

# Restructuring Troubled Assets: A Sophisticated IT Solution is the Need of the Hour

## Introduction

The International Accounting Standards Board (IASB) released the final version of the International Financial Reporting Standard 9 (IFRS 9 Financial Instruments) in July 2014 replacing the International Accounting Standard 39 (IAS 39). The IFRS 9 has an elaborate guidance on accounting of modified assets and offers better clarity on accounting for modifications of cash flows. The guidance on accounting of modification of cash flows is different from the guidance under the US Generally Accepted Accounting Practices (GAAP) for similar business events.

Debt restructuring, or modification of contractual cash flows of a financial asset through renegotiation of such terms as the interest rate or maturity date, can happen in multiple scenarios. During times of financial difficulties, a borrower would need to prolong the tenor of the loan or reduce the cash outflows and/or the interest burden. The concessions granted by the creditor to the borrower during such difficult times constitute a debt restructuring. In rare situations, restructuring also occurs when the borrower wants to prepay or speed up the repayment of loan. In both the scenarios, banks try to minimize their credit or revenue losses and alter the loan terms in such a way that they are agreeable to both the parties. The accounting treatment of such events is governed by the US GAAP and IFRS mandates in the jurisdictions covered by these standards.

This article takes a closer look at both the standards, their impact on the financial statements of banks operating in jurisdictions covered by both US GAAP and IFRS9. We also discuss how banks can leverage IT solutions to cope with these differences.

## Accounting of Asset Restructuring or Modification under US GAAP and IFRS

The US GAAP provides elaborate guidance on asset restructuring and accounting of restructured troubled-debts. IFRS 9, on the other hand, offers guidance on modifications of cash flows from debts and does not specifically distinguish between general, standard, or troubled debt restructuring.

For modifications of cash flows or assets restructuring, both the standards follow different yardsticks to determine whether the event gives rise to a new asset or the existing asset needs to be continued. Under the US GAAP, comparison of effective yields before and after restructuring is the key to decide whether the restructuring would result in a new asset. Under IFRS, the contractual terms of restructuring need to be examined to determine if they result in de-recognition of the existing asset. Table 1 summarizes the two scenarios:

Regulation	Key	Decision points	Troubled asset (borrower facing financial difficulty)	Other Assets
US GAAP Ref: ASC 310-20-35-9, 310-40-35-10	Comparison of effective yields	Terms of new asset resulting from restructuring are favorable to the lender	Continue as old asset	Treat as new asset
		Terms of new asset resulting from restructuring are not favorable to the lender		Continue as old asset
IFRS 9 Ref: 5.4.3	Restructuring terms negotiated	Modification in cash flows of asset results in de-recognition of the existing asset as per IFRS	Treat as new asset. In some cases, restructuring might result in a Purchased or Originated Credit-Impaired (POCI) asset	Treat as new asset
		Modification in cash flows of asset does not result in de-recognition of asset as per IFRS	Continue as old asset	Continue as old asset

Table 1: Comparison of US GAAP and IFRS (Source: TCS Internal)

Thus, under the US GAAP, a restructured troubled asset will always be treated as a continuation of the old asset. However, under the IFRS, if the restructuring of an asset is negotiated with the borrower facing financial difficulties, and results in de-recognition of the existing asset, the restructured asset would then be treated as a new asset.

Under the US GAAP, the restructured (non-troubled) asset will be treated as a new asset only if the effective yield of the restructured asset is higher than the existing asset. Whereas, under the IFRS, a new asset would come into being if the terms of restructuring result in de-recognition of the existing asset.

Additionally, under the IFRS, if the restructured asset gives rise to a POCI asset, which is likely to happen if the credit quality is very low or the asset is credit impaired at initial recognition (Ref B5.5.26), it would involve additional calculations to arrive at the Credit adjusted Effective Interest Rate (CEIR). This scenario is not applicable under the US GAAP.

Here is an example to better understand the impact of such a situation on the profit and loss (P&L) and the balance sheet of a typical bank. Needless to mention, the severity and quantum of the impact would depend on the spread between the pre- and post-restructuring EIRs.

