

Equity in the context of international accounting – an attempt of a definition

Abstract

This paper develops a definition of equity in the context of international accounting with the help of the New Institutional Economics. The main aim is the identification of the problem's multidimensionality and the derivation of an independent frame of reference based on the property rights theory and the theory of incomplete contracts. The use of the term "equity" as well as its stated characteristics are traditional conventions and therefore lack a theoretical and conceptual foundation. To compensate these shortcomings it is necessary to develop an independent frame of reference based on the identified nexus of equity and property. Hence the property rights theory serves as theoretical background to construct an independent equity definition, the so-called Property Rights Equity Concept (PREC). According to the property constituent criteria of residual rights to control and residual rights to income equity is given, if the financial instrument's terms and conditions equate the instrument holder with the risks and rewards of a proprietor.

1. Introduction

In the early '90s the need for a positive definition of equity became apparent, when hybrid financial instruments captured the market and brought along the problem of their proper presentation on the face of the balance sheet. According to empirical studies the classification of financial instruments on the credit side has significant influence on stakeholders' decisions and furthermore on various variables like market values (Hopkins, 1996) or the entity's systematic risk (Kimmel and Warfield, 1995; Cheng et al., 2003). The necessity of a positive definition of equity – and not only as a residual dependent on the definition of a liability – is considerable as the international standard setting bodies IASB and FASB started a joint project with the main aim of improving the financial reporting requirements for financial instruments with characteristics of equity and hence providing investors more decision useful information (IASB (2010): 2). In November 2007 the FASB published its Preliminary Views document introducing three different approaches to classify instruments with characteristics of equity followed by an IASB Discussion Paper comparing the new approaches with the principles underlying IAS 32. An alternative approach was also discussed by the Pro-Active Accounting Activities in Europe (PAAinE) focusing on the loss absorbing potential of financial instruments. The main problem of all approaches discussed so far is on the one hand the trade-off between integration of national specifics versus the comparability of financial statements and on the other hand a missing underlying consistent principle of distinguishing between equity and liabilities. Especially the shortcoming of a principles-based orientation has to be eliminated. This is underpinned by empirical studies about the discussion between rules-based vs. principles-based accounting rules, showing, that a less density of regulation indicates a less opportunistic and aggressive accounting (Tsakumis et al. (2009): 20).

This paper's aim is to develop a principles-based, positive definition of equity focusing on the interdisciplinarity of the problem. First, an independent frame of reference is identified on the basis of the nexus of equity and ownership leading to the property rights theory as theoretical background. Based on the theory's relevant hypotheses a core classification principle is drafted and translated into a set of equity constituent criteria and a consistent capital classification concept, the Property Rights Equity Concept (PREC).

2. The definition of equity as “ownership equity” in international financial accounting – An overview

According to the IFRS Framework equity is generally defined as “...the residual interest in the assets of the entity after deducting all its liabilities” (F.49 (c)). So the boundaries of equity are directly dependent on the definition of a financial liability, whose main characteristic is the unavoidable potential outflow of resources of the entity (F.49 (b)). Under IAS 32.19 the main principle of distinguishing between equity and financial liabilities is the entity's unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation. So if the entity can avoid the outflow of resources, the financial instrument has to be classified as equity. This principle causes problems as instruments with an enclosed option to be returned to the issuer by the holder have to be classified as liabilities, even if the possible outflow of resources is not probable. In this case IAS 32.16Aff provides additional guidance for entities with puttable instruments, which would not have equity capital under the classification principle of IAS 32.19. The main criterion for puttables to be classified as equity is subordination; hence the instrument has no priority over other claims on the entity's liquidation and entitles the holder only to a pro rata share of the entity's net assets after deducting all other claims. Taking a look at the norm of IAS

32.16 (b) and additionally of IAS 32.16B it is obvious, that there has to be a postulated nexus between equity and ownership: in the case of a derivative only a fixed-for-fixed settlement leads to the instrument's equity classification. So given a short call option with fixed conditions the holder is exposed to the same risks and rewards – shown in the fair value change of the entity's own shares – as the owners of the issuing entity. Even if the IFRS do not state explicitly the correlation between equity and ownership in IAS 32, it is nevertheless obvious in IAS 1.7, where an owner of an entity is defined as “holders of instruments classified as equity”.

