

CUSTOMS VALUATION AND IFRS 9 HEDGE ACCOUNTING: DIVERGENCE, IMPLICATIONS AND RECONCILIATION

Purpose. When an import transaction is hedged using a currency forward contract, it becomes subject to two non-integrated measurement frameworks: the WTO Agreement on Customs Valuation (CVA), which bases customs duty on the transaction value – the price actually paid or payable at export – and IFRS 9 Financial Instruments, which permits hedge accounting aligning gains and losses on hedging instruments with the hedged risk. The purpose is to identify and systematise the divergence between these frameworks, assess its financial implications for importers, and propose a reconciliation framework.

Methods. The study employs comparative legal and institutional analysis to contrast the normative bases of WTO customs valuation and IFRS 9 hedge accounting; conceptual modelling to construct divergence scenarios; and case-based reasoning drawing on the regulatory practice of Ukraine and the European Union.

Results. The transaction value under WTO CVA Article 1 is anchored to the invoice price converted at the official spot rate on the customs declaration date. IFRS 9 cash flow hedge accounting, by contrast, defers gains or losses on the hedging instrument into the cash flow hedge reserve within OCI until the hedged transaction affects profit or loss, resulting in asset recognition at the forward rate. Three principal zones of divergence are identified: the exchange rate for customs conversion versus the hedged forward rate under IFRS 9; the treatment of forward points, recognised under IFRS 9 but excluded from the customs value base; the timing mismatch between customs clearance and accounting recognition of the hedged item.

Conclusions. The co-existence of two non-integrated measurement frameworks creates an increased compliance burden for importers and systemic inconsistency in corporate financial data. Neither framework should be subordinated to the other. Three reconciliation principles are proposed: enhanced IFRS 7 disclosure, optional advance customs rulings for entities applying IFRS 9 hedge accounting, and corroborative use of hedge accounting data in related-party valuation reviews. These measures would reduce compliance costs without compromising fiscal integrity.

Key words: customs valuation, transaction value, hedge accounting, foreign currency risk, import contracts, derivative financial instruments, cash flow hedge reserve, financial reporting

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Introduction. The internationalisation of procurement chains has made currency risk management an operational necessity for manufacturers, retailers, and distributors that source goods abroad. According to data from the Bank for International Settlements, the daily average turnover in OTC foreign exchange derivatives reached approximately USD 3.8 trillion in 2022 (BIS, 2022), a considerable share of which reflects trade-related currency hedging by non-financial corporations. When an entity designates a currency forward contract as a cash flow hedge of a forecast import purchase under IFRS 9, the accounting treatment of the resulting gain or loss departs from the spot rate logic that governs the determination of customs value under the WTO Agreement on Implementation of Article VII of GATT 1994.

This divergence is not merely a technical accounting curiosity. For economies with significant import volumes and elevated currency volatility – such as Ukraine, Turkey, Egypt, or Nigeria – the difference between the hedged rate used in financial accounting and the spot rate applied at customs clearance can reach several percentage points, translating into hundreds of millions of dollars in measurement discrepancy at the macroeconomic level. At the firm level, this creates a situation where the cost of imported inventory

as reported under IFRS may differ materially from the customs value base, complicating cost accounting, transfer pricing documentation, and tax reconciliation simultaneously.

Despite its practical importance, the academic literature has devoted limited attention to this intersection. Studies on WTO customs valuation predominantly examine related-party transactions, royalties, and software licensing (Alagic, 2016; Pitschas & Schloemann, 2013), while IFRS 9 hedge accounting research focuses on effectiveness testing, hedge ratio rebalancing, and earnings volatility reduction (Bernhardt, Erlinger & Unterrainer, 2014; Awuye & Taylor, 2024). The specific interaction between hedging instruments and customs valuation remains an underexplored frontier in both literatures.

This paper aims to fill that gap by: (i) systematising the normative foundations of each framework; (ii) identifying the specific points at which they diverge when applied to the same hedged import contract; (iii) modelling the financial implications of the divergence; and (iv) discussing potential reconciliation mechanisms at both the firm and regulatory level.

