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Abstract: Hedge accounting rules of IFRS ensure that earnings and expenses regarding hedging relationships are accounted simultaneously. These rules should avoid an economically not justifiable increase in earnings volatility through hedging relationship. The crucial issue in hedge accounting is the separation between financial instruments that are used for speculation purposes and financial instruments that are used by an entity to hedge a risk exposure. Hedge accounting rules of IAS 39 are often criticized as being too complex and not aligned with entities' risk management strategies. Therefore, entities are faced by the trade-off between an optimal hedging strategy, which probably does not qualify for hedge accounting, and a sub-optimal hedging strategy, which qualifies for hedge accounting and decrease earnings volatility, but does not fully meet the objective of entity's risk management. As a consequence of criticism the IASB published in November 2013 the new rules for hedge accounting under IFRS 9. The new rules should eliminate weaknesses of IAS 39 by making hedge accounting rules less complex. Furthermore IFRS 9 should align hedge accounting rules with companies' risk management strategies.

Keywords: IFRS 9, *IAS* 39, *hedge* accounting, *hedge* effectiveness, *risk* management, derivative financial instruments

Introduction

Companies try to hedge their risk exposures, often by using derivative financial instruments. Hedging relationships usually consists of the hedged item and the hedging instrument, which should compensate the volatility of gains and losses of the hedged item. General accounting rules often cause that the hedged item and the hedging instrument are considered differently and therefore gains and losses resulting from the two instruments are not accounted simultaneously in profit and loss-account. As a result hedging relationships could lead to an increase in earnings volatility.

Hedge accounting means a set of rules to prevent companies, which use hedging instruments, from an economically not justifiable increase in earnings volatility. In the International Financial Reporting Standards (IFRS) rules for hedge accounting are currently defined in *IAS 39 Financial Instruments: Recognition and Measurement*. However, these rules are often criticised as being too complex and not aligned with entities' risk management strategies.

Especially the second point of criticism often represents a trade-off for companies. Either risk management implement a hedging strategy, which is economically sub-optimal, but allows the application of hedge accounting rules. Alternatively, the optimal hedging strategy leads to an increase in earnings volatility, because the hedging relationship does not

qualify for hedge accounting. Therefore hedging strategies of business entities are usually strongly influenced by accounting standards (cf. Panaretou, et. al., 2013, 116).

The International Accounting Standards Board (IASB) has finalized the adoption of rules for hedge accounting under IFRS as part of *IFRS 9 Financial Instruments*. The standard will replace the rules of IAS 39 in multiple phases, whereby rules for hedge accounting (phase 3) have been published in November 2013.

This article presents the main points of criticism of hedge accounting rules under IAS 39 and the most important rules of hedge accounting under IFRS 9. Furthermore it will take a look on the new rules of IFRS 9 and the related changes from the risk management's perspective.

Points of criticism regarding hedge accounting rules under IAS 39

Hedging relationships usually consists of two separate transactions, the hedged item and the hedging instrument. According to the general accounting rules of IAS 39, the two transactions have to be measured on an item-by-item-basis. As the hedging instrument is usually a derivative financial instrument, it has to be measured at fair value through profit or loss (FVTPL). In contrast the hedged item is usually classified in a different category, with different rules for measurement. These differences in classification lead to an asynchronous periodic measurement of income and loss concerning the financial instruments, which are part of the hedging relationship. These accounting mismatches lead to an increase in earnings volatility which is economically not justified (cf. Glaum, Klöcker, 2010, 6). Doupnik and Perera (2012) pointed out, that as a result hedging relationships might not be shown accurately in companies' financial statements.

IAS 39 provides specific hedge accounting rules to avoid such accounting mismatches and economical unjustifiable increases in earnings volatility. These rules are exceptions of the general rules and can be voluntarily applied. The rules of hedge accounting should ensure that income or loss of the hedging instrument and the hedged item are synchronized between periods (cf. Kablan, 2014, 102). IASB (2012) defines hedge accounting as a mechanism to reflect the risk management activities in companies' financial statements.

Conditions for hedging relationships to qualify for hedge accounting

IAS 39.88 defines the conditions which have to be cumulatively fulfilled that a hedging relationship qualifies for hedge accounting. Firstly, there has to be a formal designation and documentation at the inception of the hedging relationship. Secondly, the hedging relationship has to be "highly effective" and has to be assessed during the duration of the hedge. Furthermore, for cash flow hedges it must be highly probable that the underlying forecasted transactions will take place.

The hedge accounting rules of IAS 39 are often criticized as being very complex as well as rule-based. Therefore the hedge accounting rules do not reflect entities' risk management activities appropriately (cf. Ernst & Young, 2014, 3; IASB, 2008). Hereafter the main rules of IAS 39, which lead to a misalignment between risk management and accounting, are discussed.

Hedge effectiveness tests

One of the main points of critics refers to the mandatory periodic effectiveness test, with its difficult and burdensome aspects (cf. Ernst & Young, 2014c). According to IAS 39.9 effectiveness of a hedging relationship is the degree to which changes in the fair value or cash

flows of the hedged item are offset by changes in the fair value or cash flows of the hedging instrument.

