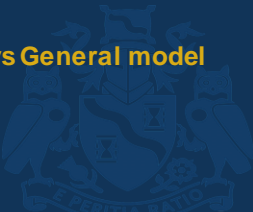


Institute
and Faculty
of Actuaries

IFRS 17

Variable fee approach vs General model

Steve Cheung, FSA
EY Hong Kong



04 May 2018

Agenda

- Brief IFRS 17 update
- Variable fee approach
- Illustrative example



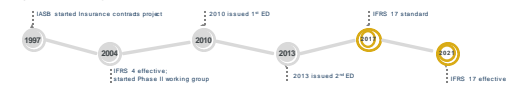
Institute
and Faculty
of Actuaries

1. Brief IFRS 17 update

arise
ponsorship
Thought leadership
Thought process
Community
Seasonal Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

IFRS 17 Insurance Contracts development

Key IFRS 17 development milestones



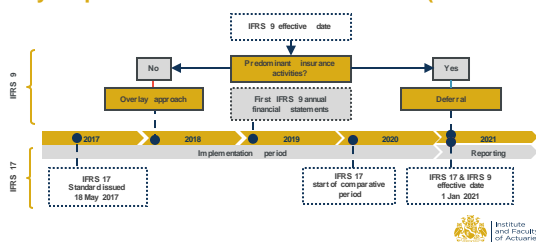
Key international development



04 May 2018

4

Key implementation milestones ahead (IFRS 17 & 9)



04 May 2018

5

Why does this fundamental change in insurance accounting standards matter?

Current situation	Forthcoming practice	Key transition steps
<ul style="list-style-type: none"> Mix of different local generally accepted accounting principles (GAAPs) Limited comparability between insurers and inconsistency with other industries Limited use for steering the business and understanding sources of profit in current period or expected in future periods Some key metrics used to inform investors and stakeholders are based on IFRS (i.e. ROE and payout ratios) but there is significant use of secondary metrics such as EV 	<ul style="list-style-type: none"> Consistent adoption across geographies Current assumptions for each reporting period Impact likely more significant for life insurance products Exposure approach to recognition of profit and revenue – as insurance or investment services are provided Significant changes in disclosures Greater insight into sources of profit within the business (e.g. underwriting, expenses, investment returns) 	<ul style="list-style-type: none"> Operational considerations: <ul style="list-style-type: none"> Use clear design principles Opt for efficient and cost-effective implementation approach Trade-off between operational simplicity and optimization Compliance vs catalyst for change (Finance & Risk transformation) Accounting decisions: <ul style="list-style-type: none"> Policy decision making and implementation of choices Consistently applied across Group Communication challenges: <ul style="list-style-type: none"> Implications for external messaging Explain strategic choices

04 May 2018

6

2. Variable fee approach

04 May 2018

-rise
 -norship
 Thought Leadership
 Progress
 Community
 Seasonal Meetings
 Education
 Working parties
 Volunteering
 Research
 Shaping the future
 Networking
 Professional support
 Enterprise and risk
 Learned society
 Opportunity
 International profile
 Journals
 Support

VFA eligibility

- **What is participating contracts?**
 - Contracts that have a feature by which the entity shares additional risks and rewards with the policyholder, in some contracts subject to discretion of the entity
 - Profit sharing may be based on specific assets, groups of assets and liabilities, the profit made by a fund or company or an index
 - These are referred to as 'underlying items'
 - Distinction between "direct" and "indirect" participating contracts
 - Only direct participating insurance contracts are eligible for VFA
- **Example of contracts that typically with participating features:**
 - Unlinked contracts
 - Universal life contracts
 - Variable annuity contracts
 - Participating contracts
 - With profit contracts

Direct participating contracts – definition

- "Substantially investment-related service contracts": Insurance contracts with direct participation features are insurance contracts that are substantially investment-related service contracts under which an entity promises an investment return based on underlying items
- The Board views these contracts as creating an obligation to pay policyholders an amount equal in value to specified underlying items, minus any expected cash flows that do not vary directly with the underlying items [BC239] or ... is compensated for the services by a fee that is determined by reference to the UI [B107(b)]

- 1 The contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items.
- 2 The entity expects to pay to the policyholder an amount equal to a substantial share of the fair value, return on the underlying items.
- 3 A substantial proportion of any change in the expected payments are expected to vary with the change in the fair value of the underlying items.

