

OPINION

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Tax Base for Education Tax of Financial Companies and the Need for Profit and Loss Netting

Issues have been raised regarding the tax base calculation method for the financial company education tax, which reflects only gross gains regardless of overall profit and loss. For securities, foreign exchange, and derivatives, differences in calculated gains amounts occur even when the economic substance is the same, depending on various transaction methods. This has been partially addressed, with foreign exchange and “derivatives, etc.” transactions being taxed on net profit after profit and loss consolidation, while securities transactions include only trading gains in the tax base, creating differences in tax bases despite economically identical transactions.

Securities companies generate related gains and losses from securities and derivatives trading in the process of serving as liquidity providers in stock and bond markets and supplying various financial products such as customer RPs and derivative-linked securities. Considering the role banks play in foreign exchange markets and the large proportion of loan assets without profit and loss netting effects, the current recognition of profit and loss netting only for foreign exchange and “derivatives, etc.” excluding securities can be seen as creating tax equity issues between financial industry sectors.

When comparing the effects of securities profit and loss netting reflecting the education tax rate increase, the necessity for profit and loss consolidation increases further. In the current situation where a tax rate increase is scheduled, there is a need to actively review expanding the scope of profit and loss netting. To reduce abrupt changes in tax revenue, a phased approach could be considered: first introducing profit and loss netting for the securities sector, then pursuing profit and loss netting between securities and “derivatives, etc.” in the medium to long term while reviewing tax revenue impacts.

* All opinions expressed in this paper represent the author's personal views and thus should not be interpreted as Korea Capital Market Institute's official position.

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Financial and insurance business operators(hereinafter referred to as “financial companies”) are subject to the education tax under Article 3 of the Education Tax Act, with their gross gains serving as the tax base pursuant to Article 5. Specifically, gross gains includes interest, dividends, fees, guarantee fees, gains from trading or redemption of securities(hereinafter “trading gains”), insurance premiums, and other items prescribed in Article 4 of the Enforcement Decree. However, amid ongoing debate over the appropriateness of imposing the education tax on financial companies, the method of calculating the tax base has remained a persistent issue.¹⁾ This is because the calculation method is complex, gives rise to interpretative disputes, imposes significant compliance costs,²⁾ and reflects only gross gains as the tax base regardless of losses. In the case of securities, foreign exchange, and derivatives, differences in the calculated gains arise depending on the type of transaction, even when the economic substance is the same. To some extent, this has been addressed by including net income after profit and loss netting in the tax base for “derivatives, etc.”³⁾ and foreign exchange transactions. However, despite continued controversy, only trading gains are included in the tax base for securities transactions.⁴⁾

This paper examines not only the economic substance issues previously raised in relation to the calculation of the education tax base for financial companies, but also the role of securities firms in the capital market, and argues for the need to introduce profit and loss netting both among securities and between securities and “derivatives, etc.”

1) For an overview of the education tax and the controversies and issues regarding the appropriateness of imposing education tax on financial companies and the calculation method of taxable income, please refer to the following literature:

Lee, Young-han, Moon, Sung-hoon, Park, Hoon, and Cho, Hyung-tae, 2025, A Study on the Reform of Education Tax on Financial and Insurance Industries: Focusing on the Appropriateness of Taxation and Taxable Income Calculation Methods, Tax Accounting Research 42(1)(hereinafter Lee et al., 2025); Lee, Ye-ji, 2023, Issues and Improvement Tasks of Education Tax Taxable Income for Financial and Insurance Business Operators, National Assembly Research Service Research Report(hereinafter Lee, 2023).

2) This refers to all economic, temporal, and psychological costs other than the tax itself that taxpayers bear in the process of filing and paying taxes. A revenue calculation system different from corporate tax is required for calculating the education tax taxable income.

3) Article 4, Paragraph 1, Item 5 of the Enforcement Decree of the Education Tax Act applies loss offset under the concept of net profit, which includes gains and losses from transactions of "derivatives, etc.(including derivative-linked securities and derivatives)," foreign exchange trading gains and losses, and valuation gains and losses on monetary foreign currency assets and liabilities.