Literature Review. The normative architecture of WTO customs valuation is grounded in the Agreement on Implementation of Article VII of the GATT 1994, commonly referred to as the Customs Valuation Agreement (CVA). The primary valuation method under Article 1 of the CVA establishes that customs value is the transaction value – defined as “the price actually paid or payable for the goods when sold for export to the country of importation” – adjusted for specific additions enumerated in Article 8 (WCO, 2009). The World Customs Organization estimates that the transaction value method underlies approximately 90–95% of all customs valuations globally (WCO, 2009; Walsh, 2003). Alagic (2016), in an article published in this journal, emphasises that the WTO system consciously moves away from notional or constructed values toward actual commercial prices, thereby grounding customs duty in demonstrated economic reality.

The treatment of currency conversion in customs valuation has received attention from scholars examining the interaction between exchange rate policy and import costs. Pitschas and Schloemann (2013) analyse how EU customs regulations translate the transaction value into the national tariff currency, with the applicable exchange rate determined by reference to the rate of the penultimate week as published by the European Central Bank, irrespective of any forward contract concluded by the importer. This administrative anchoring of the exchange rate to a published official rate has a direct parallel in Ukrainian customs legislation, where Article 51 of the Customs Code of Ukraine requires the conversion of the invoice value using the official NBU exchange rate on the date of customs declaration submission.

The IFRS 9 hedge accounting model introduced with the full standard in 2014 and effective from 1 January 2018 represented a fundamental shift from the rules-based approach of IAS 39 toward a principles-based framework (Bernhardt, Erlinger & Unterrainer, 2014). Hedge effectiveness is no longer assessed against the 80–125% effectiveness threshold; instead, it requires an economic relationship between the hedging instrument and the hedged item, the absence of credit risk dominance, and a hedge ratio consistent with the entity’s actual risk management practice (IASB, 2014). For cash flow hedges of forecast foreign currency purchases, the effective portion of cumulative gains or losses on the forward contract is deferred into the cash flow hedge reserve within OCI and subsequently reclassified to the cost of the acquired asset or to profit or loss when the hedged transaction affects the financial statements (KPMG, 2013).

A systematic literature review by Awuye and Taylor (2024) covering over 120 post-implementation studies of IFRS 9 identifies earnings volatility reduction and improved alignment between risk management and financial reporting as the two most consistently documented outcomes of the standard’s hedge accounting chapter. However, the authors note that the interaction between hedge accounting and non-financial regulatory frameworks – including customs and taxation – remains “largely absent from the empirical literature.”

The closest body of work to the present study concerns the relationship between transfer pricing and customs valuation, where the tension between the arm’s length principle under OECD guidelines and the transaction value method under the CVA has been extensively documented (Neighbour, 2002). The fundamental problem, as framed by Pitschas and Schloemann (2013), is that transfer pricing seeks to allocate profit among related parties using economic benchmarks, while customs valuation seeks to protect the fiscal base using actual transaction prices. An analogous tension, this paper argues, exists between IFRS 9 hedged rates and WTO transaction values – two legitimate but non-integrated measurement outcomes simultaneously applied to identical commercial transactions.

Normative Frameworks: Key Differences. The two frameworks share a common object – the import transaction – but pursue structurally different objectives through incompatible measurement methodologies. Table 1 contrasts their principal characteristics.

