



Supplementary controls under long-duration targeted improvements (LDTI)

From an actuarial and finance perspective

Background and purpose

Insurance institutions' existing design and the effectiveness of actuarial and finance change management controls will soon be put to the test as Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2018-12, *Financial Services—Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts*, goes into effect for public filers January 1, 2023.

The implications of change resulting from ASU 2018-12 have far-reaching impacts across the record-to-report continuum. Adopters will be faced with the rewrite of accounting

Contents

One-time control deep dive.....	2
Preparing for the change on the horizon	5
Contacts	6

policies, deployment of new actuarial methods, consideration of redesign of the enterprise chart of accounts (CoA), and reconfiguring and deploying IT infrastructure to support connectivity of data for internal and external reporting. It is imperative that finance and actuarial functions, at both enterprise and line-of-business levels, demonstrate a well-controlled environment during the transition and restatement periods, as internal and external assurance functions are already planning enhanced audit procedures with adapted testing methodologies.

As a result of this magnitude of change, LDTI adopters will need to complete many modeling updates, data-collection steps, and rounds of methodology testing before completing the production process redesign, and thus should consider supplementary or one-time controls to complement existing and enhanced controls.

This added layer of assurance can be crucial in mitigating unforeseen control failures of otherwise reliable business-as-usual controls subject to significant process and environment changes from large-scale implementation. Supplementary or one-time controls may be considered across the broader control spectrum. The following are a few examples of potential supplementary controls:

- Actuarial analytics: Actuaries may leverage key assumptions and historical data to establish base expectations of reasonableness for new model output to guide review ahead of generating outputs.
- Overarching CoA change management governance: Controllers may use extraction, transformation, and loading (ETL) analytical tools to identify and inventory all pre- and post-ASU 2018-12 CoA hierarchy differences, then confirm all changes went through the appropriate organizational change management governance.

- GAAP-to-LDTI bridge schedule report: Produce corporate and line-of-business pre- and post-LDTI account balance views reports for finance and actuarial stakeholder review, and sign off confirming account change as expected.

One-time control deep dive

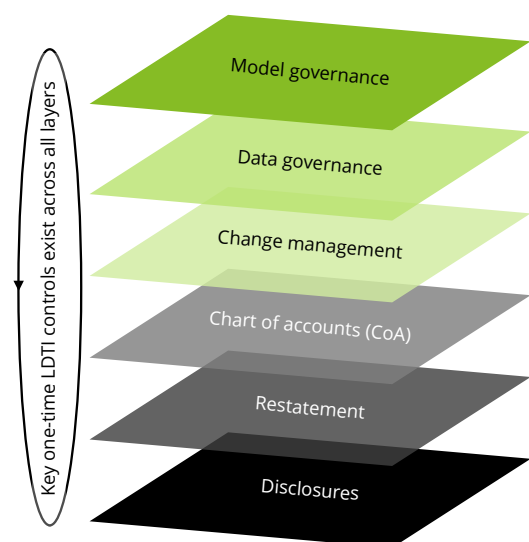
Control 1: Actuarial analytics

ASU 2018-12 introduces fundamental change to actuarial modeling and demands the report out of significantly more granular inputs and outputs of those models. Actuaries face the challenge that historically locked-in assumptions and time-tested models are changing concurrently.

Before actuaries open up the hood of their models to apply ASU 2018-12, they should step back and establish fundamental, directional hypotheses regarding the impact of the FASB standard and think critically about the downstream impact. They should document these hypotheses and work with finance counterparts to build analytical checks across the record-to-report continuum to flag and benchmark deviations.

One way to accomplish this is to create an actual-versus-expected analysis to predict the impact on each actuarial balance subject to ASU 2018-12, then attribute the impact to key drivers. The following lists some of the key design elements, organizational benefits, and a set of example considerations.

