The Micro-Level Anatomy of Korea's Rising Labor Share

Jiyoon Oh*

This paper investigates the unique upward trend in the corporate labor share in South Korea since the 2000s, contrasting to the global decline observed during the same period. Analyzing financial statements from externally audited Korean firms, the study reveals that the increase in labor share is pervasive across all sectors, driven primarily by within-firm effects rather than the between-firm effects observed in the decline in the U.S. Notably, large firms have experienced a significant rise in labor share, attributed to the relatively slower growth in value-added compared to wages. The study also identifies a decreasing trend in industry concentration in South Korea, diverging from the increasing concentration and markups seen in the United States. These findings challenge the prevailing narrative attributing declining labor shares to technological advancements and the emergence of superstar firms, instead highlighting distinctive dynamics within the Korean corporate sector.

I. Introduction

Over the past decade, substantial body of research has documented a long-term decline in labor shares. While much of this research has focused on the U.S. (Barkai, 2020; Elsby et al., 2013; Grossman and Oberfield, 2021; Kehrig and Vincent, 2021), it also extends globally, encompassing both emerging and developed economies (Karabarbounis and Neiman, 2014; OECD, 2015; Dao et al., 2017; Andic and Burda, 2021). South Korea is no exception. Numerous studies have reported a downward trend in the aggregate labor share in South Korea (Kim, 2013; Joo and Su, 2014; Jeong, 2015; Lee, 2020), primarily relying on national accounts. Although

aggregate data provide a broad overview of the Korean economy, they are limited by the challenge of accurately splitting the mixed income of proprietors —a significant issue given that approximately one-fourth of Korea's employment is in the unincorporated sector.

In contrast, this paper demonstrates that the labor share in Korea's corporate sector has steadily increased over the past two decades (the 2000s and 2010s). By analyzing financial statements of externally audited Korean firms from 1989 to 2020, we show that although the corporate labor share declined sharply in the 1990s, it began to rise in the 2000s—a period when most countries experienced a significant drop in labor share (Andic and Burda, 2021). This upward trend in the corporate labor share continued through the 2010s.

This pattern is observed across most sectors, including manufacturing and services, indicating that the increase in the corporate labor share is not confined to a specific industry. The rise since the 2000s is evident across most percentiles, suggesting that the increase in the corporate labor share is largely driven by changes within incumbent firms (the within-firm effect). This contrasts with the findings in the U.S. (Autor et al., 2020), where the decline in aggregate labor share has been attributed to large, low-labor firms gaining more market share (the between-firm effect). The within-firm effect observed in South Korea represents a significant departure from the between-firm effect, which has been a primary driver of labor share decline in many countries, including the U.S.

Alongside the increasing labor share in South Korea, industry concentration has decreased since 1990. Additionally, corporate profit rates have been declining since the 2000s, suggesting that average markups in the corporate sector may be decreasing in Korea. These findings stand in contrast to the trend of increasing concentration and markups in the United States, as discussed by Autor et al. (2020) and De Loecker et al. (2020).

A distinctive feature of the corporate labor share in South Korea is that the increase is particularly pronounced among large firms. It is found that firms with fewer than 300 employees showed almost no increase in labor share during the 2000s. In contrast, firms with more than 300 employees exhibited a steady rise in labor share from the 2000s through the 2010s. Within these larger firms, the growth in labor share is primarily attributable to relatively slow growth in value-added rather than an increase in wages. These characteristics of the Korean corporate labor share differ significantly from findings in other contexts, particularly in the U.S., highlighting the need for greater attention to the unique aspects of the Korean context.

National accounts are commonly used to calculate the aggregate labor share. However, this study utilizes financial statements due to two main challenges that complicate the use of national accounts. First, the allocation of mixed income for the self-employed between labor and capital is a widely recognized challenge

(Bridgman, 2018). In South Korea, the self-employed constitute a significant portion of the labor force, accounting for 25% of the employed population as of 2017. Korea has the fifth-largest self-employment sector among OECD countries, which is unusual for a country with a high GDP per capita. Moreover, there have been substantial shifts in both the proportion and characteristics of the self-employed over time. Therefore, the static adjustment of proprietors' mixed income, as proposed by Gollin (2002), cannot accurately represent the actual labor share. Second, while the corporate labor share offers a useful alternative when adjusting for the self-employed is problematic, the available data period is insufficient to examine long-term trends in Korea. Many researchers (e.g., Karabarbounis and Neiman, 2014; Bridgman, 2018) prefer corporate labor shares as a benchmark for cross-country comparisons, as it alleviates some measurement issues. However, it was only in 2010 that Korea began disclosing compensation in the corporate sector within the national accounts. As a result, national accounts cannot provide a long time series of the corporate labor share in Korea.

The corporate sector is a subset of the entire economy. In the United States, it accounts for approximately 50-60% of the total value added (Karabarbounis, 2024), whereas in Korea, it represents about 68% as of 2010, according to national accounts. This study focuses on relatively large firms within the corporate sector, underscoring the importance of addressing the representativeness of the sample. To ensure our results are representative, we compared the corporate labor share with the aggregate labor share and the more comprehensive statistics from the 「Financial Statement Analysis」 (FSA). The FSA, compiled by the Bank of Korea, includes a broader set of firms. Consequently, the corporate labor share in this study aligns with aggregate trends and the FSA indicator. Additionally, accounting data may differ from survey data. To address potential measurement issues, we compared the labor share calculated in this study for the manufacturing sector with the labor share derived from the Statistics Korea 「Mining and Manufacturing Survey」 (MMS). The trend observed in the corporate labor share for manufacturing aligns closely with that of the MMS, indicating that accounting data can be consistent with survey data. These comparisons confirm that the corporate labor share in our study is broadly representative and not significantly affected by measurement errors.

The use of financial statements in economics is fundamentally challenging. According to Autor et al. (2017), De Loecker et al. (2020), and Traina (2018), an important barrier in labor share analysis using financial statements is the limited information about the total labor costs. The labor costs in a firm's financial statement are divided into two components. One is from the labor cost of SG&A (Selling, General, and Administrative Expenses), and the other is the labor expenses of COGS (Cost of Goods Sold). The first one is indirect labor expenses such as overhead costs, whereas the last one is more direct labor costs to produce goods and

services. However, in many countries, including the United States, disaggregated items within the COGS are not required to be disclosed, often resulting in direct labor costs being concealed within COGS. In contrast, Korea's corporate disclosure system is comparatively more stringent in this regard. Until 2004, Korea mandated the public disclosure of specific items within COGS. Although this requirement was removed after 2004, credit rating companies have continued to collect total labor costs as a separate component from annual reports. As a result, our study effectively obtains and utilizes comprehensive labor cost information for externally audited firms, thereby overcoming the limitations associated with using accounting data to study the labor market.

Related literature: There are two main branches of labor share research. The first is about the measurement issues on labor shares, such as proprietor's mixed income, consumption of fixed capital, housing rents, government sector and taxes. The second is about the key factors that drive changes in labor shares. This study contributes to both aspects by focusing on the Korean case, identifying the interesting pattern of the corporate labor share, and studying the causes of Korean labor share using detailed micro-data.

There are many concerns about the measurement of labor shares. In Korea, a key issue is the division of self-employed mixed income into labor and capital[1]. Previous research (Joo and Su, 2014; Jeong, 2015; Lee, 2019) showed that the labor share in Korea has decreased from the Asian Financial Crisis (1997-1998) to the present, based on Gollin's (2002) adjustment method. However, labor shares based on Gollin's (2002) static adjustment are subject to measurement error. This study is one of the few attempts to examine the Korean labor share using firm-level data directly. It provides evidence that the corporate labor shares of medium to large-sized firms in Korea have been rising since the 2000s, which contradicts the overall labor share when adjusted for mixed income. While the coverage of this study is smaller compared to national accounts, it is free from the adjustment issue.

The second contribution of this paper relates to the causes of changes in labor shares. The primary drivers of declines in labor share are (1) technological advances and automation, (2) globalization, and (3) increased market power of leading firms resulting from the rise of superstar such as Google, Amazon, and Facebook. This study examines the third hypothesis in the context of the Korean case. In the United States, Grullon et al. (2019) found that industry concentration has increased, with

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[1] Even within the same researcher's work, the trend in Korea's aggregate labor share can vary depending on the adjustment method applied. In the appendix of Karabarbounis and Neiman (2014), Korea's labor share appears to increase, as their measure closely resembles the BOK labor share. However, in Karabarbounis (2024), Korea shows a significant decline in labor share, as this measure follows Gollin (2002)'s second adjustment method. (Explanations of these measures will be introduced in Section 3 of Chapter 3.) This highlights that in Korea, the trend in aggregate labor share can differ considerably depending on the measurement approach used.

"winning firms" making large profits, realizing outstanding stock returns, and engaging in more profitable M&As. Autor et al. (2020) demonstrated that corporate labor shares declined because low labor share firms gained more market share. De Loecker et al. (2020) computed aggregate markups using Compustat, the financial statements for publicly traded firms in the United States and found a substantial increase in aggregate markups over several decades, primarily driven by the excessive profits of large firms. In contrast, industry concentration in Korea has decreased over time, indicating that market power is not concentrated within a few large enterprises. This finding aligns with the observation that in Korea, the rise in labor share is mostly driven by incumbent firms. While the between-firm effect, where low labor share firms gain more market share, still exists in Korea, it is not sufficient to reverse the increasing within-firm effect. Consequently, the influence of 'superstar firms' is not particularly strong in Korea.

This study is organized as follows Chapter 1 is an introduction. Chapter 2 explains the difficulties in calculating the labor share in Korea and presents the results of calculating the corporate labor share using financial statement data. Additionally, this paper compares the labor share findings with those from other studies and statistics. Chapter 3 explains the results of this study by examining the trend of concentration by industry and decomposing the key factors of labor share change. Chapter 4 concludes.

II. The Corporate Labor Share in Korea

1. Challenges of Measuring the Labor Share in Korea

Labor share is measured as labor income as a share of value added. The measurement issue about the labor shares is related to the question of what value to put on labor income in the numerator and value added in the denominator. A typical measurement issue from a numerator is to isolate the labor share of the proprietor[2]'s mixed income (Gollin, 2002). For measuring value added in the denominator, issues relate to how to treat fixed capital consumption that is not actually distributed but used in the production process (Bridgman, 2018)[3], and

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[2] In this study, we will refer to self-employed individuals without employees, self-employed individuals with employees, and unpaid family workers collectively as proprietors.

[3] Consumption of fixed capital represents the portion of value added needed to maintain the capital's production value. Gross value added includes this consumption, and it's used to calculate the gross labor share. For the net labor share, consumption of fixed capital is excluded. As software and IT capital, which have high fixed capital consumption, became more integral to production, this factor has gained importance in labor share calculations. Bridgman (2018) shows that while the gross labor share has declined significantly in major economies, the net labor share has not, highlighting the

whether to include capital income from owner-occupied housing (Rognlie, 2015)[4].

The primary challenge in calculating labor shares for Korea lies in separating the labor portion of self-employed income in the numerator. As of 2017, Korea's non-wage workers accounted for 25.4% of all employed, an unusually high share of the total economy given its level of economic development. This ranks as the fifth highest among 36 OECD countries, following Greece, Turkey, Mexico, Chile. Moreover, there is a significant shift occurring in both the number and the characteristics of self-employed, but the adjustment methods up to date are static. Therefore, the labor share measures of the overall economy in Korea can be significantly distorted by the large and changing nature of the non-corporate sector[5].

