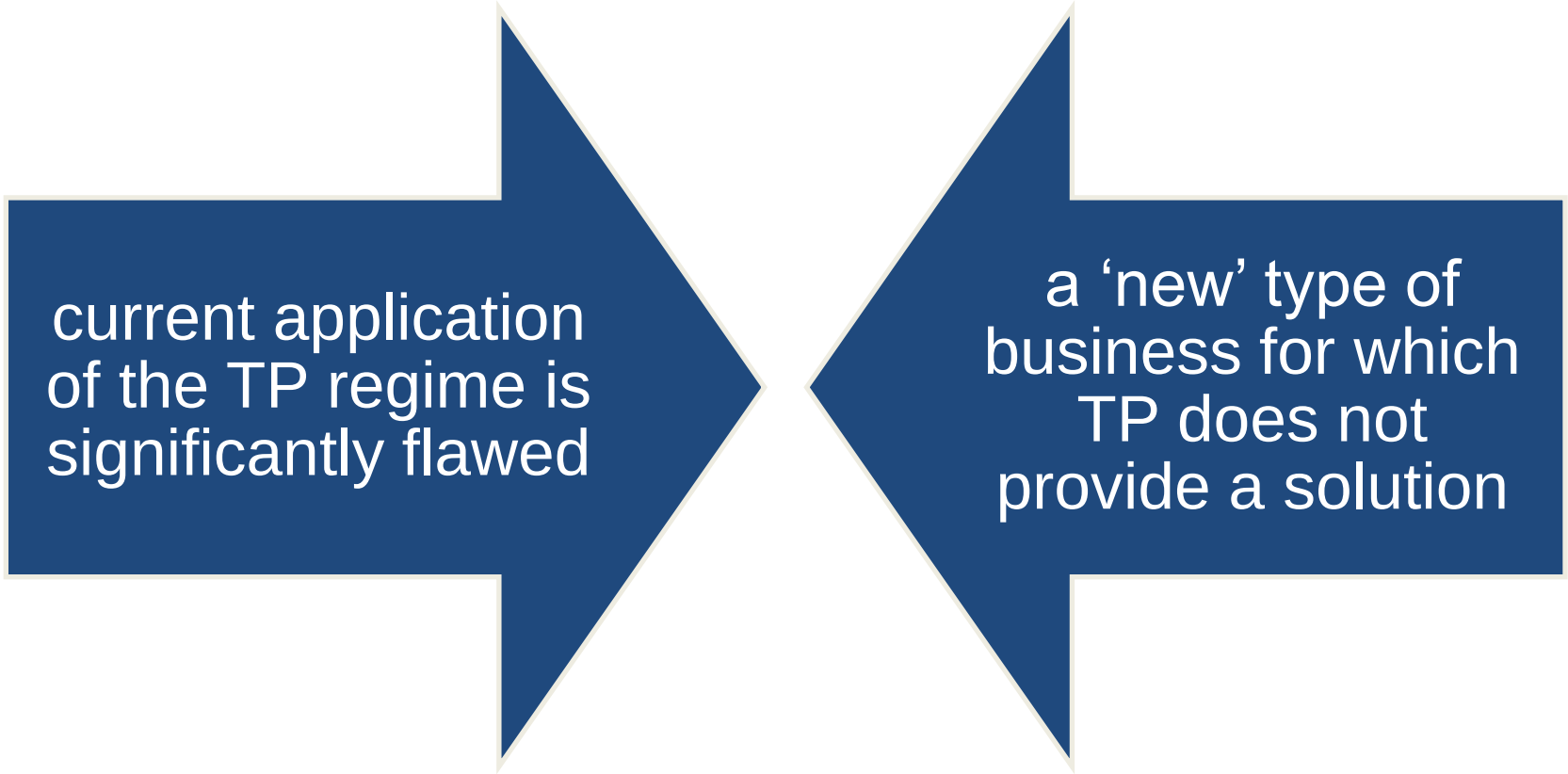
by far the biggest challenge to an in-principle agreement will be due to path dependency by international organisations, particularly the OECD, and regulatory capture by business and the profession

However, given the difficulties various industries face in applying the traditional model, this may be a simpler approach than one which requires a paradigm shift.

