EXPLORING GLOBAL RESIDUAL PROFIT ALLOCATION

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Residual Profit Allocation: the basic idea

MNE Global Profit

- Routine Return
  - Allocate by ALP to ‘source’
- Residual Return
  - Allocate by formula
    - e.g. by user participation or marketing intangibles (OECD, 2019)
Residual Profit Allocation: the basic idea

Based on unitary taxation, so would substantially eliminate opportunities for *profit shifting*

But what about its *efficiency* and *revenue* effects?

- Is it less distortive to investment than the current system?
- What about the scale and distribution of routine and residual profits?
- All essential to evaluate RPA proposals
Cost of Capital under Global RPA

Worldwide after-tax profit for an MNE under RPA:

\[(1 - W(\tau, k))(F(K) - rK) - r \sum_i t_i k_i\]
Worldwide after-tax profit for an MNE under RPA:

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(1 - W(\tau, k))(F(K) - rK) - r \sum_{i} t_i k_i
\]

Routine profit
Worldwide after-tax profit for an MNE under RPA:

\[
(1 - W(\tau, k))(F(K) - rK) - r \sum_i t_i k_i
\]
Cost of Capital under Global RPA

The worldwide after-tax profit for an MNE under RPA:

\[(1 - W(\tau, k))(F(K) - rK) - r \sum_i t_i k_i\]

- Routine profit
- Weighted average tax rate on residual profit
- Residual profit
Cost of Capital under Global RPA

The worldwide after-tax profit for an MNE under RPA:

\[ (1 - W(\tau, k))(F(K) - rK) - r \sum_{i} t_i k_i \]

- Routine profit
- Weighted average tax rate on residual profit
- Residual profit
- Total tax on routine profit
Cost of Capital under Global RPA

\[ METR_{i}^{RPA} = \frac{(1 - \tau_i)m_i}{(1 - W)} + \frac{\partial W}{\partial k_i} \frac{(F - rK)}{1 - W} \]

- \( m_i: METR_i \) under the current system, with no profit shifting
- \( METR_{i}^{RPA} > m_i \) iff \( \tau_i < W \): so METR increases for low-tax countries
- For high-tax countries, ambiguous and ultimately an empirical question
Cost of Capital under Global RPA

\[ METR_{i}^{RPA} = \frac{(1 - \tau_i)m_i}{(1 - W)} + \frac{\partial W}{\partial k_i} \frac{(F - rK)}{1 - W} \]

- Only vanishes with fixed W
- Otherwise even the rent part of the RPA is distorting
- Now also depends on profitability as captured in \((F - rK)\)
Redistribution of CIT Revenue

Given by the model as:

\[ D_i^{RPA} - D_i \]

\[ rk_i + W\Pi^R(k) \]

+ additional assumption, can also infer the extent of revenue change due to elimination of profit shifting

current/observed CIT revenue in each country
So what do we know from the data?

Consolidated accounts for the world’s largest 10,000 MNEs, year 2017 (S&P Capital IQ)
• to assess the scale of routine vs. residual profits on a consolidated basis

Aggregate fixed capital stock in the corporate sector for 41 countries, year 2017 (UNCTAD)
• to infer the scale of routine profit in each country

Aggregate fixed capital stock, CIT revenue, proxy for destination-based sales for 125 countries, year 2017 (UNCTAD, WB, IMF WoRLD, GFS)
• to assess changes in CIT revenue if moving to destination-based RPA
With assumed routine return of 10% of fixed assets or 7.5% cost mark-up:

- Residual ≈ 30% of total profit
- 30-40% firms report residual < 0
- Large variation across sectors
- 30% of all residual is concentrated in top 1% firms
- 40% of global residual is concentrated in U.S.-based MNEs

Source: IMF (2019)
Scale of Routine Profits

With assumed routine return of 10% of fixed assets:

Source: IMF staff calculations
Note: Numbers are for 2017 or latest available year if 2017 unavailable
Next Steps

Summary:

• Eliminates profit shifting
• Retains inefficiency for investment
• Routine element of RPA attractive for low-income countries

Next Steps:

• Quantifying country-specific $METR_i^{RPA}$
• How/whether residual profits change over time
• Revenue effects under different weighting schemes