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ASSESSING TAX CONSEQUENCES AND RISKS OF ANALYTICAL MISINTERPRETATION OF BOOK-TAX DIFFERENCES IN ARMENIAN ELECTRICITY-SECTOR COMPANIES

Alvard Sargsyan
Armenian State University of Economics
Ph.D. in Economics, Associate Professor
alvard.sargsyan@asue.am
ORCID ID: https://orcid.org/0000-0001-8981-8981

Ani Serobyan*
Armenian State University of Economics, Lecturer
ani.serobyan@asue.am
ORCID ID: https://orcid.org/0009-0000-5601-4012

Abstract: This study examines the tax consequences of book-tax differences and the risk of analytical misinterpretation using 2016–2025 data from three Armenian electricity-sector companies. The empirical design combines effective tax rate reconciliation, cross-document reconciliation of current tax, a multi-stage reconciliation of net deferred tax positions, gross-versus-net deferred tax analysis, and a descriptive sensitivity measure for the use of carried-forward tax losses. The findings show that extreme effective tax rates should not be treated as stand-alone evidence of tax aggressiveness or elevated tax risk. In 5 of 30 company-year observations (16.7%), the year-to-year change in the net deferred tax position cannot be fully reconciled to deferred tax recognized in profit or loss alone. In 2022, High Voltage Electric Networks

reported a net deferred tax liability of AMD 44.9 million while its gross deferred tax asset and liability balances totaled AMD 3.6 billion, illustrating the informational limitation of net presentation. In 8 of 15 observations involving the use of prior-period tax losses (53.3%), separating the carried-forward tax effect changes the inferred direction of the book-tax difference. The findings support a distinction between tax risk and the risk of analytical misinterpretation and provide the basis for a multi-stage book-tax reconciliation framework.

Keywords: book-tax differences, corporate income tax, effective tax rate, deferred tax, tax-loss carryforwards, tax risk, reconciliation

JEL codes: M41, H25, Q40

Research aims: To identify the informational limitations that arise when the effective tax rate, current tax, the net deferred tax position, and prior-period tax losses are interpreted in isolation, using evidence from Armenian electricity-sector companies, and to develop a reconciliation approach that distinguishes genuine tax uncertainty from risks of misinterpretation caused by data presentation, period attribution, or restatement.

Research novelty: The article (a) distinguishes year-to-year from within-year reconciliation of movements in the net deferred tax position; (b) directly compares gross deferred tax assets and liabilities with the resulting net position; and (c) proposes a descriptive indicator ($S^{LU}c$) that captures the sensitivity of the book-tax difference to the temporal attribution of prior-period tax-loss utilization.

Introduction

Research on book-tax differences is often confined to measuring the numerical gap between accounting profit and taxable profit or to examining the effective tax rate. Although these measures reveal the magnitude of the final deviation, they do not resolve two related analytical problems. The first concerns the composition of the tax effect: the same net outcome may arise from different recognition channels, effects carried forward from prior periods, and deferred tax assets and liabilities that offset one another. The second concerns interpretation, because a numerical deviation alone does not reveal whether it reflects tax-law provisions, a financial-statement restatement, the utilization of prior-period tax losses, a deferred-tax item recognized outside profit or loss, or a change in the company's tax behavior.

The tax literature likewise cautions against mechanically interpreting individual indicators. Dyreng, Hanlon, and Maydew show that a single-year tax rate provides limited information about long-run tax behavior (Dyreng et al., 2008). Blouin emphasizes that a low effective tax rate is not, by itself, evidence of tax aggressiveness or elevated tax risk (Blouin, 2014). Neuman, Omer, and Schmidt conceptualize tax risk as uncertainty about future tax outcomes and distinguish it from tax avoidance, tax uncertainty, and general business risk (Neuman et al., 2020). Accordingly, book-tax indicators should not be interpreted as measures of tax risk without additional documentary and contextual evidence.

The objective of this article is to identify the informational limitations that arise when the effective tax rate, current tax, the net deferred tax position, and prior-period tax losses are interpreted in

isolation, and to develop a reconciliation approach that distinguishes genuine tax uncertainty from risks of analytical misinterpretation arising from presentation, period attribution, and restatement. The article makes three contributions. First, it distinguishes year-to-year from within-year reconciliation of movements in the net deferred tax position. Second, it directly compares gross deferred tax assets and liabilities with the net position. Third, it proposes a descriptive measure of the sensitivity of BTD to the temporal attribution of prior-period tax-loss utilization.