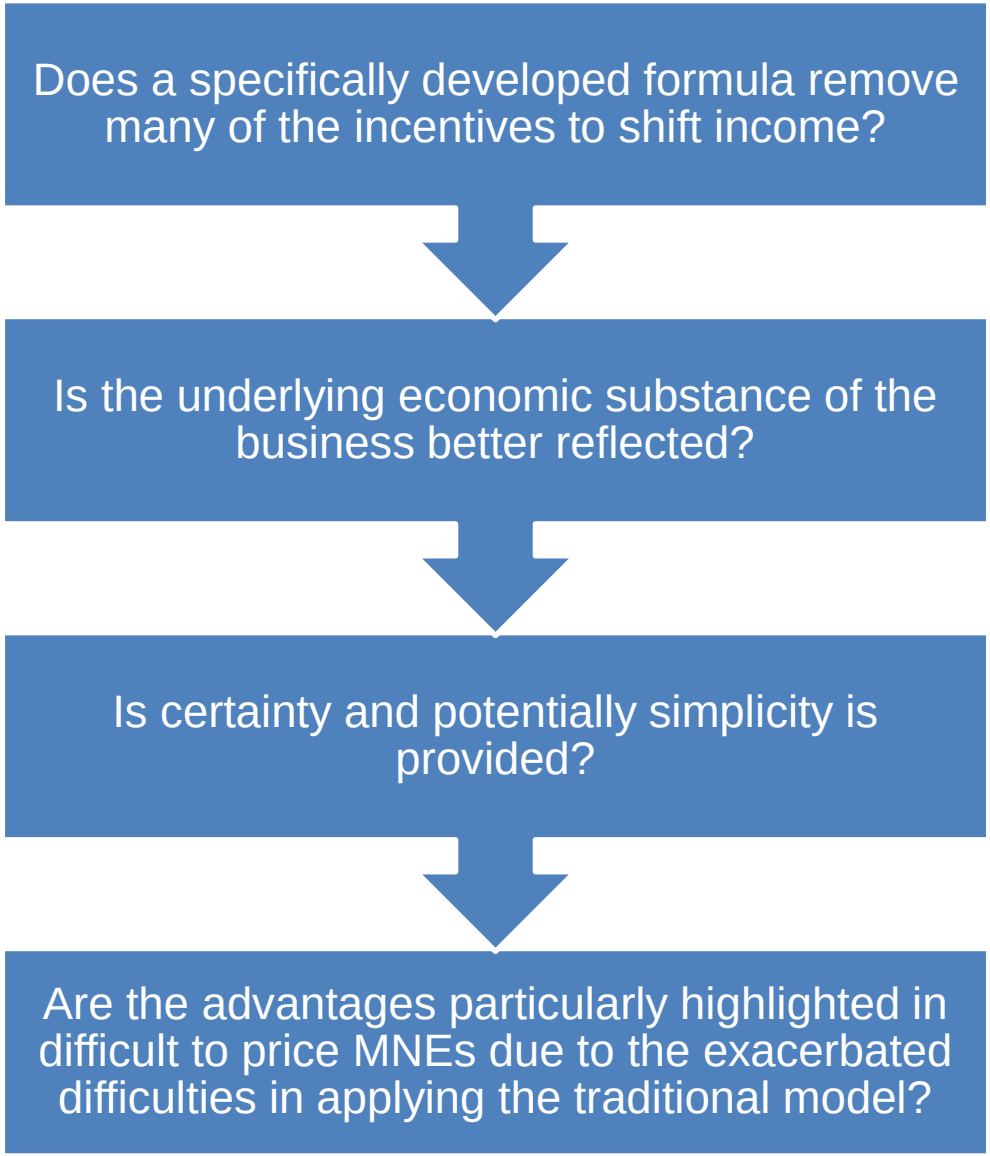
## A FRAMEWORK FOR ASSESSING BUSINESS SECTOR FORMULA APPORTIONMENT



# STEP 1:
# Can a move be justified?



# Advantages: are they greater?



