# Two New Bases, One Big Transformation— Thoughts on Concurrent Implementation of two Accounting Bases

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or insurers that are public filers reporting under US GAAP, the Financial Accounting Standards Board (FASB) has confirmed that the effective date of Accounting Standards Update (ASU) 2018-12, Targeted Improvements to the Accounting for Long-Duration Contracts, also referred to as "US GAAP Targeted Improvements," will be Jan. 1, 2021. This coincides with the effective date of IFRS 17. The latter will impact multi-national insurers who also have to report in certain jurisdictions under IFRS, or U.S. subsidiaries of multi-national insurers located in different jurisdictions which complete consolidated reporting under IFRS.

While these two standards are very different, the approach to implementing each accounting change has similarities, and can even result in significant synergies derived from implementing the two bases concurrently. Typically, one of the standards will be more relevant to a company than the other. For example, insurers domiciled in the United States with international offices may be more concerned with detailed, fully operationalized implementation of the US GAAP Targeted Improvements.

This article focuses on considerations for those companies that will be implementing both IFRS 17 and US GAAP Targeted Improvements, but the practical considerations are common to

A holistic roadmap can be developed, with interdependencies and interaction points accounted for in detail. both implementations and will also be of interest to readers who are only implementing one of these changes.

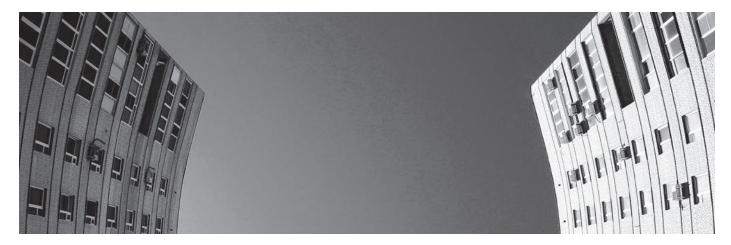
# SYNERGIES OF DUAL IMPLEMENTATION

There are many synergies to concurrent program management. It is less disruptive to have a single agenda to facilitate change and adoption management. A single transformation team across both reporting bases can help drive momentum and keep costs down. Stakeholder engagement tends to be more effective, since combining multiple priorities into one project plan makes it easier to track progress against the project timeline and reduces competing needs. Additionally, significant budget and resource savings can be realized when supporting multiple major initiatives in one project plan.

A holistic roadmap can be developed, with interdependencies and interaction points accounted for in detail. Where model platforms are consistent between the two programs, a consistent model enhancement testing strategy and acceptance process will better clarify requirements for all stakeholders. Assumptions and inputs can be aligned more closely, bringing efficiencies to the assumptions setting process. IFRS 17 requires a current measurement approach, which involves updating assumptions. Under the Targeted Improvements, insurance entities must review assumptions for traditional and limited-payment contracts, and if there is a change, update the assumptions used to measure cash flows at least annually. Additionally, the discount rate must be updated at each reporting date. Applying IFRS 17 and Targeted Improvements together for traditional and limited-payment contracts may allow the development of an assumption setting process that can be used for both standards.

Concurrent implementation allows for software and vendor selection covering both reporting bases and therefore provides an opportunity to choose a single software solution. To the extent that cash flows are the same under the two bases (where there are no differences in contract boundaries between the two standards), significant savings in model runtime can be realized since best estimate cash flows will only need to be projected once. There should also be savings on the design and development of the solution for the data supporting the multiple bases. The expectation is that the data solution will be defined so that it is flexible, historic, granular and detailed enough to meet the requirements for U.S. and international reporting bases. This will avoid rework, which typically comes with high cost.

The process for bridging between metrics can be established prior to implementation. Where practical, a consistent set of reporting and analysis tools may be defined. On-cycle reporting effort and elapsed time can be reduced, provided that the process is built without excessive steps to quantify minor differences.



Communication with senior management and investors can be improved as a result of consistent analysis across metrics.

# PLANNING

Generally, most entities will begin their process by digesting the standard to understand its general principles. Then management will want to determine an initial assessment of the impact on its business, operations, people and financial reporting. This assessment may include things such as:

- Financial assessment;
- Operational assessment;
- Educational and change management needs analysis; and
- A roadmap for moving into the design and implementation stages.

The financial impact assessment involves agreeing on key methodology and design decisions, and governance for capturing these decisions. A financial impact assessment should be carried out for key product groups, focusing on impact on financial key performance indicators (KPIs), profitability and dividend payment ability. It is helpful to use a simplified prototype model as well as sample policy-level calculators to understand the impact of key methodology and design decisions on the company's business. Using the prototype model as well as consistently formatted policy-level calculators for IFRS 17 and US GAAP Targeted Improvements would optimize the modeling process, standardize ongoing model updates and allow for easier and more transparent communication with key stakeholders. The financial impact assessment may try to maximize alignment of methodology and design decisions between the two programs.

