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Cross-Border Income Flows in Liechtenstein

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Cross-Border Income Flows in Liechtenstein
Prepared by Tara Iyer (EUR) and Andrew Baer (STA)

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April 2025

ABSTRACT: In Liechtenstein, the gap between Gross Domestic Product (GDP) and Gross National Income (GNI) is significant due to the country's economic structure as a financial center with a high percentage of cross-border commuters and globally competitive manufacturers contributing to high GDP per capita. Using currently available data, this paper examines the drivers of the GDP-GNI gap in Liechtenstein to provide a broader context of its high per capita income.

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SELECTED ISSUES PAPERS

Cross-Border Income Flows in Liechtenstein

Prepared by Tara Iyer and Andrew Baer[1]

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PRINCIPALITY OF LIECHTENSTEIN

SELECTED ISSUES

March 5, 2025

Approved By
European Department

Prepared By Andrew Baer (STA) and Tara Iyer (EUR).[1]

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CROSS-BORDER INCOME FLOWS IN LIECHTENSTEIN[1]

In Liechtenstein, the gap between Gross Domestic Product (GDP) and Gross National Income (GNI) is significant due to the country's economic structure as a financial center with a high percentage of cross-border commuters and globally competitive manufacturers contributing to high GDP per capita. Using currently available data, this paper examines the drivers of the GDP-GNI gap in Liechtenstein to provide a broader context of its high per capita income.

A. Contextualizing the GDP-GNI Gap in Liechtenstein

1. In assessing Liechtenstein's economy, it is important to distinguish between Gross Domestic Product (GDP) and Gross National Income (GNI). GDP measures economic activity by the total value of goods and services produced within a nation's borders, whereas GNI represents the total income earned by the residents of that country, regardless of whether that income is generated within or outside the country's borders. This distinction becomes relevant due to the country's economic structure as a financial center with a high number of cross-border commuters and manufacturers with global reach. Liechtenstein has a high nominal GDP per capita—second highest in Europe—driven by its robust financial services sector and presence of numerous multinational corporations. These companies contribute significantly to economic output within Liechtenstein's borders, but some of this output is distributed as income to nonresidents, including wages paid to commuters from Austria and Switzerland. GNI provides a more nuanced view in light of the economic structure and the large share of cross-border commuters.

2. GNI is affected by compensation and profits flowing outside the country and is typically lower than GDP in Liechtenstein. Given the substantial number of commuters, a significant portion of the income generated within its borders does not accrue to Liechtenstein's residents. Additionally, profits from foreign firms may be repatriated, further affecting the GNI. GNI tends to be lower than the GDP, highlighting a disparity between economic activity and actual income available to the population. When GDP per capita is adjusted for cross-border commuters, it is considerably lower (Figure 1a).

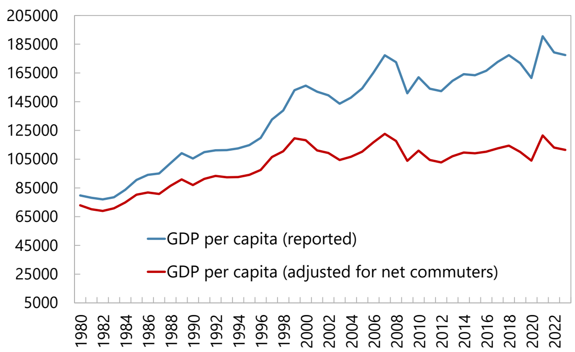
3. The GDP-GNI gap in Liechtenstein can be further contextualized with respect to other countries, including Ireland and Luxembourg. These two countries also have gaps that are among the highest in the world (Figure 1b). Like Liechtenstein, both Ireland and Luxembourg exhibit high GDP per capita figures, fueled by the presence of multinational corporations. However, the gap between GDP and GNI in Liechtenstein is more volatile than in Ireland and Luxembourg. This paper focuses on the historical drivers of the GDP-GNI gap in Liechtenstein and analyzes it in a cross-country context, including in comparison with Ireland.[2]

[1] Prepared by Andrew Baer (STA) and Tara Iyer (EUR).

[2] Detailed data for Luxembourg are not as readily available. Ireland also publishes GNI* which excludes the depreciation of certain assets and the income of redomiciled PLCs. We use GNI for the purposes of this paper.

