www.pwc.co.uk

In depth

IFRS 9 Impact on the Pharmaceutical Industry

Release Date
December 2017
No. 2017-10

pwc

Contents

Application of IFRS 9 in the pharmaceutical and life sciences industry

At a glance

IFRS 9 will impact the pharmaceutical industry and, with an effective date of 1 January 2018, it is fast approaching. Pharmaceutical entities hold a number of financial instruments arising from their core operations (trade receivables), from risk management activities (foreign exchange and interest rate hedges), or cash management and investing activities (bonds and equity investments). The trend of complex financing structures and royalty arrangements has seen an increased focus on financial instruments in the industry. All financial assets need to be carefully assessed, to understand the classification and impairment implications.

IFRS 9 replaces the majority of IAS 39; it covers classification, measurement, recognition and derecognition of financial assets and financial liabilities, and impairment of financial assets, and it provides a new hedge accounting model.

IFRS 9: Classification and measurement: PwC In depth INT2014-05, IFRS 9: Expected credit losses: PwC In depth INT2014-06 and in depth 2015-05 IFRS 9: hedging in practice – Frequently asked questions provide a comprehensive analysis of the new standard. This In depth discusses some of the more significant impacts on entities within the pharmaceutical and life sciences industry.

What to do now?

Pharmaceutical 'to do' list before 1 January 2018:

Here is your immediate 'to do' list for the implementation of IFRS 9 (read the guide for more detail in each area):

1. ***Equity investments*** will ALL be held at fair value, even if they are unquoted. There is no cost exemption. An entity needs to decide if it will make an irrevocable election to hold any equity instruments at fair value through other comprehensive income. This can be done on an instrument-by-instrument basis.

2. ***Factoring*** can lead to trade receivables being classified as 'hold to collect and sell', and it results in a fair value measurement. To avoid recognising all receivables at fair value, the factored or held to sell receivables might be able to be segregated. However, two different business models would need to be clearly articulated and documented before 1 January 2018.

3. The ***impairment model*** has changed and, in many cases, this will lead to a higher impairment provision. Entities need to work through the expected credit loss model, ensuring that expectations of forward-looking data are incorporated. Trade receivables will take a 'double hit': from discounting under the new revenue standard; and booking a 'day 1' impairment loss from IFRS 9.

4. All ***hedging documentation*** must be re-done before 1 January 2018, to show how the new hedge accounting criteria have been satisfied.

Introduction – a snapshot of the financial position of a pharmaceutical company

A typical balance sheet of a pharmaceutical company includes the following financial instruments:

Non current assets

- Equity investments
- Long term trade receivables
- Loan receivables, including intercompany loans
- Financial asset arising from future royalty streams
- Contingent consideration receivable