IAS 39 requires a forward-looking effectiveness test (prospective), whether the hedge will be highly effective in the future. Furthermore the companies have to demonstrate in a retrospective test, that the hedging relationship has been highly effective in the past (cf. Glaum, Klöcker, 2010, 7). A highly effective hedging relationship must have a retrospective effectiveness between 80% and 125% (cf. IAS 39.AG105b).

If a hedging relationship fails the effectiveness tests, IAS 39 follows its main principle that all income or loss from ineffective hedge relationships has to be recognized in profit and loss account immediately (cf. Hague, 2004, 25; IAS 39.91). Therefore a hedging relationship that fails one of the effectiveness tests is designated as speculation and the company has to discontinue the hedge accounting from the last date on which hedge effectiveness was demonstrated (cf. IAS 39.AG113). If the company is able to identify the event or changes in circumstances that caused the hedging relationship to fail the effectiveness test and the company can demonstrate that hedge has been effective before, hedge accounting has to be discontinued from the date of the event or the changes in circumstances (cf. IAS 39.AG113).

A discontinue of hedge accounting probably leads to a rise in earnings volatility. IAS 39 not allows entities to rebalance an ineffective hedging relationship, because adjustments to the hedging relationship after its initial designation that were not documented at the inception of the hedge are not allowed. Rebalancing of a hedging relationship could be for instance a change in the basis between hedging instrument and hedged item (cf. Ernst & Young, 2011, 17). Instead companies have to discontinue the ineffective hedging relationship and redesignated the rebalanced relationship. This leads to a significant additional effort for the entity (cf. Echterling, et. al., 13, 2014; Forsberg, 2013, 158).

Missing alignment with entities' risk management

Besides the critics concerning the high complexity of the effectiveness tests, another point of critique regards to the missing alignment of the effectiveness tests with companies' risk management strategies. Probably it is not always the objective of entities' risk management to use the best available hedging instrument, with the highest effectiveness. Instead entities could prefer less effective instruments, if they are cheaper or easier to transact. For instance, a company can hedge a risk in conjunction with an illiquid currency by using a derivative financial instrument in a liquid currency, if the risk management expect a parallel development of the two currencies. Furthermore a company could prefer the use of exchange-traded derivative financial instruments instead of OTC-traded instruments (cf. Ernst & Young. 2011, 13).

These hedging instruments can possibly not be declared for hedge accounting, because they are not highly effective, although they meet the general objectives of entities' risk management and are not used for speculative purpose.

Further limitations of hedge accounting

According to IAS 39.84 a hedge of a **net position** (e.g. netting of receivables and payables in foreign currency), does not qualify for hedge accounting. The IASB justifies this approach by the argument that entities have to assess hedge effectiveness by comparing the changes in the fair value or cash flow of a hedging instrument and a hedged item, based on a clearly identifiable relationship (micro hedge).

Similar assets and liabilities can only be aggregated and hedged as a **group** of hedged items if strict rules are considered. For instance, the individual assets or liabilities in the group have to share the same risk exposure and the value changes of individual items in

response to the risk factor are approximately proportional to the value change of the whole portfolio. Therefore long and short positions cannot be grouped and treated as one hedged item. This rule-based, micro hedge-approach is often in sharp contrast to risk management strategies of business entities, which often centralize risk exposures at companies' headquarters in order to determine and hedge net exposure (macro hedge) (cf. Glaum, Klöcker, 2010, 8).

IAS 39 includes a further limitation concerning the hedging instruments, which qualifies for hedge accounting. According to IAS 39.72 only derivative financial instruments can be used as hedging instrument. Non-derivative financial instruments only qualify for hedge accounting, if they are used for hedging risks regarding foreign currencies. This leads to a further limitation of entities' risk management, because if non-derivative financial instruments are used for hedging, the hedging relationship does not qualify for hedge accounting, what probably leads to an increase in earnings volatility. An example for hedging a commodity purchase price by a non-derivative financial instrument would be an investment in a commodity fund or an exchange traded commodity (cf. Ernst & Young, 2014, 28).

New Hedge Accounting Regulations under IFRS 9

In November 2009 the IASB issued the new standard IFRS 9. The publication was the beginning of a replacement process with several phases of the current standard IAS 39. The third and last phase of IASB's replacement process deals with renewals in the hedge accounting policy. In general the IASB is trying to generate a more principles-based approach compared to hedge accounting rules of IAS 39 (cf. Schiller et. al., 2013, 156).

In December 2010 the IASB released an Exposure Draft containing suggestions for a change in hedge accounting regulations. The priorities of this Exposure Draft were a simplification of IFRS hedge accounting rules, the creation of a better link between entities' risk management and hedging strategies to accounting. This improvement should lead to a more precise reflection of risk management in financial reporting (cf. Ernst & Young, 2011, 3).