- Participating contracts which do not satisfy all 3 criteria are referred to as indirect participating contracts -> measured under GM
- Assessment to be made at inception of the contracts, no re-assessment needed (unless contracts modified). Criteria for VFA to be assessed for each group of contracts

Direct participating contracts – definition

- 1 The contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items
- No need to hold the underlying items to meet criteria 1 as long as they are clearly identified by the contract:
 - Can comprise any items, for example a reference portfolio of assets, the net assets of the entity, or a specified subset of the net assets of the entity, as long as they are clearly identified by the contract
 - An entity need not hold the identified pool of underlying items (the measurement of insurances should not depend on what assets the entity holds)
 - The Board decided the underlying items do not need to be a portfolio of financial assets. They can comprise items such as the net assets of the entity or a subsidiary within the group that is the reporting entity.
 - Contract can be implied by an entity's customary business practice:
 - A contract is an agreement between two or more parties that creates enforceable rights and obligations. Enforceability of the rights and obligations in a contract is a matter of law
 - Contracts can be written, oral or implied by an entity's customary business practices [2]
 - Implied terms in a contract include those that are imposed by law or regulation
 - The practice of establishing contracts varies across jurisdictions, industries and entities, and even within an entity, depending on the class of customer



Institute
and Faculty
of Actuaries

04 May 2018

13

Direct participating contracts – definition

- 1 The contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items
- There is no clearly identified pool of underlying items when:
 - Entity can change the UI with retrospective effect OR
 - No UI identified even the return is based on entity's overall performance and expectation, or the performance and expectations of a subset of assets the entity holds (An example of such a return is a crediting rate or dividend payment set at the end of the period to which it relates. In this case, the obligation to the policyholder reflects the crediting rate or dividend amounts the entity has set, and does not reflect identified underlying items)
 - Don't preclude entity's discretion, however the link to the underlying items must be enforceable
 - A share referred to in paragraph B101(a) does not preclude the existence of the entity's discretion to vary the amounts paid to the policyholder. However, the link to the underlying items must be enforceable (see paragraph 2) [B105].
 - e.g. % of participation is a range, 'minimum' of 70% of returns', etc.



Institute
and Faculty
of Actuaries

04 May 2018

14

Direct participating contracts – definition

- 2 The entity expects to pay to the policyholder an amount equal to a substantial share of the business results on the underlying items
- 3 The entity expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items
- Substantial
 - To be interpreted in the context of contracts providing investment-related services
 - Where the entity is compensated by a fee that is determined by reference to underlying items
 - IFRS 17 does not contain a quantitative threshold for 'substantial share'
 - No clear market practice has developed yet, as a working hypothesis, a 'range' might be applied
 - Within this 'range', products would be assessed based on their specific features and circumstances (e.g., fee structures, profit sharing conditions, level of discretion)
 - Variability
 - To be assessed over the duration of the group of contracts, and on a present value probability-weighted average basis
 - For example, a guarantee of a minimum return [B108]



Institute
and Faculty
of Actuaries

04 May 2018

15

Direct participating contracts – definition

- **Contract specifies a determinable fee:**
 - For this to be the case, the contract needs to specify that the policyholder participates in a share of a clearly identified pool of underlying items. Without a determinable fee, which can be expressed as a percentage of portfolio return or portfolio asset values rather than only as a monetary amount, the share of return on the underlying items the entity claims would benefit at the discretion of the entity, and in the board's view, this would not be consistent with that amount being equivalent to a fee [BC 2.45(e)]
- **Not for reinsurance issued or held:**
 - Reinsurance contracts issued and reinsurance contracts held cannot be insurance contracts with direct participation features for the purposes of IFRS 17 [B103].
- **Assess the variability over the duration, and on a PV probability-weighted average basis, not a best or worst outcome basis:**
 - Assess the variability in the amounts in paragraphs B101(b) and B101(c): (i) over the duration of the group of insurance contracts; and (ii) on a present value probability-weighted average basis, not a best or worst outcome basis (see paragraphs B37–B38 [B107(b)]).
 - Example on a guarantee of a minimum return [B108]