Current assets

- Trade receivables
- Derivative financial assets

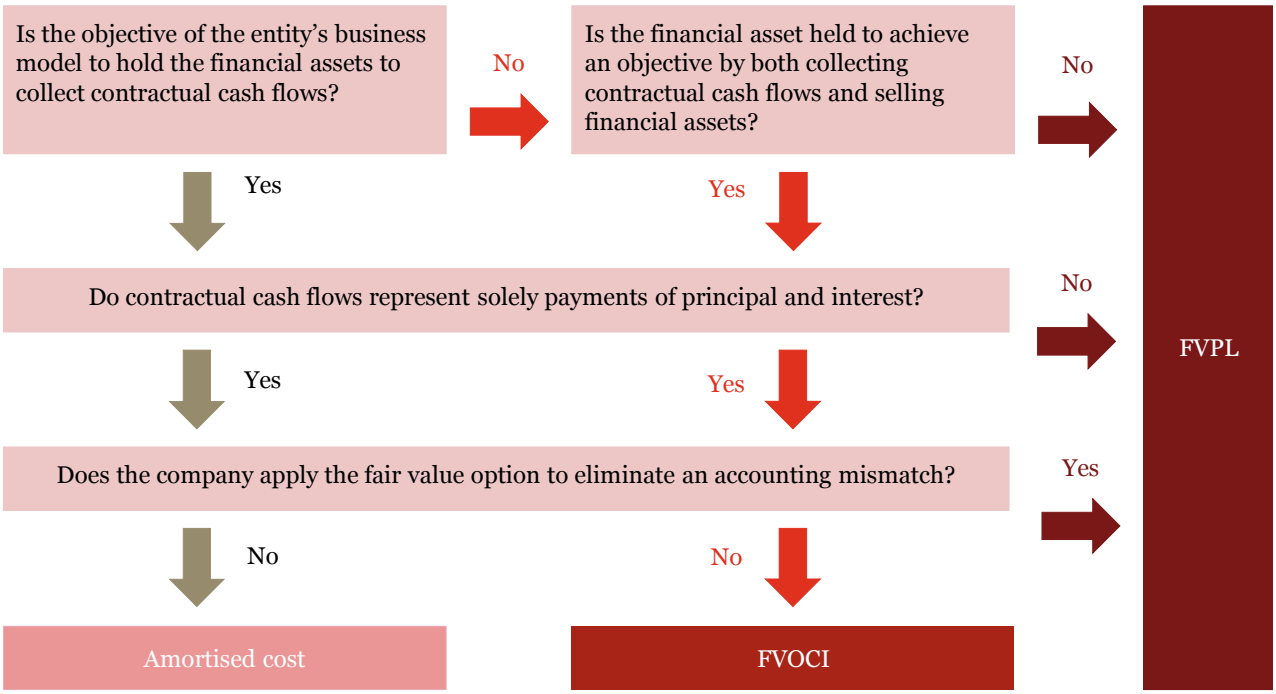
Current and non current liabilities

- Borrowings
- Derivative financial liabilities
- Contingent consideration from business combination

Classification and measurement – business model assessment

Debt investments (including receivables)

Classification under IFRS 9 of debt investments, is driven by the entity's business model for managing the financial assets and whether the contractual characteristics of the financial assets represent solely payments of principal and interest (SPPI).



Business model assessment

The classification and measurement of financial assets under IFRS 9 is determined based on two criteria:

- the business model within which the entity holds the asset (business model test), and
- the cash flows arising from the asset (SPPI test that is, the financial asset gives rise to cash flows that are solely payments of principal and interest).

The business model test will determine the classification of financial assets that pass the SPPI test. IFRS 9 makes a distinction between three different business models:

- **Hold to collect:** The entity holds the financial assets in order to collect the contractual cash flows. The entity measures such assets at amortised cost.
- **Hold to collect and sell:** The entity holds the financial assets for both selling and collecting contractual cash flows. The entity measures such assets at fair value through other comprehensive income (FVOCI)
- **Hold to sell:** The entity holds the financial assets with an intention to sell them before their maturity. The entity measures such assets at fair value through profit or loss (FVPL)

Contractual cash flows analysis

Management should also assess whether the asset's contractual cash flows represent solely payments of principal and interest ('the SPPI condition').

This condition is necessary for the financial asset, or group of financial assets, to be classified at amortised cost or FVOCI. 'Principal' and 'interest' are defined as follows:

Principal is the fair value of the financial asset at initial recognition. However, that principal amount might change over the life of the financial asset (for example if there are repayments of principal).

Interest is typically the compensation for the time value of money and credit risk.

However, interest can also include consideration for other basic lending risks (for example liquidity risk) and costs (for example, servicing or administrative costs) associated with holding the financial asset for a period of time, as well as a profit margin.

Equity investments

Investments in equity instruments (as defined in IAS 32, from the perspective of the issuer) are always measured at fair value under IFRS 9. The cost exception, under IAS 39 has been removed even for unquoted investments.

Equity instruments that are held for trading are required to be classified at FVPL, with dividend income recognised in profit or loss. For all other equities within the scope of IFRS 9, management can make an irrevocable election on initial recognition, on an instrument-by-instrument basis, to present changes in fair value in other comprehensive income (OCI) rather than in profit or loss. Dividends are recognised in profit or loss unless they clearly represent a recovery of part of the cost of an investment, in which case they are recognised in OCI. There is no recycling of amounts from OCI to profit or loss (for example, on sale of an equity investment) nor are there any impairment requirements. There are additional disclosure requirements if an entity elects to measure equity instruments at FVOCI. [IFRS 7 paras 11A 11B].

No expected credit loss (ECL) provision is recognised on equity investments (see the section on ECL for debt measurement below.)

What does this mean for the pharmaceutical industry (Pharma)?