To address this issue, much study has primarily focused on the corporate sector (Barkai, 2020; Bridgman, 2018; Karabarbounis and Neiman, 2014; Karabarbounis, 2024; Rognlie, 2015). By focusing on the corporate labor share, we can eliminate ambiguity regarding value added allocation for self-employed individuals (proprietors) who are not legally established as corporations. The corporate labor share refers to the proportion of income allocated to employees in the corporate sector, excluding income derived from housing and government sources, which offers an additional advantage. Nevertheless, this approach is not feasible in Korea because the national accounts only provide time series data on the compensation of the corporate sector separately starting from 2010, which is insufficient for observing the long-term evolution of labor shares.

2. The Corporate Labor Share using Financial Statements

We use corporate financial statements to calculate the corporate labor share. This is the first study in Korea to calculate the labor share trend and analyze the factors that contribute the changes in aggregate labor shares within and between firms, while current research in the U.S. extensively examined firm level data.

The main dataset is KISDATA, which comprises the individual financial statements of the medium-to large-sized firms from 1989 to 2020. KISDATA is a service provided by NICE Evaluation Information, Inc. that manages the provision of corporate information data. It involves the digitization of firm financial statement information released by the Financial Supervisory Service. KISDATA's financial data includes all sectors over a long horizon, enabling the long-term observing of a firm's labor share. The KISDATA used in this study also includes exited firms,

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impact of fixed capital consumption.

[4] Rognlie (2015) calculates the capital share by type of capital goods rather than directly calculating the labor share. His findings show that in G7 countries, the net capital share has increased due to rising house prices, which boost net capital income.

[5] Oh (2018) and Park (2020) discuss the characteristics and dynamic aspects of self-employment in Korea.

which is different from collecting financial data of currently existing firms only.

The financial statements present several data issues that complicate these analyses. Generally, as Autor et al. (2017) says, a firm's labor cost is not fully reported in financial statements. Only a minority of firms report payroll data because it is not mandatory. In economics, labor cost refers to all expenses incurred in paying for labor. However, the income statement only displays the labor expenses that are reported under Selling, General, and Administrative expenses (SG&A) and the compensation included in the Cost of Goods Sold (COGS) is not explicitly shown. Labor expenses in SG&A are costs, such as overhead, that are not directly related to the production of goods or services, while labor expenses hidden in COGS are labor costs that are directly related to the production of goods or services. Thus, to fully recoup the labor costs, it is necessary to have the labor expenses in COGS.

Korean financial statements have a notable benefit in relation to this concern. Fortunately, the individual components of COGS should be disclosed until 2004, as mandated by the Corporate Disclosure Act in Korea. This allows us to include the complete labor expenses from the financial statements. Since 2004, the KISDATA service provider has manually gathered the complete labor expenses from annual business reports.

The scope of firms included in this study is as follows. First, only the firms subject to external audit are included. Financial statements of externally audited firms are more reliable than those that aren't required to be. Therefore, it maintains the continuity of firms that submit financial statements every year, so there is relatively less lack of observations. The range of externally audited firms in our study includes both private and public companies, offering a broader scope than Compustat, which exclusively includes publicly traded firms[6]. Second, Financial and insurance industries, state-owned firms, and non-profit organizations are excluded from the sample. This is because it is difficult to calculate the labor share in terms of output.

Initially, we performed data cleansing in the following manner prior to computing the labor share. We exclude the highest and lowest 1 percent of observations annually. Specifically, if the labor share exceeds the 99th percentile or falls below the 1st percentile in a given year, those observations are eliminated. In

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[6] In the United States, private companies are not required to undergo external audits unless they are publicly traded. These audits are typically voluntary and occur when a company needs to secure bank loans, at the request of investors, or to enhance its reputation. External audits are mainly limited to companies in regulated industries, such as finance or insurance. In contrast, in Korea, publicly traded companies, organizations planning to go public within the next two years, and small and medium-sized enterprises meeting specific criteria outlined in the Enforcement Decree of the Act on External Audit of Corporations are required to undergo external audits. Currently, in Korea, privately held companies with assets of 12 billion KRW or more are subject to mandatory external audits.

addition, we eliminated firms that had either zero or only one employee because we suspect that they may be paper companies for specific purposes, not the genuine entities engaged in the production of goods and services[7].

The KISDATA sample used in this analysis accounts for about 57 percent of the operational profit reported in the National Accounts. Similarly, employee compensation in this example corresponds to approximately 48% of the compensation in the National Accounts. When comparing the Financial Statement Analysis conducted by the Bank of Korea with the KISDATA sample, it was found that KISDATA's operational profit represented around 73 percent of the total in the 「Financial Statement Analysis」, compiled by the Bank of Korea. In the KISDATA sample, employee compensation makes up around 50% of the total compensation in the 「Financial Statement Analysis」.

[Table 1] shows the descriptive statistics of the sample. The total number of observations is 289,495. The analysis period of the final sample is 31 years from 1989 to 2020, which implies that, on average, there are around 9,338 firms each year (=289,495/31) in the sample. The labor share in each firm is determined by dividing the total compensation by the value added. Total compensation comes from the labor costs of SG&A and the labor expenses of COGS. Value added is calculated by adding up the total compensation, operating profit, depreciation & amortization, and taxes[8]. The average value added is 306 billion KRW and the average labor cost is 124 billion KRW. The labor share has an average value variables such as value added, compensation, we find that the standard deviation is

[Table 1] SUMMARY STATISTICS (1989–2020)

Variables	N	Mean	Standard Deviation	Min	Max
Gross labor share	289,495	0.551	0.327	-2.727	3.397
Value added (KRW Trillion)	289,495	0.306	4.407	-11.050	858.133
Compensation (KRW Trillion)	289,495	0.124	1.140	0	156.486

Note: Gross labor share is calculated by summing operating profit, compensation, depreciation and amortization, and taxes and interest. If the operating profit is negative enough to outweigh the sum of the other components, the denominator of the labor share becomes negative, resulting in a negative labor share. Conversely, if the operating profit is negative but not large enough to exceed the absolute value of the remaining sum, the labor share will be greater than 1.

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[7] This criterion is the same as the one used by the 「Financial Statement Analysis」, compiled by the Bank of Korea, for excluding firms from their sample.

[8] In addition to operating profit and compensation, value added was calculated by summing taxes, depreciation, amortization of intangible assets, costs of tangible and intangible leases, rental expenses, and interest expenses.

typically significantly greater than the mean. As an illustration, the mean value of approximately 55.1%. When examining the relationship between firm size and added is 306 billion KRW, whereas the standard deviation is 4.4 trillion KRW. Although most of the final sample consists of larger firms, there is significant variation in size among the firms.

[Figure 1-A] presents the corporate labor share collected from KISDATA. The corporate labor share is calculated by dividing the total annual compensation by the total annual value added. Within the corporate sector in Korea, the labor share in medium to large sized firms had a decline until 1997 and was further reduced during the Asian Financial Crisis. However, this declining pattern ceased around 1999, and since then, it has consistently exhibited an upward trend until 2020.

In Korea, the increase in corporate labor share from the 2000s over nearly two decades is noteworthy because it contradicts prior research findings in other countries, which have indicated a sustained decrease in labor shares. These results are particularly remarkable given that aggregate labor shares in most countries, including the United States, experienced a substantial decline during the 2000s (Andic and Burda, 2021; Aum and Shin, 2020).

[Figure 1-B] represents the aggregate labor share in the corporate sector controlled by entry and exit of firms in the sample. The long-term sample of KISDATA is not balanced panel due to the frequent entry and exit, which is crucial to manage this effect. Based on Karabarbounis and Neiman (2014), which aims to eliminate the influence of countries entering and exiting in the sample to calculate global labor shares, we run a regression as in equation (1) with firm fixed effect. $S_{i,t}$ is the labor share of firm i at time t. The term φ_i refers to the fixed effect of firm i, and α_t^f represents the time dummy. The regression is weighted by firm's value added, which serves as the denominator of $S_{i,t}$. α_t^f in equation (1) corresponds to the aggregate labor share shown in panel B, normalized by the 1989 level. The controlled corporate labor share also exhibited a continuous increase from 1999 to 2020, hence reinforcing the observed upward trend in labor shares as seen in Panel A.

$$S_{i,t} = \varphi_i + \alpha_t^f + \epsilon_{i,t} \tag{1}$$

[Figure 2] shows the labor shares of the manufacturing, service, and construction industries over time. The increase in labor shares in the manufacturing sector since the 2000s is particularly noteworthy, given that this sector typically experiences the largest drop in labor share in most countries. The service and construction industries, being more labor-intensive, have higher labor shares compared to the manufacturing industry. Despite some short-term fluctuations, both sectors exhibit a similar long-term trend as the manufacturing sector.

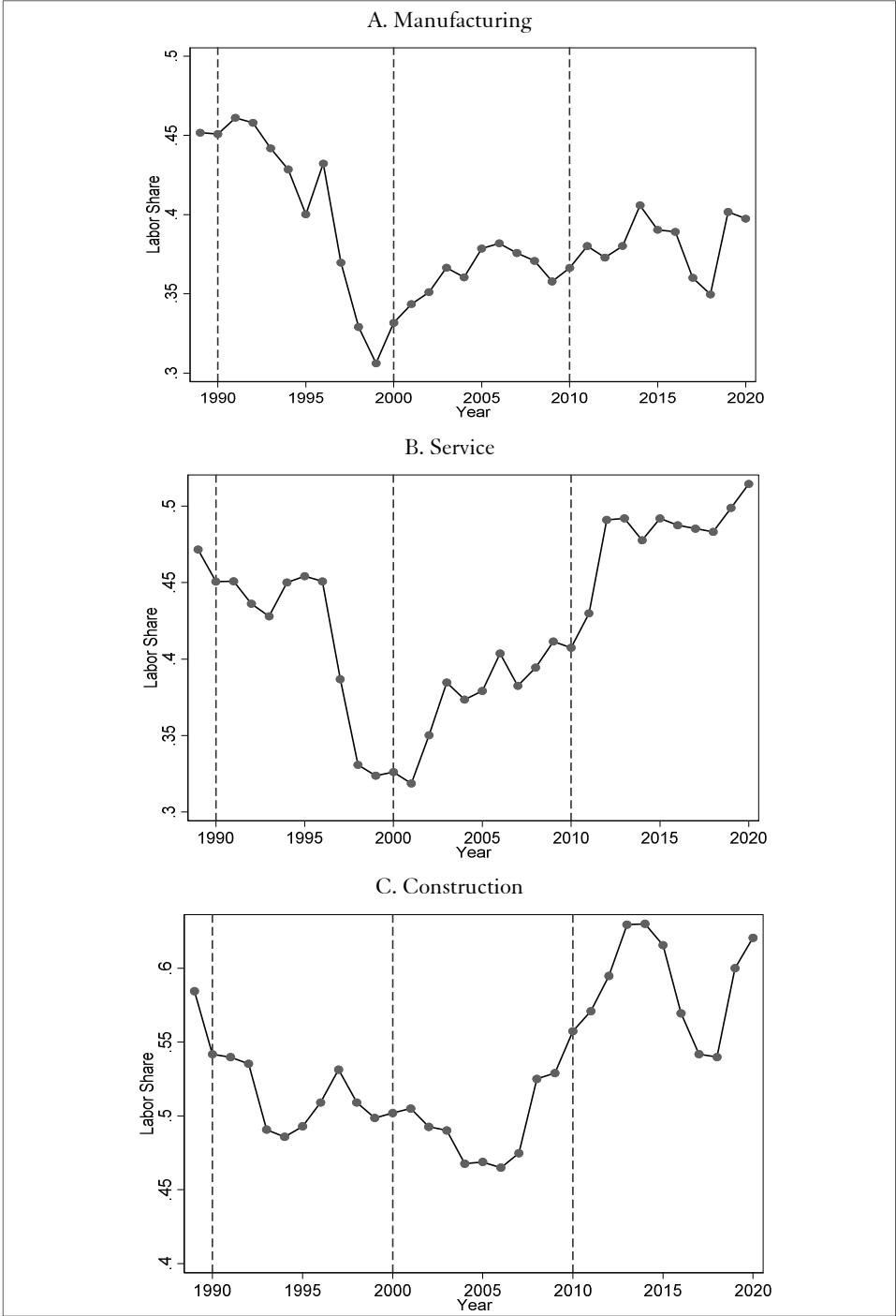**[Figure 1]** The Corporate Labor Share
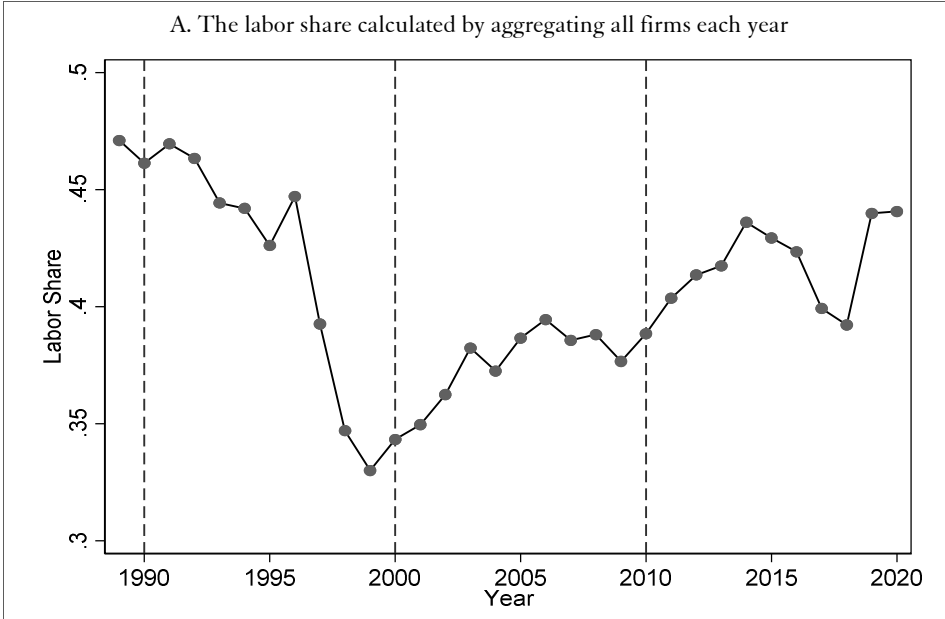
A. The labor share calculated by aggregating all firms each year