The operational impact assessment involves creating an illustrative current and future state of IT, actuarial, accounting and reporting processes to understand potential impacts and identify gaps in the current processes. A target process should be designed, and the assessment should clarify changes required to current close processes, new processes to be implemented and assure appropriate resourcing and technology exist to support these. This stage includes a gap analysis on current data, assumptions, systems and reporting processes. Many of the processes for the two bases may be able to be implemented in parallel, which could help reduce resource strain. One of the key objectives of the operational impact assessment stage is to identify synergies in the business as usual processes and streamline future state design of IFRS 17 and US GAAP reporting to the extent possible.

In order to set up an implementation plan a company needs to analyze the transition options and determine a realistic path forward, based on the financial and operational assessments, including availability and accessibility of historical data, assumption data, technology infrastructure, resource skill and availability, actuarial and accounting system capabilities, and budget constraints. A transition roadmap will detail decisions, resources, dependencies and budget required to meet the implementation timeline. Ideally this would include time for parallel runs. A plan to educate key stakeholders about the upcoming changes and their respective roles in the transformation processes can help to smooth the way to a successful implementation. Each functional area of the company should be clear on the upcoming changes to their routine processes, as early education can help ensure buy-in from stakeholders.

Planning to implement both bases is more complex and needs to manage competing priorities and resource constraints. The plan should aim to consolidate and streamline similar processes, including possible cross-use of resources. Early educational programs will be especially important in this case, as a two-basis implementation is more complex than one, and a more impactful message to stakeholder and management will be needed.

Table 1 Comparison of US GAAP Targeted Improvements and IFRS 17

	US GAAP Targeted Improvements	IFRS 17
Implementation timeline	Required for public business entities for fiscal years beginning after 12/15/2020 (effectively 1/1/2021). Early adoption permitted.	Required adoption date of 1/1/2021. Early adoption permitted (if IFRS 9 and IFRS 15 have been implemented).
Measurement model	Multiple measurement models, depending on product type (e.g., traditional and limited- payment contract, non-traditional, participating contracts, market risk benefits). Models do not require explicit risk adjustment or contractual service margin.	The general measurement model applies to all groups of insurance contracts in the scope of IFRS 17. However, simplifications or modifications apply to groups of: - insurance contracts measured using the premium-allocation approach; - investment contracts with discretionary participation features (DPF); and - reinsurance contracts held. The way in which this model is applied to direct participating contracts, referred to as the variable fee approach, differs in certain ways as well. A simplified approach (premium-allocation approach) is available if certain conditions are applied. Generally, this approach may be applied to short-duration contracts. IFRS 17 does not introduce the concept of market risk benefits.
Assumptions	Cash-flow assumptions are best-estimate, reviewed at least annually for traditional and limited-payment contracts.	Liability assumptions are best estimate (central estimate, where stochastic modeling is required), updated at each reporting period. Assumptions include an explicit risk adjustment for non- financial risk.
DAC	DAC is to be amortized on a constant level basis and not tied to expected profit. DAC is written off for unexpected contract terminations, but is not subject to an impairment test. Shadow DAC adjustment no longer required.	DAC is implicit in the calculation of the liability. Insurance acquisition costs included in the IFRS liability calculation are different from insurance acquisition costs eligible for deferral under US GAAP.
Discount rates for determining the present value of future cash flows	Discount rate based on an upper-medium grade (low-credit risk) fixed income instrument yield, to be updated each reporting period.	The discount rate used should maximize the use of observable inputs and reflect the cash flows' characteristics and the contract's liquidity.
Transition arrangements	Transition method for liability for future policy benefits and DAC is to apply to contracts in force as of the beginning of the earliest period presented. May elect to apply retrospectively.	Transition methods include full retrospective (required if practicable), modified retrospective and fair value.
Disclosure	Enhanced and more granular disclosure requirements.	Enhanced and more granular disclosure requirements.

## GAAP TARGETED IMPROVEMENTS VS. IFRS: SUMMARY

Table 1 summarizes some of the US GAAP Targeted Improvements and IFRS 17 changes for key areas. For US GAAP Targeted Improvements, best-estimate cash flow projection models will need to be developed for all traditional and limited pay products, including long-term care and disability insurance. The need to incorporate historical information may make a grouped reserve calculation, rather than individual policy reserve calculations (e.g., GAAP factors), more appropriate. A new approach to DAC calculation (constant-level basis) will need to be developed; revamping the DAC process will require decisions related to data, amortization approach and contract grouping.