Trade receivables	• Trade receivables in a pharma company will normally meet the hold to collect criterion. The payments would normally comprise of solely of principal and interest. • They would thus be measured at amortised cost. • Be alert for factoring arrangements.
Financial assets from royalty streams	• Outlicensing might result in the recognition of financial assets based on the receipt of a future royalty stream. • The assets would fail the SPPI criterion and would be classified at fair value through profit or loss.
Equity investments	• Equity instruments are measured at fair value under all circumstances. An entity can make an irrevocable election to measure equity investments at fair value through OCI. There are additional disclosure requirements if this election is used. No ECL is recognised for equity investments.
Investments in bonds	• For long term investments such as bonds the entity will need to assess the business model. • They might be classified at amortised cost, fair value through other comprehensive income or fair value through profit or loss.
Derivatives	• Derivatives remain classified at fair value through profit or loss.
Contingent consideration	• Monetary contingent consideration that the acquirer is due to pay or receive is within the scope of IFRS 9. Contingent consideration assets and liabilities are measured at fair value through profit or loss. Any contingent consideration receivable previously classified as AFS will need to be reclassified to FVTPL.

Factoring

Pharmaceutical entities might manage credit risk by entering into factoring arrangements. They can enter into factoring arrangements where they sell receivables to a third party and transfer substantially all of the related risks and rewards.

Factoring arrangements will affect the business model in which the receivables are held.

An entity will be receiving **cash flows from selling** if the factoring **results in derecognition** of the receivables.

'De-recognition' under IFRS 9 is considered to be a 'sale' for the purpose of the business model assessment. Therefore, sales are considered to have taken place where the disposals/transfers of trade receivables under the factoring agreements qualify for de-recognition in their entirety.

An entity might be receiving cash flows by collecting the contractual cash flows from the receivable if the factoring **does not result in derecognition**,

Depending on the above, a factored receivable might be in the hold to collect and sell model.

Example – Business model for receivables that potentially could be subject to factoring

Pharma sets up a trade receivables factoring agreement with a bank. At the inception of a trade receivable, it is often unknown whether it will be subject to factoring. Pharma both factors and holds significant amounts of receivables.

The factoring decisions rests typically with the Pharma's management and is made later in the process. The terms of the factoring agreement are such that all receivables that are factored meet the financial asset de-recognition criteria, resulting in the original receivables being de-recognised from the statement of financial position.

What would be the applicable IFRS 9 business model for the trade receivables, which could potentially be subject to factoring?

Solution

When evaluating the business model, the relevant activities should be considered. One of two business models might be appropriate, depending on the facts and circumstances.

1. ***Hold to collect and sell' business model*** – this would apply where relevant activities are represented through both the collection of contractual cash flows (for those receivables that are not factored) and regularly selling receivables (via selling receivables into the factoring agreement on a regular basis, even if the exact extent and the specific receivables impacted cannot be identified at inception). Therefore, the whole portfolio of trade receivables should be classified as 'hold to collect and sell'.

2. ***Hold to sell business model*** – Where Pharma's objective is to realise the cash flows primarily through selling, the business model is not held to collect and sell, and so the receivables should be measured at FVPL.

In the case above, Pharma cannot specify which receivables it plans to factor, and it both factors and holds significant amounts of receivables. The 'hold to collect and sell' business model might be more appropriate.

What does this mean for Pharma?

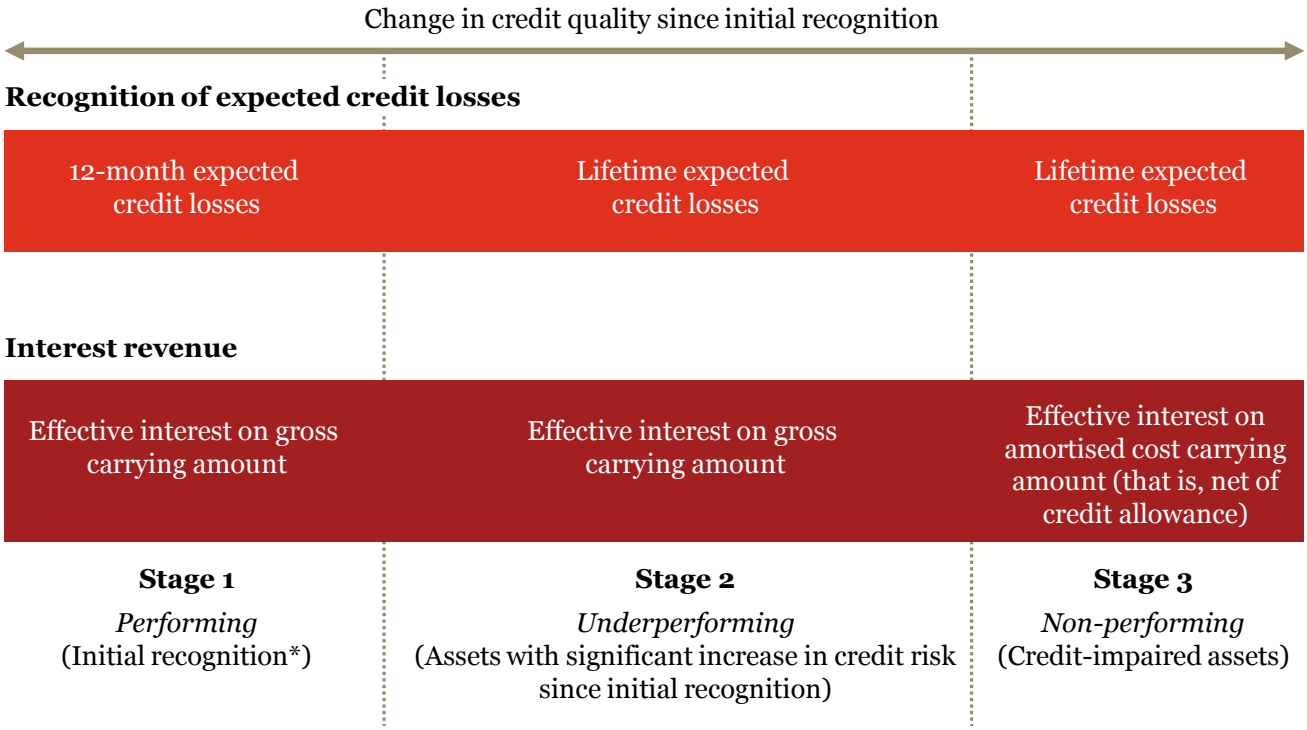
If a pharmaceutical entity factors only some of its receivables (for example, only those due from certain customers), it might be able to split its portfolio of receivables into two sub-portfolios.