Note: This result represents the ratio of the total value added to the total compensation of all firms in the sample for each year.

B. The labor share considering the entry and exit of firms

Note: This is the coefficient of α_t^f in equation (1), normalized such that the fixed effects equal the level of the corporate labor share in the dataset in 1989. The top and bottom of the intervals at each point represent the 95% confidence band.

[Figure 2] The Industry Labor Share

Note: This result represents the ratio of the total value added to the total compensation of all firms by industry for each year.

3. Comparison of Corporate Labor Share with Existing Research

This section compares the corporate labor share of externally audited firms in this paper with several labor shares in existing studies.

Many studies (Joo and Su, 2014; Jeong, 2015; Lee, 2019) use national accounts data to construct labor shares based on the suggestion of Gollin (2002) because the size of the unincorporated sector is very large relative to the size of the economy[9]. Gollin (2002) provides three options for decomposing the mixed income of the self-employed into capital and labor, but the one most often used by Korean researchers is Gollin's (2002) second correction, which assumes the same proportion of capital and labor in the corporate and self-employed sectors. [Figure 3] shows aggregate labor shares and the corporate labor share of this paper. Two aggregate labor shares are presented: one (a) is the corrected aggregate labor share by the second method of Gollin (2002), and the other (b)[10] is published by the Bank of Korea, both representing the overall economy. In contrast, the corporate labor share in this paper includes only externally audited firms. Even when comparing just these two indicators (a) and (b), which represent the entire economy, there are long periods when the directions do not match. When comparing (a), (b) and the corporate labor share from 1990 to 2020[11], the discrepancy in terms of directions is evident in the 1990 and the 2000s. Specifically, in the 1990s, indicator (a) and the corporate labor share exhibit a downward trend, while indicator (b) does not. In the 2000s, indicator (a), adjusted using Gollin's (2002) method, continues to decline, whereas indicators (b) and the corporate labor share show an upward trend. It is only from 2010 onwards that all three indicators demonstrate a qualitative upward trend.

The direction of labor shares in the 1990s and the 2000s varied by indicator, making it difficult to provide a clear answer, which is beyond the scope of this study. However, some inferences can be made. Gollin's (2002) indicator (a) should be calculated as (total compensation – compensation in the unincorporated sector) / (total value added - compensation in the unincorporated sector – operating surplus in the unincorporated sector – fixed capital consumption in the unincorporated

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[9] In addressing the labor share in Korea, Gollin (2002)'s adjustment is often modified. Song (2021) adopts Gollin's third adjustment but adapts it to the Korean context. Instead of assuming that the self-employed earn the same as wage workers, as Gollin originally suggested, Song assumes that the labor income of the self-employed is 60% of that of wage workers. Kim (2013) also uses Gollin's third adjustment but assumes the labor income of unpaid family workers is zero. These various modifications indicate that none of Gollin's three adjustments provide a perfect method for dividing the mixed income of the self-employed into labor and capital components.

[10] The indicator (b) is a net labor share where the denominator's value-added does not include fixed capital consumption and taxes, and it does not separately adjust for self-employed workers.

[11] Comparing the corporate labor share calculated in this paper with (a) and (b), we can see that the corporate labor share, which is calculated for relatively large firms, is generally lower. This result reminds that larger firms are more capital-intensive.

sector). Due to the lack of corporate sector data in many countries, including Korea, numerous studies have used a simplified formula: (total compensation) / (total value added – operating surplus in the unincorporated sector).

This simplified formula assumes negligible non-corporate employee compensation and fixed capital consumption. However, Oh (2018) reports that in 2016, the unincorporated sector employed nearly 28% of all wage and salary workers, and its fixed capital consumption accounted for 17.2% of the total. A more significant concern is the dynamic nature of the unincorporated sector, where the characteristics of the self-employed are deteriorating over time. As a result, Gollin's (2002) 'static' method cannot accurately capture the 'dynamic' labor share of the unincorporated sector. Consequently, relying on the simplified formula to adjust for the self-employed may be misleading regarding both the level and trend.

[Figure 3] The Aggregate Labor Shares and the Corporate Labor Share
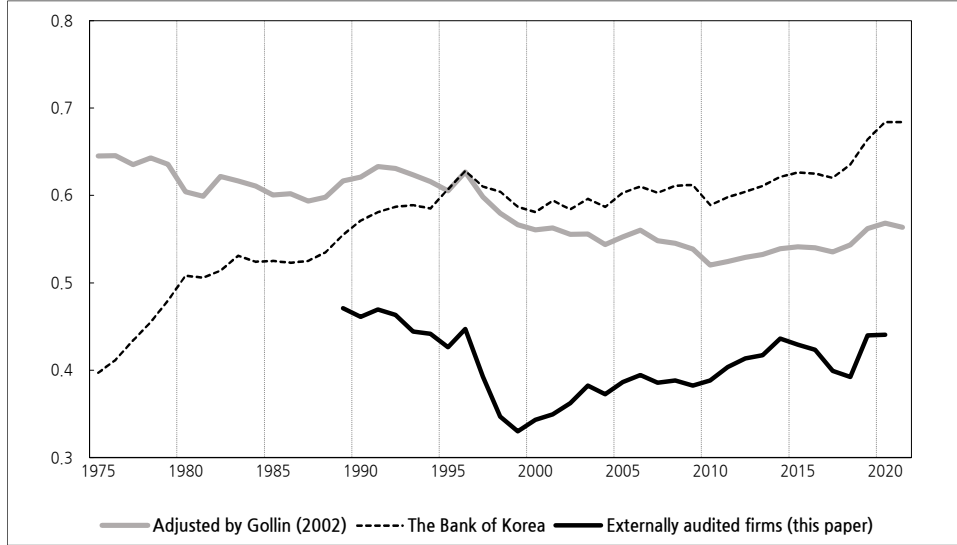

Note: The indicator adjusted by Gollin (2002) is calculated as (total compensation) / (total value added – operating surplus in the unincorporated sector) using national accounts. The labor share of "externally audited firms (this paper)" is the same as in Panel A of [Figure 1].

The measurement issues in the selected samples from financial statements data can be examined. [Figure 4] plots the labor share measures based on the 「Financial Statement Analysis」 (FSA) statistics and the indicator from this paper. The FSA, compiled by the Bank of Korea, is available from 1990 and includes both incorporated and unincorporated firms required to file corporate taxes. The labor share in the FSA is calculated using the same value-added components and methodology as this paper's corporate labor share. Although the FSA covers a broader set of firms, the trends of both indicators are qualitatively similar. Notably,

both show an upward trend in the 2000s. Certainly, the corporate labor share of larger firms, such as those subject to external audits, has shown a more significant increase in the 2000s compared to the labor share reported by the FSA. This suggests that this trend is primarily observed among larger firms. This aspect is directly confirmed in [Figure 14], which will be discussed later, where the labor share of firms with more than 300 employees shows a substantial increase in the 2000s when categorized by firm size.

Census data are known to align more closely with economic concepts than accounting data. Particularly, deriving the economic concept of value-added from accounting items has its limitations. This study, based on financial statement data, aims to analyze the economic indicator of labor share, making it essential to verify whether accounting data can accurately reflect economic concepts. Therefore, this study compares its indicators with survey data to discuss the validity of its measures.

**[Figure 4]** The Labor Share Indicators based on the Financial Statements
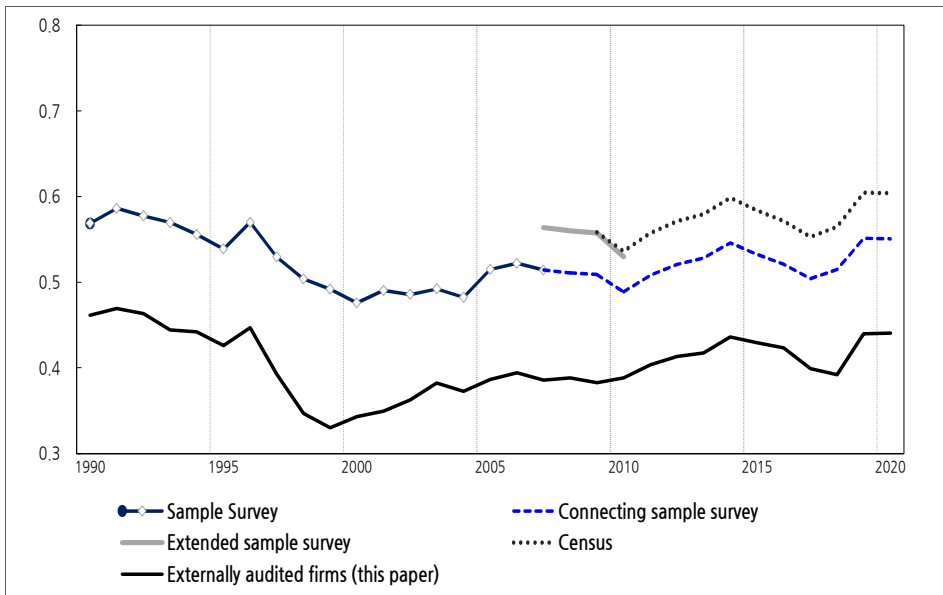
Note: The "Financial Statement Analysis" (FSA) statistics by the Bank of Korea have seen several sample changes over time. Before 2007, only firms with revenues above a certain threshold filing corporate taxes were included. From 2007 to 2009, all corporations with revenues of 0 KRW or more were included. Since 2009, it has been a complete enumeration of all corporations filing corporate taxes. The sample survey graph includes data from corporations with specific revenue thresholds until 2006. From 2007 to 2009, it includes all corporations with revenues of 0 KRW or more, representing the labor income share. From 2010 onwards, the data is based on a complete census. "Connecting previous statistics" refers to the adjusted labor share, where discontinuities in 2007 and 2010 are corrected, extending the initial time series. The labor share of "externally audited firms (this paper)" is the same as in [Figure 1].