In November 2013 the IASB announced the completion of the third phase of introduction of IFRS 9. The new rules offered an introduction in the new hedge accounting requirements. Moreover, there has been an onward development of the Exposure Draft's aims (cf. Ernst & Young, 2014, 2). The IASB has lately delayed the mandatory effective date of IFRS 9 to 1 January 2018 due to provide greater alignment between IFRS 9 and the new insurance contracts standard (cf. Ernst & Young, 2014b, 1). Although the period until the changeover is realised seems to be quite long entities have to be prepared properly, because there will be some fundamental alterations. The following topics are significantly affected by the key changes in hedge accounting between IAS 39 and IFRS 9.

Hedging Instruments

IFRS 9 will contain fewer restrictions regarding hedging instruments than IAS 39. Therefore more types of financial instruments will be accepted as hedging instruments (cf. Schiller, et. al., 2013, 157). While under IAS 39 hedging instruments must have a derivative character under IFRS 9 it is intended that entities are allowed to use derivatives, but also non-derivative financial instruments as hedging instrument such as non-derivative assets and liabilities.

However, non-derivative hedging instruments can only be used if they are carried at FVTPL. With the fact that IFRS 9 will beyond that allow entities to carry many more instruments at FVTPL, this can lead to more and easier hedge accounting. Furthermore, IFRS

9 requires that an external party must be participating in the financial instrument (cf. Echterling, et. al., 2014, 6f; Du Plooy, et. al., 2014, 2).

Hedged Items

The definition of hedged items under IFRS 9 remains rather constant to IAS 39 with some exceptions. Provided that a reliable measurement of a fair value is possible and there is an external party involved, entities are permitted to hedge recognised assets or liabilities, unrecognised firm commitments, highly probable forecast transactions and net investments in foreign operations (cf. Ernst & Young, 2014, 6). The adjustments regarding hedged items touch the following fields.

Aggregated exposures

An aggregated exposure stands for a composition of an exposure which consists of a derivative item and a non-derivative item (cf. Ernst & Young, 2014b, 7). The term of an aggregated exposure has been newly introduced under IFRS 9. Under current applicable standard IAS 39, a derivative position is excluded for designated as a hedged item. In addition an entity is not permitted to handle its overall risk exposure through compensation of their derivative contracts. From the viewpoint of accounting new derivative contracts which are entering the hedging relationship during its maturity have to be designated and redesignated at the time of entrance. This approach enhances complexity and hedge ineffectiveness due to the fact of current derivatives which are not accounted with a zero fair value at the point of designation. Under IFRS 9 a company is allowed to assign an aggregated exposure as a hedged item under the precondition that the aggregated exposure is administered as one exposure (cf. BDO, 2014, 14).

IFRS 9.6.3.4 also offers the possibility to include future expected transactions which are leading to aggregated exposures. According to IFRS 9.6.3.4 derivatives, as a part aggregated exposures have to be recognized as a separate asset or liability and assessed at FVTPL (cf. Echterling, et. al., 2014, 6).

As already mentioned above the aggregated exposure can consist of several individual items which are treated separately in accounting perspective. That means using the standard conditions of hedge accounting. In terms of accounting no changes taking place due to the fact that the aggregated exposure is not handled synthetically as a single item. For instance, if a company has a hedging combination consisting of a pay fixed/receive variable interest rate swap and a variable rate loan, the loan will further be considered at amortised cost, while the interest rate swap is separately considered in the financial statement of position. As a result a company is not permitted to show the aggregated exposure, consisting of the loan and the interest rate swap, in one single line in that way of showing a single fixed rate loan (cf. KPMG, 2013, 44f).

In the assessment process of effectiveness and ineffectiveness of an aggregated exposure as a hedge, the effects resulting from the combination of the single items have to be considered. This is important due to the fact that there is the possibility of existing of a nonperfect match between the hedged item and a hedging instrument, for instance a basis risk. Subsequently any ineffectiveness arising from the first level automatically leads to ineffectiveness in the stage of the second level. In terms of hedge accounting basis risk stands for deviations in the underlying of the hedged instrument and the hedged item itself which is usually expressed as a certain degree of ineffectiveness. Under IFRS 9 the first-level relationship is not necessary for the qualification as an aggregated exposure in order for hedge accounting, although it is much more complicated if it is not used in the stage of the first level relationship (cf. EY, 2014b, 7f).

Credit exposures

IFRS 9.6.7.1 offers the possibility of assessing credit exposures, which are entirely or partially hedged with credit default swaps (CDS) and can be measured at FVTPL either at first time-adoption or in the upcoming periods, even if they are not in scope of IFRS 9 (cf. Echterling, et. al., 2014, 15f). Prerequisite for this accounting method is that the name of the borrower is appropriate to the reference of the credit default swap (name matching). Furthermore the seniority of the hedged financial instrument is in accordance with the CDS (cf. BDO, 2014, 35).