The business model for the sub-portfolio containing the factored receivables will be 'held to sell'. The business model for the sub-portfolio containing the remaining receivables will be 'held to collect.'

Judgement should be applied, based on all of the facts. The business should be reviewed if the facts change. Two different business models would need to be clearly articulated and documented before 1 January 2018.

Impairment of assets measured at amortised cost

The impairment rules of IFRS 9 introduce a new, forward looking, expected credit loss ('ECL') impairment model which will generally result in earlier recognition of losses compared to IAS 39.



- **Stage 1** includes financial instruments that have not had a significant increase in credit risk since initial recognition or that have low credit risk at the reporting date. For these assets, 12-month ECLs are recognised and interest revenue is calculated on the gross carrying amount of the asset.
- **Stage 2** includes financial instruments that have had a significant increase in credit risk since initial recognition (unless they have low credit risk at the reporting date) but are not credit-impaired. For these assets, lifetime ECL are recognised, and interest revenue is still calculated on the gross carrying amount of the asset.
- **Stage 3** consists of financial assets that are credit-impaired, (that is, where one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred). For these assets, lifetime ECL are also recognised, but interest revenue is calculated on the net carrying amount (that is, net of the ECL allowance).

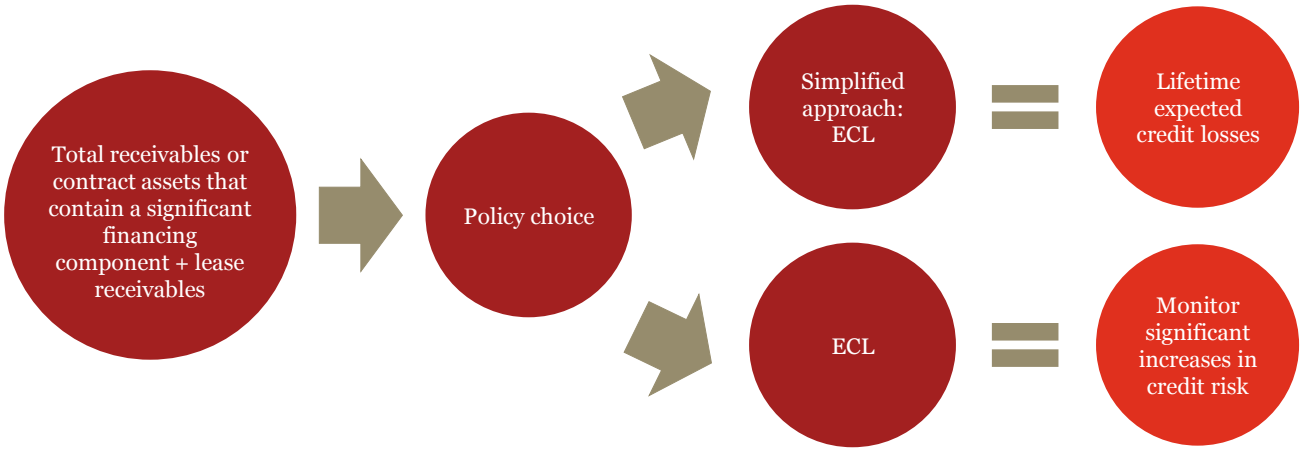
Impairment – scope exception for trade and lease receivables: the simplified approach

The general impairment model includes some operational simplifications for trade receivables, contract assets and lease receivables, because they are often held by entities that do not have sophisticated credit risk management systems.