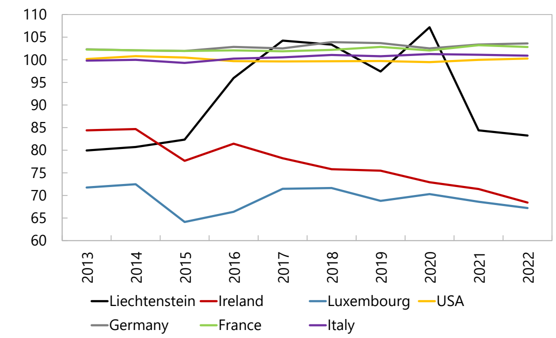
Figure 1. Visualizing Income in Liechtenstein

GDP per Capita
(CHF)



Source: Liechtenstein Authorities and IMF staff calculations.

GNI as a Share of GDP
(Percent of GDP)

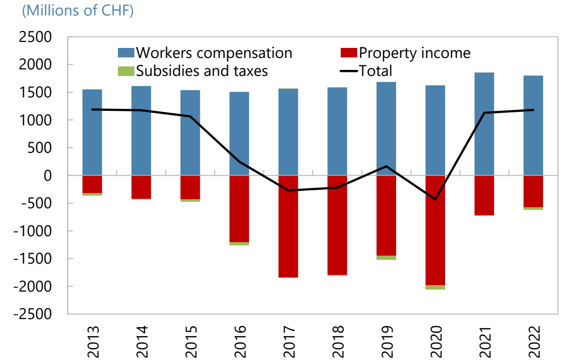


Source: Liechtenstein Authorities, Haver Analytics, and IMF staff calculations.

B. Drivers of the Gap and Cross-Country Comparisons

4. **GDP in Liechtenstein is calculated using both production and income approaches, while GNI is equal to GDP less primary incomes paid to nonresidents plus primary incomes received from nonresidents** (Figure 2). GDP by production is the total of value added produced by resident units plus taxes less subsidies on production. GDP by income is the sum of primary incomes distributed by resident producers. These are alternative approaches meant to produce the same results. The net primary incomes in GNI are composed of (i) cross-border worker compensation; (ii) cross-border property income, which includes interest and dividends, reinvested profits from direct investments, and rent; and (iii) cross-border subsidies and taxes, which are not very significant in Liechtenstein. Positive net primary incomes to the rest of world indicates GNI less than GDP, while negative net primary incomes to the rest of the world result in GNI greater than GDP.

Figure 2. Net Primary Income to Rest of World
(Millions of CHF)



Source: Liechtenstein Authorities.

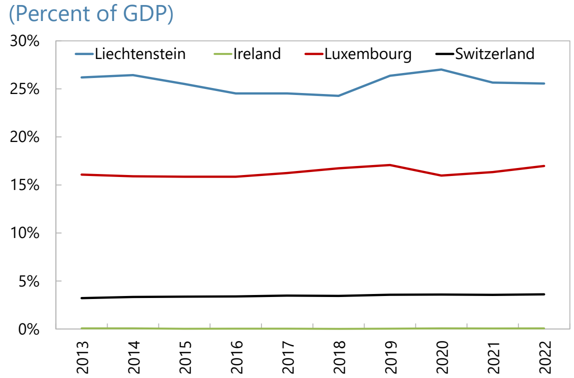
5. **To better understand the GDP-GNI gap, it is useful to analyze its specific sources.**

- **Workers' compensation (Figure 3a)**, which in GDP includes all wages and salaries paid to workers of resident companies, irrespective of their nationality. This means that the wages of inward commuters—those who work in Liechtenstein but reside in neighboring countries—are counted in Liechtenstein's GDP, while the wages of outward commuters—Liechtensteiners who work abroad—are excluded. For GNI, the accounting is reversed. Due to significant net inward commuting, roughly 25 percent of incomes paid by Liechtenstein producers go to nonresidents, after incomes received by outward commuters are netted out. This net outward flow reduces GNI when compared to GDP. By comparison, net workers' compensation (flowing out to non-residents) is around 15 percent of GDP for Luxembourg, under 5 percent for Switzerland, and almost 0 percent for Ireland. While Liechtenstein's flow is large compared to other European countries, it has also been relatively stable since 2013.