[Figure 5] compares the labor share in manufacturing calculated in this study with that derived from the Statistics Korea 「Mining and Manufacturing Survey」 (MMS). This survey is equivalent to the U.S. 「Annual Survey of Manufactures」 and includes a value-added item. However, since it is based on plant-level data, it may not include indirect labor costs of headquarters in multi-plants firms. Additionally, while it provides total wages over a long period, it lacks compensation data that includes social insurance and retirement benefits, making its labor share level lower than that of this study. Nonetheless, as shown in the figure 5, both indicators exhibit similar trends. Both declined in the 1990s and gradually increased from the early 2000s to 2020.

In this section, we compared the corporate labor share from this study with the labor shares of the aggregate economy, the FSA data, and the MMS. The analysis yields the following conclusions: In the 1990s, most of the indicators, including Gollin's (2002) second adjustment method (indicator a), the FSA, and the manufacturing survey, demonstrated a declining trend. The only exception was the aggregate labor share (indicator b) published by the Bank of Korea, which showed an increase in the early 1990s. During the 2000s, all indicators, except for indicator (a), exhibited an upward trend to varying degrees. From 2010 onwards, all indicators consistently displayed an upward trajectory. Thus, it is evident that the corporate labor share presented in this study does not solely represent a specific subset of firms, nor does it reflect an increase post-2000 due to measurement errors.

[Figure 5] The Manufacturing Labor Shares based on Survey and Financial Statements
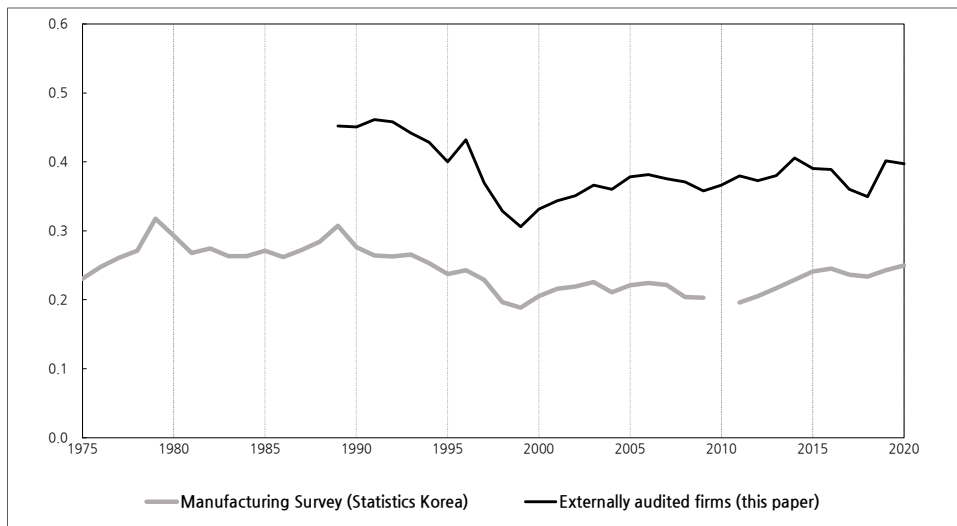
Note: Before 1998, the plants in the "Mining and Manufacturing Survey" were surveyed if they
    had more than 5 employees, but after 1999, the cutoff level changed to 10 employees. The
    mining sector is not included, and the 2010 observation is not revealed by Statistics Korea.
    The corporate labor share in this graph represents only the manufacturing sector.

4. The Various Aspects of the Corporate Labor Share

This section examines how the components of the labor share evolve and how the distribution of labor shares changes over the approximately 30 years in relation to the overall changes in the labor share.

[Figure 6] is the decomposition of labor share into three parts. In the sub-sample where the number of employees is available, labor share, $\frac{wN}{PY}$, can be divided into w, N, PY. All time series are normalized to a base value of 1 in the year 2000. Panel A displays nominal compensation (wN), and nominal value added (PY), where value added is slowly increasing relative to compensation from the 2000's. In the 1990s, the value added increased faster than compensation. However, from the 2000s to 2020, the rate of increase in compensation has outpaced the growth in value added. This trend once again explains the pattern observed in [Figure 1], where the labor share decreased in the 1990s but has been gradually rising since the 2000s in the corporate sector.

Panel B further decomposes compensation into wage rates (w) and the number of employees (N). It is the growth in wage rates, rather than the increase in the number of employees, that has driven the rise in total compensation. This was particularly evident during the 2000s, suggesting that the rise in the corporate labor share of relatively large firms since the early 2000s has been driven primarily by increases in wages per worker rather than by an increase in the number of workers.

The changes in the corporate labor share are clearly demonstrated in the distribution firm labor shares. [Figure 7] displays the distribution of labor shares in the years 1990, 2000, 2010, and 2019[12]. The range is defined up to 1.5, similar to Kehrig and Vincent (2021)[13]. From 1990 to 2000, the aggregate decrease in the corporate labor share is seen in the decline of each firm's labor share. Since 2000, the upward trend of aggregate labor share is also supported by the gradual shift toward higher labor shares in firm level.

[Figure 8] displays the labor shares at the 25th, 50th, and 75th percentiles in the sample. Over approximately 30 years, rather than observing an expansion or contraction of variance within the distribution, we find that the percentiles move simultaneously in the same direction. Throughout the 1990s, 2000s, and 2010s, the specific percentiles of labor shares (25th, 50th, and 75th) fell and rose together, maintaining similar distances between them. This characteristic is related to the results of the Dynamic Olley-Pakes decomposition, which will be discussed later.

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[12] Due to the potential distortion by the Covid-19 pandemic, the year 2019 is used instead of the year 2020 for distribution purposes.

[13] It is not unexpected to find labor shares exceeding 1.0 in firm-level data, as labor costs are always positive, while operating earnings can occasionally be negative. Consequently, the value added may be less than the labor cost, resulting in labor shares exceeding 1.0.

[Figure 6] The Trends of Labor Share Components

A. Compensation and Value-added

B. The Number of workers and Wage Rates
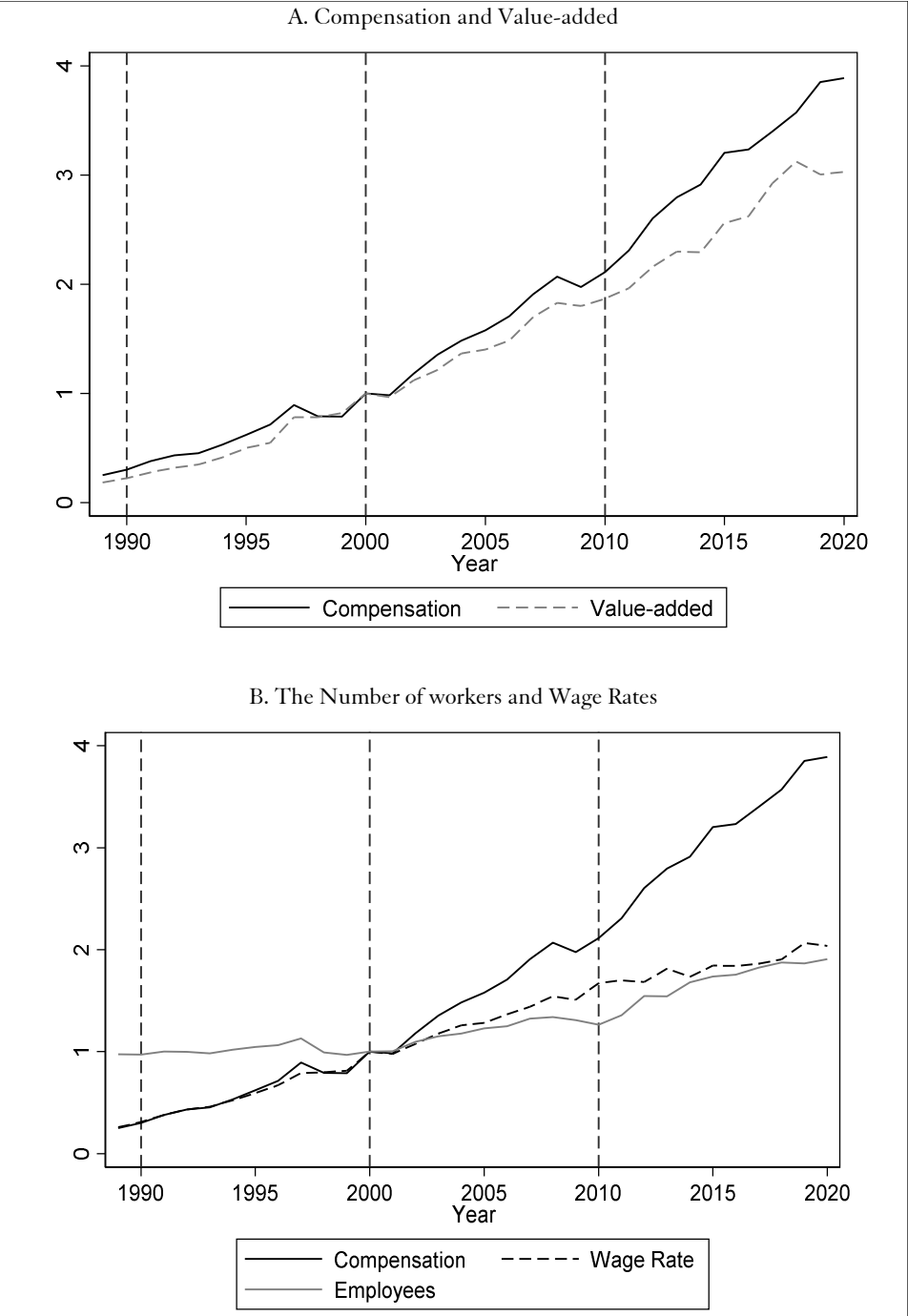
Note: This result represents the time trends of employees, wage rates, and value added over the 30 years in the sample where information on the number of workers is available.

[Figure 7] Distribution of Firm Labor Shares
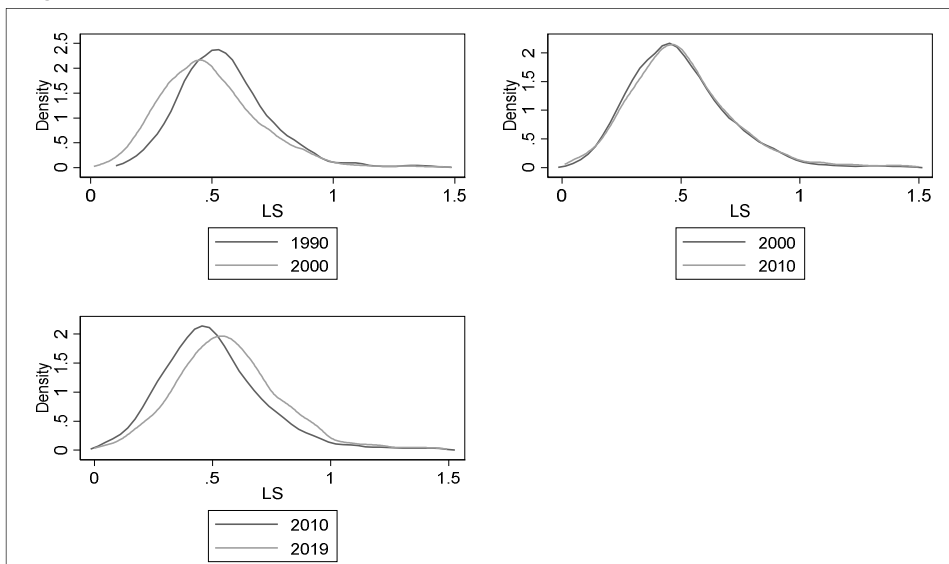
Note: This is a univariate kernel density estimation.