These simplifications eliminate the need to calculate 12- month ECL and to assess when a significant increase in credit risk has occurred.

For trade receivables or contract assets that do not contain a significant financing component, the loss allowance should be measured at initial recognition and throughout the life of the receivable, at an amount equal to lifetime ECL. As a practical expedient, a provision matrix could be used to estimate ECL for these financial instruments.

For trade receivables or contract assets that contain a significant financing component (in accordance with IFRS 15) and lease receivables, an entity has an accounting policy choice: either it can apply the simplified approach (that is, to measure the loss allowance at an amount equal to lifetime ECL at initial recognition and throughout its life), or it can apply the general model.



What does this mean for Pharma?

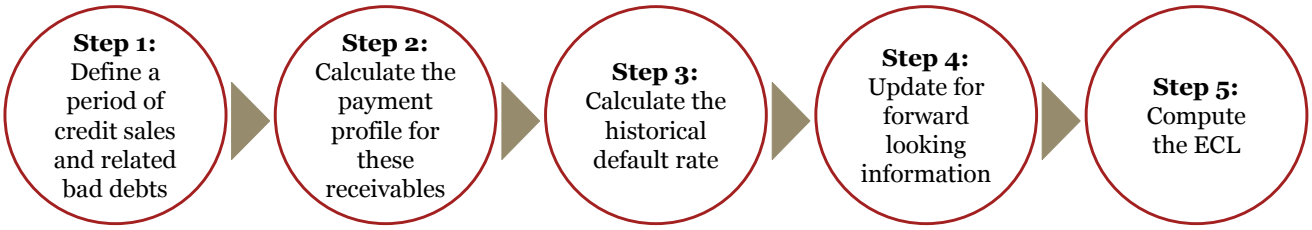
Short term trade receivables	• A trade receivable with maturity of less than one year will most likely qualify for the simplified model, since generally it will not contain a significant financing component. The entity will recognise lifetime expected credit losses throughout the life of the receivable. Materially higher provisions might not arise for short term trade receivables with customers with good collection history.
Long term trade receivables and intercompany	• For trade receivables that contain a significant financing component, for example long term receivables, the entity will have an accounting policy option. • Intercompany loans would normally not qualify for the scope exclusion and the full 3-stage model would need to be applied.
Financial investments in bonds	• For long term investments such as bonds the entity will need to apply the full 3-stage model.

Provision matrix

IFRS 9 allows an operational simplification whereby companies can use a provisions matrix to determine their ECL under the impairment model.

How does a provision matrix work?

A provision matrix method uses past and forward information to estimate the probability of default of trade receivables.



Step 1

The first step, when using a provision matrix, is to define an appropriate period of time to analyse the proportion of trade receivables written off as bad debts. This period should be sufficient to provide useful information. Too short might result in information that is not meaningful. Too long might mean that changes in market conditions or the customer base make the analysis no longer valid. In the example, we have selected one year. The overall receivables were CU10,000 and the receivables ultimately written off were CU300 in that period.

Total sales	CU10,000
Bad debts written off out of these sales	CU300

Step 2

In step 2, we determine the amount of receivables outstanding at the end of each time bucket, up until the point at which the bad debt is written off. The ageing profile calculated in this step is critical for the next step, when calculating default rate percentages.

Total sales (CU)	10,000	Total paid	Ageing profile of sales (step 3)
Paid in 30 days	(2,000)	(2,000)	8,000
Paid between 30 and 60 days	(3,500)	(5,500)	4,500
Paid between 60 and 90 days	(3,000)	(8,500)	1,500
Paid after 90 days	(1,200)	(9,700)	**300** (written off)

Step 3

In this step, Pharma calculates the historical default rate percentage. The default rate for each bucket is the quotient of the defaulted receivables at each bucket over the outstanding credit sales for that period.

For example, in the above information, CU300 out of the CU10,000 sales made, was written off.