Literature Review and Regulatory Framework

IAS 12 Income Taxes distinguishes current tax from deferred tax. Temporary differences arise from differences between the carrying amounts of assets and liabilities and their tax bases, while a deferred tax asset for unused tax losses and tax credits is recognized only to the extent that it is probable that future taxable profit will be available against which they can be utilized (IFRS Foundation, n.d.). IAS 12 also requires a numerical reconciliation between tax expense and accounting profit and specifies the conditions under which deferred tax assets and liabilities may be offset (IFRS Foundation, n.d.). Thus, the standard itself distinguishes profit-level tax reconciliation, balance-sheet temporary differences, and their deferred-tax consequences. This distinction provides a methodological basis for keeping these analytical levels separate in empirical work.

A first strand of the literature on book-tax differences focuses on their magnitude, sources, and economic content. Manzon and

Plesko show that differences between financial and tax reporting arise from a limited set of factors that are nevertheless heterogeneous in economic substance, while also cautioning against indirectly reconstructing taxable income from financial-statement data (Manzon & Plesko, 2002). Lev and Nissim argue that the relation between taxable and accounting income may contain information about future earnings, but that its interpretation depends on the underlying components (Lev & Nissim, 2004). Hanlon and Heitzman's comprehensive reviews similarly show that tax-research measures capture different economic phenomena and cannot be used interchangeably without a clear definition of what each measure represents (Hanlon & Heitzman, 2010).

A second strand links the information content of BTDs and deferred-tax measures to earnings quality and financial-reporting judgments. Hanlon finds that company-year observations with large book-tax differences are, on average, associated with lower earnings persistence; however, this does not imply that every large BTD is evidence of tax aggressiveness or accounting distortion (Hanlon, 2005). Phillips, Pincus, and Rego show that deferred tax expense can, under certain conditions, provide incremental information for identifying particular forms of earnings management (Phillips et al., 2003). For the purposes of this article, these studies support treating BTD and deferred-tax measures as diagnostic signals that require source-level and documentary analysis, rather than as direct evidence of non-compliance.

A third strand addresses the measurement of tax avoidance, tax aggressiveness, and tax risk. Using long-run cash effective tax rates, Dyreng, Hanlon, and Maydew show that a single-year tax measure

provides only a limited view of long-run tax behavior (Dyreng et al., 2008). Frank, Lynch, and Rego document a positive association between tax-reporting aggressiveness and aggressive financial reporting, but their measure is model-specific and does not imply that any large BTD or low ETR can be equated with aggressive behavior (Frank et al., 2009). Blouin focuses on this measurement problem by distinguishing tax-planning aggressiveness from individual accounting indicators (Blouin, 2014). Neuman, Omer, and Schmidt, drawing on practitioner evidence, relate tax risk to uncertainty about future tax outcomes (Neuman et al., 2020).

A separate strand of deferred-tax research examines persistence, reversal, and decomposition by source. Görlitz and Dobler's systematic review shows that deferred-tax variables are frequently analyzed at aggregate gross or net levels, while only 13 of the studies they review decompose those variables by underlying source (Görlitz & Dobler, 2023). Chludek's empirical findings likewise document substantial persistence in deferred-tax balances and show that reversal patterns are not always directly observable from published IFRS data (Chludek, 2011). These findings are particularly relevant for capital-intensive companies, where opposing movements in long-lived assets, tax-loss carryforwards, and other sources can leave a net position relatively stable even when the underlying gross components change substantially.

The literature also highlights the methodological importance of data sources. Many empirical studies of book-tax differences infer taxable income from financial-statement disclosures, which can introduce measurement error because of reporting-scope differences, tax-loss carryforwards, prior-period adjustments, and

other items (Manzon & Plesko, 2002). This study mitigates that limitation by obtaining the tax result directly from the companies' corporate income tax computations and the financial result from audited financial statements. This approach makes it possible not only to measure the reported BTD, but also to separately identify the use of prior-period tax losses, cross-document differences in current tax, and restatements affecting deferred-tax balances.

