

Income Distribution Effect of ESG in the Context of Common Prosperity

-- From the Perspective of Labor Income Share of Micro Enterprises

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Abstract

The increase of labor income share is an important measure to improve income inequality and promote common prosperity. Based on the data of China's A-share listed companies from 2012 to 2022, this paper empirically studies the impact, heterogeneity and internal mechanism of ESG on the internal income distribution of enterprises from the perspective of micro-enterprises' labor income share. The results show that: (1) ESG has a promoting effect on the labor income share of enterprises, and this conclusion is still valid after a series of robustness tests. (2) Through the heterogeneity analysis, it is found that the role of ESG in improving the labor income share of enterprises is more obvious in non-state-owned enterprises. (3) The analysis of the influence mechanism shows that ESG can improve the labor income share of enterprises by improving the level of labor employment and exerting the labor creation effect. The research in this paper has certain reference significance for solidly promoting the strategy of common prosperity and deepening the reform of income distribution system under the background of current digital economy era.

Keywords

ESG; Enterprise Labor Income Share; Common Prosperity.

1. Introduction

With the wave of globalization, scientific and technological progress and economic restructuring, the gap between the rich and the poor and income distribution have become the focus of international attention. As an important economic indicator, labor income share directly reflects the proportion of workers in national income, is an important factor affecting national income distribution and promoting high-quality economic development (Li Xudong et al., 2023), and to a large extent affects social stability and harmony. In the report of the 20th National Congress of the Communist Party of China, it is clearly stated that "Chinese-style modernization is the modernization of common prosperity for all the people. We should increase the proportion of labor remuneration in the primary distribution and promote common prosperity for all the people." It can be seen that increasing the share of labor income to improve the pattern of income distribution is an intrinsic requirement for achieving the strategic goal of common prosperity (He Xiaogang et al., 2023). Therefore, how to increase the labor income share to safeguard the reasonable rights and interests of workers and ensure the realization of the goal of common prosperity has become the core issue concerned by governments and all sectors of society.

Since the beginning of the 21st century, while people enjoy the convenience brought by the development of The Times, social problems such as resource shortage and ecological

deterioration have also accompanied. The concept of ESG (Environment, Society and Governance) was first put forward in 2005, and the emergence of the concept reflects the growing attention to sustainable economic models and a new perspective on the long-term value creation of enterprises. ESG has rapidly become a central concern for companies, investors and policy makers over the past few years. As a major producer of environmental pollution and an important subject of economic activities, enterprises should actively implement the concept of ESG. While pursuing economic performance, enterprises should take the initiative to take into account the interests of environment, society and the public, so as to create a healthy and sustainable development environment and jointly promote economic performance, social performance and environmental performance (Li Zongze and Li Zhibin, 2023).

Based on this, this paper selects the data of China's A-share listed companies from 2012 to 2022 and empirically studies the impact, heterogeneity and internal mechanism of ESG on the internal income distribution of enterprises from the perspective of micro-enterprises' labor income share. The results show that: (1) ESG has a promoting effect on the labor income share of enterprises, and this conclusion is still valid after a series of robustness tests. (2) Through the heterogeneity analysis, it is found that the role of ESG in improving the labor income share of enterprises is more obvious in non-state-owned enterprises. (3) ESG can improve the labor share of enterprises by improving the level of labor employment and exerting the labor creation effect.

Compared with the existing researches, the possible contributions of this paper are as follows: (1) It enriches and expands the research framework of ESG's economic consequences. (2) In terms of micro-mechanism, this paper systematically reveals the transmission path of ESG advantages to the labor income share of enterprises from the perspective of labor employment. (3) This paper deepens and expands the related research on labor income share. (4) As for the practice of solidly promoting common prosperity, most scholars' current studies tend to focus on the macroeconomic policy and market level, while this paper focuses on the micro enterprise level, revealing that ESG plays an important role in promoting high-quality economic development and solidly promoting common prosperity.

2. Literature Review and Research Hypothesis

This research is closely related to three types of literature: first, related literature on the economic consequences of ESG; Second, the relevant literature on the factors affecting labor income share. The third is about the relationship between ESG and labor income distribution.