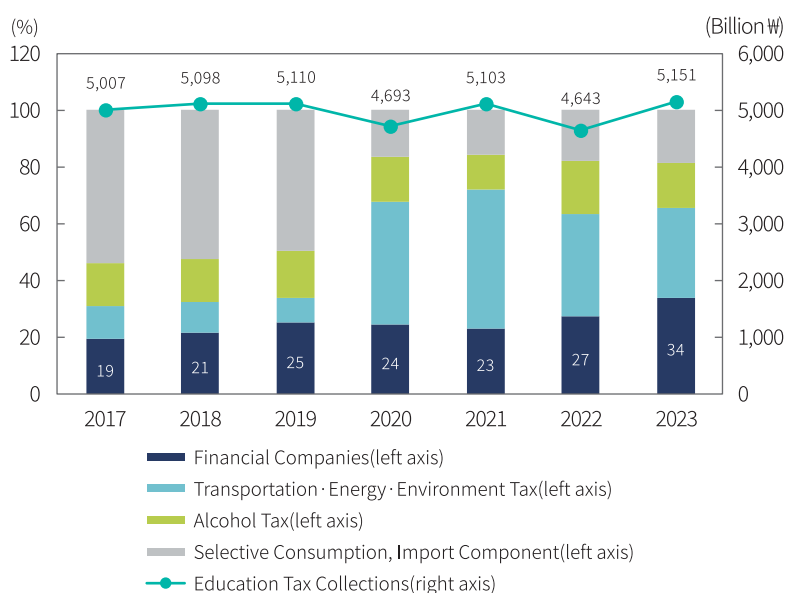
4) Lee et al., 2025; Lee, 2023.

The Tax Base for Education Tax on Financial Companies

The education tax imposed on financial companies adopts a special taxation method under Article 5, Paragraph 3 of the Education Tax Act, applying a tax rate of 0.5% with 'gain amount' as the tax base. This gain-based taxation appears to be based on the judgment that the gross gain amounts of financial companies have similar characteristics to the sales revenues of general manufacturing companies. However, due to the significantly different business models across industries, it is difficult to directly compare items on income statements, and as financial company transactions become more complex and financial product structures become more diverse, such comparisons have become impractical.

The gain amount items specified as tax bases in Article 5, Paragraph 3 of the Education Tax Act and Article 4, Paragraph 1 of the Enforcement Decree are structured to be taxed independently with limited profit and loss offsetting between items. As a result, even when net losses occur, education tax may be imposed as long as there are gains, potentially causing an imbalance in tax burden. Indeed, examining the trend in the proportion of education tax collection by tax source, the share of education tax collection from financial companies has continuously increased from 19% in 2017 to 34% in 2023(<Figure 1>).

<Figure 1> Collection Ratio of Education Tax by Tax Source



Note: Collection from Each Education Tax Source / Total Education Tax Collection

Source: Tax Statistics Information Service.

Need for netting: Among Securities, Between Securities and Derivatives

Regarding the tax base for the education tax, foreign exchange and "derivatives, etc." transactions are taxed on net profit calculated through profit and loss consolidation, while securities trading gains are taxed only on the profit amount. The issue that the tax base differs depending on the securities trading method despite identical economic substance has been raised in various literature.⁵⁾ In light of the role of securities firms in capital markets, including providing liquidity to stock and bond markets, supplying financial products, and enhancing market efficiency through arbitrage trading, we aim to discuss the necessity of introducing profit and loss netting between securities as well as between securities and "derivatives, etc."

(Liquidity Provision in Equity and Bond Markets)

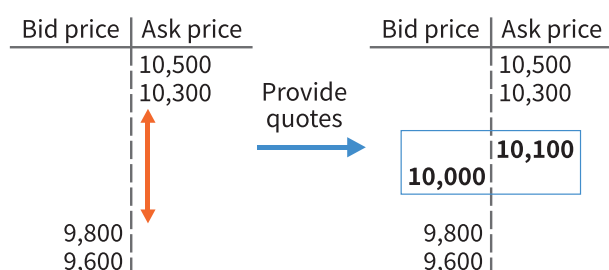
Securities companies serve as Market Makers or Liquidity Providers in securities markets for stocks, bonds, ETFs, and exchange-traded derivatives markets(individual stock futures and options, etc.), facilitating trading for investors through liquidity provision and enhancing price discovery functions.⁶⁾

Taking the stock market as an example, the left order book in <Figure 2> shows a situation where the bid-ask spread has widened, and securities companies provide liquidity by offering bid and ask prices at 10,000 won and 10,100 won respectively(<Figure 2> right). Assume that after a contract is executed and the securities company purchases 200 shares at 10,000 won, market prices change, leading to the sale of 100 shares at 9,900 won and 100 shares at 10,100 won(<Table 1>). While the trading profit subject to taxation is 100 shares $\times$ 100 won = 10,000 won, when offset against trading losses, the actual profit or loss is 0 won. Meanwhile, if 200 shares are simultaneously sold at 10,000 won, the education tax base is calculated as 0 won.