Hedge accounting rules of IFRS 9 do not allow entities with credit exposures to use the FVTPL-method if it is hedged with a credit derivative. If a financial instrument in the context of a hedging credit risks is initially designated at FVTPL for upcoming periods, the difference between book value and fair value has to be captured through profit and loss at the stage of designation. As a result the adjustment of measurement does not only show any deviations in credit risk part, but in addition deviations in fair value like interest rate risk. Another difference to the treatment of a fair value hedge is that financial instruments which are hedged for credit risk purposes are recognised at the full fair value rather than the adjusted value for deviations arising from the actual risk hedged position. Consequently, by applying hedging for credit risk exposures the entity is required to remeasure its financial instruments in terms of interest rate risk. As a result the mismatch leads to increasing volatility in profit or loss. In case of derecognition of credit risk the specific accounting method has to be discontinued by the entity (cf. Echterling, et. al., 2014, 16; Deloitte, 2012, 5).

Financial institutions which are faced with credit risks resulting from loans or facilities (credit lines) manage these risks by using credit default swaps. Such hedging relationships would often lead to a mismatch in accounting of hedged item and hedging instrument, because the loan or credit line is measured as FVTPL.

If an entity intends to hedge the credit risk component of a financial item, for instance in form of a debt security or credit line, IAS 39 and IFRS 9 hedge accounting approach demands that the single credit risk component can be isolated and is separately measureable. Designating the credit risk as a risk component would be the simplest way of accounting, but the eligibility criteria is not fulfilled (cf. EY, 2014b, 26).

Groups and Net Positions

The hedge accounting rules of IAS 39 are primarily designed for hedging relationships including a single hedging instrument that hedges a single item (micro hedge). However, entities often hedge several items together due to safe costs. Under IAS 39 it is already possible to designate groups as a hedged item, but several requirements have to be fulfilled. Hence, IAS 39 allows only few types of groups to be eligible as hedged items.

To better illustrate the risk management policy of entities some restrictions for group hedging will be removed or loosened under IFRS 9. IFRS 9 will allow a designation of groups as hedged item if the items or the items' components the group consists of can be qualified individually for hedge accounting. Furthermore all items have to be managed in the company on a group basis (cf. Echterling, et. al., 2014, 7ff; Ernst & Young, 2014, 18f; BDO, 2014, 9).

Entities often handle a group risk exposures as a net position. This is the case if positive and negative cash flows of a hedged item compensate one another. Under IAS 39 hedging of net positions does not qualify for hedge accounting. IFRS 9 will allow entities to hedge the

fair value of net positions if a designation as hedged item reflects their risk management strategy.

Furthermore, under the new standard cash flow hedging of net positions for foreign exchange risk will also be permitted. However, entities have to determine at the beginning of the hedging relationship how and when each item of the net position will affect profit or loss (cf. BDO, 2014, 29; Deloitte, 2012b, 4).

Risk Components

According to the new IFRS standard, risk components can be classified as hedged item if they can be identified separately and changes in fair value or cash flows can be measured reliably. This voids the constraint of IAS 39 that non-financial positions can only be designated as hedged items either entirely including all the risks or exclusively regarding foreign currency risk. Additionally, IFRS 9 will permit entities to designate a non-contractual inflation risk of a financial position as hedged item. However, in many cases a separate identification and a reliable measurement are not guaranteed. This makes a designation of risk components still inherently difficult (cf. Echterling, et. al., 2014, 8f; PwC, 2013, 18).

A risk component in a financial item could be for instance the floating interest rate LIBOR (London Interbank Offered Rate) of a bond. An example for a risk component of a non-financial item is the oil price component of jet fuel price exposure. Under IFRS 9 there will be no distinction between types of hedged items. It is just important that a risk component can be identified and measured reliable. Consequently, more entities will apply hedge accounting that depicts their risk management strategy, what makes it easier for entities to use their risk management data as a basis for hedge accounting. This reduces the amount of analysis, what again reduces costs of implementation compared to IAS 39 (cf. IFRS Foundation, 2013, 6).

Hedge effectiveness testing

The effectiveness of hedging relationships can be measured by how changes in the fair value or cash flow of the hedging instrument offset the fair value or cash flow of the hedged item. Thus, a hedge is ineffective if the changes in fair value or cash flows of the hedging instrument are noticeable greater or less than those on the hedged item.

As already mentioned, under IAS 39 a hedging relationship is qualified for hedge accounting if there is an expectation that it will be highly effective in each hedging period. The effectiveness has to be assessed prospectively and retrospectively. The meaningfulness of this effectiveness tests can be questioned, because it is very onerous to perform numerical tests to demonstrate that the extent of the offset is in the requested range. Moreover, if a hedge is not qualified for hedge accounting based on the required range (80% - 125%) this approach fails to show the true performance of an entity's hedging strategy.