Both reserving bases use best estimate assumptions, although there are some differences in definitions, and in both cases there are changes to reporting and disclosure requirements.

As the table illustrates, there are significant differences between Targeted Improvements and IFRS 17. However, there are also many similarities, especially in assumption setting, and with careful planning these similarities provide opportunities for savings in both cost and effort.

# EXPLORING DATA NEEDS

A first step in determining data needs is to assess the current state, including data availability, accuracy and completeness, and in particular, whether the current data solution is granular and flexible enough for the new basis, including historic information as required. This could be done by surveying company offices (including international offices) and requesting details on the availability and granularity of data at each location. Since some of the data components for US GAAP and IFRS 17 are similar, a consolidated information survey would save resource time and allow for a comprehensive picture of the current state for each office. Next, the company needs to identify the desired future infrastructure, required data elements and data flow processes. New elements required by the US GAAP Targeted Improvements include historical actuals and grouping indicators, depending on product. IFRS 17 will also require historical actuals and data for grouping purposes. The CSM and loss component calculations will also require tracking and storing historical data. A gap analysis of the data requirements for the new basis will be needed. This process will include identifying the business owners of systems and data, and defining governance requirements. Some companies or business units may have already done much of this work for Solvency II.

Another initial approach is to use reverse engineering, i.e., to start with the elements required for the financial reports and disclosures, and work backwards from these to determine the data needed.

Depending on the measurement model, data needs for the two bases may be similar. While there are certain differences between IFRS 17 and US GAAP Targeted Improvements, notably in the definitions of contract boundaries and attributable expenses, some best estimate assumptions, e.g., mortality, are likely to be the same. Data underlying such assumptions should be consistent, including data to generate best estimate assumptions from the company's own experience. Both bases will require some sort of grouping of data: while mapping may be different, the process of consolidation will be similar. Both bases will probably require a platform to take data from actuarial and finance repositories to calculate DAC amortization and CSM. Discount rates under both bases will use market data and will need a process to integrate external data.

Implementing the data changes will require a plan and roadmap. It is often helpful to design a representative data flow prototype to demonstrate the desired future state processes on a smaller subset of data. After implementing the changes, extensive testing will be needed, including tests of data elements, user acceptance testing, and parallel testing of the new processes.

## MODELING AND SYSTEM CONSIDERATIONS

Both US GAAP Targeted Improvements and IFRS 17 use best-estimate cash flows. However, there are multiple measurement models for US GAAP Targeted Improvements but only one measurement model (with modifications) for IFRS 17. Targeted Improvements retains a net premium model (for products that do not follow deposit accounting), and there is separate determination of market risk benefits. For IFRS 17 the general measurement model applies to all groups of insurance contracts in scope. However, simplifications or modifications apply to groups of insurance contracts measured using the premium-allocation approach, investment contracts with DPFs, and reinsurance contracts. There are also certain differences in the way in which the general model is applied to direct participating contracts, referred to as the variable fee approach. Some actuarial modeling systems may be better positioned to model one basis or another. Companies will need to consider carefully which modeling system best aligns with their needs; ideally a single platform would be used for both bases.



Companies will also need to consider transition methods and whether changes in modeling approach need to be applied retrospectively. For US Targeted Improvements, some of the changes in modeling are applied for contracts in force as of the beginning of the earliest period presented or can be elected to be applied retrospectively if certain conditions are met (e.g., liability for future policy benefits and DAC). Other changes, such as market risk benefits, are applied retrospectively. Under IFRS 17, an entity will have to apply the standard retrospectively. However, if it is impracticable to use a full retrospective approach, it may choose between a modified retrospective approach or a fair value approach. The latter is not necessarily based on historical information. An entity can apply different transition approaches to different groups of contracts, if appropriate, under IFRS 17. In both cases, an entity would ideally implement the required changes in its models prior to the effective date to allow it to carry out parallel runs. Many IFRS 17 reporters are planning for a full year of parallel runs.

In addition to actuarial modeling system alignment, companies will need to choose a reporting solution. For US GAAP, many companies calculate DAC externally to actuarial systems. Additionally, the new regulation will require a significant increase in granularity of reporting and disclosures. For IFRS 17, a CSM calculating engine will need to be developed.

The process to implement the accounting change is similar for both cases, although the calculations and requirements are different. Companies first need to understand the current state of model processes and methodologies, and should begin by creating an inventory of all actuarial valuation models, including DAC calculators for US GAAP. Then the company needs to identify the desired future state of model processes and methodologies and conduct a gap analysis including system functionality, model inputs, and required changes in reporting methodology. Some companies may be able to leverage Solvency II models for best estimate cash flows.