# STEP 2:
# Can the business sector be adequately distinguished from other business sectors?

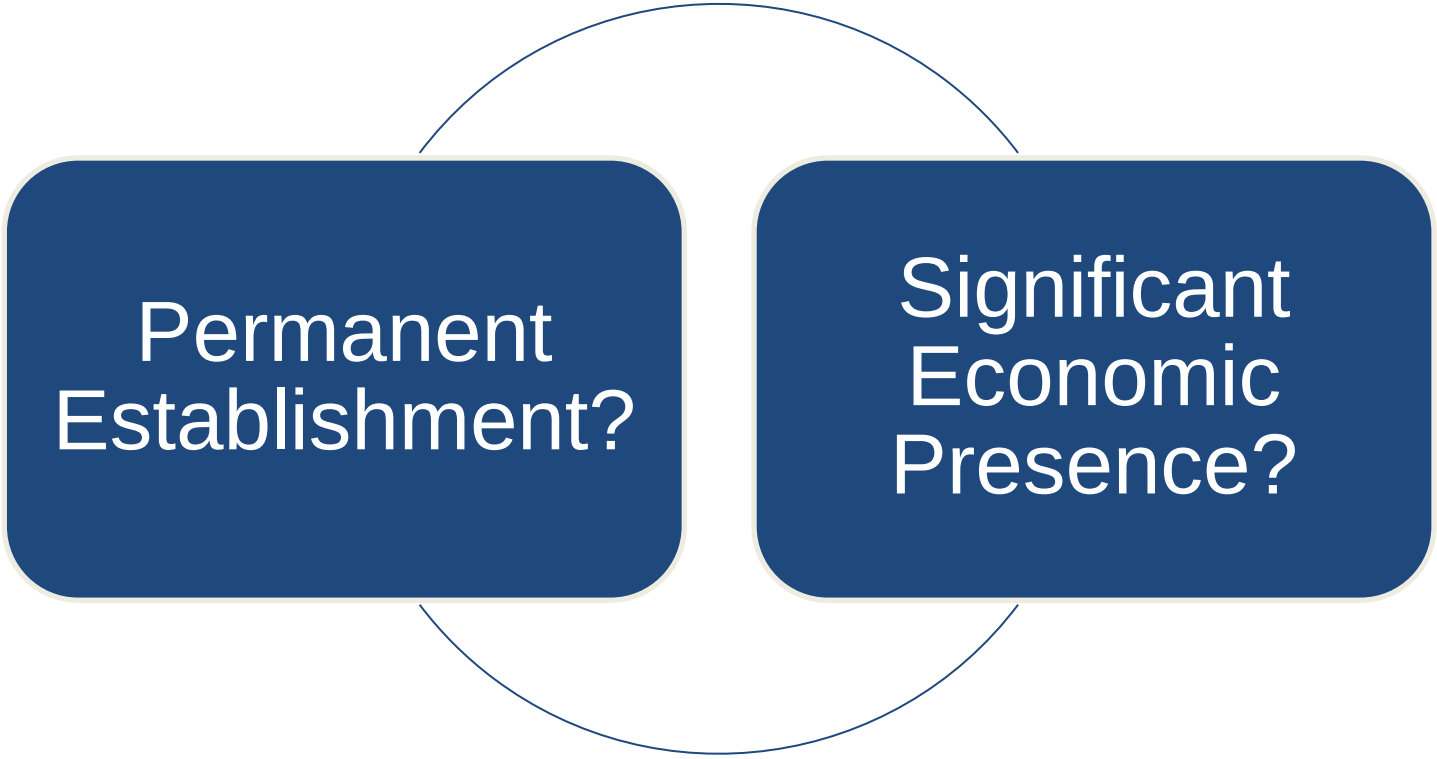
## Sector level questions:

- How is the sector defined?
- What are the activities of the sector?