Table 1

Comparative Characteristics of WTO CVA and IFRS 9 Cash Flow Hedge Accounting

Dimension	WTO CVA (Article 1)	IFRS 9 Cash Flow Hedge
Primary objective	Fiscal: establish the dutiable value	Accounting: faithfully represent economic risk management
Applicable exchange rate	Official spot rate at date of customs declaration	Forward rate embedded in the hedging instrument
Treatment of forward points	Excluded from transaction value (not part of “price paid”)	Included in OCI as cost of hedging (IFRS 9.6.5.16)
Recognition timing	At the moment of customs clearance	When hedged item affects profit or loss (often deferred)
Permitted adjustments	Article 8 additions only (transport, insurance, etc.)	Hedge ratio rebalancing, basis adjustments
Legal basis	WTO Agreement, Article VII GATT 1994	IASB IFRS 9 (2014), effective 01.01.2018
Jurisdiction	All WTO member states (164 members)	All IFRS-adopting jurisdictions (~140 countries)

Source: compiled by the author based on WCO (2009); IASB (2014); EU Customs Valuation Quick Info (2019)

The divergence is most acute along two dimensions: the exchange rate and the inclusion of hedging costs. Under the WTO framework, the customs authority converts the invoice price using a published official rate – in Ukraine, the NBU rate on the date of the customs declaration. Under IFRS 9, the entity records the imported asset at the hedged forward rate adjusted for any elected treatment of forward points, which typically differs from the official spot rate. Neither framework contains provisions acknowledging the other’s measurement outcome, and no international guidance has been issued to bridge the gap.

Exchange Rate Timeline and Measurement Anchors. To clarify at which precise moment each framework captures the exchange rate, Table 2 maps the key events of a hedged import transaction against the applicable rates and regulatory bases.

Table 2

Exchange Rate Timeline and Measurement Anchors for a Hedged Import Contract

Event	Date	Exchange Rate Applied	Framework	Regulatory Basis
Forward contract concluded	T ₀ (contract date)	Spot rate: 43.00 UAH/EUR	Risk management reference	Internal hedging policy
Hedge designation documented	T ₀	Spot rate: 43.00 UAH/EUR	IFRS 9	IFRS 9.6.4.1(b)
Customs declaration submitted	T ₁ (clearance date)	NBU official rate: 45.80 UAH/EUR	WTO CVA	Customs Code of Ukraine, Art. 51
Forward contract settled	T ₁	Forward rate: 44.20 UAH/EUR	IFRS 9	IFRS 9.6.5.11
Hedged item recognised in P/L	T ₂ (sale of inventory)	Hedged rate basis adjustment	IFRS 9	IFRS 9.6.5.11(d)
Measurement divergence	T ₁	$\Delta = 45.80 - 44.20 = 1.60$ UAH/EUR	CVA vs. IFRS 9	-

Source: compiled by the author based on WTO CVA Article 1; IFRS 9.6.5.11; Customs Code of Ukraine, Article 51

Table 2 demonstrates that the divergence crystallises at moment T₁ – the date of customs clearance – when the two frameworks simultaneously capture the same transaction at different rates. The WTO-mandated NBU official rate reflects macroeconomic spot pricing, whereas the IFRS 9 forward rate reflects the

contractually locked price negotiated 90 days earlier. Neither rate is economically incorrect; they are simply anchored to different points in time and to different policy objectives.

The Divergence Model: Three Scenarios. To illustrate the practical financial implications of the normative divergence, this section develops a simplified model based on a representative import transaction. Consider an entity importing industrial equipment with a contract price of EUR 1,000,000, designated as a cash flow hedge using a EUR/UAH forward contract at 44.20 UAH/EUR, concluded 90 days before delivery. Table 3 presents three scenarios arising from this configuration.

Table 3

Measurement Divergence: Customs Value vs. IFRS 9 Carrying Amount (EUR 1,000,000 contract)*

Scenario	NBU spot on clearance date	Forward rate (hedge)	Customs value (UAH)	IFRS 9 asset cost (UAH)	Divergence (UAH)	Direction
A: UAH depreciation	45.80	44.20	45,800,000	44,200,000	-1,600,000	Customs > IFRS
B: Rates equal	44.20	44.20	44,200,000	44,200,000	0	No divergence
C: UAH appreciation	42.50	44.20	42,500,000	44,200,000	+1,700,000	IFRS > Customs

*Note: IFRS 9 asset cost excludes forward points for simplicity; customs value uses the NBU official rate at T_1 .