Let us say, bank A disbursed a five-year, CU 1,000,000 loan on January 1, 2010, with a fixed annual interest rate of five percent, repayable in equated annual installments at the end of each year. The carrying value of the loan as on January 1, 2012 was CU 859,976 and its credit quality had deteriorated. The second installment was overdue, and the bank restructured the loan, which qualified as a de-recognition event as per the IFRS. As per the new terms, the loan tenure was extended by seven years and the interest rate reduced to 4.75 percent. Table 2 presents how the calculations would be under GAAP and IFRS:

Asset	Continuation of old Asset (US GAAP)						New Asset, post restructuring (IFRS)						
	Year	Opening Carrying Value	Interest	Cash Flow	Gain/Loss	Closing Carrying Value	Year	Opening Carrying Value	Interest	Cash Flow	Gain/ Loss	Closing Carrying Value	
Continuation of existing asset	1	1,000,000	50,000	230,975		819,025	Before Asset	1	1,000,000	50,000	230,975	-	819,025
	2	819,025	40,951		7,775	852,201	2	819,025	40,951		0	859,976	
	3	852,201	42,610	147,277	-	747,534	New, after restructure	1	859,976	40,849	147,277	-	753,548
	4	747,534	37,377	147,277	-	637,634		2	753,548	35,794	147,277	-	642,064
	5	637,634	31,882	147,277	-	522,238		3	642,064	30,498	147,277	-	525,285
	6	522,238	26,112	147,277	-	401,073		4	525,285	24,951	147,277	-	402,959
	7	401,073	20,054	147,277	-	273,849		5	402,959	19,141	147,277	-	274,823
	8	273,849	13,692	147,277	-	140,265		6	274,823	13,054	147,277	-	140,599
	9	140,265	7,012	147,277	-	(0)		7	140,599	6,677	147,277	-	(0)
Total			269,690		7,775		Total		261,915		-		

Table 2: Amortization under US GAAP and IFRS (Source: TCS Internal)

For simplicity, the EIR of the asset is considered to be same as the customer interest rate of five percent.

Calculations under the US GAAP:

- The troubled loan would continue and be amortized at the original EIR.
- The restructuring loss, calculated at present value of restructured cash flows and discounted at the original EIR (CU 7775), would be charged to the P&L.

- Post restructuring, the asset would continue to be amortized at the original EIR of five percent.

Calculations under the IFRS:

- Post restructuring, the original asset would be treated as a new asset and the opening carrying value would be the present value of future cash flows, discounted at the new EIR of 4.75 percent.
- In this case, there would not be any restructuring gain or loss.
- The asset would be amortized at the new EIR of 4.75 percent.

Thus, it is evident that the different guidance under US GAAP and IFRS for restructuring of troubled assets gives rise to timing differences in accounting of interest income as well as gains or losses on restructuring. The banks would need to tackle such situations with utmost care. Rather than depending on spreadsheet-based calculators, banks will have to maintain separate records for loans, to report under the IFRS and the US GAAP. They will need to deploy an application that captures requisite information, such as data related to disbursement and estimated and actual cash flows, from the source system, and performs dual calculations with regard to EIR, CEIR, amortization, interest revenue, and so on. Further, it should post relevant information to separate general ledgers and sub-ledgers, accurately. Such a system will need to have robust security controls and access restrictions, along with adequate audit trail capabilities. This will facilitate the creation of elaborate reports for management reporting and regulatory disclosures.

## Conclusion

Asset restructuring or modification of cash flows could give rise to differential accounting and impact the financial statements of a bank if it operates in multiple accounting jurisdictions. The bank would need to comply with different sets of accounting standards for parent and local reporting. Additionally, the decision triggers — whether the restructuring would give rise to a new asset or the existing asset needs to continue — are different. This means the banks will have to maintain multiple sets of computations of asset amortizations for accounting compliances and customer reporting. Further, if dual reporting under the IFRS and the US GAAP is required, the systems that maintain amortization records will have to be equipped with requisite capabilities to reconfigure the parameters and perform relevant calculations, while maintaining multiple sets of records. Banks should therefore upgrade their IT systems to enhance the speed and accuracy of such dual computations and accounting.

## About The Author

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Ashwini Kamat is a Senior Consultant with the Banking and Financial Services (BFS) business unit at Tata Consultancy Services (TCS). A qualified chartered accountant, she has over 25 years of industry experience, and currently leads the Finance and Reporting practice of the business unit. Kamat is responsible for defining the charter and setting up the Center of Excellence (CoE) for IFRS and XBRL to nurture TCS' competencies in these areas. She closely works with the delivery and product teams, and has contributed immensely in the conceptualization and design of IFRS compliance solutions of the TCS BaNCS suite. Kamat has also anchored several global-scale implementations of Oracle's financial solutions for TCS' leading clients. She holds numerous industry certifications including CQA, PMP, Six Sigma Black Belt, and IFRS.

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