The question of drawing a line between equity and liabilities has also a long tradition in the Anglo-American standard setting body FASB. Not less than 60 different documents were published with diverging issues in the classification of financial instruments, because as Concept Statement No. 6 (CON 6) para. 55 puts it: “Although the line between equity and liabilities is clear in concept, it may be obscured in practice.” Equity is generally defined in CON 6.54 and CON 6. 61 as a residual interest, which is significantly dependent on the entities profitability and does not constitute an entity's obligation to transfer assets to its owners except in the case of liquidation. The nexus between equity and ownership is more apparent in CON 6.60, where equity is precisely defined as ownership interest, which stems from ownership rights.

3. Methodology

As the term equity has diverging semantic extensions it is methodologically necessary to develop a nominal definition of equity based on the neoinstitutional economics theory. Then the main findings and hypotheses of the property rights theory including aspects of the theory of incomplete contracts are discussed and integrated into a theoretical frame of reference by the means of logic-deductive

methods. This frame of reference should be understood as a theoretical outline but not as a theory itself because it does not comply with the scientific understanding of a theory as a system of hypotheses (Kirsch et al. (2007): 22-3). It is common in the hitherto existing research to deduct rules from a superior objective of financial accounting. This approach should not be followed out of two reasons: first, it is not possible to develop normative accounting standards without value judgement and second, facing the inhomogeneous interests in financial statements it seems to be impossible to deduct rules from a scope of financial accounting (Wüstemann (2002): 99; Moxter (2000): 2147). A neuralgic point is the negative correlation between the complexity of a rule and the perception of the information (Nelson (2003): 94; Plumlee (2003): 293). Given the fact that information systems such as financial statements are not free of cost, stakeholders prefer by trend less detailed accounting (Ballwieser (1991): 112). These facts have to be considered developing the classification model.

Another relevant aspect in financial accounting is the underlying point of view referred to as the entity vs. the proprietary view. These two main streams trace back to the Anglo-American accounting tradition as main accounting concepts (Haller (1994): 80) and diverge in the disclosure of the so-called “ownership-equities” (Baxter and Spinney (1975): 32). According to Sprague, the credit side of the balance sheet shows the “...claims against or over the left-hand side...” (Sprague (1972): 53). So the proprietor’s rights diverge to those of a creditor as far as the exclusive right of participating in the risks and rewards of the investment and control rights are concerned (Sprague (1972): 53). The entity view instead questions the property view’s owner-oriented separation of equity and liabilities, as Paton states: “Each security issue carries certain privileges and obligations with reference to all of the elements of

ownership.” (Paton (1973): 73). The vagueness of referring to ownership as separation criterion is evident, if the owner has the right to receive dividends, as he becomes owner and creditor at the same time. According to the entity view, the main difference is the liabilities’ possibility to legally enforce payment, whereas investors cannot (Paton (1973): 78ff). So in how far is the underlying view relevant for the question of distinguishing between equity and liabilities? One main difference would be the treatment of contracts that have to or may be settled in the entity’s own equity instruments: according to the proprietary view these contracts would reduce the share of net assets of the existing investors and would therefore qualify as liabilities. However the entity view would classify them as equity, because from the entity’s perspective there is no outflow of resources to be expected (PAAinE (2008): Para. 1.41). It is therefore necessary to determine, which view should underlay the classification approach to be developed. The postulate of decision usefulness in the context of international accounting should deal as starting point for further considerations. The main interest of an individual decision taker lies in the net cash flow resulting from its investment (Wüstemann (2002): 55 and 58) and so the investor primarily seeks to estimate the expected future cash flows. Traditionally the investor’s focus on the entity’s earning position leads to the residual equity point of view in accounting (Staubus (1959): 4). But from the entity’s point of view the relevant question is, which instruments form the foundation of its capital structure. Hence it is necessary to follow a pragmatic approach as the entity view is chosen as underlying view and aspects of the proprietary view are integrated.