[Figure 8] Percentiles of the Labor Share
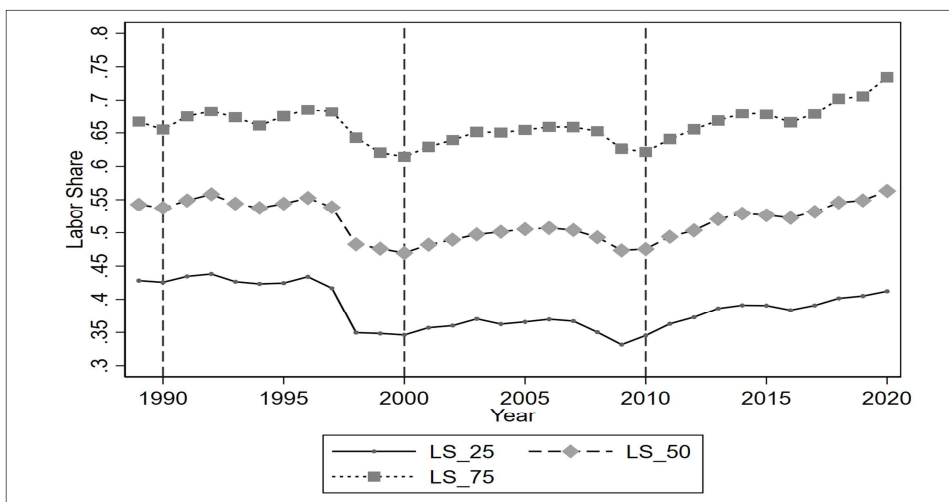
Note: These values represent the 25th, 50th, and 75th percentiles of labor shares for each year.

The 2000s marked the period of the largest decline in the labor share for major countries, but the Korean corporate labor share stands in stark contrast. Aum and Shin (2020) emphasize that the 2000s were a period of significant decrease in the U.S. labor shares. They note that previous research has focused on the gradual decrease in labor share from the 1980s to the present but has overlooked the swift reduction in the 2000s. Andic and Burda (2021), who classify the labor share of

about 50 countries into advanced and emerging economies, also found that the 2000s was a period of decline for most countries.

What is the cause for the upward trend of the Korean labor shares since 2000, in contrast to other countries? Grossman and Oberfield (2021) attribute the main cause of a change in labor shares to the technology advances. The greater decrease in labor share in manufacturing, compared to the aggregate economy in major countries, can be attributed to the more significant influence of technical advancements in the manufacturing sector. The rise of the corporate labor shares in Korea since 2000, in all sectors, is somewhat incongruous with the global trend of technological advancement. This is particularly noteworthy given that the firms included in this study are of medium to large size, and new technology are typically adopted by well-capitalized large firms.

III. Industry Concentration, Profitability and Labor Share Fluctuations

The factors contributing to the changes in labor shares can be broadly categorized into three groups. The forces shifting to this trend include: (1) technological advancements that favor capital over labor, (2) globalization and the emergence of China, and (3) the rising industry concentration and the resulting increase in market power. In this analysis, the focus will be on the third hypothesis regarding the change of labor shares in Korea[14].

Industry concentration is a simple measure to evaluate the degree of market competition, although it is an outcome rather than a causal factor. Grullon et al. (2019) find that over the last two decades, more than 75% of U.S. industries have experienced an increase in concentration level. They also show that firms in industries with the largest increases in product market concentration have enjoyed higher profit margins and more profitable M&A deals, suggesting that market power has become a significant source of value. Autor et al. (2020) find a close relationship between the rise in concentration and the decline in the labor share, presenting that the decline in labor's share of GDP is due to the rise of "superstar firms." These firms, which have high productivity and low labor shares, gain an increasing share of the market due to factors such as globalization and technological changes. Similarly, Barkai (2020) demonstrates that increased concentration is associated with a decline in the labor share and highlights the broader economic implications of rising market concentration, also showing that profit share has increased. These studies collectively imply that while industry concentration is influenced by various

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[14] Although all three factors are considered significant in influencing changes in labor share, it is not feasible to examine all of them within a single paper. This study will focus primarily on investigating the third factor.

factors beyond market competition, it remains a valuable indicator when used alongside other metrics to assess the competitive landscape and its broader economic impacts.

Korea is particularly notable for exhibiting a long-term decline in industry concentration, contrary to trends observed in the U.S. [Figure 9] illustrates the corporate sector industry concentration in Korea. The revenue-based aggregate Herfindahl-Hirschman Index (HHI, Panel A) is determined by taking the revenue-weighted average of industry $j's HHI_j$ at the 2-digit level. Similarly, Concentration Ratio 4 (CR4, Panel B) is derived by calculating the revenue-weighted average of industry $j's CR4_j$ at the 2-digit level. Over the long term, both the aggregate HHI and CR4 exhibit a declining trend from the late 1990s to 2020, although there are fluctuations and periods of increase in some years. These findings are also maintained in each manufacturing and service industry (Refer to [Figure A-1, 2]). While these indicators are limited to medium to large-sized firms and do not include small firms in the industry, the picture is different from the U.S., at least in that competitiveness among major firms does not decline over time.

[Figure 10] presents the unweighted averages of HHI (Panel A) and CR4 (Panel B), demonstrating that the decline in industry concentration is more pronounced in average industries. This implies that the reduction in industry concentration is widespread across sectors. Specifically, 49 out of 54 two-digit industries in the sample exhibit a downward trend in HHI. This finding for Korea might contradict general perceptions. Given that major manufacturing conglomerates in Korea generate significant revenue through exports, one might have expected industry concentration to have increased. However, in the manufacturing sector, the only exception is industry 26, which encompasses semiconductors, displays, and electronic devices. In this industry, the value-added share has been increasing, and industry concentration is also on the rise, likely due to the influence of Samsung Electronics. All other manufacturing industries did not show an upward trend in HHI[15].

The decline in industry concentration is closely linked to the decreasing trend in profitability within the corporate sector. [Figure 11], which illustrates the mean, median, and revenue-weighted operating profit margins (OPM)[16], provides insights

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[15] Ko (2023) analyzed industry concentration from 2006 to 2021 using data from Statistic Korea "Business Activity Survey" (BAS). Except ICT manufacturing (including industry 26), the industry concentration based on sales decreased in BAS. The finding of Ko (2023) is compatible with the finding of this paper.

[16] The operating profit margin is calculated by dividing its operating profits by its revenue (EBIT/revenue), which serves as an approximate measure of the firm's markup. In the context of monopolistic competition, it is widely recognized that there is an inverse relationship between the markup, which represents the degree of substitutability of a good, and the labor share. De Loecker et al. (2020) found that both markup and profit rates have risen together. However, in Korea, for firms subject to external audits, the profit rate has gradually declined when measured as a weighted mean

into the reasons behind this decline. The aggregate OPM weighted by revenue has decreased since the mid-2000s, and the unweighted mean and median OPM have

[Figure 9] Industry Concentration
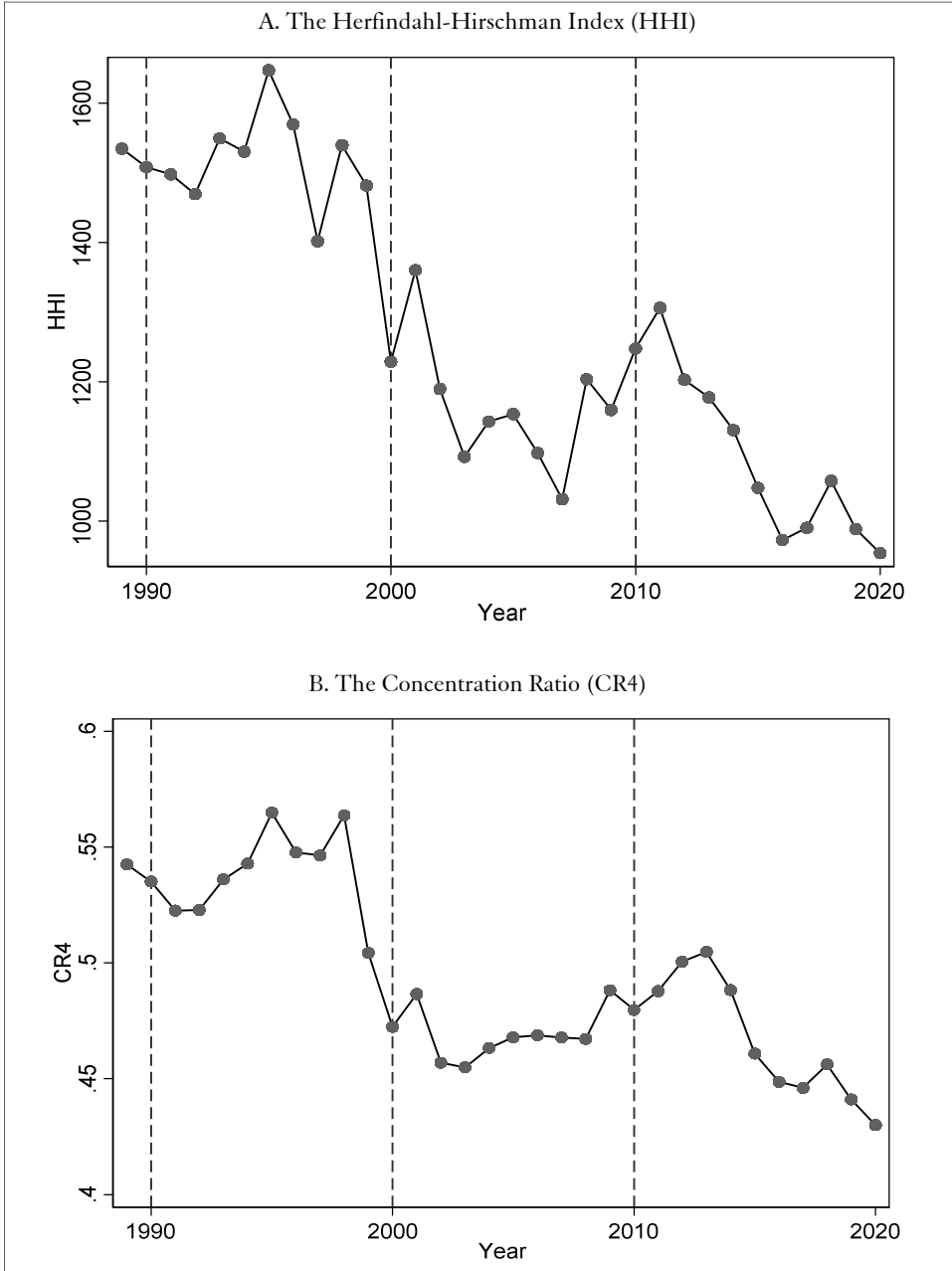
and has decreased rapidly on average since the 2000s. This indirectly suggests that the markup of relatively large firms in Korea may have also declined since the 2000s.