Source: compiled by the author based on NBU (2026)

Scenario A – the most common in economies with depreciating currencies, including Ukraine – produces a customs value *higher* than the IFRS carrying amount of the imported asset. This has two direct consequences: first, the entity pays customs duty on a base that exceeds the recognised cost of the inventory, creating a permanent accounting asymmetry; second, the customs duty itself, once capitalised into the cost of inventory under IAS 2, partially offsets but does not eliminate the divergence, since it is computed on the higher customs base.

Scenario C – currency appreciation – produces the inverse outcome: the IFRS asset cost exceeds the customs value. In this case, the financial statements report a higher inventory cost than the dutiable base, which may attract scrutiny from customs authorities conducting post-clearance audits and concerned about potential undervaluation.

Scenario B, representing rate equality, is theoretically possible but practically improbable, as it requires the forward rate negotiated at T_0 to exactly coincide with the official NBU spot rate at T_1 – an event that presupposes perfect exchange rate foresight over the hedging horizon.

Implications for Ukrainian Importers. Ukraine constitutes a particularly instructive case, given the simultaneous presence of: (i) mandatory IFRS application for large enterprises and listed companies under Ukrainian accounting legislation; (ii) significant UAH volatility, with the official NBU rate depreciating from approximately UAH 28/USD in early 2022 to UAH 42/USD by late 2024 (NBU, 2026); (iii) a customs valuation system anchored to the official NBU rate at the date of declaration; and (iv) a developing market for currency hedging instruments, primarily OTC forwards offered by major Ukrainian banks operating under NBU foreign exchange regulations.

For a mid-sized Ukrainian importer hedging EUR payables at a 90-day forward rate, a 5% depreciation of UAH during the hedging period generates a divergence of approximately 5% of the import value between the customs and accounting bases. On an annual import volume of EUR 10 million, this implies a cumulative measurement divergence exceeding UAH 20 million – sufficient to materially distort inventory values, cost of goods sold, and gross margin ratios in the financial statements.

Furthermore, the amendment to IAS 21 “Lack of Exchangeability,” effective 1 January 2025, introduces an additional layer of complexity for Ukrainian entities (IASB, 2023). The amendment requires entities to assess whether the UAH is exchangeable into foreign currencies at the official NBU rate or whether the rate represents a managed administrative quote that does not reflect an observable market transaction. To the extent that Ukrainian entities must apply an estimated exchange rate under the amended IAS 21, a three-way divergence arises: the WTO customs value (NBU official rate), the IFRS 9 hedged rate (forward

rate), and the IAS 21 estimated market rate – three simultaneous measurements of the same foreign currency transaction applied for different regulatory purposes.

Towards Reconciliation: A Conceptual Framework. The divergence between WTO customs valuation and IFRS 9 hedge accounting does not represent a regulatory failure of either framework; it reflects the fact that each was designed to serve distinct policy objectives within separate international governance structures. However, the absence of any coordination mechanism imposes unnecessary compliance costs on importers and creates systematic inconsistencies in corporate data used simultaneously by investors, tax authorities, and customs officials. The following three reconciliation principles are proposed.

Principle 1 – Disclosure-based approach. IFRS financial statements should include a dedicated note disclosing the aggregate difference between the customs value of imported goods and their IFRS carrying amount where the difference is material and attributable to hedge accounting. This approach requires no amendment to either framework and could be incorporated into existing IFRS 7 disclosures on the nature and extent of hedging instruments.

Principle 2 – Optional customs advance ruling mechanism. Customs administrations – including Ukraine’s State Customs Service – could establish a voluntary administrative procedure whereby importers with qualifying IFRS 9 hedge accounting programmes apply for advance rulings confirming the acceptability of the hedged forward rate as the “price actually paid or payable” under CVA Article 1. Implementation of this principle would require a formal opinion from the WCO Technical Committee on Customs Valuation regarding the compatibility of forward-hedged contract prices with the transaction value definition.