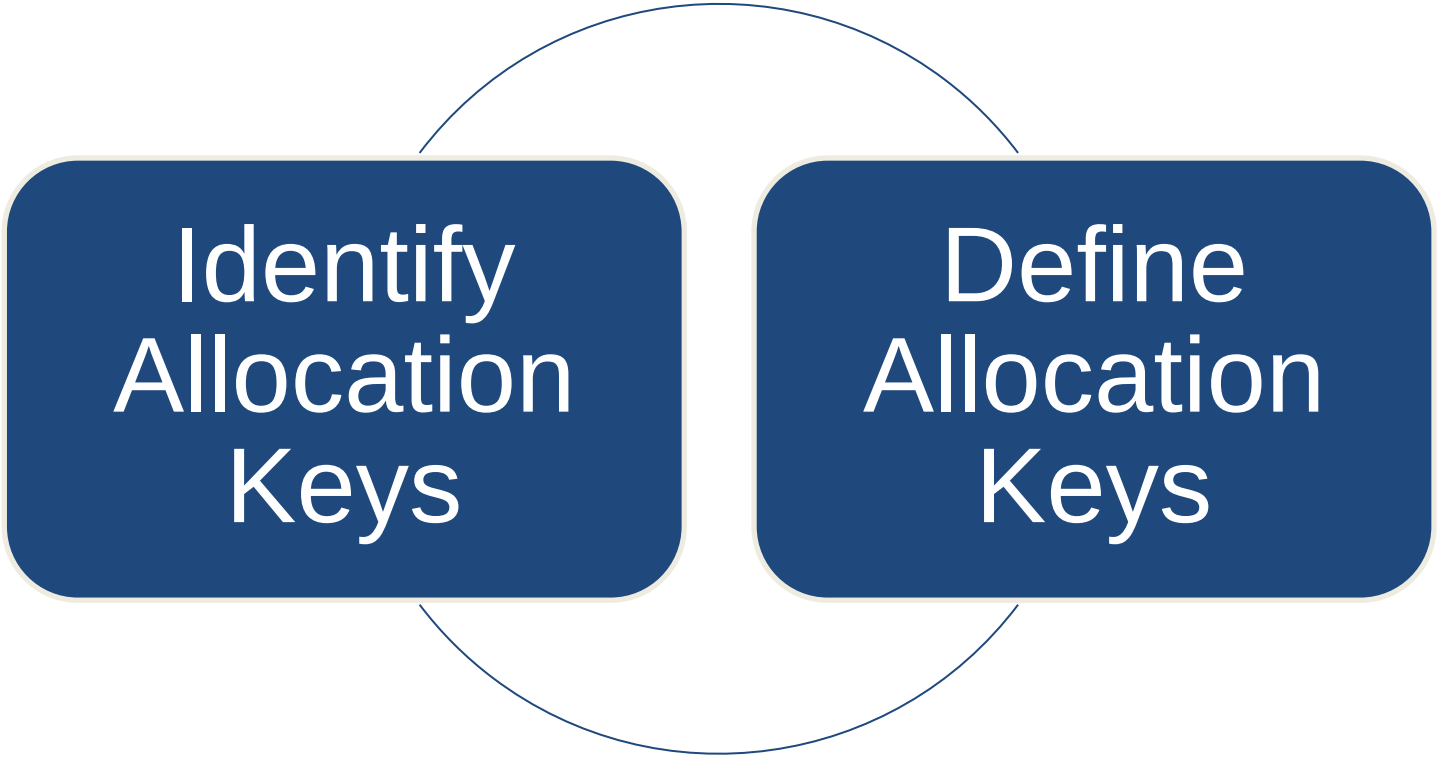
## Entity level questions:

- What is the scope of the business group?
- What is the scope of the activities for FA application?

# STEP 3:
# A Workable Nexus?



# STEP 4:
# A Suitable Formula?



# Our Study to Date

The study draws on data from the Orbis corporate database and estimates sales using data from the OECD's Input-Output Table database and the United Nations (UN) Comtrade Database.