[Figure 10] Industry Concentration: unweighted

A. The Herfindahl-Hirschman Index (HHI)

B. The Concentration Ratio (CR4)
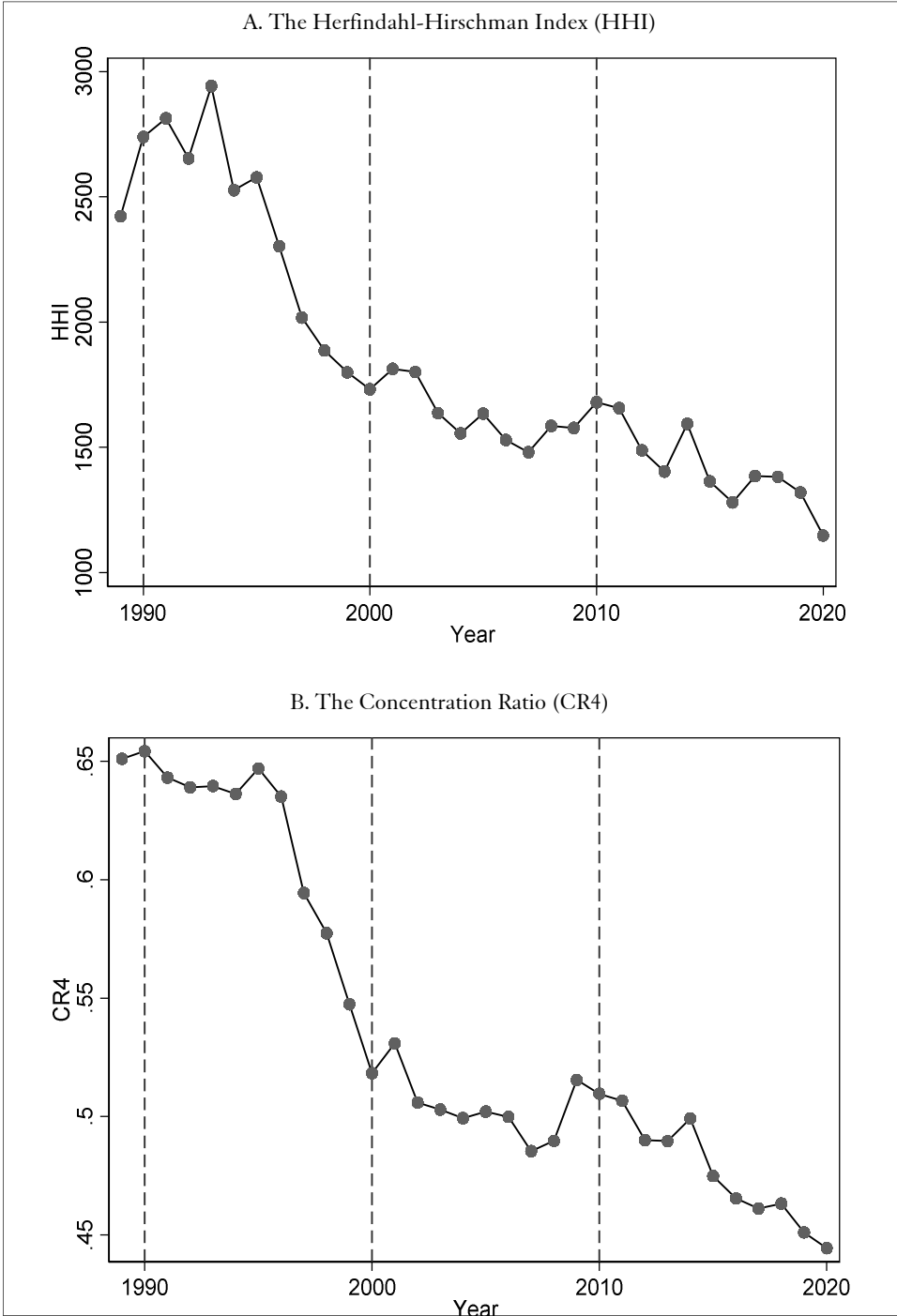
Note: HHI and CR4 are calculated as the simple average of the HHI and CR4 of 2-digit
industries.

[Figure 11] The Operating Profit Margins
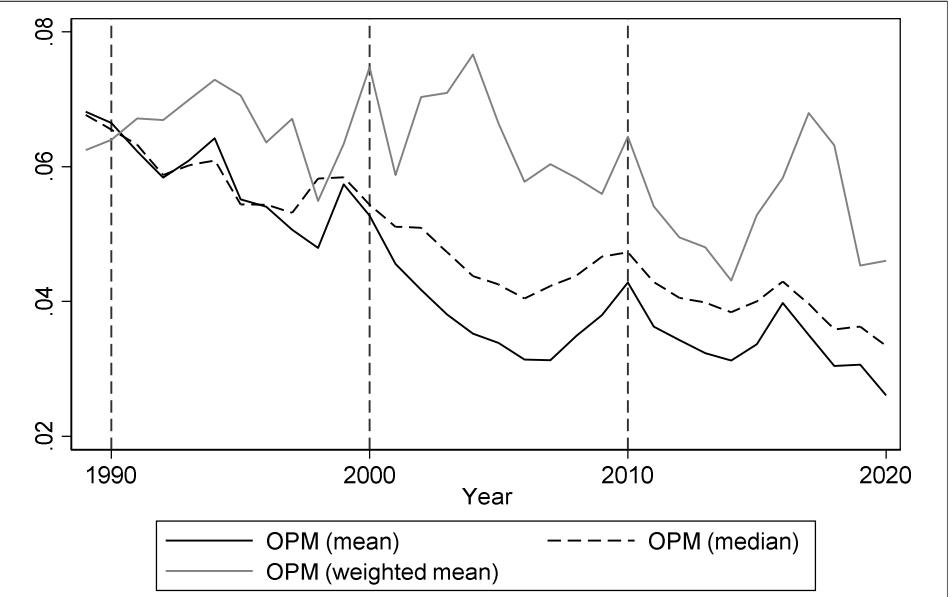
Note: The black solid line represents the simple mean of the operating profit margin, the dashed line indicates the median level of operating profit, and the gray solid line represents the revenue-weighted operating profit margin.

shown further sluggishness. This result contradicts the findings from the U.S., where profit margins and ROA increase with rising industry concentration (Grullon et al., 2019; De Loecker et al., 2020; Barkai, 2020).

The declining trend in industry concentration and profitability within the corporate sector is closely related to the increasing labor share, particularly from the 2000s. Over the entire period from 1989 to 2020, the simultaneous correlations between industry concentration, aggregate OPM, and corporate labor share do not exhibit statistically significant relationships. However, since 2000, the contemporaneous correlation between the corporate labor share and HHI has been statistically significant and negative (-0.597, p=0.004), as has the correlation between the corporate labor share and aggregate OPM (-0.799, p=0.000). This suggests that changes in the corporate labor share since the 2000s may primarily be attributed to declining market power or the absence of superstar firms that exhibit high levels of productivity.

More specifically, we examine whether the big firm effect dominates in the evolution of the corporate labor share in Korea. Autor et al. (2020) argue that the rise of superstar firms has played a significant role in the decline of the U.S. labor share over the past three decades. Using US Census data, they decompose changes in the labor share of firms though dynamic Olley-Pakes decomposition (DOPD), a methodology of Melitz and Polanec (2015). They find that the magnitude of the

decline in the labor share was small within firms but large between firms. This "between-firm effect" implies that the growth of firms with low labor share is the main driver of the aggregate decline of labor share.

We decompose the changes in the corporate labor share in KISDATA according to Autor et al. (2020). Equation (2) represents S, X, and E, which stand for survivors, exits, and entrants respectively. Between two periods, $t=0$ and $t=1$, S_i is the labor share of firm i, ω_i is the value-added share of firm t. $S_{X,0}$ is the value-added weighted mean labor share of exiters at $t=0$, and $S_{E,1}$ is the value-added weighted mean labor share of entrants at $t=1$. Variable with bar means average. $\Delta \overline{S_S}$ is within-firm effect, $\Delta[\sum(\omega_i - \overline{\omega})(S_i - \overline{S})]_S$ is between-firm effect, and $\omega_{X,0}(S_{S,0} - S_{X,0}) + \omega_{E,1}(S_{E,1} - S_{S,1})$ is net entry effect. Within-firm effect refers to the change in the labor share among survivors, and between-firm effect, also known as the reallocation effect, measures the covariance between firm size and firm labor shares for surviving incumbents.

$$\Delta S = \Delta \overline{S_S} + \Delta[\sum(\omega_i - \overline{\omega})(S_i - \overline{S})]_S + \omega_{X,0}(S_{S,0} - S_{X,0}) + \omega_{E,1}(S_{E,1} - S_{S,1}) \qquad (2)$$

[Figure 12] summarizes the within-firm, between-firm, and net entry effects by decade. In the 1990s, the within-firm effect is the primary contributor to the decline in the corporate labor share, indicating a 12-percentage point decrease in the unweighted average labor share of surviving firms in 2000 compared to 1990. The between-firm effect and the net entry effect are not significant in magnitude. This trend reverses from the 2000s onward. The labor share of the average surviving firm continues to increase, suggesting that individual firms' labor shares are rising. In the 2000s, the within-firm effect contributed a 7-percentage point increase, while the between-firm effect was a negative 5 percentage points. In the 2010s, although the between-firm effect increased further by 8 percentage points, the within-firm effect also grew by 14 percentage points. Unlike the U.S. described in Autor et al. (2020), between-firm effect is not sufficient to reduce the aggregate labor share. The Korean case shows that the reallocation among survivors was not the main factor determining the direction of the aggregate labor share, meaning that the between-firm effect is not dominant enough to drive down the labor share.

The relatively dominant effect of within-firm dynamics compared to between-firm effects underscores the unique characteristics of the Korean corporate labor share. Unlike in the U.S., where between-firm effects are more pronounced, Korea exhibits a dominantly positive within-firm effect despite negative between-firm effects. If a negative between-firm effect were dominant, the aggregate labor share would have declined, and the likelihood of an increase in industry concentration would have been higher[17].

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[17] The relationship between "the between-firm effect" and market concentration itself is not a one-

Also, we can recall the OPM in [Figure 11]. The simple mean and median of OPMs are declining from the early 2000s, which indicate the positive within-firm effect of corporate labor share, considering that firms with lower OPM tend to exhibit higher labor shares (as depicted in [Figure A-3]). Typically, when a firm's profit rate goes up, the proportion of labor income goes down. Therefore, as profit rates decrease over time, the labor share of a typical firm consistently increases. This phenomenon offers a plausible explanation for the pronounced increase in the within-firm effect observed in Korea's DOPD results. It is important to recall that the period when disparity intensified, as shown in [Figure 11], was the 2000s. During the 1990s, the disparity between the simple average and the weighted mean was not substantial, and the decline in OPM was relatively gradual. However, since the 2000s, the gap between the simple average and the weighted mean of OPM has widened considerably, indicating that profit margins for most firms have decreased much more rapidly than for the overall economy. For this negative between-firm effect to decrease the overall corporate labor share, the revenue-weighted OPM would have needed to show an upward trend since 2000, in contrast to the decline in the mean OPM. Although the quantitative between-firm effect has been larger in the 2000s and 2010s compared to the earlier period, it did not turn the overall direction of the corporate labor share downward. This is related to the fact that, as shown in [Figure 11], the direction of the weighted OPM also did not rise.

The significant role of the within-firm effect in changes to the labor share can be observed in [Figure 13]. This figure depicts the distribution of firm labor shares (solid red line) and value added shares (gray bars) in a given year. Although firm labor shares have gradually shifted to the right since the 2000s, as shown in [Figure 7], reinforcing the dominant role of the within-firm effect, [Figure 13] highlights a slight rightward movement in the distribution of value added after the 2000s. Between 1990 and 2000, the firm labor share moved to the left, with a clear shift in

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to-one correspondence. Kehrig and Vincent (2021) decompose changes in the between-firm effect among surviving firms into several components. In U.S. manufacturing, they find that the negative change in the between-firm effect is primarily driven by the impact of the third component in this decomposition.

$$\Delta Cov(s_{it}, LS_{it}) = Cov(s_{it-1}, \Delta LS_{it}) + Cov(\Delta s_{it}, LS_{t-1}) + Cov(\Delta s_{it}, \Delta LS_{it})$$

The DOPD results, where changes in the between-firm effect appear negative, might be perceived as conflicting with the observed decrease in concentration. However, changes in the between-firm effect are not determined solely by the second term (superstar effect). If firms with low labor shares increase their labor share while their value-added share decreases, the third term, this can also result in a negative change in the between-firm effect. Such shifts exert downward pressure on the aggregate labor share compared to a scenario where their economic share remains unchanged. In other words, when firms with a large share of the economy see their labor share rise while their economic share declines, it similarly puts downward pressure on the aggregate labor share relative to a scenario where their economic share remains stable.