5) Lee et al., 2025; Lee, 2023.

6) Lee, Woo-Baek, 2022, Analysis of the Effectiveness of Market Makers' Liquidity Enhancement in the Stock Market, Korean Journal of Financial Studies 51(1); Lee, Woo-Baek, 2022, Performance Analysis of Liquidity Providers(LP) in the Korean Stock Market, Korean Journal of Financial Management 39(4); Ahn, Hee-Jun, Kim, Hak-Gyeom, Jang, Un-Ok, 2015, The Impact of Market Making Activities on Price Discovery Function and Liquidity in the Korean Treasury Bond Market, Korean Journal of Financial Studies 44(1).

<Figure 2> Liquidity Provision Example



<table 1> Education Tax Base Example

(Unit: KRW)		
Price/Shares	Gain	Loss
9,900/100		10,000
10,100/100	10,000	
Education Tax Base	10,000	

Note: Only gains included in tax base

In the bond market, including government bonds, securities companies play an important role in providing liquidity. Securities companies supply liquidity as Primary Dealers(PDs) in exchange markets and also account for a significant portion of bond trading in over-the-counter markets(government bonds and corporate bonds).⁷⁾ During the liquidity provision process, similar to the equity case, profit and loss offsetting is not permitted for bond transactions that are economically equivalent in substance, which may result in different education tax bases. This issue can also arise when securities companies perform roles in corporate bond issuance and underwriting, as they engage in bond trading.⁸⁾ Therefore, considering securities companies' role in providing liquidity to bond markets and serving as channels for corporate financing, profit and loss offsetting for securities is necessary. Meanwhile, if securities companies' government bond trading shrinks due to increased education tax burden, liquidity deterioration in the government bond market may occur, which could negatively impact government bond market stability through rising government bond interest rates or increased volatility.⁹⁾ This could also lead to higher government bond funding costs.

7) Over the past 10 years, securities companies have averaged approximately 80% of bond trading in both exchange and over-the-counter markets(Exchange trading: Korea Exchange, OTC trading: Korea Financial Investment Association Bond Information Center).

8) As an example of bond underwriting, if B Securities underwrites a KRW 100 billion bond issuance for A Electronics and takes on KRW 20 billion in unsold portions, then subsequently sells KRW 10 billion at KRW 10.5 billion and the remaining KRW 10 billion at KRW 9.5 billion, only the trading profit of KRW 500 million would be included in B Securities' education tax base without profit and loss offsetting(case restructured from Lee Young-han et al.(2025) p. 172).

9) Kim Phil-gyu and Jung Hwa-young, 2023, "Current Status and Liquidity Analysis of Korea's Government Bond Secondary Market," Korea Capital Market Institute Research Report 23-10.

(Financial Product Supply)

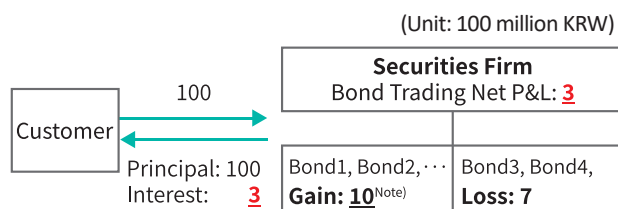
Securities firms supply various financial products according to investor demand, with representative examples being customer RPs(including CMA RPs) that have a profit structure similar to deposits, and derivative-linked securities as investment products. To manage funds raised through product sales, securities firms purchase bonds and provide liquidity in the bond market through active trading based on these holdings. First, looking at <Figure 3> as an example of customer RPs, the firm pays 300 million won as interest to customers from the aggregate profit and loss of 300 million won obtained by managing bonds with various credit ratings and maturities using 10 billion won received from customers. If bond trading gains(1 billion won) and trading losses(700 million won) occur during this process,¹⁰⁾ the trading gains of 1 billion won, rather than the aggregate profit and loss of 300 million won, becomes the taxable base for education tax.

As an example of derivative-linked securities, assume an index-linked ELS with 10 billion won in issuance is redeemed with a 10% coupon, resulting in an ELS redemption loss of 1 billion won. Index-linked ELS are typically managed with derivatives such as futures and bonds. Similar to the customer RP case, assume bond trading gains and losses of 1 billion won and 700 million won respectively, and derivative product aggregate profit and loss of 800 million won(<Table 2>). In <Table 2>, the shaded portion representing profit amounts corresponds to the education tax taxable base. According to Article 4 of the Enforcement Decree of the Education Tax Act, ELS redemption losses and derivative product gains and losses are subject to profit and loss offsetting as "derivatives, etc.," resulting in a taxable base of 0 won.¹¹⁾ However, the 1 billion won in bond trading gains, which cannot be offset, becomes the final taxable base separately, which is 900 million won more than the net profit and loss of 100 million won from related transactions. This case suggests that it would be reasonable to apply profit and loss offsetting among securities as well as between "derivatives, etc." and securities, similar to how profit and loss offsetting is applied between foreign exchange and "derivatives, etc."