The effectiveness assessment under IFRS 9 will be significantly different to the approach of IAS 39. Due to the mentioned points of critiques the IAS 39 regulation will be replaced under IFRS 9 by a prospective and principle-based effectiveness test. In general this new regulatory should increase flexibility in how effectiveness of hedging relationship is demonstrated. The first requirement for effectiveness is that the hedging relationship must include an economic relationship between the hedged item and the hedging instrument. This can be proofed with qualitative and quantitative assessments. Moreover, value changes that result from economic relationships should not be dominated by the effect of credit risk. Additionally, the hedge ratio of the hedging relationship should reflect the actual quantities of hedged item and hedging instrument (cf. Deloitte, 2012, 1ff; KPMG, 2013, 49). Ernst &

Young (2011) stated that changes in effectiveness testing is one of the most important effort to align hedge accounting in IFRS 9 with companies' risk management strategies.

If a hedging relationship fails the effectiveness test under the rules of IAS 39, hedge accounting has to be discontinued from the last date on which hedge effectiveness was demonstrated. Entities could redesign the hedging relationship and re-designate it. Otherwise, discontinue of hedge accounting probably leads to an increase in earnings volatility. IAS 39 does not allow rebalancing an ineffective hedging relationship. In contrast IFRS 9 requires entities to try to rebalance the hedge, instead of discontinue and re-designate it. If rebalancing fails and the hedging relationship remains ineffective, entities have to discontinue the hedge. Methods of hedge effectiveness assessment under IFRS 9 will not differ from the methods used under IAS 39 (Forsberg, et. al., 2013, 158f). Therefore, hedge effectiveness testing will remain an extremely difficult exercise, because the use of complex statistical techniques and valuation models is necessary (Ernst & Young, 2014c).

Closer look at the changes from a risk management's perspective

The previously discussed changes in hedge accounting, as part of the replacement of IAS 39 by IFRS 9, will be represented in the following section in practical illustrations. The focus of the discussion will be on the changes for entities' risk management strategies.

Hedging instruments

The following example demonstrates the effects of the new hedging regulations regarding hedging instruments:

A business entity intends to constantly purchase crude oil in the future. Forecasts show that the prices of crude oil will vary prospectively. Therefore, the entity wants to hedge its cash flow risk relating to the intended purchases. The management decides to buy exchange traded commodities (ETCs) that replicate the performance of future contracts instead of using derivative contracts.

Figure 1: Example hedging instruments

Under IAS 39 only financial instruments with a derivative character and non-derivative financial assets or liabilities in a hedge of foreign currency risk are qualified for hedge accounting. Therefore, IAS 39 does not accept the investments in ETCs as hedging instruments, because they have no derivative character and the aim in this contract is to hedge crude oil prices not a foreign currency risk (cf. IAS 39.72).

By contrast, IFRS 9 allows derivatives, but also non-derivative financial instruments at FVTPL as hedging instruments. Under IFRS 9 these investments would be measured at FVTPL. Therefore, if all other criteria are met the entity is allowed to apply the hedge accounting rules for the investment in the ETCs.

These new regulations can be helpful if an entity does not have access to derivatives markets, does not have collaterals (margin requirements) or does not want to enter into uncollateralised OTC derivatives (cf. Ernst & Young, 2014, 28).

Hedged items

The following examples of the present paper show differences regarding the definition of hedged items.

Groups and net positions

An entity with EUR as functional currency expects purchases of USD 150 and sales of USD 100 in six months. Therefore, the entity intends to eliminate the foreign currency risk by concluding a forward contract of a net amount of USD 50.

Figure 2: Example groups and net positions

IAS 39 allows the hedging of groups only if all items of the group are subjected to similar risks and if the fair value of each item is proportionate to the group's overall change of fair value (cf. IAS 39.83f).

According to the adapted rules of IFRS 9 it is allowed to hedge groups of items without the constraint that the fair value of each item must be proportional to the overall change. Moreover, it is also allowed to hedge groups of offsetting exposures. Therefore, the entity in the example will be allowed to designate the USD 50 forward purchase contract as a hedging relationship consisting of the USD 150 purchase and the USD 100 sales in six month.

This new possibilities regarding the hedge of net exposures match common risk management practices and eases the complicated requirements of IAS 39 significantly (cf. Althoff, et. al., 2014, 12).

Aggregated exposures

A company needs for its production one main raw material. The entity expects to buy the raw material in twelve months. The price of the raw material is deviating and denominated in a foreign currency. Subsequently the entity is exposed to two risks. Firstly the commodity risk and secondly the FX-risk. In a first step the entity hedges the deviation of the commodity by using a futures contract. The FX-risk further exists. Two months later the entity hedges the FX-risk by using a forward, which enables the company to buy a specified amount of the foreign currency in ten months.

Figure 3: Example aggregated exposures

Under IAS 39 the recognition of derivatives as part of a hedged item is not permitted. There are two options existing under IAS 39. First option is the designation of a new hedge relationship consisting of a future contract on the commodity and the forward contract from the FX-position to a hedging instrument. In that case the first relationship has to be excluded. The second option under IAS 39 is to keep the commodity price risk and set the FX forward contract to a second hedging relationship that considers the foreign currency of the commodity price. Under this possibility the hedged item is changing in volume and the variable commodity price is hedged against FX-risks (cf. PwC, 2014, 23).