[Figure 12] Dynamic Olley-Pakes Decomposition
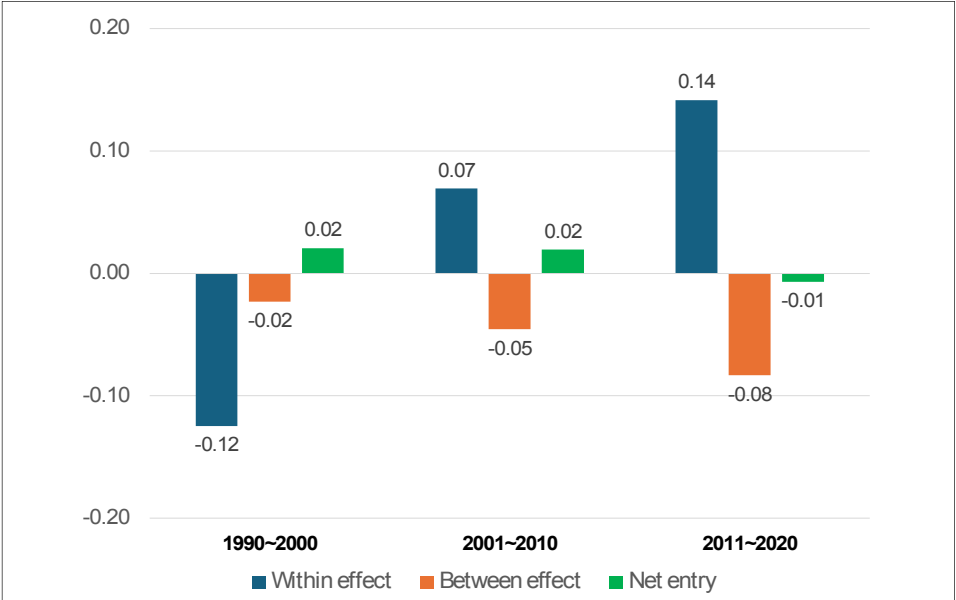
[Figure 13] The Changing Distributions of Corporate Labor Share and Value Added
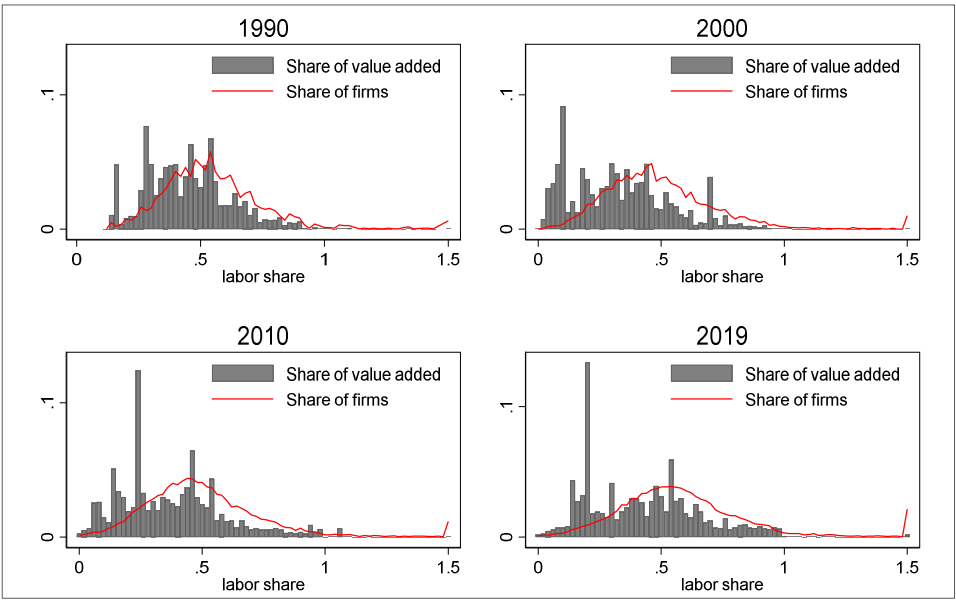
value added towards firms with lower labor shares. Thus, during the 1990s, the corporate labor share declined due to both within-firm and between-firm effects. Since the 2000s, the distributions of firm labor shares and value-added shares have consistently shifted to the right. Kehrig and Vincent (2021) demonstrated that in

U.S. manufacturing, despite an increase in the median labor share, a significant covariance effect caused the value-added share to skew to the left, towards a low labor share. Similarly, if Korea had experienced a substantial covariance effect, or between-firm effect, despite the firm labor share skewing to the right, the distribution of value-added shares would have also skewed to the left like in the U.S. However, [Figure 13] shows that this is not the case.

The relationship between a firm's sluggish performance and the rising labor share within firms can be further examined using the regression model proposed by Kehrig and Vincent (2021). We do a regression analysis using equation (3) on a subset of data that includes employment information to analyze the behavior of firms with a higher labor share. We define a high-labor-share firm (HL) as one that goes through a rapid increase in its labor share. The objective is to decompose the change in the labor share (dLS) of HL firms relative to non-HL firms into the contributions from changes in wages (dw), employment (dN), and value added (dPY).

If the growth rate of labor share in an individual firm (dLS_t) is greater than the 75th percentile of the year t, then the firm is defined as an HL firm and $HL_{it} = 1$. Then wages, employment, and value added are regressed on HL_{it}. X_{it} are 2-digit industry and year dummies.

$$dlnx_{it} = c + \beta HL_{it} + \gamma X_{it} + e_{it}$$
$$\text{Where} \quad x_{it} = LS_{it}, w_{it}, N_{it}, PY_{it} \tag{3}$$

[Table 2] displays the regression findings, both unweighted and value-added weighted. Panel A shows that HL firms experience labor share growth that is 49% higher in comparison to non-HL firms. The primary factor in this growth is mostly the decline in value-added growth, which has decreased by 42% relative to non-HL firms, rather than an increase in compensation, which has only risen by 7.1%.

Within changes in compensation, the increase in wage growth (8%) was the main driver, while employment reversely decreased by 1%. The value-added weighted regression result in Panel B reinforces the major role of wage rate, rather than employment, in the breakdown of compensation. This suggests that the increase in wages per employee is more significant in larger firms.

[Figure 14] illustrates the labor shares by firm size, highlighting that increases in labor shares are concentrated in larger firms among those that are externally audited. The 1990s and 2010s exhibit a uniform pattern where labor shares either decrease or increase consistently across all firm sizes. However, the 2000s demonstrate a distinct trend. For firms with fewer than 300 employees, labor shares either decreased or showed minimal increase during this period. Conversely, firms with more than 300 employees experienced a substantial increase in labor shares in the 2000s.

[Table 2] Dynamics of High Labor Share Firms

Unweighted Result

	ΔLS	ΔwN	Δw	ΔN	ΔPY
β (HL)	0.492***	0.071***	0.080***	-0.010***	-0.421***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Observations	229,651	229,651	229,651	229,651	229,651
R^2	0.398	0.051	0.024	0.010	0.209

Weighted Result

	ΔLS	ΔwN	Δw	ΔN	ΔPY
β (HL)	0.393***	0.071***	0.149***	0.008	-0.236***
	(0.008)	(0.002)	(0.039)	(0.006)	(0.037)
Observations	229,651	229,651	229,651	229,651	229,651
R^2	0.330	0.051	0.111	0.021	0.124

Note: Panel A displays the results of unweighted OLS regressions, while Panel B presents the results when regressions are weighted by firm value added. The total number of observations is smaller than the entire sample because only the data that includes the number of employees is used. "*", "**" and "***" denote significance levels at 10%, 5%, and 1%, respectively.

[Figure 14] The Labor Shares by Firm Size
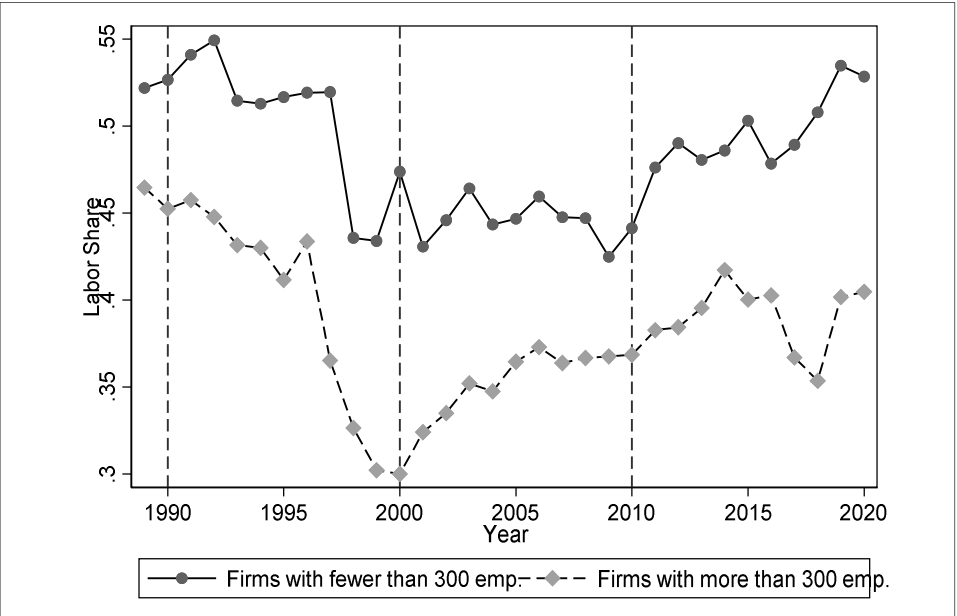
Note: This graph groups firms by the number of employees each year and calculates the labor share for each group. Therefore, there may be movements of firms between groups, and these results do not control for such composition effects.

IV. Conclusions

An analysis of Korea's financial statements reveals that the share of labor in the corporate sector declined throughout the 1990s but has been steadily increasing since the 2000s. This trend is corroborated by other statistics, such as the 「Financial Statement Analysis」 by the Bank of Korea and the 「Mining and Manufacturing Survey」 by Statistics Korea, which encompass a broader range of firms. This suggests that the movement in corporate labor share observed in this paper is not confined to a small segment of the aggregate economy. However, during the 2000s, the direction of labor share varied by firm size, indicating that the trend in corporate labor share during this period may differ from that of self-employed or small firms.

Korea's corporate labor share trends, particularly the increase since the 2000s, sharply contrast with the experiences of many other countries where labor shares have declined. Research often attributes changes in labor share to factors such as increased industry concentration and mark-ups, but Korea exhibits the opposite trend. Since 2000, Korea's industry concentration has decreased, and overall profit rates have also fallen. This contrasts with studies suggesting that increased market concentration, mark-ups, and aggregate profit rates in the U.S. are closely linked to declining labor shares.

Notably, a decomposition of Korea's corporate labor share using DOPD reveals that, unlike in the U.S., the reallocation effect among surviving firms, or the between-firm effect, does not significantly influence the overall labor share. The negative between-firm effect was not sufficient to outweigh the positive within-firm effect in Korea's corporate sector. This indicates that the decline in industry concentration, the decrease in aggregate profit rates, and the greater significance of the within-firm effect over the between-firm effect in Korea's corporate labor share are all interconnected.