The studies discussed above address related but distinct questions: the information content of BTDs, the measurement of tax behavior, the usefulness of deferred-tax information, tax risk, and the source composition of deferred-tax positions. In the literature reviewed, these strands are rarely integrated into a single reconciliation framework that simultaneously distinguishes cross-document discrepancies in current tax, year-to-year and within-year movements in the net deferred tax position, the gross DTA/DTL structure, and the effect of utilized tax-loss carryforwards. The research problem addressed in this article is formulated from this combined perspective.

Four methodological implications follow from the literature review. First, the effective tax rate and BTD should be interpreted in light of their underlying sources (Hanlon & Heitzman, 2010; Dyreng et al., 2008; Blouin, 2014; Manzon & Plesko, 2002). Second, net deferred-tax presentation is not a substitute for gross and source-level analysis (Görlitz & Dobler, 2023; Chludek, 2011). Third, tax aggressiveness and tax risk cannot be inferred from a single accounting indicator (Blouin, 2014; Neuman et al., 2020; Frank et al., 2009). Fourth, cross-document and temporal reconciliation become particularly important when prior-period tax

losses are utilized or comparative figures are restated. These implications determine the structure of the empirical analysis that follows.

Research Methodology and Data

The study uses the audited financial statements and corporate income tax computations of Armenian Nuclear Power Plant CJSC (ANPP), High Voltage Electric Networks CJSC (HVEN), and Yerevan Thermal Power Plant CJSC (Yerevan TPP) for 2016–2025. The ten-year period across three companies yields 30 company-year observations. The analysis follows a document-based reconciliation principle: a calculated difference is not interpreted as an error or a risk until it has been reconciled with the notes to the financial statements, the corporate income tax computation, and, where relevant, comparative figures reported in adjacent years.

The effective tax rate is calculated as total income tax expense or benefit divided by profit or loss before tax:

$$ETR(c,t) = TE(c,t) / PBT(c,t) \times 100 \quad (1)$$

where

TE is total income tax expense or benefit,

PBT is profit or loss before tax.

For loss years, the indicator is retained as a reconciliation ratio but is not interpreted as a conventional measure of tax burden. The deviation from the statutory rate is calculated as the difference between the ETR and the statutory rate applicable in the relevant year. Statutory corporate income tax rates and the legal basis for the tax computation are determined in accordance with the tax legislation of the Republic of Armenia in force for each period (Tax Code of the Republic of Armenia, 2016).

The difference between current income tax recognized in the financial statements and the current-year tax determined in the corporate income tax computation is measured as follows:

$$\Delta CT(c,t) = CTFS(c,t) - CTTR(c,t) \quad (2)$$

where

CTFS is current tax recognized in the financial statements,

CTTR is the current-year tax determined in the corporate income tax computation.

A non-zero difference is not treated, by itself, as an error, because the current-tax amount reported in the financial statements may include adjustments relating to prior periods.

For the net deferred tax position, the analysis distinguishes year-to-year from within-year reconciliation. Let NDTcl(c,t) denote the closing net deferred tax position for the current year, NDTop(c,t) the opening position reported for the current year, and NDTcl(c,t-1) the prior year's published closing position.

Then:

$$\Delta NDTinter(c,t) = NDTcl(c,t) - NDTcl(c,t\text{-}1) \quad (3)$$

$$OB(c,t) = NDTop(c,t) - NDTcl(c,t-1)$$

$$\Delta NDTwithin(c,t) = NDTcl(c,t) - NDTop(c,t) \quad (4)$$

Accordingly,

$$\Delta NDTinter(c,t) = \Delta NDTwithin(c,t) + OB(c,t). \quad (5)$$

This structure separates the movement recognized during the current year from any difference between the prior year's published closing balance and the opening balance reported in the current-year financial statements.

To assess the sensitivity of BTD to the temporal attribution of prior-period tax-loss utilization, the study applies the following descriptive indicator:

$$S^{LU}c = N^{c}sign / N^{cLU} \times 100 \quad (6)$$

where:

$S^{LU}c$ — the temporal-attribution sensitivity indicator for prior-period tax-loss utilization for company c;

$N^{c}sign$ — the number of years in which separating the effect of prior-period tax-loss utilization results in opposite signs for BTD^{0} and BTD^{R};

N^{cLU} — the number of years in which company c utilized tax losses carried forward from prior periods;

c — the company under study.