Current sales – historical rate of default

Since all of the receivables relating to the sales made and those written off were current at some stage, it can be derived that for all current amounts, Pharma might incur an eventual loss of CU300. The default rate would therefore be 3% (CU300/CU10,000) = For all current amounts.

Sales payments outstanding after 30 days

An amount of CU8,000 was not paid within 30 days. An eventual loss of CU300 was a result of these outstanding receivables. Therefore, the default rate for amounts outstanding after 30 days would be 3.75%.

Remaining buckets

The same calculation is then performed for 60 days and after 90 days. Although the amount outstanding reduces for each subsequent period, the eventual loss of CU300 was, at some stage, part of the population within each of the time buckets, and so it is applied consistently in the calculation of each of the time bucket default rates.

The historical default rates are determined as follows:

	Current sales	Sales payments outstanding after 30 days	Sales payments outstanding after 60 days	Sales payments outstanding after 90 days
Ageing profile of sales (1)	10,000	8,000	4,500	1,500
Loss: (2)	300	300	300	300
Default rate: *(2) / (1)* *(%)*	**3**	**3.75**	**6.67**	**20**

Step 4

IFRS 9 is an ECL model, so consideration should also be given to forward-looking information.

Such forward-looking information would include:

- changes in economic, regulatory, technological and environmental factors, (such as industry outlook, GDP, employments and politics);
- external market indicators; and
- customer base.

For example, Pharma concludes that the defaulted receivables should be adjusted by CU100 to CU400 as a result of political difficulties affecting government spending on healthcare. Pharma also concludes that the payment profile and amount of sales are the same. Each entity should make its own assumption of forward looking information. The provision matrix should be updated accordingly.

The default rates are then recalculated for the various time buckets, based on the expected future losses.

	Current sales	Sales payments outstanding after 30 days	Sales payments outstanding after 60 days	Sales payments outstanding after 90 days
Ageing profile of sales (1)	10,000	8,000	4,500	1,500

Loss: (2)	400	400	400	400
Default rate: *(2) / (1)* *(%)*	**4**	**5**	**8.9**	**27**

Step 5

Finally, take the default rates from step 4 and apply them to the actual receivables, at the period end, for each of the time buckets. There is a credit loss of CU12 in the example illustrated.

	Total	Current (0-30 days)	30-60 days	60-90 days	After 90 days
Trade receivable balances at year end: (1)	140	50	40	30	20
Default rate: (2) (%)		4	5	8.9	27
Expected credit loss: (1)*(2)	**CU 12**	**CU 2**	**CU 2**	**CU 3**	**CU 5**

Interaction between IFRS 9 and IFRS 15

Trade receivables arising from sales with contracts with customers in the scope of IFRS 15, 'Revenue from contracts with customers', are within the scope of IFRS 9. There might be additional complexity where the sale has a significant financing component, which creates an accounting impact in both the IFRS 9 and IFRS 15 measurement of the sale and the corresponding receivable.

This results in a 'double hit' in the income statement.

Example – Measurement of receivables from customers with a history of long delays in payment

Pharma sells drugs to a governmental entity in a country facing significant financial difficulties.

Pharma has historically experienced long delays in payments for sales to this entity, due to slow economic growth and high debt levels in the country.

Under the terms of the sales contract the amount becomes payable 18 months after the drugs have been shipped. Pharma has an unconditional right to receive payment.

Pharma currently has outstanding receivables from sales to this entity of over 12 months from their due date. Pharma continues to sell products at its normal market price. Pharma has not entered into any factoring arrangements for these receivables.

The criteria for recognition of revenue in accordance with paragraph 9 of IFRS 15 have been met. The contract is also considered to have a significant financing component in accordance with paragraph 60 of IFRS 15. Pharma's accounting policy is to apply the simplified approach when determining ECLs for trade receivables with a significant financing component. The ECL is calculated using a probability weighted approach, considering scenarios where the government will and will not pay the amount due.

The following financial information has been extracted from Pharma's records in relation to the sales in country X:

New sales during 20X1 – Before discounting for financing element under IFRS 15	**CU50m**
New sales during 20X1 – After discounting for financing element under IFRS 15	CU45m

Lifetime expected losses as calculated using a provision matrix approach	CU8m

The sales are performed in Pharma's functional currency.

How should Pharma account for the receivables from the governmental entity?

Solution

Pharma recognises the new sales when the drugs are transferred to the customer because it is probable that it will collect the consideration that it is entitled to. However, the revenue and receivable will need to be discounted at initial recognition, because there is a significant financing component, due to the 18 months between the sale and the actual payments.