2.1. Research on ESG Economic Consequences

Since the concept of ESG was first put forward in 2005, it has been widely studied by scholars, and more and more enterprises in practice have incorporated ESG into their strategic planning. At present, most scholars have found that the economic consequences of ESG are positive. From the perspective of corporate performance, Friede et al. (2015) reviewed more than 2,000 literatures on corporate ESG performance and financial performance, and found that about 90% of empirical studies verified the non-negative correlation between the two. Based on the principal-agent theory, the problem of information asymmetry exists between enterprises and various stakeholders, and the performance of enterprises' social responsibility is conducive to reducing the degree of information asymmetry, thereby reducing transaction costs and improving corporate performance. Based on the signal transmission theory, enterprises' active participation in ESG practice can convey to stakeholders a strong sense of environmental protection and social responsibility, which can enhance stakeholders' confidence in the future long-term development of enterprises and promote the sustainable development of enterprises (Li Jinglin et al., 2021). From the perspective of enterprise value, based on stakeholder theory,

enterprises' participation in ESG practice can win the trust and support of all stakeholders, and reduce transaction costs between enterprises and all stakeholders. Based on the resource dependence theory, the survival and development of enterprises cannot be achieved without various resources, including capital and talents, etc. However, ESG activities can improve the reputation of enterprises, win the support of external resources, and further enhance their core competitiveness (Wang Linlin et al., 2022). In addition, Wang Bo and Yang Maojia (2022) also verified the role of ESG in improving enterprise value from two dimensions of enterprise book value and market value. From the perspective of innovation, Fang Xianming and Hu Ding (2023) believe that ESG can promote enterprise innovation by easing financing constraints and improving employees' innovation efficiency and risk bearing level. Wang Zhi and Peng Baichuan (2022) believe that ESG can improve innovation performance through reputation effect and resource effect. From the perspective of enterprise risk, ESG can improve the reputation of enterprises, establish a good social image, accumulate reputation capital, reduce the possibility of enterprises getting into financial difficulties, and reduce the financial risk of enterprises. ESG can reduce information asymmetry, improve information transparency and reduce information risks. ESG can reduce agency costs between shareholders and creditors, thereby reducing the agency risk of enterprises (Lian Yonghui et al., 2023). From the perspective of capital cost, on the one hand, Lian Yonghui et al. (2023) believe that ESG can reduce the debt financing cost of enterprises by reducing corporate risk. On the other hand, ESG can enhance investors' confidence and reduce risk premium compensation, thus reducing the cost of equity capital of enterprises (Wang Yiqiu and Xie Meng, 2022).

2.2. Research on Driving Factors of Labor Income Share in Enterprises

Labor income share is closely related to residents' income distribution gap, and the reasons for the change of labor income share have always been the focus of academic attention. Related researches are mainly carried out from the macro and micro paths:

From the macro level, industrial structure transformation (Bai Chongen and Qian Zhenjie, 2009), technological progress (Huang Xianhai and Xu Sheng, 2009); Economic growth pressure (Zhan Xinyu et al., 2023) and other factors caused the decline of labor income share. Factors such as industrial policy, digital financial inclusion (Liu Changgeng et al., 2022), financial market development (Jiang Hongli et al., 2022), and competition policy (Li Xudong et al., 2023) can raise the labor income share. At the micro level, entrepreneurs' political relationships and institutional environment (Wei Xihai et al., 2013); Enterprise risk (Jia Shen and Shen Guangjun, 2016); Xiao Tu-sheng et al., 2022); And factors such as outward direct investment (Li Zenggang and Wang Dian, 2023) can raise the labor share. In addition, Zhan Xinyu and Yu Qian (2022) believe that government subsidies have an inverted U-shaped effect on labor income share.

2.3. ESG and Firm Labor Income Share

The concept of ESG (Environmental, Social and Governance) has been widely accepted and practiced on a global scale. The ESG philosophy provides a framework for companies to look at the issue of Labour income shares in a more holistic and strategic way. As companies pay more attention to their responsibilities to stakeholders such as employees, suppliers and communities, how to increase labor income share through ESG strategies has also received a lot of attention from academia and practice circles and has become increasingly important. The impact of ESG on the internal income distribution of enterprises is to promote sustainability and fairness, help enterprises to convey their social responsibility, and gain recognition and support from investors, employees and consumers, which helps to enhance the long-term development and competitiveness of enterprises. As for the role of ESG in raising the share of corporate labor income, it can be divided into the following three aspects: From the environmental aspect of ESG, the concept of ESG encourages enterprises to consider environmental sustainability in income distribution. This may include investing part of the