Principle 3 – Corroborative alignment for related-party transactions. In transactions between related parties – where both customs valuation scrutiny and transfer pricing obligations apply concurrently – IFRS 9 hedge accounting data could serve as corroborating documentary evidence that the contracted price reflects genuine economic substance rather than profit shifting. This would reduce the risk of customs value adjustment under CVA Article 1.3 without creating any new regulatory burden.

Conclusions. This study establishes that the co-existence of WTO customs valuation rules and IFRS 9 hedge accounting generates a systematic and structurally irreducible measurement divergence when applied to the same hedged import transaction. The divergence arises from three sources: the exchange rate used for currency conversion at the moment of customs clearance, the treatment of forward points, and the timing mismatch between customs recognition and accounting recognition of the hedged item. In economies with volatile exchange rates, including Ukraine, the financial magnitude of this divergence can be material at both the firm and macroeconomic level.

The scientific novelty of this paper lies in the first systematic comparative analysis of these two frameworks from the perspective of their simultaneous application to hedged import contracts – a topic that remains absent from both the customs valuation and the IFRS 9 academic literatures. The proposed conceptual reconciliation framework – based on enhanced IFRS 7 disclosure, optional customs advance rulings, and corroborative use of hedge accounting data in related-party valuation – provides a practical starting point for regulatory dialogue between accounting standard-setters, the WCO, and national customs administrations.

Future research should extend this analysis to fair value hedges of existing import payables and to the treatment of commodity price components in import contracts hedged using cross-currency basis swaps, where the divergence from the WTO transaction value is likely to be even more pronounced. An empirical study quantifying the aggregate measurement divergence across Ukrainian importers using IFRS would be a particularly valuable contribution to the literature.

References:

1. Alagic, O. (2016). Customs valuation. *Customs Scientific Journal*, no. 1, pp. 7–25. <https://csj.umsf.in.ua/archive/2016/1/4.pdf>
2. Awuye, I. S., & Taylor, D. (2024). Over half a decade into the adoption of IFRS 9: a systematic literature review. *Journal of Accounting Literature*, vol. 47, iss. 4, pp. 793–814. DOI: <https://doi.org/10.1108/JAL-11-2023-0204>
3. Bank for International Settlements. (2022). *Triennial Central Bank Survey: OTC Foreign Exchange Turnover in April 2022*. Basel: BIS. https://www.bis.org/statistics/rpfx22_fx.htm

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4. Bernhardt, T., Erlinger, D., & Unterrainer, L. (2014). IFRS 9: The new rules for hedge accounting from the perspective of risk management. *ACRN Oxford Journal of Finance and Risk Perspectives*, vol. 5, iss. 3, pp. 1–14. <https://www.acrn-journals.eu/resources/jofrp0503a.pdf>
 5. European Commission. (2019). *Customs valuation: quick information sheet*. Luxembourg: Publications Office of the European Union. https://taxation-customs.ec.europa.eu/system/files/2019-03/06_taxud_ucc_customs_valuation_quick_info_en.pdf
 6. International Accounting Standards Board. (2014). *IFRS 9 financial instruments*. London: IFRS Foundation. <https://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/>
 7. International Accounting Standards Board. (2023). *Amendments to IAS 21: lack of exchangeability*. London: IFRS Foundation. <https://www.ifrs.org/projects/completed-projects/2023/lack-of-exchangeability-research/#final-stage>
 8. Walsh, J. T. (2003). Customs valuation in developing countries and the World Trade Organization valuation rules. In L. Ebrill, M. Keen, J.-P. Bodin, & V. Summers (Eds.), *The Modern VAT* (Ch. 6, pp. 83–94). Washington, DC: International Monetary Fund. <https://www.elibrary.imf.org/display/book/9781589062115/ch06.xml>
 9. KPMG IFRG Limited. (2013). *First Impressions: IFRS 9 (2013) – Hedge Accounting and Transition*. London: KPMG. <https://assets.kpmg.com/content/dam/kpmg/pdf/2013/12/first-impressions-hedging-dec2013.pdf>
 10. National Bank of Ukraine. (2026). *Official Exchange Rates Archive 2022–2026*. Kyiv: NBU. <https://bank.gov.ua/en/markets/exchangerates>
 11. Neighbour, J. (2002). Transfer pricing: keeping it at arm's length. *OECD Observer*, no. 230, pp. 29–30. https://www.oecd.org/content/dam/oecd/en/publications/reports/2002/03/oecd-observer-volume-2002-issue-1_g1gh2b12/observer-v2002-1-en.pdf
 12. Pitschas, C., & Schloemann, H. (2013). WTO Customs Valuation Agreement: customs value of goods imported as gifts. *Global Trade and Customs Journal*, vol. 8, no. 1, pp. 2–11. <https://kluwerlawonline.com/journalarticle/Global+Trade+and+Customs+Journal/8.1/GTCJ2013001>
 13. World Customs Organization. (2009). *WTO Valuation Agreement: Overview and Technical Commentary*. Brussels: WCO. <https://www.wcoomd.org/en/topics/valuation/overview/wto-valuation-agreement.aspx>