Key layers of LDTI controls



Description, impact, and implication of LDTI controls

	Model governance	New actuarial calculation methods and new/modified vendor systems, along with system setup, will necessitate enhanced (and accelerated) governance routines, as increased scrutiny will be placed on model controls, final elected methods, and approved assumptions over historical and current measurements.
	Data governance	New LDTI requirements necessitate significantly increased data granularity capture, processing, reporting, and storage, resulting in potential new risk points across the reporting continuum that will need to be mitigated with enhanced data controls.
	Change management	Processes and controls across the reporting continuum, including, but not limited to, valuation, modeling, assumption (hindsight) and experience studies, ledger booking, and internal and external reporting and analytics, will be significantly affected, and existing change management controls may not be suitable to handle the volume and complexity of change.
	Chart of accounts (CoA)	Enhanced and refreshed LDTI data will need to be accurately and efficiently captured and stored through structural enhancements to the subledger, general ledger CoA, and potentially supplementary systems, depending on IT infrastructure.
	Restatement	New reporting complexities will require integrating processes and systems across actuarial and finance departments. Comparative financial statements must be produced with accompanying control redesigns or enhancements.
	Disclosures	A significant number of additional disclosures will need to be provided as part of the interim and annual financial statement close processes. The consideration of new non-GAAP measures will require new definitions and additional insights.

Key design elements

- **Iterative:** Ideally, the actual-versus-expected analysis should continue to be produced as design decisions and industry insights change. For example, actuaries and accountants may decide on a certain disclosure aggregation level that must be modified after receiving feedback from management or the SEC. Alternatively, once model results complete a cycle of analysis, a more appropriate aggregation may be discovered.
- **Separate treatment of new business:** Separate analysis should be produced for new business after the transition date (12/31/2020) versus transitioning business.
- **Consistency:** Consider uniform approaches to analysis results across business units and products to achieve end-to-end coverage.

Organizational benefits

- **Leadership awareness:** Producing expected impacts early can assist with up-front socialization of impacts, and an interactive approach can help manage expectations of stakeholders.
- **SOX control readiness:** Expected-versus-actual analysis can not only help detect errors early, but also reassure the business that it can provide sufficient commentary during the SOX and management reporting processes. The early versions of controls may be readily migrated into other aspects of the final transformed process.
- **Driver identification:** An iterative view of expected impacts can also help zero in on the key drivers causing change in each actuarial balance, which can help determine how to structure transition disclosure reports.

Examples

Using ASU 2018-12's impact on the benefit reserve as an example, actuaries may consider developing expected impacts on the benefit reserve balance due to the following modeling changes:

- **Assumption unlock and provision for adverse deviation (PAD) removal:** Previously locked-in actuarial assumptions must now be reviewed and potentially changed at least annually. By capturing data from an existing process (e.g., loss recognition), one can leverage existing controls to anchor the starting point of cash flows and assumptions for more granular assumption-setting or modeling as needed. This can be used to determine the expected impact of changing assumptions and removing PADs. For transitioning business, it may also be useful to identify the amount of PAD buildup in transitioning reserves to understand how much PAD runoff contributes to future earnings.
- **Cohort definition:** Depending on the level of aggregation in a cohort, benefit reserves may increase or decrease, also subject to the net premium ratio cap.
- **Net premium ratio cap:** Net premium ratio is capped at 100%. Applying this cap when applicable will cause an increase in benefit reserves. The expectations associated with this mechanic for the benefit reserve calculation associated with this mechanic are indelibly connected with cohort definition.
- **Historical data:** How will historical data collection affect reserves? How will changing from a fully prospective method today to a retrospective method (under LDTI) uniquely affect balances? Early and large events can drive different net premium ratios and balances.
- **Other:** How will the introduction of allocations or other approximations (e.g., ICOS, IBNR) affect reserve balance? Historical data is not limited to claims paid and premiums collected, depending on final accounting policy decisions. The LDTI benefit reserve method introduces claim reserves considerations as part of its key design decisions.

Establishing these expectations will help management connect with results and establish a basis for future evaluation. Additionally, this work can serve as a basis for future insightful activities like source-of-earnings analysis.

Control 2: Overarching chart of accounts governance

While ASU 2018-12 change starts upstream with actuarial model enhancements and ends downstream in reporting, individual institutions may differ in where they choose to land the additional data needed for reporting (e.g., data warehouse, subledger, general ledger). Those institutions that choose to enhance their subledger and/or general ledger can expect significant impact on their CoA to accommodate enhanced external and internal reporting needs. Even a mature CoA change management process will be put to the test as potentially 15% or more of the underlying account structure experiences change to accommodate ASU 2018-12.