IFRS 9 widens the possibility recognizing hedged items by applying aggregated exposures. These exposures are consisting of two components, the exposure that can be enabled as hedged item and a derivative instrument. As a result of that the entity is qualified to transfer the FX forward contract to a cash flow hedge that comprises the futures contract on the commodity as well as the original exposure, also called the aggregated exposure. Hence a further discontinuation and redesignation of the first hedge is obsolete (cf. Ernst & Young, 2014b, 8; BDO, 2014, 14f)

Credit exposures

In respect of dealing with credit risk exposures financial institutions usually use credit derivatives to reduce the risk or transfer it to a third party. However it is very difficult to separate the credit risk in order to be isolated identifiable for changes in fair value. Financial institutions, which are using CDS for hedging their credit risk within loan portfolios, regularly do not consider commitments and are measured at amortised cost. As a result of the deviations of fair value, credit default swaps have to be considered in the profit and loss account, thus leads to accounting mismatches. In addition it often does not show a financial institution's risk management strategy regarding the economic substance (cf. PwC, 2014, 22). Under IFRS 9 a new fair value option is offered for financial institutions which are hedging credit risk by using CDS. Under the condition that the measurement of hedges takes place at FVTPL, financial institutions are allowed to measure their credit exposure to the amount of the CDS-coverage.

Supposing a financial institution that issues a loan commitment of EUR 500 to a customer based on a fixed rate. Bank's risk management strategy tends to hedge credit risk resulting from single loan commitments not exceeding EUR 300. Hence, the financial institution concludes a credit default swap of EUR 200.

Figure 4: Example credit exposures

According to IAS 39 the financial institution recognises the credit default swap at FVTPL but not the given loan commitment. The bank entitled to choose fair value option if there is a proportion existing. In that case no compensation effects in profit and loss account result from deviation in fair value. Under IFRS 9 it is possible to apply fair value option also for a proportion amount of the commitment and has a compensating effect regarding the deviations in fair value of the credit default swap (cf. KPMG, 2013, 12f).

Risk components

Under IAS 39 benchmark components like EURIBOR as risk component of financial items can already be elected as hedged item, due to the permission if the component of a financial asset is identifiable and separately measurable. Under the upcoming standard IFRS 9 also risk components of non-financial items are eligible hedged items. Eligible risk components have to be differentiated as either contractually or non-contractually. In case of existing non-contractually risk component an assessment on being identifiable, reliable and a linkage to potential hedged item has to be undertaken. In the following the two forms of contracts are illustrated by examples (cf. KPMG, 2013, 32).

Company A concludes a contract of purchasing 50 tonnes of cocoa in twelve months. The contract price is being calculated on the formula: cocoa futures + 3 percent transport fee. The company comes into the cocoa futures contract for the purpose of hedging the volatility of cocoa prices.

Figure 5: Example risk components - contractual

Under current standard IAS 39 a designation of risk components in non-financial items is not permitted, as the company is only capable designating the purchase of the cocoa contract as the hedged item. This subsequently leads to an ineffectiveness of the hedge regarding deviations of the fair value of the transport fee. On the contrary under IFRS 9 the future contract on cocoa can be identified separately and therefore considered as a specified

component of the pricing contract. In other words, the company is able to compare deviations between the hedged item and the hedging instrument. A 100 percent effectiveness match is constituted by matching of all other factors like maturity of cocoa futures and date of purchase (cf. BDO, 2014, 11f; KPMG, 2013, 32).

Supposing a company C that concludes a contract of purchasing kerosene. The price of kerosene consists of the price of crude oil which represents an identifiable component. For managing deviations in price level of crude oil the company hedges this position in form of crude oil futures.

Figure 6: Example risk components – non-contractual

Under IAS 39 the company is only allowed to allocate the deviations between crude oil futures and the total kerosene price. This leads subsequently to hedge ineffectiveness, because the company can only hedge the total price risk, but not a single component. This status is responsible for contradictions regarding the risk strategy approach and hedge accounting.

Under IFRS 9 it is possible to consider financial and non-financial items in respect of being separately identifiable and reliably measureable. This means that the company is permitted to designate the part of crude oil in the kerosene price as a hedged item, because crude oil is a significant component of the kerosene price (cf. BDO, 2014, 13f; KPMG, 2013, 35).

Hedge effectiveness testing

An entity intends to issue a floating rate bond with a principal of EUR 100m. The interest rates (3M LIBOR + margin) will be paid quarterly (1 January, 1 April, 1 July, 1 October) over an entire term of ten years. Regarding entity's risk management strategy, interest rate swaps are used to hedge the interest rate risk. Thereby, the floating interest rate is swapped with a fixed interest rate of 2,2%.

Figure 7: Example hedge effectiveness testing

Hedge accounting under IAS 39 would require the entity in the example to carry out prospective effectiveness testing at the beginning of each reporting period and retrospective effectiveness testing at the end of each reporting period to demonstrate that the hedge is expected to be highly effective (offset of 80% - 125%). The fact that the entity has hedged 100% of the exposure is not relevant.