- **Net cross-border flows of property income (Figure 3b)**, which includes dividends and interest income. While worker's compensation has remained stable since 2013, net property income has exhibited large fluctuations in recent years. For instance, net property income to the rest of the world surged by 178 percent in 2016, increased by 37 percent in 2020, but then plummeted by 64 percent in 2021. This volatility is also evident in terms of share of GDP, particularly compared to other European countries with large cross-border flows. Another notable feature is that Liechtenstein has persistent net inflows of property income, while Ireland, Luxembourg, and Switzerland, have instead seen net outflows.

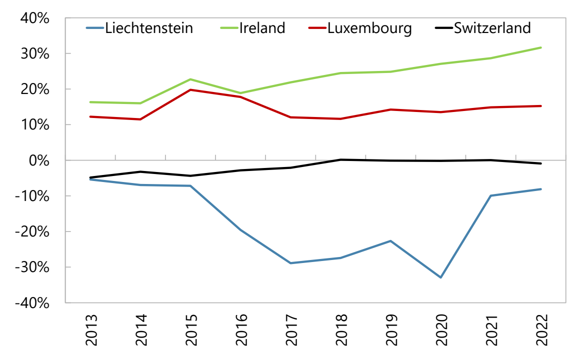
Figure 3. Net Worker's Compensation and Net Property Income to Rest of World: Cross-Country Comparison

Net Worker Compensation to Rest of the World
(Percent of GDP)



Source: National Authorities.

Net Property Income to Rest of World
(Percent of GDP)



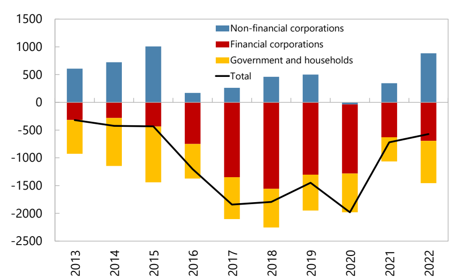
Source: National Authorities.

6. Net property income – which has different dynamics for Liechtenstein and Ireland (Figures 4 and 5)—can be dissected into contributions from various institutional sectors, including households, government, non-financial corporations (NFCs), and financial corporations (FCs). Volatility is primarily influenced by NFCs, including Liechtenstein resident multinationals and FCs. Liechtenstein NFCs generally have net outflows of property income while

FCs consistently have net inflows.[3] Liechtenstein's somewhat balanced property income cross-border flows are contrasted with Ireland, which are dominated almost exclusively by outflows of NFC interest, dividends, and reinvested profits to foreign entities. In Ireland, MNCs have key headquarter functions domiciled outside the border, leading to greater net outflows of property income.

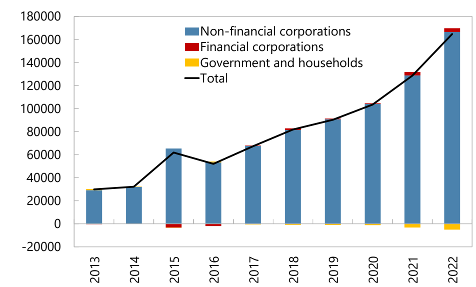
Figure 4. Net Property Income to Rest of World: Liechtenstein vs Ireland

Liechtenstein Net Property Income to Rest of the World
(Millions of CHF)



Source: Liechtenstein Authorities.

Ireland Net Property Income to Rest of the World
(Millions of Euro)



Source: Ireland National Authorities.

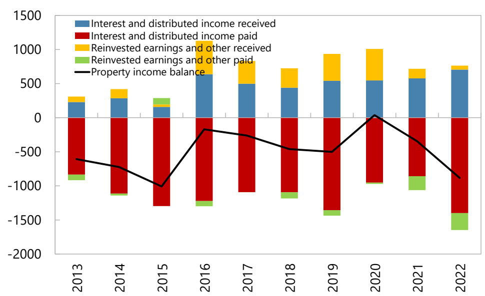
7. Liechtenstein's government and households are consistent net recipients of property income. This reflects both government surpluses and foreign interest and dividend income of households. Liechtenstein FCs also receive more foreign property income than they distribute to nonresidents, although this balance is highly volatile. Strong net inflows of interest and dividends led to FC net property income amounting to over 1 billion CHF each year between 2017 and 2020. These inflows reflect Liechtenstein's position as a financial center.