income into environmental protection and renewable energy projects to reduce the negative impact on the environment. In addition, some investors and consumers are also increasingly inclined to support businesses that are committed to environmental protection, which may result in environmentally friendly companies having a competitive advantage in the market, thus increasing the income that can be distributed. As a result, businesses that focus on ESG practices tend to be more likely to achieve long-term sustainable growth, which creates more resources and room for companies to increase their labor income share (Eccles et al., 2014). From the social dimension of ESG, the ESG philosophy emphasizes social justice and equity. When it comes to the distribution of labor income, companies may be pressured to take measures to ensure that employees are paid fairly for their work. This may mean more equal and just pay structures to ensure employees' fair share in the company's economic success, and efforts to narrow the internal pay gap to avoid unjustified income inequality (Nie Huihua et al., 2022). As employees are increasingly focused on corporate social responsibility and sustainable performance, a fair and sustainable distribution of labor income can improve the competitiveness of companies in recruiting and retaining talent, and companies can better attract and retain talent and expand their business scale (Hu Jie et al., 2023). In addition, companies that value ESG tend to pay more attention to employee welfare, satisfaction and loyalty. This is not only reflected in the good salary package, but also in the aspects of employee training, health and safety (Goergen et al., 2018). This focus could eventually lead to an increase in the share of labor income. From the governance level in ESG, the ESG concept requires enterprises to establish and strengthen effective corporate governance mechanisms. There is a clear link between good corporate governance and fair income distribution. On the one hand, companies that practice good governance are more likely to ensure that their employees receive an income that matches their contributions (Chen et al., 2018). On the other hand, good governance can also ensure that top management and the board of directors are held accountable for income distribution decisions and prevent potential abuses of authority. In addition to this, as ESG is increasingly being looked at by investors and stakeholders, their demands on the distribution of Labor income within companies are also increasing. It is possible for investors and stakeholders to push companies to improve labor income distribution through voting power, advocacy and pressure.

Based on the above analysis, this paper proposes the following hypothesis 1: ESG can increase the labor income share of enterprises and promote common prosperity within enterprises.

3. Research Design

3.1. Sample Selection with Data Sources

This paper takes the data of China's A-share listed companies from 2012 to 2022 as the initial research sample. In order to ensure the quality and validity of the data, the data are processed as follows: (1) ST and PT listed companies are excluded. (2) Because the relevant accounting standards of the financial industry are different from those of other industries, the financial listed companies are excluded. (3) Samples with seriously incomplete and missing data are excluded. (4) Samples with data anomalies, such as the number of employees less than 100, total business income less than 0, and labor income share greater than 1 and less than 0, are excluded. (5) All continuous variables were indorned by the upper and lower 1% points, so as to exclude the influence of extreme values. The relevant data of enterprise labor income share in this paper are from the financial reports of listed companies, the ESG rating data of Hua Zheng is from Wind database, the initial data of control variables are from CSMAR database, and the remaining data are from the financial reports of listed companies, China Statistical Yearbook and Guotai 'an Database, etc. After data processing by Stata17.0, A total of 31770 valid samples were obtained.

3.2. Variable Definition

3.2.1. Core Being Explained Variable

The core explanatory variable of this paper is enterprise labor income share. Referring to the practice of Wang Xiong Yuan, Huang Yujing (2017), Shi Xinzheng et al. (2019) and Zhan Xinyu et al. (2023), the enterprise labor income share (LS1) is measured by dividing "cash paid to and for employees" by total operating income. "Cash paid to and for employees" comes from the cash flow statement in the annual report of a listed company, which reflects all expenses of an enterprise to employees; "Total operating income" comes from the income statement in the annual report. In addition, with reference to the studies of Li Daokui et al. (2009) and Wei Xiahai et al. (2013), the Logistic transformation is used to map it between $(-\infty, +\infty)$, that is, $LS / (1-LS)$ is used for LS1 and the natural logarithm is taken to measure the labor income share.

3.2.2. Explanatory Variables

At present, the academic community mainly uses ratings or scores from third-party rating agencies to measure ESG. Referring to the practice of Lin et al. (2021), Wang linlin et al. (2022), China Securities ESG rating index is used to measure enterprise ESG. Compared with other ESG evaluation systems, Hua Zheng ESG rating system combines the mainstream ESG evaluation framework of foreign countries and the characteristics of China's capital market, which has the advantages of wide coverage and high updating frequency. The ESG rating is divided into nine levels, from low to high in order of C, CC, CCC, B, BB, BBB, A, AA, AAA, which are assigned 1-9 points in turn.

3.2.3. Control Variables

Based on the research conducted by Nie Huihua et al. (2022), we selected company Size (Size), asset-liability ratio (Lev), net profit rate on total assets (ROA), cash flow ratio (Cashflow), number of directors (Board), listing years (ListAge), and whether the company has been approved by the Big Four accounting firms (Big4), management fee rate (Mfee), etc., were selected as control variables. All variables are defined in detail as shown in Table 1.

