Irish GDP growth: the effect of multinational transfers

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Les questions que l'on se pose

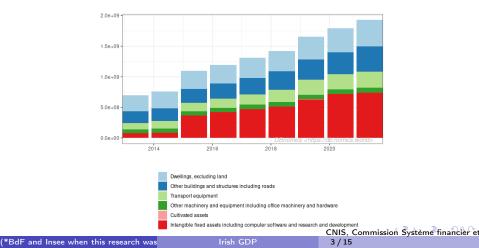
Le cas du PIB irlandais est bien connu depuis 2016 (révision de 7% à 26% !) mais les distorsions persistent

- Quel est l'effet des activités des multinationales sur le sur le PIB irlandais ?
- Où localiser la production dans une économie mondialisée ? qui plus est lorsqu'elle mobilise des actifs intangibles ?
- Quelles solutions actuelles et futures ?

The relocations of intangible assets in Ireland

"Shocks" on intangible assets in 2015, 2019, 2020, etc. are due to external transfers/relocations of balance sheet of multinationals

Gross capital stock by asset type (current prices in euros)



Asset relocations in Ireland: its effects on Irish GDP?

- **Balance sheet operations** : multinationals which re-located intellectual property in Ireland (in 2015 €300 billion, after 2015 smaller transfers)
- A balance sheet operation should not have impacted the GDP no more than the extent of new revenues of the intangible assets
- However, Irish affiliates of multinationals have meanwhile become economic owners of some new production (manufactured abroad under contract manufacturing / "goods for processing")

Residency of the producer

- National accounts do not define the producer as one who physically participates in the production activity but as one who owns the product that is being processed
- This principle leads to the recording in the territory of residence of the producer the value added that results from physical production abroad
- National accounts then allocate production to the country who own intellectual property rights

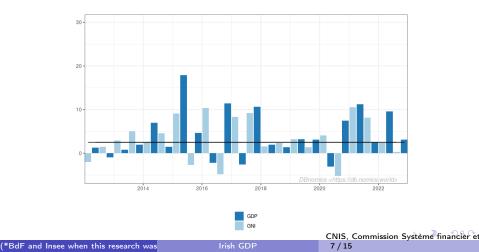
Production is assigned to the unit which has *economic* property

- The distinction between legal and economic property is fundamental principle of national accounts
- The situation is blurred because Irish affiliates became economic owner of goods (e.g. smartphones) after an asset transfer of intellectual property
- Economic property is hard to track within MNEs + complex guidance of SNA 2008

Irish GDP growth

Irish GDP growth over the recent period has been strongly influenced by US MNEs

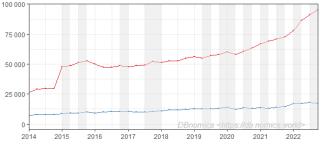
Irish GDP and GNI (Gross National Income) (%-growth, real terms)



Expenditure approach

Exports is the main channel of the effects of MNE's transfers, stemming from contract manufacturing

From International trade data to National accounts (K euros)



Exportation de biens (au sens de la comptabilité nationale)

Exportation de biens (au sens des douanes)

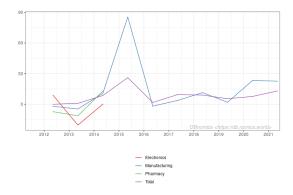
Note: the "contract manufacturing" is the gap between the two curves ; shaded area: quarterly GDP > 2.5% CNIS, Commission Système financier et

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Production approach

Recording of manufacturing production (pharmaceuticals and electronics) as a counterpart of exports

Manufacturing and total value added (growth in %, real terms)



Irish GDP

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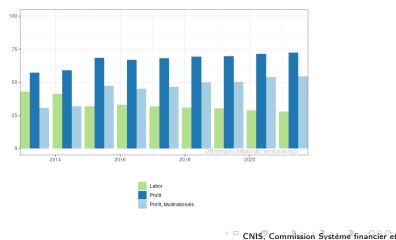
Note: Electronics and pharmaceuticals value added series are not available after 2014 CNIS, Commission Système financièr et

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Income approach

Profit share > labor share in Ireland

Labor and profit share (in % of value added)



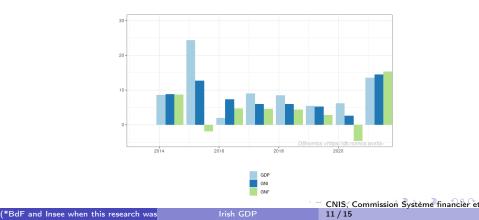
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Solution 1: New complementary indicator, the GNI^{\star}

- GNI^{\star} which equals GNI adjusted for:
 - the retained earnings of re-domiciled firms
 - depreciation on foreign-owned domestic capital assets

Irish GDP, GNI and GNI^* (growth in %, real terms)



Solution 2: Adjusting GDP for MNEs' offshore profit shifting

• Guvenen et al. (2022) inspired by tax lawyers' "formulary apportionment method": re-attributing profits to each multinational to its entities (the US parent and its affiliates) according to the share of the MNE's employment/sales to capture the "true" economic activity in each location



FIGURE 4 - Geographical reattribution of earnings of U.S. MNEs, 2012 (bil. USD)

Notes: The United Kingdom Islands (U.K.I.), Caribbean, are made up of the British Virgin Islands, Cayman Islands, Montserrat, and Turks and Caicos Islands.

Solution 3: Multi-regional input-output tables and KLEMS

Recent developents: WIOD, TiVA, FIGARO, ExioBase, Eora, etc.

- Reduce asymmetries between countries in the international exchange of goods and services
- Avoiding double counting between countries in the case of offshoring/relocation
- Locate the countries where intangible assets are accumulated or hosted in global value chains
- Enhance measure the income flows of intangible assets (share of intangible revenues in VA > tangible capital revenues)

Solution 4: Towards the 2025 SNA

Special purpose entities: legal entities with no or little employment or physical presence, to gain the benefits of varied legal and tax systems

New recommendations

- The economic ownership (parent, producer, special purpose entities), for previously produced intellectual property, depends on the underlying arrangement, there is no default solution applicable to all cases
- A clearer decision tree to determine the economic owners of intellectual property across a group

Conclusion

- Developments in GDP may result from changes concentrated in a few large groups
- This calls for greater exchange of information between countries on the monitoring of major groups
- Increase the the use of indicators based multi-regional input-output tables (e.g. domestic / foreign content of exports)