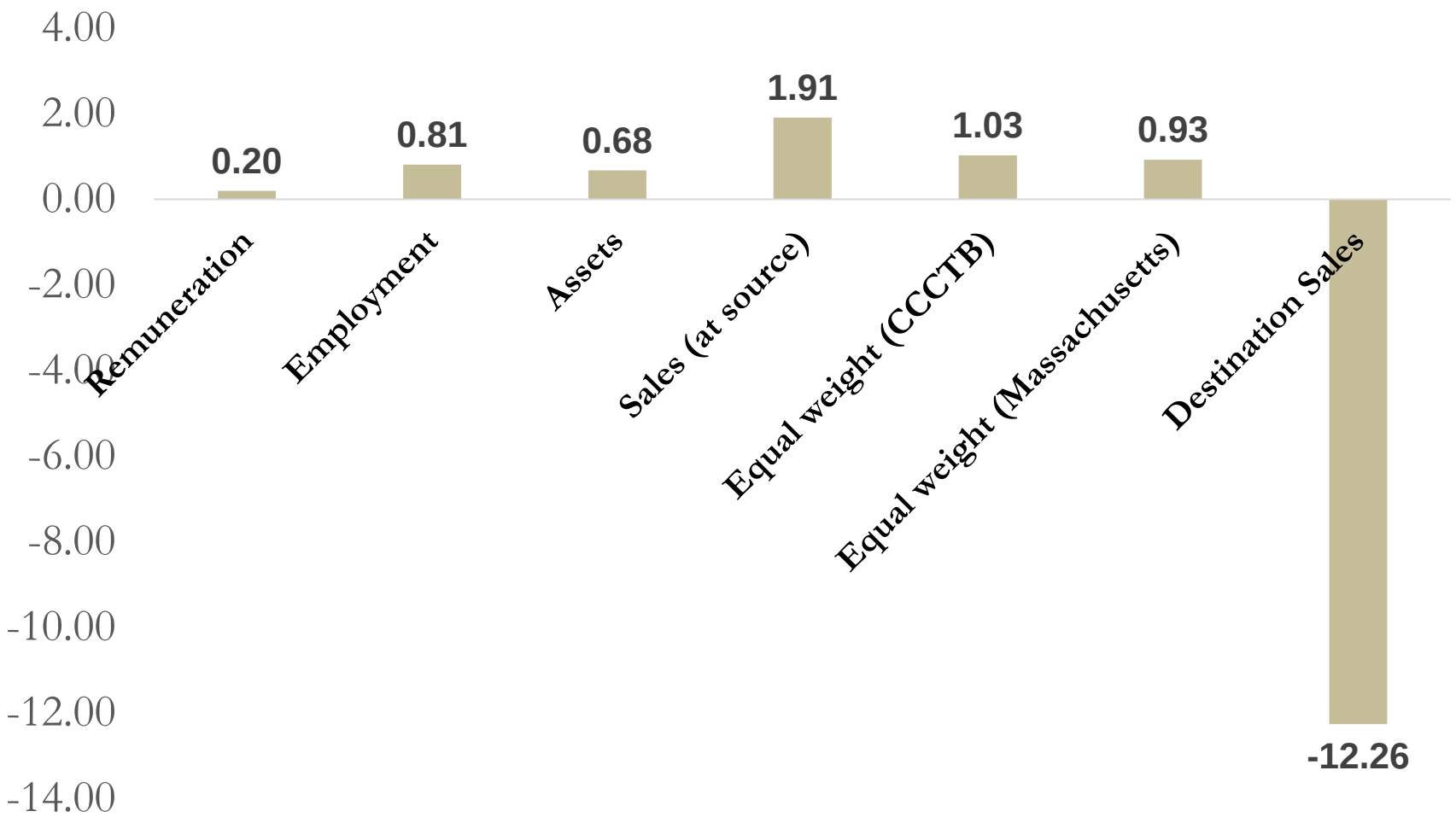
As the most comprehensive data was available for the mining and natural resources sector, the effect of changing from the current arm's length apportionment system to one using formulary apportionment was restricted to this sector, providing an illustration of how broader economy studies could be constructed in the future.

The findings, presented with caveats concerning the difficulty of obtaining comprehensive data, indicate that in almost every case, a switch to formulary apportionment will lead to significant changes in global and national tax revenues collected from MNEs, with particularly large swings possible depending on the weightings assigned to the different formulary apportionment factors.