The journal entry to record under would be:

Receivables	DR CU45m
Sales	CR CU45m

Pharma will also need to apply the provisions of IFRS 9 and recognise impairment on initial recognition of the receivable. The ECL will also need to be discounted from the expected payment date to the due date.

Pharma applies the simplified approach, and it recognises lifetime ECLs on the receivable. This results into a 'double' hit on the income statement: the discounting element on the recognition of the financing component, and the ECLs. This might appear counterintuitiv,e given that the discount rate used under IFRS 15 for contracts containing significant financing components already incorporates the customer's credit risk. [IFRS 15 para 64].

Impairment losses (P&L)	DR CU8m
Receivables	CR CU8m

Intra-group loans

The impact of IFRS 9 on intra-group funding ('funding') might often be dismissed, because it is eliminated on consolidation. However, the impact in separate financial statements could be significant.

The scope for the accounting of intra-group loans is not expected to change from the introduction of IFRS 9. Funding, previously within the scope of IAS 39, 'Financial instruments: Recognition and measurement' will also be within the scope of IFRS 9.

Impairment of intra-group loans

Intra-group loans do not qualify for the simplifications in IFRS 9. The full impairment model needs to be applied, so 12 month ECL will be recorded on the day when funding is advanced.

Subsequently, if there is a significant increase in credit risk (for example, if the subsidiary's trading performance declines), the impairment loss will be increased to a lifetime expected credit loss.

What does this mean for Pharma?

Intra-group funding with written terms would generally fall withinin the scope of IFRS 9. All requirements of IFRS 9 will therefore apply, including impairment.

Under IFRS 9, entities will be required to ensure that they implement adequate processes for collection of the information needed for impairment, for example:

- Indicators for a significant increase in credit risk must be developed.
- Forward-looking information, as well as past events must be incorporated.
- The contractual period over which to assess impairment may not be clear.

Cash advanced might not be fair value

Intra-group loans within the scope of IFRS 9 are required to be measured at fair value on initial recognition. Intra-group loans are often either interest-free or they are provided at below-market interest rate. The amount lent is, therefore, not fair value.

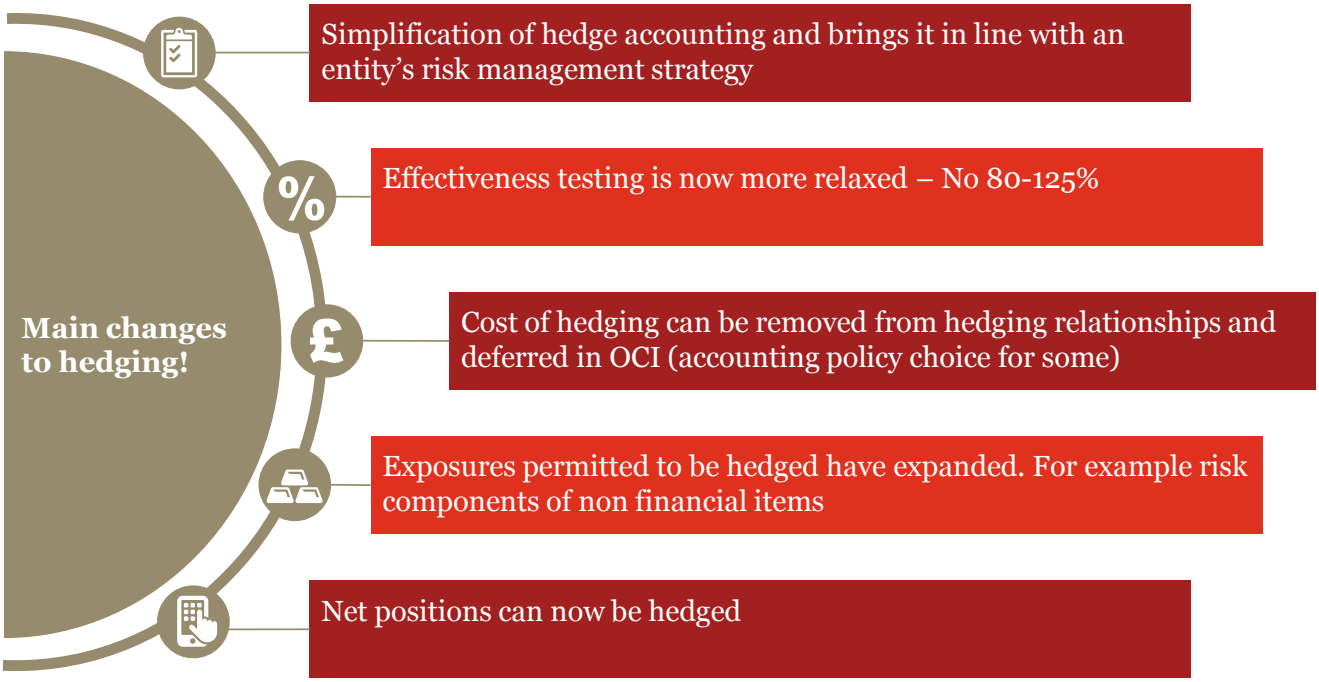
What does this mean for Pharma?