This indicator is not a measure of tax risk. It captures the frequency with which separating the effect of prior-period tax-loss utilization changes the directional interpretation of BTD in years when such losses are actually used. It therefore measures temporal-attribution sensitivity, not the magnitude of a tax liability or the riskiness of tax behavior.

Analytical Limitations of the Effective Tax Rate

Table 1 shows substantial year-to-year and cross-company variation in effective tax rates. The economic meaning of that variation, however, becomes clear only when the underlying tax-reconciliation items are examined. At ANPP in 2022, profit before tax was AMD 10,204,246 thousand. Applying the statutory 18% rate gives a tax amount of AMD 1,836,764 thousand. The net effect of non-taxable income and non-deductible expenses was AMD -

1,828,754 thousand, reducing total income tax expense to AMD 8,010 thousand and the ETR to approximately 0.08%. Although exceptionally low, this ETR is explained by the disclosed reconciling items and, by itself, does not indicate tax aggressiveness (ANPP, 2016–2025).

Table 1. Effective corporate income tax rates of the companies studied, 2016–2025 (%)

Source: *Authors' own work based on the companies' audited financial statements (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).*

Year	Statutory rate	ANPP	HVEN	Yerevan TPP
2016	20.0	3.44*	38.97	-63.92*
2017	20.0	10.36*	61.69	9.02*
2018	20.0	12.24*	18.52	96.14
2019	20.0	-5.66*	37.40	50.95
2020	18.0	2.92*	-7.99*	-5.68*
2021	18.0	0.63*	0.57	-2.22
2022	18.0	0.08	3.39	4.14
2023	18.0	-2.34*	34.89	13.31
2024	18.0	-0.55*	7.64	-121.27
2025	18.0	28.86*	28.34	12.56

*Note: * denotes years with a pre-tax loss.*

HVEN's 2017 figures illustrate the opposite case. On pre-tax profit of AMD 3,000,466 thousand, the statutory 20% rate implies tax of AMD 600,093 thousand. A net positive reconciling effect of AMD 1,250,864 thousand from non-deductible expenses and non-taxable income increased the ETR to 61.69%. In 2022, with PBT of AMD 21,916,298 thousand and a statutory rate of 18%, a net

reconciling effect of AMD -3,202,228 thousand reduced the ETR to 3.39%; in 2023, a positive reconciling effect increased it to 34.89%. High and low ETRs therefore need not have the same economic explanation (HVEN, 2016–2025).

Yerevan TPP's ETR of -121.27% in 2024 further illustrates the limits of interpreting the ratio in isolation. With pre-tax profit of AMD 860,420 thousand, a negative reconciling effect of approximately AMD 1,198,282 thousand resulted in an income tax benefit of AMD 1,043,406 thousand. When a relatively large tax expense or benefit is divided by a comparatively small PBT, the ETR can take extreme values. Accordingly, this article treats the ETR as a reconciliation ratio rather than as a stand-alone measure of tax risk. This interpretation is consistent with Blouin (2014) and Dyreng et al. (2008) (Yerevan TPP, 2016–2025).

Effects of Restatements and Cross-Document Reconciliation of Current Tax

The ANPP case shows that a restatement can change not only the magnitude of an indicator but also its sign. When the 2019 corporate income tax computation is reconciled with the financial statements as originally issued for 2019, the ETR is -5.66%; using the restated 2019 comparative figures reported in the 2020 financial statements yields an ETR of approximately +0.59%. The two calculations answer different comparison questions and neither is necessarily erroneous.

Table 2. Effect of the restatement on ANPP's 2019 income-tax indicators

Source: *Authors' own work based on ANPP's audited financial statements for 2019 and 2020 (ANPP, 2016–2025).*

Indicator	2019 financial statements as originally issued	2019 comparative restated in the 2020 financial statements	Change
Loss before income tax, thousand AMD	-1,289,825	-1,752,378	-462,553
Income tax expense/(income), thousand AMD	72,946	-10,314	-83,260
Effective tax rate, %	-5.66	0.59	sign reversal

For same-period document reconciliation, the financial and tax documents originally issued for the same reporting period should be matched. For longitudinal financial analysis, restated comparatives should be considered separately and the resulting comparability adjustment should be documented (ANPP, 2016–2025).