10) For example, profits may occur in short-term bonds while losses occur in long-term bonds. Additionally, when conducting bond replacement trading, losses may occur on sold bonds while profits may arise when subsequently selling replacement bonds that were purchased.

11) Since the aggregate profit and loss from "derivatives, etc." is $-1 \text{ billion won} + 800 \text{ million won} = -200 \text{ million won}$, representing a loss, the taxable base for this item becomes 0 won.

<Figure 3> Example of Bond Trading for Customer RP



Note: Gain subject to Education Tax

<Table 2> ELS Redemption¹⁾ Example

(Unit: 100 million KRW)

Trades		P/L ³⁾	Gain ⁴⁾	Loss ⁵⁾
ELS Redem: 110		-10	0(-2)	
Hedge Trade	Derivatives ²⁾	8		
	Bond Trading	3	10	7
Net Gain/Loss		1		

Note: 1) Assume that ELS is redeemed with a 10% coupon

2) Back-to-back hedge: equity swap/ Self-hedge: futures and other derivatives

3) Net Gain/Loss

4) Subject to education tax base; ELS and derivatives qualify for netting as 'derivatives, etc.'

5) ELS and derivatives: Net gain/loss only

(Arbitrage)

Between spot and futures widens, spot-futures arbitrage occurs, normalizing spot and futures prices in the market. This spot-futures arbitrage enhances market efficiency, but is inevitably affected by transaction costs since profits arise when the spot-futures price divergence exceeds transaction costs. As an example from the equity market, after imposing transaction taxes on arbitrage trading by Korea Post in the past, arbitrage trading volume plummeted sharply, but recovered to previous levels after the transaction tax was exempted again.¹²⁾ The education tax system, which prevents profit and loss offsetting between securities and derivatives(futures), has the effect of increasing transaction costs, and if this leads to reduced arbitrage trading, it can negatively impact market efficiency.

Assessment of Tax Equity across Financial Sectors

<Table 3> compares representative customer products and operations between securities firms and banks. First, looking at principal-guaranteed products, banks primarily invest funds raised through deposits in loan assets. Since loan assets generate only interest income until maturity without trading, there is no profit and loss netting effect. However, as examined

12) Kim Jun-seok, 2019, The Significance of Securities Transaction Tax Reduction and Future Tasks, Capital Market Focus No. 2019-08(Figure 1).

earlier, securities firms operate customer RPs with bonds, resulting in a mixture of trading gains and losses, which creates significant differences in education tax depending on whether profit and loss netting is applied to securities.

Next, banks' customer hedging product, currency forwards, are operated with foreign exchange and derivatives, and according to Article 4 of the Enforcement Decree of the Education Tax Act, profit and loss netting applies to both foreign exchange and "derivatives, etc.(including currency forwards)" gains and losses. In contrast, for securities firms' ELS, only ELS and derivatives fall under "derivatives, etc." where profit and loss netting applies, while individual securities trading gains are taxed separately. Therefore, even when ELS hedging is performed accurately, education tax is incurred unlike in the case of currency forwards.

Additionally, as examined earlier, the market-making and liquidity provision roles that securities firms perform in securities markets can be understood in the same context as the roles banks perform in foreign exchange markets.¹³⁾ While profit and loss netting is recognized for foreign exchange and "derivatives, etc." trading gains and losses, profit and loss netting is not recognized for securities.

Thus, education tax equity issues may arise due to differences in major products and operating assets between financial industry sectors, and to resolve equity issues, it is necessary to expand the scope of profit and loss netting to include securities.

<Table 3> Major Retail Products: BK(Banks) vs. SF(Securities Firms)

	Sec.	Product	Invested Assets	P&L composition	Netting	Need for Netting
Principal Protected Product	BK	Deposit	Loan	Interest	×	No need
	SF	Customer RP	Bond	Bond trading	×	Need for netting among securities
Invest /Hedge Product	BK	Currency forward	FX Derivatives	FX trading, Deriv. trading	○	Already netted
	SF	ELS	Stock · Bond Derivatives	Stock · Bond trading, Deriv. trading	△ ^{Note)}	Need for Inter-securities Securities-derivatives

Note: Only ELS and derivatives are classified as 'derivatives, etc.' for which gain/loss netting is permitted.