Finance and CoA change management teams should consider the addition of an overarching supplementary control to self-assure a well-controlled CoA redesign. One way to achieve this is to perform analytics on the pre- and post-LDTI CoA to identify the population of accounts with change, along with the change type (e.g., move, new, close), then compare this to the list of approved account changes. As the CoA is undergoing significant redesign, institutions deploying less technically savvy methodologies will need significantly more time to test CoA updates. Additionally, unintended impacts on CoA resulting from ASU 2018-12 may not be identified until further downstream in report testing, resulting in significant rework and retesting.

Deloitte's accounting information science tool, AToM, may be leveraged to ingest pre- and post-TI hierarchies and support the CoA redesign governance routine. AToM allows users to see CoA mapping changes, along with financial impact of changes, in a powerful real-time financial balance view.

Control 3: GAAP-to-LDTI bridge report

With a redesigned CoA able to accommodate new and more granular actuarial model output, institutions should produce detailed account-level views bridging pre-LDTI GAAP balances to new LDTI balances with highlighted differences. This may vary from organization to organization, but typically, the corporate finance and controllers should produce these bridge reports and formally share them for review and sign-off with all institution users of affected accounts.

Separate bridge reports should be prepared for the transition period (point-in-time cutover from pre-LDTI GAAP to LDTI as of January 1, 2023), as well as each restatement period (quarterly). Line-of-business (LOB) finance and actuaries should closely review bridge reports to ensure actuarial changes flow through to accounts as intended. Additionally, corporate and LOB finance and actuaries should consider and observe how approximations and simplifications are flowing through to the general ledger and rollup collectively.

The design and automation of these bridge reports can be handled through a number of ETL and analytical tools. The review, comment, and sign-off on bridge reports is most effectively and efficiently handled if connected through a workflow tool. Deloitte can help adopters integrate the report buildout and review workflow together to promote a well-controlled and more expedient process.

Preparing for the change on the horizon

Ready or not, ASU 2018-12 is bringing significant change to finance and actuarial organizations across insurance institutions. Additional supplementary or one-time controls are a great complement to existing control frameworks and may be necessary given the high degree of change across the record-to-report continuum. Actuarial analytics, overarching CoA governance, and detailed bridge reports are just a few examples of powerful supplementary controls that may help adopters avoid control pitfalls.

Deloitte has deep and wide-ranging experience with a variety of industry-leading finance information technology companies to help clients meet their finance transformation goals with a bespoke, vendor-agnostic approach.

Deloitte support

- Enterprise Resource Planning (ERP) upgrade and implementation: Strategic vendor alliances and deep experience with all major ERP providers allow Deloitte's Controllingship and Actuarial professionals to plug in and immediately move the needle forward, regardless of where your institution is in its finance transformation journey.
- CoA redesign and integration: Deloitte's accounting information science proprietary tool, AToM, is easily integrated to allow powerful, rapid, and real-time governance of the CoA. AToM is ideally used to complement ERP upgrades, but can also be used in a number of value-added ways, such as reconciling and cleaning up subledgers and merging disparate CoAs.
- Reconciliation automation: Deloitte leverages a variety of leading reconciliation tools to help clients automate traditionally time-intensive reviews and reconciliations, enabling employees to spend time in a more value-added manner investigating differences rather than producing reports.
- Controls modernization: Deloitte's Digital Technology and Controls Automation (DTCA) approach helps clients realize immediate and long-term benefits by automating traditionally manual controls and allowing for potential real-time monitoring of controls performance. This helps organizations achieve a lower cost-per-control while enhancing control range and effectiveness.



Contacts

Matthew Clark, FSA, CFA, CERA, MAAA

Principal
Actuarial and Insurance Solutions
Deloitte Consulting LLP
matthewclark@deloitte.com
+1 312 486 0185

Wallace Nuttycombe

Principal
Risk and Financial Advisory
Deloitte & Touche LLP
wnuttycombe@deloitte.com
+1 973 602 6769

Thomas Q. Chamberlain, ASA, MAAA

Managing director
Actuarial and Insurance Solutions
Deloitte Consulting LLP
tchamberlain@deloitte.com
+1 312 486 3828

Joseph Tedesco

Manager
Risk and Financial Advisory
Deloitte & Touche LLP
jtedesco@deloitte.com
+1 303 294 4254



About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the “Deloitte” name in the United States, and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional adviser.

Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.