Table 3. Selected differences between current tax reported in the financial statements and in the corporate income tax computation (thousand AMD)

Source: *Authors' own work based on audited financial statements and corporate income tax computations (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).*

Company	Year	Current tax per financial statements	Current-year tax per corporate income tax computation	ΔCT
ANPP	2016	568,619	489,426	+79,193
ANPP	2019	116,055	132,992.227	-16,937.227
ANPP	2020	16,876	0	+16,876
ANPP	2021	60	0	+60
HVEN	2016	73,971	70,249	+3,722

The current-tax reconciliation further shows that a numerical discrepancy must first be explained at the document level. ANPP's 2016 difference of AMD 79,193 thousand corresponds to an adjustment relating to the prior year's current tax. HVEN's 2016 difference of AMD 3,722 thousand is likewise disclosed in the financial statements as a prior-period reserve adjustment. A non-zero ΔCT may therefore reflect different period attribution rather than a computational error in the current year's tax. For control purposes, the reconciliation should therefore distinguish at least the current-year tax amount from prior-period adjustments (ANPP, 2016–2025; HVEN, 2016–2025).

Reconciliation of Year-to-Year Movements in the Net Deferred Tax Position

Table 4. Observations in which the change in the net deferred tax position is not fully explained by deferred tax recognized in profit or loss

Source: *Authors' own work based on the companies' financial statements (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025). Rounding tolerance: ±1 thousand AMD.*

Company	Year	Additional reconciling component, thousand AMD	Nature
ANPP	2017	+1,363,006	Opening-balance difference / restatement
ANPP	2019	-117,506	Opening-balance difference
ANPP	2020	-83,260	Opening-balance difference / restatement
Yerevan TPP	2017	-362,122	Deferred-tax effect recognized in equity
Yerevan TPP	2020	-141,708	Restated opening balance

In 25 of 30 company-year observations (83.3%), the year-to-year change in the net deferred tax position reconciles to deferred tax recognized in profit or loss, subject to the stated rounding tolerance. In the remaining five observations (16.7%), an additional reconciling component is required. The sum of the absolute values of these five components is AMD 2,067,602 thousand, of which

approximately 65.9% relates to ANPP's 2017 opening-balance difference alone. Thus, a small number of observations can have a disproportionately large effect on longitudinal comparability (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).

The accounting nature of these five exceptions is not uniform. Yerevan TPP's 2017 component of AMD -362,122 thousand is a deferred-tax effect recognized in equity rather than in profit or loss. The remaining four cases relate to opening-balance differences or restatements. It is therefore necessary to distinguish an effect recognized outside profit or loss from an adjustment required for year-to-year comparability. Otherwise, a restated opening balance may be misinterpreted as a current-period deferred-tax movement (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).

These findings support a simple but important reconciliation chain: prior-year closing balance → current-year opening balance → current-year recognized movement → current-year closing balance. This sequence separates two questions: first, whether the within-year movement reconciles to deferred tax recognized in profit or loss and other recognition channels; and second, whether the prior year's published closing balance agrees with the opening balance reported in the current-year financial statements. This distinction is one of the article's central methodological contributions.

Informational Limitations of Net Presentation

Table 5. Selected comparisons of gross and net deferred tax positions

Source: *Authors' own work based on audited financial statements (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).*

Company, year	DTA	DTL	DTA + DTL	Absolute net position	Net / gross, %
HVEN, 2022	1,783,873	1,828,814	3,612,687	44,941	1.24
ANPP, 2016	2,543,552	5,096,620	7,640,172	2,553,068	33.42
ANPP, 2017	854,781	3,460,003	4,314,784	2,605,222	60.38
ANPP, 2025	721,137	654,677	1,375,814	66,460	4.83

HVEN's 2022 data provide a particularly clear illustration of the informational limitation of net presentation. With a DTA of AMD 1,783,873 thousand and a DTL of AMD 1,828,814 thousand, the net DTL was only AMD 44,941 thousand, or 1.24% of the combined gross DTA and DTL balances of AMD 3,612,687 thousand. Moreover, AMD 1,722,797 thousand of the DTA related to carried-forward tax losses, whereas the main DTL components were AMD 1,440,096 thousand related to property, plant and equipment and intangible assets and AMD 388,718 thousand related to loans and borrowings. A small net balance therefore does not imply that the underlying deferred-tax positions are small or analytically unimportant (HVEN, 2016–2025).