Next, the company will need to design a plan and roadmap to implement model changes. A system selection should be carried out, keeping the needs for both bases in mind. The option of keeping the existing system should receive the same level of scrutiny as the decision to move to a new system. The requirements for both bases should be lined up, and systems should be evaluated consistently against both bases. Some companies may have different modeling systems around the globe, and the accounting basis change could be a catalyst for aligning the models globally, using a standardized system and approach.

## ASSUMPTION MANAGEMENT

The requirement to review assumptions for traditional and limited-payment contracts at least annually was the initial headline of US GAAP Targeted Improvements and many companies are considering changes to the way assumptions are stored, developed, governed and implemented into models. Companies will need to ensure that the assumptions used for different reporting bases are internally consistent; there may be valid reasons why assumptions are not identical, but a company should be able to explain how they are consistent with each other.

While both US GAAP and IFRS 17 use best estimate assumptions to generate cash flows, there are some differences in the way these assumptions are to be developed and used. The two bases have different definitions of contract boundary and expenses, and the discount rates are different. However, both bases will require financial data to be used in expense calculations, and although the definitions of acquisition expenses are different, the process is similar.

For US GAAP, the discount rate is based on an upper-medium grade (low-credit risk) fixed income instrument yield. IFRS 17 requires that a curve is used; this curve should maximize the use of observable inputs and reflect the characteristics of the cash flows and the contract's liquidity.

The process to ensure that the assumption setting process is rigorous and fit for the new reporting basis is essentially the same for US GAAP and IFRS 17. The initial stage is to identify the various assumption types and formats required for US GAAP and IFRS 17 calculations for each of the company's products. Then, for each of these assumptions, a process must be set up to review and update the assumption in accordance with the requirements of the new framework. Dual basis implementation may be a catalyst for changes in how companies manage assumptions. Companies could consider designing a structured assumption repository that would automate and streamline the assumption update process. Such a repository can help with ensuring that assumptions are stored, managed and catalogued in a consistent manner, and could also be used for other purposes such as storage of PBR assumptions. Such a repository would also allow a company to store and revert back to historic assumptions, if needed.

Experience study calculations will need to be more robust and automated due to the increased demand for company-own experience and the increased frequency of assumption updates. New technology may need to be developed or purchased. Companies have been exploring cloud computing as it allows storage and quick retrieval of the large amounts of data required for experience studies. Close collaboration between the data management and experience analysis teams will be required as company experience will be required for experience studies and assumption updates.

## REPORTING AND DISCLOSURES

Under US GAAP Targeted Improvements, there will be new qualitative and quantitative disclosure requirements for interim and annual financial statements. These include on a disaggregated basis for the liability for future policy benefits and DAC, rollforwards of beginning and ending balances, and information about significant inputs judgments, assumptions and methods used in measurement. Additionally, the profit and loss will now reflect changes in the cash flow assumptions and the portion of the change in the fair value of market risk benefits not related to instrument-specific credit risk of market risk benefits in a liability position; previously there was no profit and loss impact for traditional business unless loss recognition occurred.

Under IFRS 17 an entity must disclose reconciliations that depict how the net carrying amounts of insurance contracts changed during the period arising from cash flows and amounts recognized in the statements of financial performance. For example, it will be required to reconcile the opening balances to the closing balances of the estimates of the present value of future cash flows, the risk adjustment for non-financial risk and the CSM.

An important part of the reporting process is the analysis of the results so as to get a proper understanding of the drivers. New analysis reports need to be designed to satisfy the disclosure requirements, particularly analysis of change, reconciliation across metrics, and forecasting. Analysis should include any impact on internal management reporting or KPIs; these may have wider implications and receive a good deal of high-level attention. For each basis, companies should consider the need to develop a reporting package consolidating all the newly required disclosures and analysis reports. This will involve calibrating existing sources to produce the required information and developing a roadmap and action plan to determine sources for missing information, at the appropriate level of granularity. A company may consider consolidating disclosure requirements into a single data repository with historic disclosures filed accordingly. Business intelligence platforms can be useful tools to create dynamic reporting and disclosure dashboards.

Actuarial teams will require additional analysis time to gain comfort with results defined in new ways—more expertise will be required to solve the complex issues, and more reconciliation will be needed between different metrics. Additional time for analysis can be gained by automating the model output and generation of disclosure components; this will require collaboration with the IT department.

## CONCLUSION

Many changes are coming to the day-to-day work of actuaries, and significant transformation will be needed. The overall process for implementing changes to an accounting basis is similar whether the basis being changed is US GAAP or IFRS 17. Implementing two sets of changes at the same time could increase strain on resources, but using the right technology allows processes to be automated and streamlined. Implementing either basis will require improvements in process and governance for most companies and implementing both changes concurrently provides an opportunity to design structures which work well for both bases.



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