04 May 2018

16

Direct participating contracts – measurement

[B104] The conditions in paragraph B101 ensure that insurance contracts with direct participation features are contracts under which the entity's obligation to the policyholder is the net of:

- the obligation to pay the policyholder an amount equal to the fair value of the underlying items; and
- a variable fee, (see paragraphs B110–B118) that the entity will deduct from (a) in exchange for the future service provided by the insurance contract, comprising:
 - the entity's share of the fair value of the underlying items; less
 - fulfilment cash flows that do not vary based on the returns on underlying items.

➡ Changes in variable fee → adjust against CSM and therefore spread over remaining coverage

- **Variable fee approach**
 - Changes in the variable fee are not recognized immediately in comprehensive income but included in CSM
 - CSM updated for current interest rates, and released on the basis of passage of time
 - If the insurer adjusts underlying items, induces OCI for reporting changes in market interest rates, the P&L interest charge is equal to the P&L investment income on the underlying items
 - Risk mitigation: option to report changes in embedded guarantees in P&L if certain criteria and documentation requirements are met



04 May 2018

17

Summary key difference between GM and VFA

Measurement model	Changes in fulfilment cash flows due to the changes in financial variables	Insurance financial income or expenses
GM	All changes in discount rates and other financial variables are reported in the statement of comprehensive income (profit or loss; or other comprehensive income)	The interest expense on the contractual service margin is explicitly accrued using rates at the initial recognition of the contracts
VFA	The contractual service margin is adjusted to reflect the changes in the variable fee, which includes some changes in discount rates and other financial variables	The interest expenses are implicit in the changes in the insurer's variable fee (its share of the underlying items and other cash flows needed to fulfil the contracts)



04 May 2018

18

Concept checking...

- (1) What is a clearly identified pool of underlying items?
 - The pool of underlying items can comprise any items, for example a reference portfolio of assets, the net assets of the entity, or a specified subset of the net assets of the entity, as long as they are clearly identified by the contract. An entity need not hold the identified pool of underlying items because the measurement of insurance contracts should not depend on what assets the entity holds. The underlying items do not need to be a portfolio of financial assets. They can comprise items such as the net assets of the entity or a subsidiary within the group that is the reporting entity.



04 May 2018

19

Concept checking...

- (2) What is the definition of "contract" and "contractual terms" when defining the clearly identified pool of assets?
 - A contract is an agreement between two or more parties that creates enforceable rights and obligations. Enforceability of the rights and obligations in a contract is a matter of law. Contracts can be written, oral or implied by an entity's customary business practices. Contractual terms include all terms in a contract, explicit or implied. Implied terms in a contract include those imposed by law or regulation.
 - There are certain features which may not satisfy VFA criteria: (i) different portfolios of participating contracts (direct or indirect) share the same fund with a notionally separated assets in the entity's general account, and (ii) the segregation of assets are only managed internally without enforceability or proper disclosure to the policyholders. While "ring-fenced assets" may better meet this criterion, there are also discussions if the "accounting designation" or "entity's governance framework and disclosure" meet this criterion. Advocates argue that commercial communication, i.e., materials presented or disclosed to the policyholders, conform part of the enforceability and the entity should consider these factors for the assessment of clearly identified pool of assets. In any case, the definition of the "underlying items" should be documented clearly, and the entity cannot change the underlying items with retrospective effects.



04 May 2018

20

Concept checking...