The comparison of ANPP's 2016 and 2017 figures illustrates movement-information loss. The net DTL increased by only about 2.0%, from AMD 2,553,068 thousand to AMD 2,605,222 thousand, while the combined gross DTA and DTL balances declined from AMD 7,640,172 thousand to AMD 4,314,784 thousand, a decrease of approximately 43.5%. The DTA fell by about 66.4% and the DTL by about 32.1%. A nearly stable net position therefore coexisted with substantial changes in the underlying gross components (ANPP, 2016–2025).

The cross-company comparison leads to the same conclusion. The absolute net positions of ANPP in 2025 and HVEN in 2022 are relatively close, at AMD 66,460 thousand and AMD 44,941 thousand, respectively, yet HVEN's combined gross DTA and DTL balances are approximately 2.63 times those of ANPP. Net presentation therefore obscures three dimensions of information: gross scale, source composition, and movement. This interpretation is consistent with Görlitz and Dobler's emphasis on source decomposition (Görlitz & Dobler, 2023) (ANPP, 2016–2025; HVEN, 2016–2025).

These findings do not imply that net presentation permitted under IAS 12 is inappropriate from an accounting perspective. Paragraph 74 specifies the conditions under which deferred tax assets and liabilities may be offset (IFRS Foundation, n.d.). The analytical issue is different: even when net presentation is accounting-appropriate, management and analytical purposes may require separate disclosure or internal tracking of the gross DTA, gross DTL, their principal sources, and their annual movements.

Temporal Sensitivity of BTD to Prior-Period Tax-Loss Utilization

Table 6. Temporal-attribution sensitivity of BTD to prior-period tax-loss utilization

Source: *Authors' own work based on corporate income tax computations (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).*

Company	Years with prior-period tax-loss utilization	Years with a BTD sign change	$S^{LU}c$, %	Prior-period tax losses utilized, thousand AMD
ANPP	6	3	50.0	53,397,233.707
HVEN	4	2	50.0	27,306,127.015
Yerevan TPP	5	3	60.0	43,046,411.616
Total	15	8	53.3*	123,749,772.338

**The aggregate indicator is calculated as 8/15 and is not the simple average of the company-level indicators.*

Across all 30 company-year observations, BTD^0 and BTD^R have opposite signs in 8 cases, giving a full-sample prevalence of 26.7%. Prior-period tax losses were actually utilized in 15 observations; in 8 of those cases (53.3%), separating their effect changed the inferred direction of BTD. The company-level sensitivity is 50.0% for ANPP, 50.0% for HVEN, and 60.0% for Yerevan TPP. The distinction matters because 8/30 measures prevalence in the full sample, whereas 8/15 measures sensitivity conditional on prior-period tax-loss utilization (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).

The economic interpretation of the indicator is straightforward. Utilization of a tax loss carried forward from a prior period is not a

new current-period book-tax recognition difference. If that carried-forward effect is included in the source-level interpretation of the current year's BTD, a temporal-attribution problem arises. $S^{LU}c$ therefore measures the frequency with which failure to separate the carried-forward tax effect can alter the inferred direction of the current year's BTD; it does not measure the magnitude of a tax liability or the company's tax risk.

The amount of tax losses utilized does not, by itself, determine the sensitivity measure. ANPP utilized the largest cumulative amount over 2016–2025, AMD 53,397,233.707 thousand, yet its $S^{LU}c$ is 50.0%. Yerevan TPP utilized a smaller cumulative amount, AMD 43,046,411.616 thousand, but its sensitivity measure reaches 60.0%. Temporal-attribution sensitivity therefore depends not only on the amount of loss utilization but also on the relationship among PBT, the tax result before loss offset, and the final tax result (ANPP, 2016–2025; HVEN, 2016–2025; Yerevan TPP, 2016–2025).

Distinguishing Tax Risk from the Risk of Analytical Misinterpretation

The ETR, ΔCT, net-to-gross deferred-tax comparisons, NDT reconciliation differences, and $S^{LU}c$ calculated in this article primarily characterize the sensitivity of data reconciliation and interpretation. They should not be interpreted as direct measures of a company's tax risk. As discussed by Neuman, Omer, and Schmidt, tax risk concerns uncertainty about future tax outcomes (Neuman et al., 2020). Accordingly, a high ETR, a large BTD, or large gross deferred-tax balances may warrant further

investigation, but none of these measures, on its own, establishes tax non-compliance or aggressive tax behavior.