МИТНА ОЦІНКА ТА ОБЛІК ХЕДЖУВАННЯ ЗА МСФЗ 9: РОЗБІЖНОСТІ, НАСЛІДКИ ТА УЗГОДЖЕННЯ

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Мета. Коли імпортна операція хеджується валютним форвардним контрактом, вона одночасно підпадає під дію двох не інтегрованих систем оцінки: Угоди СОТ про митну оцінку (CVA), яка нараховує мито на основі ціни угоди – ціни, «фактично сплаченої або такої, що підлягає сплаті» за товари на момент експорту, – та МСФЗ 9 «Фінансові інструменти», який дозволяє застосовувати облік хеджування для зіставлення прибутків і збитків за інструментом хеджування з хеджованим ризиком. Метою дослідження є виявлення та систематизація розбіжностей між цими системами, оцінка їх фінансових наслідків для імпортерів і розробка концептуальних засад узгодження.

Методи. У дослідженні застосовано порівняльно-правовий та інституційний аналіз для зіставлення нормативних основ митної оцінки СОТ та обліку хеджування за МСФЗ 9; метод концептуального

моделювання для побудови сценаріїв розбіжності у вимірюванні; метод аналізу конкретних ситуацій на основі регуляторної практики України та Європейського Союзу.

Результати. Ціна угоди за статтею 1 CVA прив'язана до ціни рахунку-фактури, конвертованої за офіційним курсом НБУ на дату митної декларації. МСФЗ 9, натомість, відстрочує ефективну частину прибутків або збитків за інструментом хеджування до резерву хеджування грошових потоків у складі іншого сукупного прибутку до моменту, коли хеджована операція вплине на прибуток або збиток, – унаслідок чого актив визнається за форвардним курсом. Визначено три основні зони розбіжності: (1) обмінний курс для митної конвертації порівняно з хеджованим форвардним курсом за МСФЗ 9; (2) порядок обліку форвардних пунктів, що визнаються за МСФЗ 9, але виключаються з митної оціночної бази; (3) часова невідповідність між митним оформленням і бухгалтерським визнанням хеджованого об'єкта.

Висновки. Співіснування двох не інтегрованих систем вимірювання створює підвищене компласн-навантаження для імпортерів та системну суперечливість у корпоративних фінансових даних. Жодна із систем не повинна підпорядковуватися іншій. Запропоновано три принципи узгодження: розширене розкриття інформації за МСФЗ 7, необов'язкові попередні митні рішення для підприємств, що застосовують облік хеджування за МСФЗ 9, та використання даних обліку хеджування як підтверджувальних доказів при митній оцінці операцій між пов'язаними особами. Реалізація цих заходів знизить витрати на компласнс без шкоди для фіскальної цілісності.

Ключові слова: митна оцінка, ціна угоди, облік хеджування, валютний ризик, імпортні контракти, похідні фінансові інструменти, резерв хеджування грошових потоків, фінансова звітність.



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