Under IFRS 9 it is crucial, whether there is an economic relationship between the hedged item and the hedging instrument. This is the case, if the fair value or the cash flows of the hedged item and the hedging instrument move in opposite directions. Therefore, the critical terms between the two have to match. In this example the terms of the hedged item and the hedged instrument match. Furthermore, the fair value of the swap is zero at the commencement of the hedge. Based on these qualitative facts the entity would be able to determine that an economic relationship exists. Furthermore, the entity has to proof that the credit risk does not dominate the value changes. In this example the entity would have to determine that the own credit standing and the counterparty's credit standing are high and stable so that changes in credit risk would not dominate the value changes that result from the economic relationship.

Finally, if the entity would hedge its EUR 100m bond with a swap with matched terms and a notional amount of EUR 100m, this hedge would be designated as balanced and could

be regarded as an effective hedge. If the term or the notional amount would be lower it would be regarded as a deliberate under-hedge and would not meet the effectiveness requirements (cf. Deloitte, 2012, 4f).

Summary and Conclusion

Hedge accounting under IAS 39 is largely rule-based and includes many limitations on what can be used as hedged item and hedging instruments. Ernst & Young (2014c) mentioned the **hedge effectiveness test** as the most challenging aspect of IAS 39, because complex statistical techniques and valuation models are necessary. Hedge accounting is only allowed, if the hedging relationship passes a retrospective and a prospective test. If a hedging relationship fails the effectiveness assessment, the entity has to discontinue hedge accounting. Afterwards the company can re-designate the rebalanced hedging relationship. This leads to significant additional effort for the entity. In contrast under IFRS 9 the retrospective effectiveness test will be removed. The prospective test will be still required, whereas a hedging relationship fails the assessment, the entity is obligated to rebalance the hedge (Forsberg, et. al., 2013, 152). If rebalancing fails, the entity has to discontinue hedge accounting.

Under IAS 39 only derivative **hedging instruments** can qualify for hedge accounting, except financial instruments that are used for hedging foreign currency exchange risks. For instance, currently investments in commodity funds or exchange traded commodities (ETCs), which are used to hedge a commodity risk, do not qualify for hedge accounting. As a consequence earnings volatility probably increases, if such hedging instruments are used. IFRS 9 follows a different approach that focuses on which instruments are used for hedging. As a consequence, IFRS 9 permits entities to designate non-derivative financial assets or liabilities, which are accounted for at FVTPL, as hedging instruments (Ernst & Young, 2014, 27).

IAS 39 allows hedging of a **group** of financial instruments only if all items of the group are subject to similar risks and the fair value of each item it proportionate to the group's overall change of fair value. These rules prohibit that for instance long and short positions are grouped and treated as one hedged item. Furthermore, the hedge of **net positions** does not qualify for hedge accounting. This strict approach of IAS 39 regarding hedge of groups and net positions is in sharp contrast to entities' risk management strategies, which often include a centralization of risk exposures at companies' centralized treasury department. In contrast, under IFRS 9, hedge accounting may apply to a group of financial instruments if the items would individually qualify for hedge accounting. Furthermore, the items have to be managed together on a group basis for risk management purpose. The approach of IFRS 9 is more principal-based and is an important contribution that financial reporting presents entities' risk management activities (Ernst & Young, 2014, 19; Forsberg, et. al., 2013, 161).

The rule-based approach of IAS 39 commonly forced treasurers to apply a hedging strategy which does not follow its main target of minimizing entities' risks. Instead treasurers have to implement risk management strategies, which qualify for hedge accounting, but are suboptimal concerning risk-minimization. These restrictions caused by the accounting standards probably impact the operational efficiency of the risk management process. The changes in hedge accounting, which have been discussed in the present article, will entities allow to reflect their risk management activities in the financial statements more closely, as IFRS 9 provides a more flexible approach. However, the principle-based approach of IFRS 9

will also assist users of financial statements in understanding risk management activities (Forsberg, et. al. 2013, 162ff; Mc Carroll, Khatri, 2014, 36f).