Table 1. Variable definitions

Type	Name	Variab les	Definitions
Explained variable	Firm labor income share	LS1	"Cash paid to and for employees" divided by gross operating income
		LS2	$LS1 / (1-LS1)$ and take the natural logarithm
Explanatory variable	Corporate ESG score	ESG	China Securities ESG rating is measured on a scale of 1 to 9
Control variables	Company size	Size	Take the natural logarithm of total assets at year-end
	Asset-liability ratio	Lev	Total year-end liabilities divided by total year-end assets
	Net profit margin on total assets	ROA	Net profit divided by the average balance of total assets
	Cash flow ratio	Cashflow	Net cash flow from operating activities divided by total assets
	Number of directors	Board	Take the natural logarithm of the number of boards
	Market life	ListAge	Year minus year of listing plus one takes the natural logarithm
	Big Four or not	Big4	1 when audited by the Big Four, 0 otherwise
	Overhead rate	Mfee	Administrative expenses divided by operating income

3.3. Measurement Model

In order to explore the impact of ESG on income distribution pattern within enterprises, this paper constructs an econometric model shown in equation (1) to verify hypothesis 1 by referring to the practices of scholars such as Xiao Tu-sheng et al. (2022), Wang Xiongyuan and Huang Yujing (2017) and Gao Jieying et al. (2021).

$$LS_{it} = \alpha_0 + \alpha_1 ESG_{it} + \sum_{j=2}^9 \alpha_j Controls_{it} + \mu_{it} + \tau_{it} + \varepsilon_{it} \tag{1}$$

Where the subscript i represents the enterprise and t represents the year; LS_{it} is the labor income share of the firm, $Controls_{it}$ is the control variable, and ε_{it} is the random disturbance term.

This paper focuses on the sign and significance of ESG coefficient in model (1). If the significance is positive (negative), it indicates that ESG can significantly increase (decrease) the labor income share of enterprises.

All regression equations in this paper adopt firm-level clustering robust standard error; At the same time, individual fixed effects (μ_{it}) and year fixed effects (τ_{it}) are controlled as much as possible in all regression models.

4. Empirical Test

4.1. Descriptive Statistics

Table 2 shows the results of descriptive statistics. As can be seen from Table 2, the total sample size is 31770 the mean value of ESG score of Hua Zheng is 4.11, the maximum value is 8.00, and the minimum value is 1.00, which is consistent with most literatures. The mean, median, maximum and minimum values of LS1 are 0.14, 0.11, 0.70 and 0.01, the mean, median, 1.43 and minimum values of LS2 are -2.02, -2.00, 1.43 and 0.00, respectively. It indicates that the proportion of total business income of listed enterprises in China is more than 10% for paying employees' compensation. The mean value of the sample firm Size (Size) is 22.27, and the maximum and minimum values are 26.45 and 19.57, respectively, indicating that the sample contains enterprises of different sizes. The variance inflation factor (VIF) among the variables is all less than 10, and the Mean VIF is 1.39, which is much less than 10, indicating that there is no serious multicollinearity between the variables. The other control variables are all within a reasonable range, so we will not go into too much details here.

Table 2. Descriptive statistical results

Variable	N	Mean	p50	SD	Min	Max	VIF
LS1	31770	0.14	0.12	0.10	0.01	0.70	
LS2	31770	-2.02	-2.00	0.84	-4.47	0.87	
ESG	31770	4.11	4.00	1.09	1.00	8.00	1.15
Size	31770	22.27	22.08	1.28	19.57	26.45	2.04
Lev	31770	0.42	0.42	0.20	0.03	0.93	1.75
ROA	31770	0.04	0.04	0.07	-0.38	0.26	1.53
Cashflow	31770	0.05	0.05	0.07	-0.20	0.27	1.23
Board	31770	2.12	2.20	0.20	1.61	2.71	1.08
ListAge	31770	2.15	2.30	0.82	0.00	3.40	1.35
Big4	31770	0.06	0.00	0.23	0.00	1.00	1.13
Mfee	31770	0.09	0.07	0.07	0.01	0.64	1.23
Mean VIF							1.39

4.2. Baseline Regression

Table 3 shows the baseline regression results after adding the relevant control variables. It can be seen from Table 3 that the goodness of fit of the regression model is 0.864 and 0.881, respectively, indicating that the model has a good fitting effect. The regression coefficients of ESG on enterprises' labor income share (LS1 and LS2) are 0.001 and 0.012 respectively, and both are positively significant at the level of 1%. This indicates that the higher the ESG score, the higher the labor income share of enterprises. It further indicates that more participation of enterprises in ESG activities can improve enterprises' labor income share and improve internal income distribution. And then promote the common prosperity within the enterprise.