- (3) Does "a share of a clearly identified pool of underlying items" preclude the entity's discretion to vary the amounts paid to the policyholder?
 - No, but the link to the underlying items must be enforceable.



04 May 2018

21

Concept checking...

- (4) How to interpret the word "substantial" in VFA criteria II and III?
 - The IASB does not provide a concrete definition for the term "substantial" as noted in the VFA criteria II and III. This is to allow entities to apply IFRS 17 for their particular circumstances without being limited by any quantitative rules. Market consensus may be formed with potential help from TRG discussion. However, a range of sharing percentages may still be expected from various jurisdictions due to different product offerings, and comparability with the fee structures of the investment products offered. An individual entity needs to perform its own assessment, and verify its conclusion with its respective auditor.



04 May 2018

22

Concept checking...

- (5) What is the "variable fee"?
 - A variable fee that the entity will deduct in exchange for the future service provided by the insurance contract, comprises: (i) the entity's share of the fair value of the underlying items; less (ii) fulfilment cash flows that do not vary based on the returns on underlying items. Contracts eligible for VFA should specify a determinable fee which can be expressed as a percentage of portfolio returns or asset values rather than only as a monetary amount. Without a determinable fee, the share of returns on the underlying items the entity retains would be entirely at the discretion of the entity, and this would not be consistent with that amount being equivalent to a fee.



04 May 2018

23

Concept checking...

- (6) Can the VFA be applied to reinsurance contract?
 - No. Reinsurance contracts issued and reinsurance contracts held cannot be insurance contracts with direct participation features for the purposes of IFRS 17 [B109]. Hence, the VFA cannot be applied.



04 May 2018

24

Concept checking...

- (7) When should the VFA eligibility assessment be conducted?
 - In general, the assessment should be conducted at inception only. An entity shall assess whether the conditions in paragraph B101 are met using its expectations at inception of the contract and shall not reassess the conditions afterwards, unless the contract is modified, applying paragraph 72 [B102]. The variability over the duration should be assessed, and on a PV probability-weighted average basis, not a best or worst outcome basis [B107(b)(ii)].

Concept checking...

- (8) Is there an option not to apply the VFA?
 - The IASB provides the general accounting model, and two modifications as known as the VFA and the premium allocation approach (PAA) for different types of contracts. While applying the PAA is an optional simplification when certain criteria are met for the short term contracts, applying the VFA is not an option nor accounting choice. The entity should apply the VFA if the VFA eligibility assessment is passed.

3. Illustrative example

Given: product features

- A simple 5-year investment-linked product is created to illustrate the CSM differences between VFA and GM:
 - Death benefit (sum assured) = fixed 500 + account value (AV)
 - Maturity benefit = AV
 - Level annual premium = 500
 - 2% asset management charge (AMC)
 - Cost of insurance charge (COI charge)
 - 100 identical policies issued



04 May 2018

28

Given: cash flow projection

Projected best estimate cash flows (BECFs) for 100 policies at inception						
BE projection/Year	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
No. survival@OY	100	99	97	94	90	85
No. deaths@OY	1	2	3	4	5	-
No. survival@OY	99	97	94	90	85	-
Premium@OY	50,000	49,500	48,500	47,000	45,000	-
Commission@OY	5,000	2,475	970	-	-	-
Expense@OY	200	198	194	188	180	-
Death outgo@OY	1,000	3,030	6,186	10,638	16,667	-
Survival outgo@OY	-	-	-	-	-	240,833
Net CF	43,800	43,797	41,150	36,174	28,153	(240,833)



04 May 2018

29

Given: account value roll forward

Projected best estimate cash flows (BECFs) for 100 policies at inception						
BE projection/Year	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
AV@OY	-	49,500	98,470	146,814	194,362	-
Premium@OY	50,000	49,500	48,500	47,000	45,000	-
COI charge@OY	(500)	(1,000)	(1,500)	(2,000)	(2,500)	-
Investment income@OY	1,490	4,460	8,940	15,022	22,876	-
AMC@OY	(990)	(1,960)	(2,930)	(3,836)	(4,737)	-
Death outgo from AV@OY	(500)	(2,030)	(4,686)	(8,638)	(14,167)	-
AV@OY	49,500	98,470	146,814	194,362	240,833	-