References

- Althoff, J., Halterman, S., Lee Y.-B. (2014). PwC. Accounting for hedging activities. IASB new general hedge accounting requirements. *Retrieved from http://www.pwc.com/en_US/us/cfodirect/assets/pdf/dataline/dataline-2014-03-accounting-for-hedging-activities.pdf* (last retrieved: 01.05.2014)
- BDO (2014). Need to Know. Hedge Accounting. *Retrieved from http://www.bdointernational.com/Services/Audit/IFRS/* (last retrieved: 30.04.2014)
- Deloitte (2012). A Closer Look. Assessing hedge effectiveness under IFRS 9. *Retrieved from http://www.denetimnet.net/UserFiles/Documents/A%20Closer%20Look%203.pdf* (last retrieved: 03.05.2014)
- Deloitte (2012b). IFRS fokussiert. Hedge Accounting Ablösung der bisherigen Vorschriften steht kurz bevor. Retrieved from www.iasplus.com/de/publications/german-publications (last retrieved: 02.05.2014)
- Deloitte (2013). Need to Know Hedge accounting reforms: A closer reflection of risk management. Retrieved from http://www.deloitte.com/assets/Dcom-UnitedKingdom/Local%20Assets/Documents/Services/Audit/Accounting%20and%20Payroll%20Solut ions/uk-audit-hedge-accounting-reforms.pdf (last retrieved: 22.05.2014)
- Doupnik, T.S., Perera, H. (2012). International Accounting. New Jersey: Pearson Prentice Hall.
- Du Plooy, C., De Vries, K.-J., Fromont, A. (2014). IFRS 9 Hedging. Was it Worth the Wait?. *TMI Treasury* Management International. Vol. 222. 33-36.
- Echterling, F., Eierle, B., Haberberger, B., Weik, A. (2014). Die neuen Regelungen zum hedge accounting nach IFRS 9. *KoR 2014, Vol. 14, 5-17.*
- Ernst & Young (2011). Hedge accounting under IFRS 9 a closer look at the changes and challenges. Retrieved from http://www.ey.com/Publication/vwLUAssets/Hedge_accounting_under_IFRS_9_____a_closer_look_at_the_changes_and_challenges/\$FILE/Hedge_accounting_under_IFRS_9_GL_IFRS. pdf (last retrieved: 02.05.2014)
- Ernst & Young (2014). Hedge accounting under IFRS 9. Retrieved from http://www.ey.com/Publication/vwLUAssets/Applying_IFRS:_Hedge_accounting_under_IFRS_9/\$Fil e/Applying_Hedging_Feb2014.pdf (last retrieved: 27.04.2014)
- Ernst & Young (2014b). IASB sets 2018 effective date for IFRS 9, FASB scales back scope of its insurance project. Retrieved from http://www.ey.com/Publication/vwLUAssets/Insurance-Accounting-Alert/\$File/EY-IASB-sets-2018-effective-date-for-IFRS-9-FASB-scales-back-scope-of-its-insurance-project.pdf (last retrieved: 26.05.2014)
- Ernst & Young (2014c). International GAAP 2014. Hoboken.
- Forsberg, B., Lindholm, L., Muhoza, A., Örtenvik, M. (2013). Hedge accounting Simplified with new rules. In S. Schiller, S. Lundh (Eds.), IFRS Accounting in Progress from a student perspective (pp. 149-167). Linköping.
- Glaum M., Klöcker A. (2010). Hedge Accounting and its influence on financial hedging: Evidence from Germany and Switzerland.
- Hague, I. P. N. (2004). IAS 39: Underlying Principles. Accounting in Europe, Vol. 1, 21-26.
- IASB (International Accounting Standards Board) (2008). Discussion Paper Reducing Complexity in Reporting Financial Instruments. *Retrieved from http://www.ifrs.org/Current-Projects/IASB-Projects/Financial-Instruments-A-Replacement-of-IAS-39-Financial-Instruments-Recognitio/Discussion-Paper-and-Comment-Letters/Documents/* DPReducingComplexity_ReportingFinancialInstruments.pdf (last retrieved: 27.04.2014)
- IASB (International Accounting Standards Board) (2012). Hedge Accounting General Questions. *Retrieved* from http://www.ifrs.org (last retrieved: 01.05.2014)
- IFRS Foundation (2013). IFRS 9 Financial Instruments (Hedge Accounting and amendments to IFRS 9, IFRS 7 and IAS 39). Retrieved from http://www.ifrs.org/Current-Projects/IASB-Projects/Financial-Instruments-A-Replacement-of-IAS-39-Financial-Instruments-Recognitio/Phase-III-Hedgeaccounting/Documents/IFRS-9-FI-Project-Summary-November-2013.pdf (last retrieved: 01.05.2014)
- Kablan A. (2014). Financial Risk Management and Hedge Accounting. In Ü. Hacioglu, H. Dincer (Eds.), Managerial Issues in Finance and Banking: A Strategic Approach to Competitiveness (pp. 99-109). New York: Springer.
- KPMG (2013). First Impressions: IFRS 9 (2013) Hedge accounting and transition. Retrieved from

http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Newsletters/First-Impressions/Documents/First-Impressions-O-1312-IFRS9-Hedge-accounting-and-transition.pdf (last retrieved: 25.04.2014)

- McCarroll J., Khatri G. R. (2014). Aligning hedge accounting with risk management. *Financial Reporting* Accountancy Ireland, April 2014, Vol. 46. No. 2, S. 36-38.
- Panaretou A., Shackleton M., Taylor P. A. (2013). Corporate Risk Management and Hedge Accounting. Contemporary Accounting Research , Spring 2013, Vol. 30, No. 1, 116-139.
- PwC (2013). Practical guide. General hedge accounting. Retrieved from http://www.pwc.com.au/assurance/ifrs/assets/Practical-Guide-General-Hedge-Accounting-Mar14.pdf (last retrieved: 10.05.2014)
- Schiller, S., Lundh, S., (2013). IFRS Accounting in Progress. From a student perspective. Sweden: Linköping University, Department of Management and Engineering