8. Liechtenstein NFCs often report net outflows of interest and dividends to foreign investors, although this is volatile. Strong inflows of reinvested earnings, interest and dividends to NFCs brought their property income balance close to zero between 2016 and 2020. These inflows include payments made by foreign affiliates to Liechtenstein resident multinationals. This relative balance stands in contrast to Ireland, where NFCs have large and consistently growing primary income outflows. This indicates that the headquarters function of receiving payments from foreign affiliates and then reallocating them is more important in Liechtenstein than in Ireland. Many of the most important multinationals in Liechtenstein were founded in the country rather than having shifted to the country for strategic or financial considerations.

[3] Preliminary data on International Investment Position (IIP) produced by FMA in their 2023 Financial Stability Report shows that net-IIP is around 8x GDP, including large net outwards FDI with Liechtenstein headquartered companies employing 53.000 people in their foreign subsidiaries. This would suggest that Liechtenstein generally would be a net receiver of property income both for the FCs and the NFCs. The data source used here is from the national accounts published by Liechtenstein's Statistical Office. Future work will be needed to improve macroeconomic statistics and reconcile data sources.

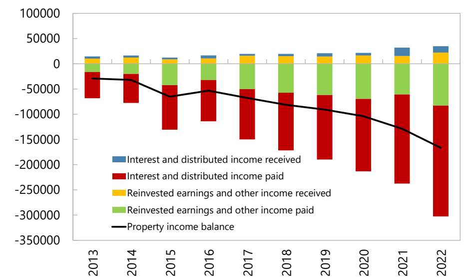
Figure 5. Property Income Balance of NFCs and FCs: Liechtenstein vs Ireland

Liechtenstein NFCs, Property Income Balance
(Millions of CHF)



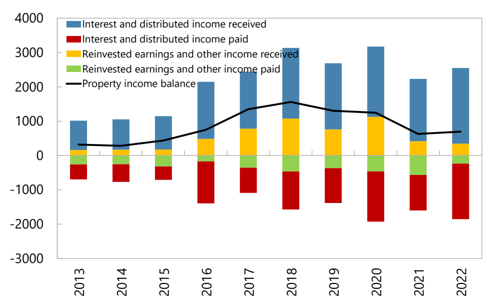
Source: Liechtenstein Authorities.

Ireland NFCs, Property Income Balance
(Millions of Euros)



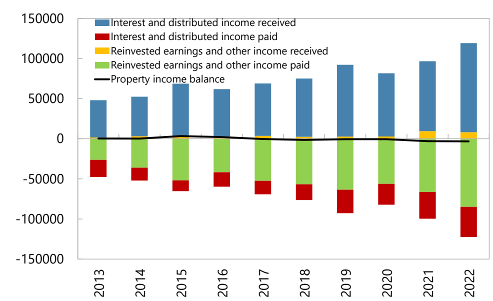
Source: Ireland National Authorities.

Liechtenstein FCs, Property Income Balance
(Millions of CHF)



Source: Liechtenstein Authorities.

Ireland FCs, Property Income Balance
(Millions of Euros)



Source: Ireland National Authorities.

C. Conclusion

9. Liechtenstein sometimes has GDP that is larger than GNI, and the sources of this gap are different from those in Ireland. The GDP-GNI gap is among the largest among major economies and comparable in magnitude to Ireland and Luxembourg – but is more volatile. Liechtenstein's gap is largely due to net outflows to foreign workers, and not because MNCs are domiciling operations in the country for financial reasons. In Ireland, MNCs can have key HQ functions and shareholders domiciled elsewhere, leading to outflows of property income. Due to Liechtenstein's role as financial center and the presence of large MNC HQs, the large outflow of compensation to foreign workers can sometimes be balanced by inflows of interest, dividends, and reinvested earnings.

10. The paper illustrates the importance of analyzing Liechtenstein's economic developments through an alternate lens, given its unique structure, namely the significant presence of commuters as well as foreign investments by Liechtenstein residents.