Table 3. Baseline regression

Variable	(1)	(2)
	LS1	LS2
ESG	0.001***	0.012***
	(3.63)	(3.70)
Size	-0.010***	-0.107***
	(-6.27)	(-7.18)
Lev	-0.019***	-0.235***
	(-3.40)	(-5.24)
ROA	-0.153***	-1.189***
	(-16.03)	(-16.46)
Cashflow	-0.057***	-0.355***
	(-8.72)	(-6.88)
Board	0.006	0.078**
	(1.57)	(2.43)
ListAge	0.011***	0.090***
	(5.61)	(5.66)
Big4	0.015***	0.113***
	(3.31)	(3.16)
Mfee	0.579***	4.549***
	(27.08)	(30.76)
_cons	0.284***	-0.298
	(8.22)	(-0.92)
<i>N</i>	31770	31770
<i>F</i>	232.894	283.067
<i>r2_a</i>	0.864	0.881

Note: * $p < 0.01$, ** $p < 0.05$, *** $p < 0.01$, with *t* values adjusted for heteroscedastic clustering robust standard error in parentheses.

4.3. Robustness Test

4.3.1. Propensity Score Matching (PSM)

In order to further deal with the possible problem of sample self-selection, this paper adopts the method of propensity score matching (PSM) for analysis. Taking the mean value of ESG as the standard, the ESG score was divided. Those below the mean value were defined as the control group, and those above the mean value were defined as the experimental group. All the above control variables were selected as covariates. Then PSM matching was performed for sample enterprises by one-to-one nearest neighbor without retracting and radius matching (matching radius value was 0.01). Through the matching balance test, it is found that the

absolute value of the standard deviation of each matching variable after matching is less than 10%, and there is no significant difference between the experimental group and the control group in all observable features, indicating that the selection of matching variables and matching methods in this paper is appropriate. Finally, the unmatched samples are eliminated and then regression is carried out. The regression results are shown in Table 4. It can be seen that in the 1:1 nearest neighbor matching mode, the regression coefficients of ESG are 0.002 and 0.010, respectively, with significant positive correlation. In the radius matching mode, the regression coefficients of explanatory variable ESG are 0.001 and 0.011 respectively, and both are significantly positively correlated at the level of 1%. Thus, the main conclusions of this paper are reliable.

Table 4. Propensity score matching

Variable	(1)	(2)	(3)	(4)
	1:1Nearest neighbor match		Radius matching	
	LS1	LS2	LS1	LS2
ESG	0.002*** (2.99)	0.010** (2.27)	0.001*** (3.60)	0.011*** (3.68)
Size	-0.008*** (-3.93)	-0.111*** (-5.02)	-0.010*** (-6.22)	-0.106*** (-7.12)
Lev	-0.032*** (-4.56)	-0.323*** (-5.52)	-0.019*** (-3.42)	-0.232*** (-5.19)
ROA	-0.204*** (-13.83)	-1.588*** (-14.37)	-0.154*** (-15.95)	-1.202*** (-16.60)
Cashflow	-0.061*** (-7.12)	-0.394*** (-5.83)	-0.055*** (-8.54)	-0.344*** (-6.65)
Board	0.007 (1.39)	0.068* (1.68)	0.006 (1.53)	0.076** (2.39)
ListAge	0.011*** (4.50)	0.092*** (4.38)	0.011*** (5.74)	0.091*** (5.74)
Big4	0.015** (2.30)	0.088* (1.92)	0.016*** (3.36)	0.116*** (3.22)
Mfee	0.521*** (16.39)	4.455*** (19.99)	0.580*** (26.77)	4.567*** (30.56)
_cons	0.260*** (5.67)	-0.117 (-0.25)	0.279*** (8.18)	-0.321 (-1.00)
N	14201	14201	31739	31739
F	104.319	141.806	229.901	281.641
r2_a	0.876	0.893	0.865	0.881

Note: * p<0.01, ** p<0.05, *** p<0.01, with t values adjusted for heteroscedastic clustering robust standard error in parentheses.

4.3.2. Instrumental Variable Method

In order to reduce the interference of possible endogenous problems on the main conclusions of this paper, the instrumental variable method is used for regression. Referring to the practice of Zhou Fangzhao et al. (2020) and Gao Jieying et al. (2021), the ESG mean of other enterprises in the same industry and province in the same year is used as the instrumental variable (IV) for testing. This instrumental variable conforms to the constraints of correlation and externality. First, in terms of correlation, the ESG score of each enterprise will be affected by the ESG score of other enterprises in the same industry and province; second, in terms of externality, the ESG average of other enterprises in the same industry and province will not have a direct impact on the labor income share of the enterprise. Therefore, it is appropriate to select this instrumental variable (IV). The regression results of instrumental variables are shown in Table 5. It can be

seen that the F statistic of the first stage is greater than 10, which passes the weak instrumental variable test. Moreover, the influence of instrumental variable (IV) on ESG is significantly positive at 1% level, indicating a strong correlation between the two. In the second stage, the regression coefficients of ESG on the labor income share of enterprises (LS1 and LS2) are 0.015 and 0.109 respectively, both of which are significantly positively correlated at the 5% level. This result indicates that the regression results of the instrumental variable method are consistent with the previous regression results after controlling the endogenous factors. The research hypothesis and results of this paper are still valid, that is, ESG can increase the labor income share of enterprises.