# Allocation Keys: The formulas tested

1. Formulary apportionment based on cost of employees = tax rate*pre-tax profits*cost of employee share of each subsidiary
2. Formulary apportionment based on number of employees = tax rate*pre-tax profits*number of employee share of each subsidiary
3. Formulary apportionment based on tangible assets = tax rate*pre-tax profits*assets share of each subsidiary
4. Formulary apportionment based on sales at origin = tax rate*pre-tax profits*sales share of each subsidiary
5. Equal weight formulary apportionment (CCCTB) = tax rate*pre-tax profits*(1/3*asset share+1/3*labour share (equal compensation and number of employees) +1/3*sales share)
6. Equal weight formulary apportionment (Massachusetts) = tax rate*pre-tax profits*(1/3*asset share+1/3*labour share (labour cost only) +1/3*sales share)
7. Formulary apportionment based on sales at destination = tax rate*pre-tax profits*sales share of each subsidiary

# Percentage Changes in Total CIT Revenue Under Different Formulae



# Country Results

| Jurisdiction | % Revenue change allocating OR using remuneration costs | % Revenue change allocating OR using number of employees | % Revenue change allocating OR using tangible fixed assets | % Revenue change allocating OR using sales at source | % Revenue change allocating using equal weight (CCCTB) | % Revenue change allocating using equal weight Massachusetts | % Revenue change allocating using sales at destination |
|---|---|---|---|---|---|---|---|
| Australia | 12.07 | 7.50 | 6.44 | 17.01 | 11.08 | 11.84 | -58.53 |
| Bulgaria | -0.11 | 0.59 | 0.39 | -0.10 | 0.18 | 0.06 | -47.96 |
| Denmark | 2.46 | -44.21 | -84.89 | -41.85 | -49.20 | -41.43 | -27.23 |
| Finland | 164.47 | 157.19 | 3.52 | 86.73 | 83.69 | 84.91 | 304.22 |
| Germany | 12.62 | 11.03 | 12.34 | 12.63 | 12.27 | 12.53 | 3494.38 |
| Hungary | 4.60 | 11.90 | -6.18 | -8.42 | -2.12 | -3.33 | 193.86 |
| Ireland | -19.95 | -24.01 | -18.29 | -23.67 | -21.31 | -20.63 | -29.80 |
| Italy | -65.38 | -60.09 | -8.80 | -11.22 | -27.59 | -28.47 | -8.04 |
| Netherlands | 67.42 | 210.91 | 41.26 | 60.64 | 80.36 | 56.44 | 2046.08 |
| Norway | -27.37 | -23.96 | 28.83 | -0.01 | 1.05 | 0.48 | -76.43 |
| Portugal | -1.01 | -0.37 | -0.19 | -0.50 | -0.46 | -0.57 | -27.16 |
| Sweden | 18.28 | 10.72 | 15.92 | 12.05 | 14.16 | 15.42 | 2256.85 |
| UK | 2.47 | -0.39 | 0.04 | -4.55 | -1.16 | -0.68 | -55.58 |
| total | 0.20 | 0.81 | 0.68 | 1.91 | 1.03 | 0.93 | -12.26 |

# Australia

1. Formulary apportionment based on cost of employees = tax rate*pre-tax profits*cost of employee share of each subsidiary **12.07% increase**
2. Formulary apportionment based on number of employees = tax rate*pre-tax profits*number of employee share of each subsidiary **7.50% increase**
3. Formulary apportionment based on tangible assets = tax rate*pre-tax profits*assets share of each subsidiary **6.44% increase**
4. Formulary apportionment based on sales at origin = tax rate*pre-tax profits*sales share of each subsidiary **17.01% increase**
5. Equal weight formulary apportionment (CCCTB) = tax rate*pre-tax profits*(1/3*asset share+1/3*labour share (equal compensation and number of employees) +1/3*sales share) **11.08% increase**
6. Equal weight formulary apportionment (Massachusetts) = tax rate*pre-tax profits*(1/3*asset share+1/3*labour share (labour cost only) +1/3*sales share) **11.84% increase**
7. Formulary apportionment based on sales at destination = tax rate*pre-tax profits*sales share of each subsidiary (**-58.53) % decrease**