ANPP and HVEN disclose tax-related uncertainties arising from changes in Armenian tax legislation, the possibility of differing interpretations of particular provisions, and the enforcement powers of the tax authorities. A comprehensive quantitative assessment of tax risk would additionally require data on tax audits, additional tax assessments, disputes, penalties, uncertain tax positions, and internal tax-control processes. The dataset used in this study does not contain those items comprehensively; accordingly, the article does not construct a composite tax-risk index (ANPP, 2016–2025; HVEN, 2016–2025).

The risk of analytical misinterpretation, by contrast, can be examined with the available data. It appears in at least four forms: temporal-attribution risk, when a prior-period tax loss is attributed to the current year's BTD; the informational limitation of net presentation, when offsetting obscures large gross DTA and DTL balances; movement-attribution risk, when the entire change in NDT is equated with deferred tax recognized in profit or loss; and comparability risk, when originally issued and restated data are combined without a consistent data-selection rule.

This distinction also has managerial implications. Tax-risk management should address legal uncertainty and uncertainty about future tax outcomes, whereas a book-tax reconciliation system should prevent misclassification, period misattribution, and loss of source-level information. The two objectives are related but require different control tools. The former depends on information about tax positions, audits, disputes, and legal uncertainty; the

latter depends on a clear reconciliation map, source-level detail, and an auditable temporal trail.

Discussion and Practical Implications

The findings support a multi-stage approach to reconciling financial and tax information. At the first level, tax expense should be reconciled to accounting profit using the applicable statutory rate, with reconciling items disclosed separately. At the second level, current tax reported in the financial statements should be reconciled to the current-year corporate income tax computation, with prior-period adjustments identified separately. At the third level, the deferred-tax position should be reconciled through the sequence of prior-year closing balance, current-year opening balance, current-year recognized movement, and current-year closing balance. At the fourth level, gross and source-level detail should be retained alongside the net DTA/DTL position. At the fifth level, the utilization of prior-period tax losses should be separated from the current year's BTD.

Such a system does not reduce tax risk itself; rather, it reduces the risk of mismeasurement and misinterpretation. For example, without a gross breakdown, HVEN's small net DTL in 2022 could be read as evidence of a small underlying deferred-tax position, whereas gross DTA and DTL balances totaling more than AMD 3.6 billion reveal a substantially different structure. Similarly, the sign reversal in ANPP's 2019 ETR could be misattributed to a change in tax behavior if the restatement were ignored. In the BTD analysis, failure to separate prior-period tax-loss utilization changed the directional interpretation in 8 of the 15 relevant observations.

From a methodological perspective, the results support moving from reliance on a single aggregate indicator toward multi-level, source-based, and temporal reconciliation of book-tax information. This is particularly relevant for deferred taxes, for which source-level decomposition remains comparatively underdeveloped in the empirical literature (Görlitz & Dobler, 2023). Because the study uses a multiple-case design, the results do not support statistical generalization to the entire Armenian electricity sector. They do, however, support analytical generalization by showing how the same methodological issues arise in different organizational contexts.

Conclusion

1. The effective tax rate should be interpreted together with the underlying tax-reconciliation items. The examples of ANPP's 0.08%, HVEN's 61.69%, and Yerevan TPP's -121.27% show that extreme values can arise from different economic mechanisms and do not, by themselves, indicate tax aggressiveness or elevated tax risk.

2. Financial-statement restatements and differences in period attribution between financial reporting and tax computations create a cross-document comparability problem. The change in ANPP's 2019 ETR from -5.66% to approximately +0.59% demonstrates why originally issued and subsequently restated data should be kept distinct.

3. In 5 of 30 observations (16.7%), the year-to-year change in the net deferred tax position is not fully explained by deferred tax recognized in profit or loss alone. Other recognition channels and

opening-balance restatements therefore need to be identified separately.

4. A net deferred tax position does not provide full visibility into the scale and source composition of the underlying gross balances. HVEN's 2022 net DTL of AMD 44,941 thousand was associated with combined gross DTA and DTL balances of AMD 3,612,687 thousand, providing the clearest example in the dataset.

5. The effect of prior-period tax-loss utilization should be separated from the current year's BTD. In 8 of the 15 observations involving tax-loss utilization (53.3%), this separation changes the inferred direction of BTD.