Table 5. Instrumental variable method

	(1)	(2)	(3)
	ESG	LS1	LS2
ESG		0.015**	0.109**
		(2.48)	(2.33)
IV	0.120***		
	(8.41)		
Size	0.272***	-0.015***	-0.146***
	(12.92)	(-6.18)	(-7.12)
Lev	-0.872***	-0.011	-0.158**
	(-11.23)	(-1.40)	(-2.40)
ROA	0.616***	-0.163***	-1.258***
	(4.36)	(-15.23)	(-15.73)
Cashflow	-0.441***	-0.054***	-0.358***
	(-4.17)	(-7.80)	(-6.36)
Board	-0.145**	0.010**	0.101***
	(-2.17)	(2.42)	(2.95)
ListAge	-0.228***	0.015***	0.111***
	(-7.56)	(5.99)	(5.71)
Big4	0.070	0.006	0.046
	(1.06)	(1.40)	(1.29)
Mfee	-0.806***	0.562***	4.451***
	(-4.65)	(23.76)	(27.38)
N	27499	27499	27499
F	70.68	200.917	240.892
r2_a	0.334	0.334	0.351

Note: * $p < 0.01$, ** $p < 0.05$, *** $p < 0.01$, with t values adjusted for heteroscedastic clustering robust standard error in parentheses.

4.3.3. Replace the Explained Variable

In order to avoid the problem of conclusion bias caused by the number of data observations, this paper adopts the measure of replacing the core explained variable to carry out the robustness test. First of all, referring to the research of Hu Yiming and Maimaitiyiming·Zunong (2013), the micro measurement method of labor income share (LS3) is divided by "total business income" by "cash paid to and for employees + end-of-period salary payable to employees - end-of-period salary payable to employees". Secondly, referring to the practice of Zhan Xinyu et al. (2023), the ratio of "credit amount of employee compensation payable" to "total operating income" is used to represent the labor income share of an enterprise (LS4), in which the credit amount of employee compensation payable includes all monetary and non-monetary salaries paid for both current and former employees. The regression results are shown in column (1) and column (2) of Table 6. It can be seen that the regression coefficients

before the explanatory variable ESG are 0.001, and they are significantly positively correlated at the level of 1%, which is consistent with the main conclusions above.

4.3.4. Changing the Window Period

Since the beginning of the 21st century, unexpected public events have broken out from time to time, such as the SARS epidemic in 2003, the Wenchuan earthquake in 2008 and the novel coronavirus pneumonia in 2020. Existing articles have confirmed that such public events have a huge impact on China's economy and financial market, and are a major problem affecting China's economic development. Therefore, this paper believes that 2020, as a special year, will have an unnatural adjustment effect on the labor income share of enterprises, which will lead to bias in the results. Therefore, data of 2020 are excluded from the robustness test and regression is carried out. The results are shown in columns (3) and (4) of Table 6. The regression coefficients before ESG are 0.002 and 0.013 respectively, both of which are significant at the level of 1%, confirming the above conclusions and reflecting the good robustness of the research conclusions in this paper.

Table 6. Robustness test

	(1)	(2)	(3)	(4)
	Replace the explained variable		Change the sample interval	
	LS3	LS4	LS1	LS2
ESG	0.001*** (3.35)	0.001*** (3.60)	0.002*** (4.02)	0.013*** (3.77)
Size	-0.008*** (-5.01)	-0.007*** (-4.64)	-0.011*** (-6.88)	-0.112*** (-7.52)
Lev	-0.013** (-2.30)	-0.015** (-2.52)	-0.019** (-3.40)	-0.242** (-5.24)
ROA	-0.143*** (-15.20)	-0.145*** (-14.93)	-0.165*** (-15.09)	-1.300*** (-14.99)
Cashflow	-0.045*** (-7.11)	-0.048*** (-7.48)	-0.056*** (-8.41)	-0.351*** (-6.31)
Board	0.006 (1.50)	0.005 (1.34)	0.009** (2.18)	0.102*** (2.98)
ListAge	0.009*** (4.71)	0.010*** (5.03)	0.010*** (5.29)	0.087*** (5.44)
Big4	0.014*** (3.13)	0.012*** (2.79)	0.015*** (3.20)	0.110*** (2.89)
Mfee	0.602*** (28.13)	0.632*** (28.63)	0.569*** (26.85)	4.517*** (30.22)
_cons	0.245*** (6.97)	0.230*** (6.62)	0.294*** (8.53)	-0.248 (-0.76)
N	31770	31770	25146	25146
F	227.635	232.777	212.732	253.211
r2_a	0.868	0.870	0.860	0.876

Note: * $p < 0.01$, ** $p < 0.05$, *** $p < 0.01$, with t values adjusted for heteroscedastic clustering robust standard error in parentheses.