# Options to address the sales at destination factor

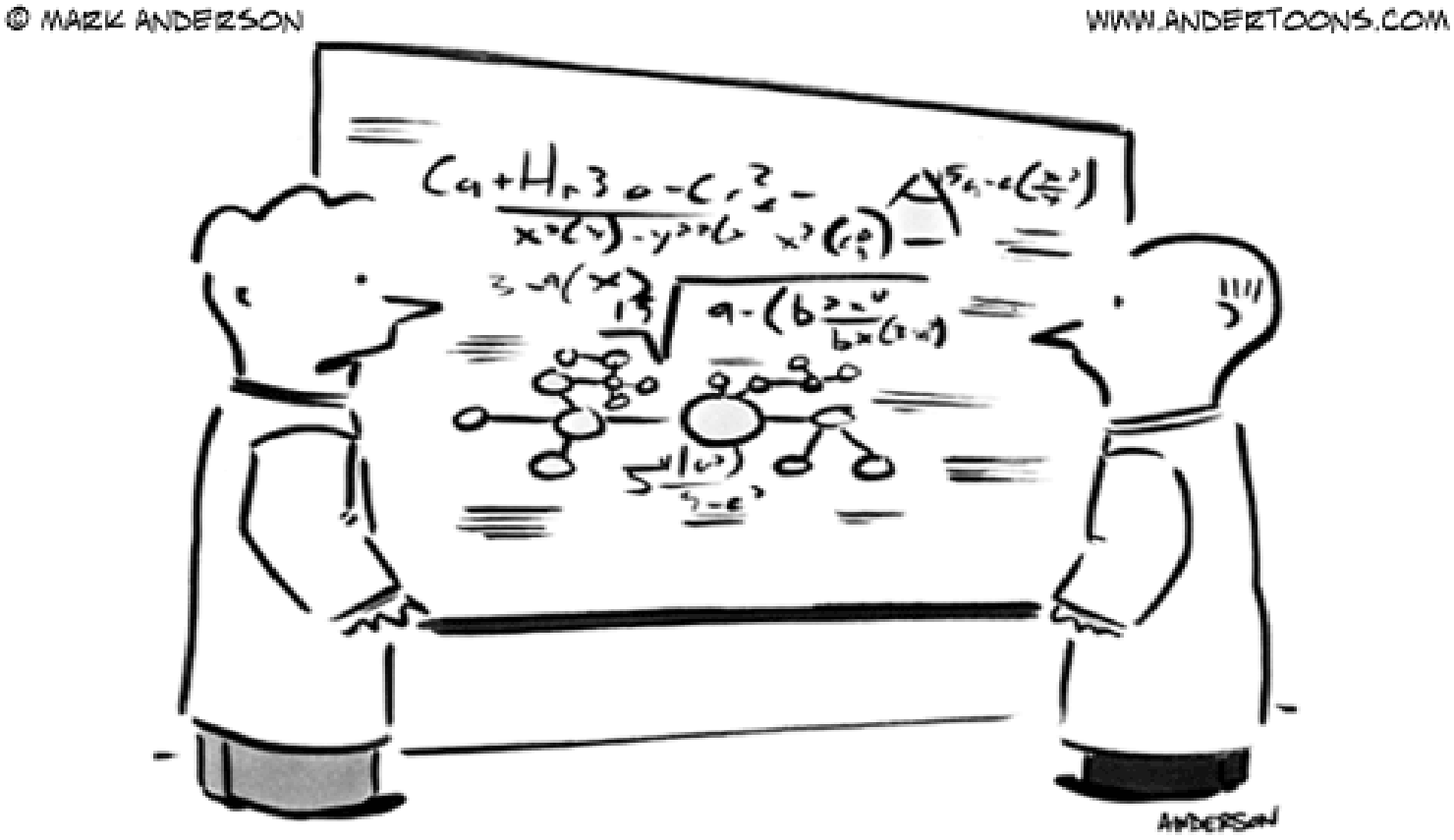
- Standard formula with greater emphasis on levies recognising that such an approach places significant emphasis on sales at destination for CIT purposes

- A fourth factor that takes into account production volume, extraction, or a source-based sales factor

# Conclusion

- A formulary apportionment system should not be used in isolation as there is the potential for abuse.

- However, a fourth factor may measure business activity in the sector more accurately than the standard formula.




"I don't know, it's a little formulaic."

# THANK YOU