Loans at below market or nil interest rate are not advanced at fair value. Practically, this means that the cash advanced will not be the receivable recorded. Instead, the receivable will be recorded at a lower amount, to take into account the impact of discounting at a market interest rate.

A day 1 difference arises between the cash advanced and the recorded receivable. If the loan is advanced from a parent entity to its subsidiary, this difference is added to the cost of investment in the subsidiary because it is the nature of the relationship that gives rise to the off-market/interest-free loan.

Hedging

'Hedging' is a risk management activity. More specifically, it is the process of using a financial instrument (usually a derivative) to mitigate all or some of the risk of a hedged item. 'Hedge accounting' changes the timing of recognition of gains and losses on either the hedged item or the hedging instrument so that both are recognised in profit or loss in the same accounting period in order to record the economic substance of the combination of the hedged item and hedging instrument.



For a transaction to qualify for hedge accounting IFRS 9 includes the following requirements:

- An entity should formally designate and document the hedging relationship at the inception of the hedge. IFRS 9 requires additional documentation to show sources of ineffectiveness and how the hedge ratio is determined.
- There must be an economic relationship between the hedging instrument and the hedged item.
- Credit risk should not dominate value changes.
- The hedge ratio should be aligned with the economic hedging strategy (risk management strategy) of the entity.

What does this mean for Pharma?

Pharma entities mostly hedge interest rate and foreign exchange currency risks, by entering into interest rate and foreign currency swaps, forwards and options.

Entities will need to update their hedging documentation and ensure that a qualitative assessment of effectiveness for each hedging relationship is performed.

There is no longer an 80-125% effectiveness 'bright line' effectiveness test. As such a retrospective effectiveness test is no longer required to prove that the effectiveness was between 80 and 125%. However, all ineffectiveness should still be recorded in the income statement.

IFRS 9 gives companies a free choice over whether to adopt its new hedge accounting requirements when the remainder of IFRS 9 becomes mandatory in 2018. A company must either move all of its hedge accounting to IFRS 9, or it must continue to apply IAS 39 to all of its hedges.

However, all entities have to apply IFRS 9's new disclosure requirements – including the new disclosures around hedge accounting.

Financial liabilities

Debt modifications

Pharma entities might restructure borrowings with banks to adjust interest rates and maturity profiles and hence modify their debt.

When a financial liability measured at amortised cost is modified without this resulting in derecognition, a difference arises between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate (the 'gain/loss').

Entities were permitted, although not required to recognise the gain/loss in the income statement at the date of modification of a financial liability, under IAS 39. Many entities deferred the gain/loss, under IAS 39, over the remaining term of the modified liability by recalculating the effective interest rate.

This will need to change on transition to IFRS 9 because the accounting will change. When an IFRS 9 financial liability, measured at amortised cost, is modified without this resulting in derecognition, the gain/loss should be recognised in profit or loss. Entities are no longer able to defer the gain/loss.

The changes in accounting for modifications of financial liabilities will impact all preparers, particularly entities which were applying different policies for recognising gains and losses under IAS 39.

Whilst it is not expected that entities will be required to change their existing accounting policy under IAS 39, the impact on transition to IFRS 9 should be considered. IFRS 9 is required to be applied retrospectively, so modification gains and losses arising from financial liabilities that are still recognised at the date of initial application (for example, 1 January 2018 for calendar year end companies) would need to be recalculated and adjusted through opening retained earnings on transition. This will affect the effective interest rate and, therefore, the finance cost for the remaining life of the liability.

Questions

PwC clients who have questions about this in depth should contact their engagement partner.

Contacts

Peter Kartscher
Partner
T: +972 3 795 4410
E: peter.kartscher@il.pwc.com

Ruth Preedy
Director
T: +44 (0) 20 7213 2123
E: ruth.e.preedy@pwc.com

Sandra Thompson
Partner
T: +44 (0) 207 212-5697
E: sandra.thompson@pwc.com

171113-210344-RP-OS