4.4. Heterogeneity Analysis

Since state-owned enterprises have both social goals such as employment and social responsibility, and Lu Zhengfei et al. (2012) found that Chinese state-owned enterprises pay higher wages than non-state-owned enterprises, and state-owned enterprises have a higher labor income share, this paper expects that the role of ESG in improving the labor income share of enterprises will be more obvious in non-state-owned enterprises. This paper divides the sample enterprises into two sub-samples of state-owned enterprises and non-state-owned enterprises according to the property rights of enterprises, and conducts regression respectively. The regression results are shown in Table 7. It can be seen that in non-state-

owned enterprises, the regression coefficients before ESG are 0.002 and 0.017 respectively, and both of them are significantly positive at 1% level. The regression coefficients before ESG are 0.001 and 0.006 respectively, which are not significant. Therefore, the increasing effect of ESG on the labor income share of enterprises is more obvious in non-state-owned enterprises, which is consistent with the above expectation.

Table 7. Heterogeneity analysis

	(1)	(2)	(3)	(4)
	LS1	LS1	LS2	LS2
	Non-state	State-owned	Non-state	State-owned
ESG	0.002***	0.001	0.017***	0.006
	(3.97)	(1.13)	(4.40)	(1.16)
Size	-0.010***	-0.009***	-0.112***	-0.083***
	(-5.03)	(-3.59)	(-6.14)	(-3.23)
Lev	-0.026***	-0.010	-0.272***	-0.244***
	(-3.92)	(-1.05)	(-5.31)	(-2.72)
ROA	-0.146***	-0.167***	-1.080***	-1.502***
	(-13.91)	(-8.44)	(-13.52)	(-9.53)
Cashflow	-0.058***	-0.037***	-0.354***	-0.228***
	(-7.27)	(-3.94)	(-5.56)	(-2.77)
Board	0.006	0.006	0.062	0.070
	(1.12)	(1.11)	(1.52)	(1.34)
ListAge	0.009***	0.003	0.071***	0.012
	(3.62)	(0.69)	(3.60)	(0.34)
Big4	0.018**	0.009	0.117**	0.067
	(2.38)	(1.58)	(2.20)	(1.44)
Mfee	0.525***	0.740***	4.108***	5.776***
	(21.48)	(19.47)	(25.10)	(19.58)
_cons	0.301***	0.261***	-0.067	-0.716
	(6.93)	(4.60)	(-0.17)	(-1.25)
N	21291	10413	21291	10413
F	171.759	75.974	208.910	91.994
r2_a	0.865	0.881	0.881	0.897
Experience P-value	0.000		0.000	

Note: The empirical p value was used to test the significance of ESG coefficient differences between different groups. Obtained through bootstrap 1000 times, * p<0.01, ** p<0.05, *** p<0.01, with t values adjusted for heteroscedastic clustering robust standard error in parentheses.

5. Mechanism Test

Benchmark regression analysis and a series of robustness tests have been done before. This part will verify the path through which ESG improves the labor income share of enterprises and what is its internal mechanism. By actively participating in ESG practice and actively promoting sustainable development and fulfilling social responsibilities, enterprises can send a signal of strong sense of responsibility to stakeholders, enhance stakeholders' confidence in the future development of enterprises, and then help enterprises attract investment, expand the scale of production and operation, and help improve the level of labor employment. In addition, enterprises with high ESG scores pay more attention to improving the working environment,

maintaining customer loyalty, paying attention to the welfare and health of employees, training and development of employees, and can attract more prepared employees (Gjergji et al.,2021), improve the level of labor employment, and thus increase the labor income share of enterprises. The regression results are shown in Table 8. It can be seen that the regression coefficient of ESG on labor employment level (employ) is 0.024, significant at 1%, indicating that ESG can significantly promote employment level; After controlling the employment level, the regression coefficients of ESG on the labor income share of enterprises are 0.001 and 0.010, respectively, and are significantly positive at the 1% level. The regression coefficients of employ are also significantly positive at the 1% level, with Sobel values of 14.000 and 14.040, indicating that a partial intermediary effect is established. It proves that ESG can increase the labor income share of an enterprise by increasing the employment level.

