

# 1 Introduction

To quantify the potential overvaluation of rents in the largest Chilean companies, we adopt a methodology inspired by the UNCTAD report’s approach to measuring surplus profits [?]. This methodology involves comparing a company’s actual profits to a benchmark representing typical profits for its sector, with the difference indicating potential overvalued rent attributable to factors such as market power, barriers to entry, or unique competitive advantages.

## 2 Data and Methodology

### 2.1 Identifying Largest Companies and Data Collection

There is a strong correlation between large companies and bond-issuing firms. This criterion is based on the premise that large companies often have to access international capital markets to finance their operations and growth, making them more likely to issue bonds. Based on this criterion, we identify the largest firms as those that issue bonds.

Financial data was gathered for a representative sample of Chilean companies across various sectors. This data includes financial statements and microeconomic data obtained from Refinitiv Eikon. To ensure data accuracy, the information was cross-checked with financial statements from the Chilean Comisión para el Mercado Financiero (CMF).

The sample consisted of 295 companies (to be confirm). However, financial companies were excluded from the analysis, as they often serve as financial subsidiaries and do not represent the core business activities of the real sector. The final dataset was structured as a panel database, encompassing 11 years of observations (2013-2023) for each firm.

### 2.2 Sectoral Analysis and Benchmark Calculation

Companies were grouped into sectors based on standard industry classifications. For each sector ( $j$ ) and period ( $p$ ), the benchmark for typical profitability ( $R_{jp}$ ) was calculated as the annual average of the median return on assets (ROA) for firms in that sector during that period. The analysis utilizes three distinct periods: 2013-2016, 2017-2019, and 2020-2023. This periodization allows us to capture potential shifts in profitability trends over time, considering factors such as economic cycles and policy changes.

Table 1 presents the average net income before taxes (NIBT) and average typical profits for both bond-issuing and non-bond-issuing firms across different sectors. As the table indicates, bond-issuing firms – representing the largest

companies – are concentrated in sectors such as mining, manufacturing, information, utilities, retail trade, and transportation and warehousing. These sectors also exhibit significantly higher NIBT for bond-issuing firms compared to their non-bond-issuing counterparts, suggesting the potential for overvalued rents.

### 2.3 Methodology for Estimating Overvalued Rents

Table 1 presents the typical profit calculations, which are based on the median Net Income Before Taxes (NIBT) for each sector across three distinct periods: 2013-2016, 2017-2019, and 2020-2023. This approach allows for a robust estimation of typical profitability, mitigating the influence of outliers and capturing potential shifts in industry dynamics over time. The detailed calculation methodology is outlined below.

For each company ( $i$ ) in sector ( $j$ ) and year ( $t$ ), the typical profit ( $\hat{\pi}_{ijt}$ ) is calculated as:

$$\hat{\pi}_{ijt} = K_{ijt} \times R_{jp}$$

Where:

\*  $K_{ijt}$  represents the total assets of the company. \*  $R_{jp}$  is the benchmark for typical profitability for the sector and period.

This calculation provides an estimate of the expected profit for a company in a given sector and period, assuming it earns a "typical" rate of return on its assets.

The overvalued rent for each company ( $i$ ) in sector ( $j$ ) and year ( $t$ ) is calculated as the difference between its observed operating profits ( $\pi_{ijt}$ ) and its typical profit ( $\hat{\pi}_{ijt}$ ):

$$\pi_{ijt} - \hat{\pi}_{ijt}$$

This difference represents the "excess" profit earned by the company above and beyond what would be expected based on its sector's typical profitability.

To assess the overall magnitude of overvalued rents, we calculate the share ( $S_p$ ) of overvalued rent in total profits for each period ( $p$ ) as:

$$S_p = \frac{\sum_{t \in p} \sum_{j=1}^Q \sum_{i=1}^{N_j} (\pi_{ijt} - \hat{\pi}_{ijt})}{\sum_{t \in p} \sum_{j=1}^Q \sum_{i=1}^{N_j} (\pi_{ijt})} \times 100$$

This measure provides a comprehensive view of the extent to which overvalued rents contribute to overall profitability in the Chilean economy across different time periods.

Sector	Avg. Net Inc. Before Taxes		Avg. Typical Profits	
	Non Issuing	Issuing	Non Issuing	Issuing
Administrative and Support Services (*)	\$78,956		\$-527,911	
Agriculture, Forestry, Fishing and Hunting	\$8,752,638		\$7,295,928	
Arts, Entertainment, and Recreation	\$513,370		\$-169,798	
Construction	\$15,759,652		\$13,107,647	
Educational Services	\$-201,972		\$-118,162	
Health Care and Social Assistance	\$12,454,268		\$16,808,143	
Information	\$31,439,605	\$164,571,552	\$30,443,616	\$169,447,981
Manufacturing	\$26,958,456	\$194,580,784	\$21,675,190	\$66,657,603
Mining, Quarrying, and Oil and Gas Extraction	\$8,345,045	\$178,973,840	\$-396,362	\$-10,793,839
Other Services (except Public Administration)	\$384,774		\$164,361	
Professional, Scientific, and Technical Services	\$35,012,704		\$23,595,645	
Retail Trade	\$34,873,467	\$340,496,119	\$28,840,917	\$317,908,460
Transportation and Warehousing	\$9,927,654	\$316,141,768	\$6,218,154	\$64,990,195
Utilities	\$53,800,652	\$537,211,166	\$45,826,082	\$368,565,390
Wholesale Trade	\$361,366,255		\$284,863,916	

Table 1: Average Net Income Before Taxes and Average Typical Profits by Sector and Bond Issuance Status

### 3 Results

The analysis reveals a consistent pattern: larger companies, particularly those with the capacity to issue debt, consistently capture a higher share of surplus profits across all analyzed periods. This finding has important implications for understanding the dynamics of market power and rent extraction in the Chilean economy.

Figure 1 (insert your figure here) visually demonstrates this pattern.

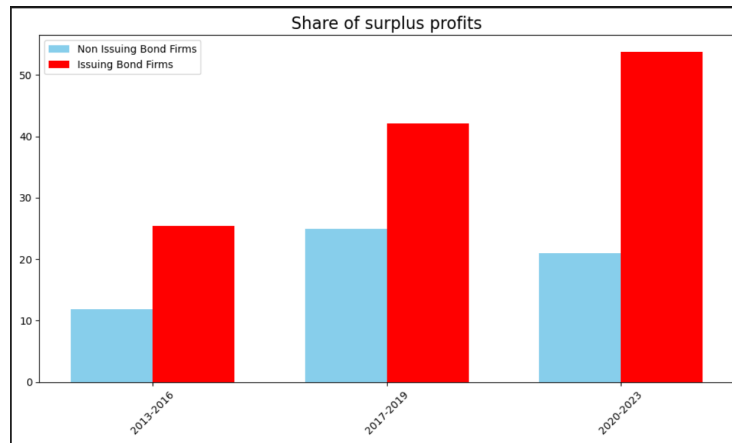


Figure 1: Share of Overvalued Rent in Total Profits by Company Size and Period

Largest firms may possess inherent advantages that allow them to secure a disproportionate share of economic surplus. These advantages could stem from economies of scale, which reduce their per-unit costs; greater access to capital markets, enabling them to invest in growth and innovation; or stronger political influence, potentially leading to favorable regulations or government contracts.

Connected with theory debate.....next section.