These findings suggest the absence of the "superstar firm effect" in Korea's corporate labor share trends. An important question arises: should these phenomena be considered positive or negative? Traditionally, decreased market power is seen as positive for welfare, but it can also reduce firms' incentives for investment and innovation. Bighelli et al. (2023) emphasize that in Europe, aggregate firm concentration has increased over the past decade, yet this rise is positively associated with productivity growth, suggesting it may reflect efficient market processes rather than weak competition. Thus, it remains essential to study whether Korea's case positively or negatively impacts overall welfare. If the rise in Korea's labor share is due to a decline in overall profitability and the absence of productivity-boosting superstar firms, rather than intensified competition from active business dynamism, this could be detrimental to overall welfare.

Moreover, Acemoglu, Lelarge, and Restrepo (2020) found that the top 1% of firms in France were the first to adopt robots. In contrast, it is noteworthy that in Korea, the labor share significantly increased in large firms with more than 300 employees during the 2000s. This raises critical questions about the underlying causes and implications of these trends, necessitating further research into the distinctive characteristics of Korea's corporate sector and their broader economic impacts.
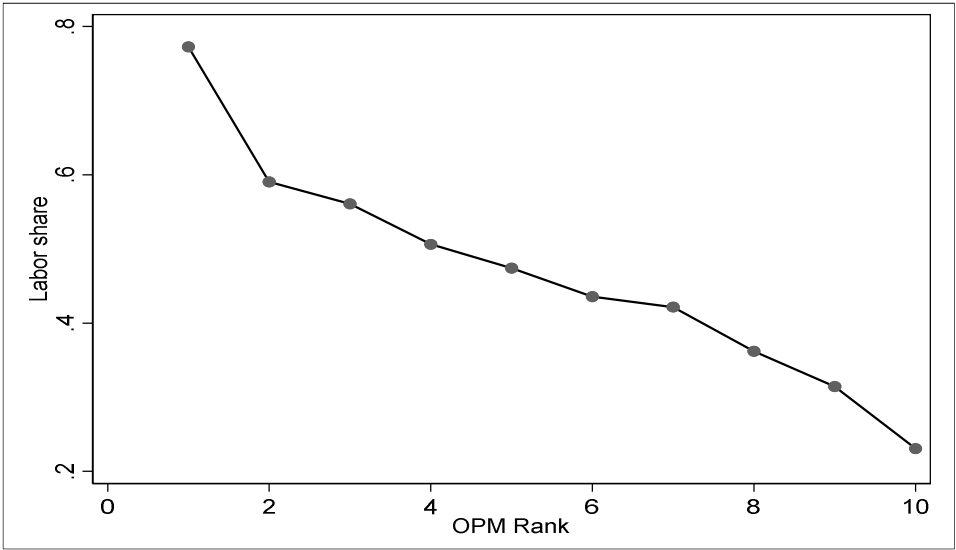
[Figure A-1] Manufacturing HHI and CR4

A. HHI

B. CR4
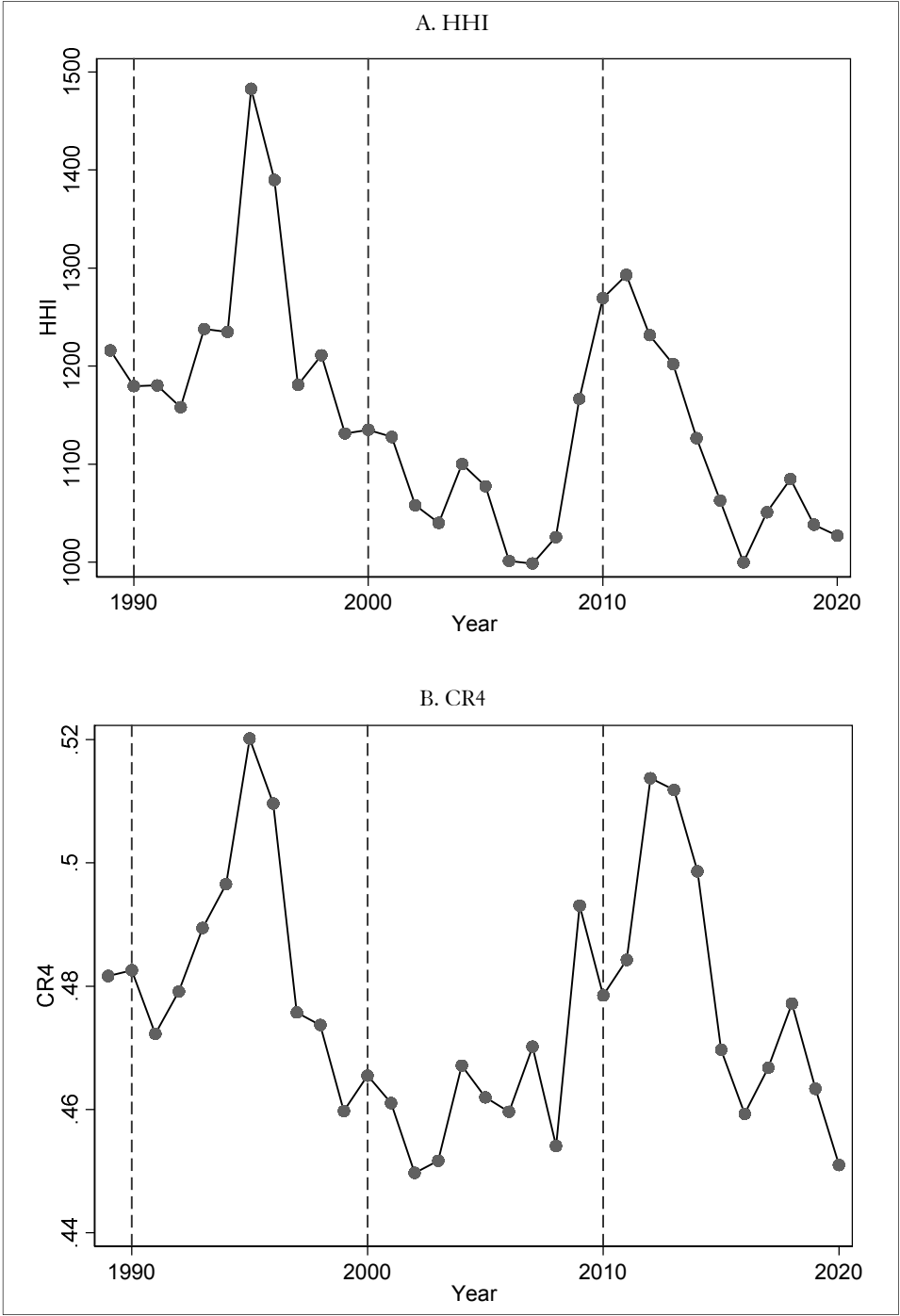
[Figure A-2] Service HHI and CR4

A. HHI

B. CR4
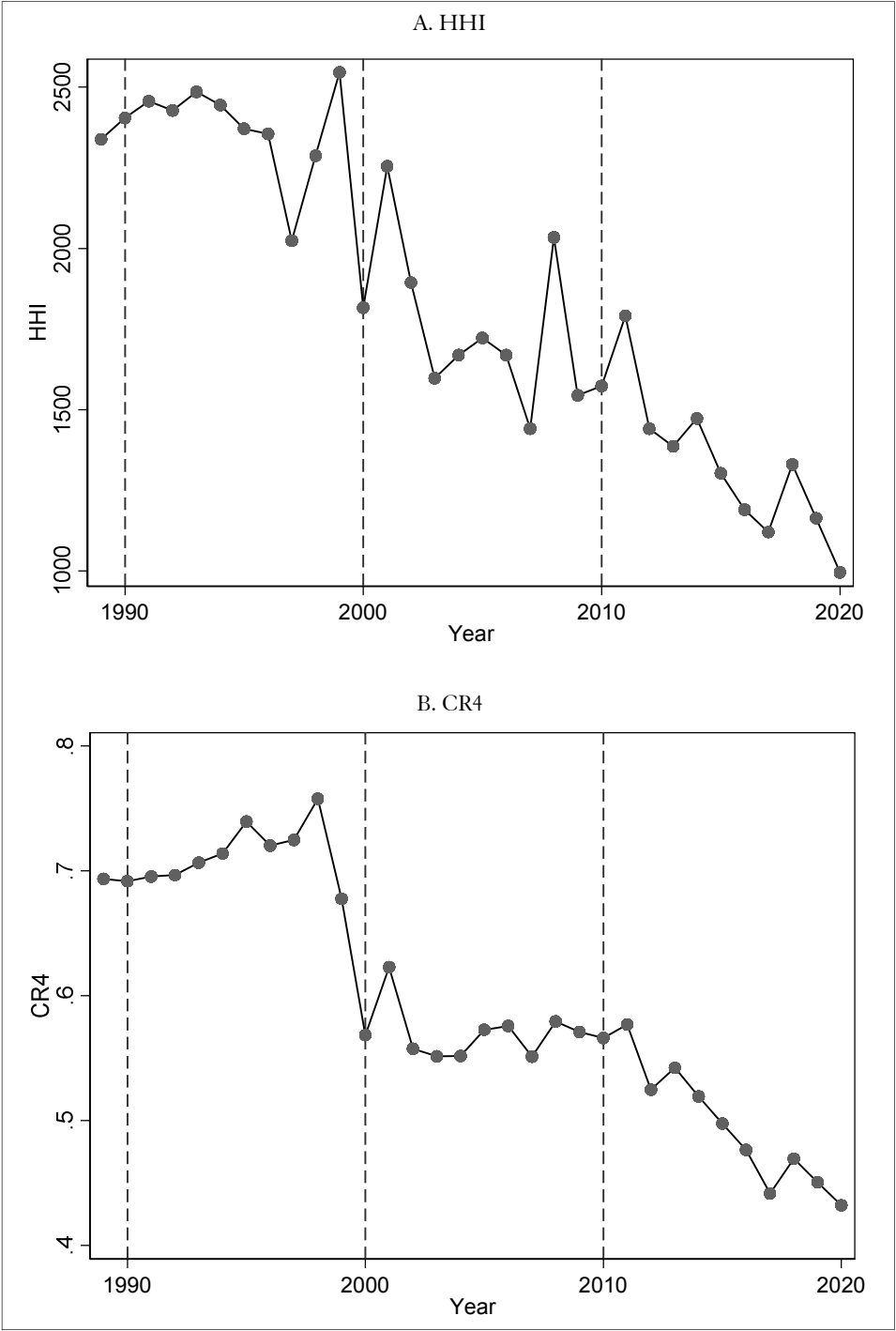
[Figure A-3] The Profit Rates and Labor Shares

Note: This graph categorizes firms' operating profit margins (OPM) into 10 ranks for each year
from 1989 to 2020 and calculates the OPM for each rank.

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한국 노동소득분배율 상승의 미시적 구조 분석

오 지 윤*

초 록 ┃ 이 논문은 2000년대 이후 한국 법인의 노동소득분배율이 글로벌 감소 추세와는 달리 상승하고 있음을 밝히고, 그 특징을 분석한다. 외부감사 대상 한국 기업(주로 대규모 기업)의 재무제표를 활용한 결과, 노동소득 분배율 상승은 기업 간 차이(between-firm effect)가 아닌 기업 내 효과(within-firm effect)에 의해 주도되었음이 확인되었다. 이는 미국 등 주요국에서 노동소득분배율 하락이 '슈퍼스타 효과(superstar firm effect)'와 같은 기업 간 차이에 의해 설명되는 것과는 대조적이다. 또한, 분석 기간 동안 한국에서는 기업 집중도가 감소하고 노동소득분배율이 상승한 반면, 미국에서는 기업 집중도와 마크업이 상승하며 노동소득분배율이 하락하는 추세가 나타났다. 이러한 결과는 한국 대기업에서 나타난 노동소득분배율 상승이 한국 경제의 독특한 구조적 특성과 연관될 가능성을 시사한다.

＊ 명지대학교 경제학과 조교수, e-mail: oh.jiyoon@gmail.com