$$employ_{it} = \theta_0 + \theta_1 ESG_{it} + \sum_{j=2}^9 \theta_j Controls_{it} + \mu_{it} + \tau_{it} + \varepsilon_{it} \tag{2}$$

$$LS_{it} = \varphi_0 + \varphi_1 ESG_{it} + \varphi_2 employ_{it} + \sum_{j=3}^{10} \varphi_j Controls_{it} + \mu_{it} + \tau_{it} + \varepsilon_{it} \tag{3}$$

Table 8. Mechanism test

	(1)	(2)	(3)	(4)	(5)	(6)
	LS1	employ	LS1	LS2	employ	LS2
employ			0.007***			0.063***
			(3.01)			(3.19)
ESG	0.001***	0.024***	0.001***	0.012***	0.024***	0.010***
	(3.63)	(3.67)	(3.21)	(3.70)	(3.67)	(3.24)
Size	-0.010***	0.384***	-0.013***	-0.107***	0.384***	-0.131***
	(-6.27)	(9.49)	(-7.41)	(-7.18)	(9.49)	(-8.27)
Lev	-0.019***	-0.026	-0.019***	-0.235***	-0.026	-0.234***
	(-3.40)	(-0.61)	(-3.40)	(-5.24)	(-0.61)	(-5.25)
ROA	-0.153***	-0.160***	-0.152***	-1.189***	-0.160***	-1.179***
	(-16.03)	(-3.06)	(-16.05)	(-16.46)	(-3.06)	(-16.50)
Cashflow	-0.057***	0.216*	-0.058***	-0.355***	0.216*	-0.369***
	(-8.72)	(1.92)	(-9.07)	(-6.88)	(1.92)	(-7.25)
Board	0.006	0.026	0.006	0.078**	0.026	0.076**
	(1.57)	(0.58)	(1.55)	(2.43)	(0.58)	(2.42)
ListAge	0.011***	-0.059**	0.011***	0.090***	-0.059**	0.094***
	(5.61)	(-2.26)	(5.86)	(5.66)	(-2.26)	(5.93)
Big4	0.015***	0.182	0.014***	0.113***	0.182	0.102***
	(3.31)	(1.50)	(3.08)	(3.16)	(1.50)	(2.92)
Mfee	0.579***	0.349***	0.577***	4.549***	0.349***	4.527***
	(27.08)	(2.68)	(27.17)	(30.76)	(2.68)	(30.99)
_cons	0.284***	-8.040***	0.340***	-0.298	-8.040***	0.208
	(8.22)	(-8.70)	(9.35)	(-0.92)	(-8.70)	(0.62)
N	31770	31770	31770	31770	31770	31770
F	232.894	20.215	213.531	283.067	20.215	260.813
r2_a	0.864	0.929	0.865	0.881	0.929	0.882
Sobel value	14.000			14.040		

Note: * p<0.01, ** p<0.05, *** p<0.01, with t values adjusted for heteroscedastic clustering robust standard error in parentheses.

6. Conclusion and Implication

The increase of labor income share is an important measure to improve income inequality and promote common prosperity. Based on the data of China's A-share listed companies from 2012 to 2022, this paper empirically studies the impact, heterogeneity and internal mechanism of ESG on internal income distribution of enterprises from the perspective of micro-enterprises' labor income share. The results show that: (1) ESG has a promoting effect on the labor income share of enterprises, and this conclusion is still valid after a series of robustness tests. (2) Through the heterogeneity analysis, it is found that the role of ESG in improving the labor income share of enterprises is more obvious in non-state-owned enterprises. (3) ESG can improve the labor share of enterprises by improving the level of labor employment and exerting the labor creation effect. The research of this paper has certain reference significance for advancing the strategy of common prosperity and deepening the reform of income distribution system under the background of current digital economy era.

According to the conclusions of the above empirical analysis, the implications of this paper are as follows:

First, at present, there is no unified measurement standard for ESG, and it is necessary to accelerate the improvement of unified ESG measurement standards and ESG information disclosure standards, and increase investment in ESG publicity.

Second, enterprises should pay more attention to ESG, participate in ESG practice, and strengthen ESG concept, which is of great significance to the promotion of high-quality national economic development and the realization of the dual-carbon goal.

Third, the increase of labor income share is an important part of promoting common prosperity. On the one hand, the research in this paper shows that ESG can increase the labor income share of enterprises, and on the other hand, the concept of ESG is highly consistent with the goal of common prosperity. In addition, ESG takes into account the three aspects of environmental protection, social responsibility and corporate governance, and is an important driving force to promote sustainable economic development, so its importance is self-evident.

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