6. Tax risk and the risk of analytical misinterpretation are distinct analytical concepts. The former concerns uncertainty about future tax outcomes; the latter concerns the possibility of incorrect interpretation arising from classification, presentation, comparability, or temporal attribution of financial and tax data.

7. For internal control purposes, the study proposes a multi-stage reconciliation chain covering: accounting profit and tax expense; current tax reported in the financial statements and in the corporate income tax computation; the prior-year closing and current-year opening NDT balances; current-year recognized deferred-tax movement; gross DTA and DTL balances and their sources; and the separate temporal effect of prior-period tax-loss utilization.

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ՀՀ ԷԼԵԿՏՐԱԷՆԵՐԳԵՏԻԿ ՈԼՈՐՏԻ ԸՆԿԵՐՈՒԹՅՈՒՆՆԵՐԻ ՀԱՇՎԱՊԱՀԱԿԱՆ ԵՎ ՀԱՐԿԱՅԻՆ ՇԱՀՈՒՅԹՆԵՐԻ ՏԱՐԲԵՐՈՒԹՅՈՒՆՆԵՐԻ ԳՆԱՀԱՏՈՒՄԸ. ՀԱՐԿԱՅԻՆ ՀԵՏԵՎԱՆՔՆԵՐ ԵՎ ՎԵՐԼՈՒԾԱԿԱՆ ՌԻՍԿԵՐ

Ալվարդ Սարգսյան
Հայաստանի պետական տնտեսագիտական համալսարան
տ.գ.թ., դոցենտ

Անի Սերոբյան
Հայաստանի պետական տնտեսագիտական համալսարան
դասախոս

Բանալի բառեր – հաշվապահական և հարկային շահույթների տարբերություններ, շահութահարկ, շահութահարկի արդյունավետ դրույքաչափ, հետաձգված հարկ, փոխանցվող հարկային վնասներ, հարկային ռիսկ, վերլուծական սխալ մեկնաբանում, համադրում:

Հոդվածի նպատակն է գնահատել հաշվապահական և հարկային շահույթների տարբերությունների հարկային հետևանքները, ինչպես նաև դրանց վերլուծական սխալ մեկնաբանման ռիսկերը՝ Հայաստանի էլեկտրաէներգետիկ ոլորտի երեք ընկերությունների 2016–2025 թվականների ֆինանսական և հարկային տվյալների հիման վրա:

Հետազոտության մեթոդաբանությունը ներառում է շահութահարկի արդյունավետ դրույքաչափի հաշվարկը, տարբեր հաշվետվություններում ներկայացված ընթացիկ շահութա-

հարկի ցուցանիշների փոխադարձ համադրումը, հետաձգված հարկային զուտ դիրքերի բազմափուլ վերլուծությունը, ինչպես նաև նախորդ շրջաններից փոխանցված հարկային վնասների օգտագործման ազդեցության գնահատումը:

Հետազոտության արդյունքները ցույց են տալիս, որ շահութահարկի արդյունավետ դրույքաչափի ծայրահեղ արժեքները ինքնին չեն կարող դիտարկվել որպես ագրեսիվ հարկային վարքագծի կամ բարձր հարկային ռիսկի ապացույց: 2022 թվականին «ԲԷՑ» ՓԲ ընկերությունը ներկայացրել է 44,9 մլն ՀՀ դրամի հետաձգված հարկային զուտ պարտավորություն, մինչդեռ հետաձգված հարկային ակտիվների և պարտավորությունների համախառն մնացորդների հանրագումարը կազմել է 3,6 մլրդ ՀՀ դրամ: Նախորդ ժամա-նակաշրջաններից փոխանցված հարկային վնասների օգտագործման հետ կապված 15 դիտարկումներից 8-ում՝ 53,3 տոկոսում, այդ վնասների հարկային ազդեցության առանձնացումը փոխում է ֆինանսական և հարկային շահույթների տարբերության ուղղության վերաբերյալ վերլուծական եզրահանգումը:

Ստացված արդյունքները հիմնավորում են հարկային ռիսկի և հարկային ցուցանիշների վերլուծական սխալ մեկնաբանման ռիսկի միջև տարանջատման անհրաժեշտությունը: Դրանք նաև հիմք են ստեղծում հաշվապահական և հարկային շահույթների տարբերությունների բազմափուլ համադրման մեթոդաբա-նական շրջանակի մշակման համար:

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