04 May 2018

30

Step 1: define the CFs for FCF calculation

Step (1): CFs for FCF calculation						
	Inception	Yr1	Yr2	Yr3	Yr4	Yr5
Premium	50,000	49,500	48,500	47,000	45,000	-
Commission & Expense	(5,200)	(2,673)	(1,164)	(188)	(180)	-
Survival outgo	-	-	-	-	-	(40,833)
Deaths (ns component)	-	(500)	(1,000)	(1,500)	(2,000)	(2,500)
Deaths (sv component)	-	(500)	(2,030)	(4,686)	(8,636)	(14,167)
Net CF (NCF)	44,800	45,827	44,306	40,826	34,182	(257,500)



04 May 2018

31

Step 2: initial measurement and initial CSM

Step (2): FCF calculation	
	Inception
BEL	(3,200)
RA	-
FCF	(3,200)



04 May 2018

32

Step 3: define the coverage unit

Step (3): Coverage unit						
	Inception	Yr1	Yr2	Yr3	Yr4	Yr5
NOP		100	99	97	94	90
SA		1,000.0	1,515.2	2,061.9	2,659.6	3,333.3
Coverage unit		100,000	150,000	200,000	250,000	300,000



04 May 2018

33

Step 4: CSM roll-forward under GM

Step (4): CSM under GM						
	Inception	Yr1	Yr2	Yr3	Yr4	Yr5
CSM@BOY		3,200	2,913	2,472	1,868	1,047
Interest accretion		96	133	152	146	101
Amortization		(803)	(574)	(765)	(567)	(1,148)
CSM@EOY		2,913	2,472	1,868	1,047	-



Institute
and Faculty
of Actuaries

04 May 2018

34

Step 5a: define the entity's share of the UI

Step (5a): Entity's share of the fair value of the underlying items (ES of UI)						
	Inception	Yr1	Yr2	Yr3	Yr4	Yr5
BOY	18,584	18,084	16,638	13,935	9,882	4,320
Paid to entity@BOY	(503)	-	-	-	-	-
Change in ES of UI		544	757	856	774	417
Paid to entity@EOY		(1,993)	(3,493)	(4,939)	(6,336)	(8,737)
EOY	18,084	16,638	13,935	9,882	4,320	-



Institute
and Faculty
of Actuaries

04 May 2018

35

Step 5b: define the FCF that do not vary with UI

Step (5b): FCF that do not vary based on the return on underlying items (FCF non UI)						
	Inception	Yr1	Yr2	Yr3	Yr4	Yr5
BOY	15,384	10,184	7,318	5,487	4,136	2,280
Paid by entity@BOY	(5,200)	-	-	-	-	-
Change in FCF non UI		307	330	337	324	220
Paid by entity@EOY		(3,173)	(2,164)	(1,688)	(2,180)	(2,500)
EOY	10,184	7,318	5,487	4,136	2,280	-



Institute
and Faculty
of Actuaries

04 May 2018

36

Step 6: CSM roll-forward under VFA

Step (6): CSM under VFA						
	Inception	Yr1	Yr2	Yr3	Yr4	Yr5
CSM(BDY)	3,200	3,038	2,810	2,358	1,467	
Change in ES of UI	544	757	856	774	417	
Change in PCF non UI	(307)	(333)	(337)	(324)	(223)	
Amortization	(399)	(853)	(971)	(1,341)	(1,654)	
CSM(BDY)	3,038	2,810	2,358	1,467	-	



04 May 2018

37

Q&A

Steve Cheung, FSA
 Senior Consulting Actuary
 Asia Pacific Insurance & Actuarial Advisory Services, Ernst & Young
steve.cheung@hk.ey.com



04 May 2018

38

Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



04 May 2018

39