13) Banks provide foreign exchange transactions for import-export companies and currency hedging transactions such as currency forwards.

Analysis of Education Tax Rate Increase Impact

The government recently announced plans to establish a new tax bracket for financial companies with education tax bases exceeding KRW 1 trillion and increase the tax rate from 0.5% to 1%.¹⁴⁾ This analysis aims to compare the effects of profit and loss offsetting following the tax rate increase, focusing solely on the securities segment. While there are limitations in identifying securities trading gains, which constitute the education tax base, we attempt to approximate these figures using securities disposal gains and losses from income statements.¹⁵⁾

<Table 4> presents the results of calculating the tax base and education tax using securities-related disposal gains and losses from the 2024 income statements of three securities companies.¹⁶⁾ Although Company B's actual net profit after offsetting(KRW 299.5 billion) exceeds Company A's(KRW 192.1 billion), when considering only trading gains without offsetting, Company A's education tax amounts to KRW 12.74 billion under the current tax rate, which is KRW 7.49 billion higher than Company B's education tax of KRW 5.25 billion. Under the proposed amendment, Company A and Company B's education taxes would be KRW 20.49 billion and KRW 5.51 billion respectively, widening the gap to KRW 14.98 billion. Meanwhile, Company C, despite incurring a loss of KRW 130.1 billion after profit and loss offsetting, faces an education tax of KRW 4.04 billion based on trading gains of KRW 808 billion as the tax base. If profit and loss offsetting were applied, the education taxes for Companies A, B, and C would be KRW 0.96 billion, KRW 1.5 billion, and KRW 0 billion, respectively.

Since other revenue items are included, the actual impact of establishing the new tax bracket exceeding KRW 1 trillion(1% tax rate) will likely be greater than the securities-only scenario(<Table 4>). As examined earlier, considering the role that securities companies play in capital markets and their economic substance, the need for profit and loss offsetting on securities becomes even more critical with such tax rate increases.

14) Ministry of Strategy and Finance, August 1, 2025, Public Notice No. 2025-162.

15) Under Article 5, Paragraph 3 of the Education Tax Act, capital gains on securities are calculated by subtracting acquisition costs(purchase price plus incidental expenses) from the sale proceeds for tax purposes, whereas disposal gains in financial statements are calculated by subtracting book value. Lee Young-han et al.(2025) estimated the impact of securities gain/loss netting using financial statement data, noting that caution is needed in interpretation. This paper follows the same methodology.

16) Examples include Company A with large trading gains, Company B with large net gains and losses, and Company C with net losses.

<Table 4> Case Study: Education Tax Calculation for Securities¹⁾

(Unit: 100 million KRW)

Firms	Disposal Gain ²⁾ ①	Disposal Loss ³⁾ ②	Net P/L (③=①-②)	Education Tax (①×0.5%)	Proposed Tax Rate Increase ⁴⁾	With netting (③×0.5%)
A	25,487	23,566	1,921	127.4	204.9	9.6
B	10,507	7,512	2,995	52.5	55.1	15
C	8,080	9,381	-1,301	40.4	40.4	0

Note: 1) There are differences between securities disposal gains/losses under corporate accounting and capital/redemption gains under education tax law.

2) Securities disposal gains(FVPL, FVOCI) serve as approximation for tax base gains

3) Securities disposal losses(FVPL, FVOCI) serve as approximation for capital /redemption losses

4) 1% tax rate applies to tax base gains exceeding KRW 1 trillion

Source: Annual business reports(2024)

Conclusion

This paper examined the role of securities companies in capital markets, including liquidity provision in securities markets and financial product offerings, while presenting the need to introduce profit and loss offsetting between securities and "derivatives, etc." along with profit and loss offsetting among securities when calculating the tax base for education tax. Subsequently, we examined that education tax equity issues may arise through comparisons of major products and operating assets across financial industry sectors. Finally, by comparing the effects of securities profit and loss offsetting reflecting the scheduled education tax rate increase, we found that the necessity for profit and loss offsetting increases further.

Issues regarding the education tax base calculation method for financial companies that reflects only revenue amounts have been continuously raised, and in the current situation where a tax rate increase is scheduled, there is a need to actively review expanding the scope of profit and loss offsetting. To reduce drastic changes in tax revenue, a phased approach could be considered: first introducing profit and loss offsetting in the securities sector, then pursuing profit and loss offsetting between securities and "derivatives, etc." in the medium to long term while reviewing tax revenue impacts.