4. Relevant hypotheses of the property rights theory

The New Institutional Economics serve as relevant theoretical base with the property rights theory and the theory of incomplete contracts. The combination of

these two theories is necessary because if contracts were complete the question of property would not influence economic efficiency (Kim and Mahoney (2005): 227). The main premise of the property rights theory is the understanding of a good as a bundle of rights and further the entity as a combination of such property rights (Fischer (1994): 317). Also funding activities – e. g. financial contracts – generate or transfer such bundles of rights (Schmidt (1988): 241). Generally spoken, the right of ownership consists of the right to use the good, to change its form and substance, to transfer all or part of the rights in the asset and the right to the fruits out of the good's usage. So property transfers control to the agent, who holds the bundle of rights (Richter and Furubotn (2003): 90), and reflects the ownership of rights rather than of the good itself (Alchian and Demsetz (1973): 17). This premise allows to draw a parallel to the property view's interpretation of the ownership equities as – according to Sprague – the proprietor's rights are mainly the exclusive right of participation in the risks and rewards of the investment and the right of control (Sprague (1972): 53).

Property rights are efficient, if “...this agent controls the allocation of some valuable resources and the distribution of the fruits of this allocation” (Grossmann (2001): 347). This definition includes the two main core characteristics in the property rights theory – the residual rights to control and the residual rights to income – which lead initially to two different trends in the respective literature as shown in Figure 1.

The residual rights to control form the main criterion in the often called GHM approach as one main stream in the property rights literature. According to Grossmann and Hart (1989: 692) residual rights to control constitute ownership including all those rights, which are too costly to be specified. Further they allow the

holder “...to potentially exclude others from profiting from or using their assets, increasing their share of any surplus generated and, hence, their incentives to maximize that surplus” (Gans (2005): 433). This leads to the conclusion that there obviously exists a correlation between risk and control, because the participation in the rewards of an investment includes also the negative dimension of a decreasing value.

If control constitutes ownership, it is necessary to discuss the phenomenon of the modern firm, where ownership and control are separated. In a modern corporation the ability of the stockholder to control the decisions made by the management decreases, which consequently leads to an attenuation of the owner’s bundle of property rights (Furubotn and Pejovich (1972): 1149). So the interpretation of control in the context of the modern firm vs the property rights theory has to reach a new dimension. For this purpose a closer look should be taken on the pioneering paper of Fama and Jensen (1983) and its stated nexus between residual claims and the decision process. Residual claims bear “...the risk of the difference between stochastic inflows of resources and promised payments to agents...” (Fama and Jensen (1983): 302) and in return hold the rights to net cash flows. The decision process in entrepreneurial firms has two dimensions: decision management as active decision taking and decision control. According to Fama and Jensen (1983: 304) two main hypotheses about the relations between risk-bearing and decision processes can be formulated:

- (1) If risk bearing is separated from decision management, this leads to a separation of decision management from decision control.
- (2) If decision management and decision control are combined in a few agents, these agents are also the holder of the residual claims.

Applying these two hypotheses to modern corporate forms a limited company or a partnership has to be subsumed under the second hypothesis. In the case of a large number of residual claimants – e. g. stock corporations – the transfer of decision control goes beyond the first hypothesis, because the individual stockholder's ability of decision control is at the first sight transferred to the board of directors. Nevertheless also the individual stockholder obtains control, namely through the owner's freedom to sell shares (Furubotn and Pejovich (1972): 1149-10) and also through redemption features (Fama and Jensen (1983): 317).

Alchian and Demsetz (1973) follow a diverging approach in defining property as they focus on the residual rights to income as property constituent criterion. According to the older stream in property rights theory literature the strong emphasis of residual income rights is necessary, because the allocation of these rights influence behaviour but not the residual rights to control per se (Foss and Foss (1999): 7). Nevertheless the GHM-model also constitutes a direct relationship between residual rights to control and residual rights to income as residual control rights influence ex post residual income, whereas Alchian and Demsetz (1973) emanate from an ex ante distribution of residual claims (Kim and Mahoney (2005): 237). The two concepts diverge regarding the hierarchy of the property constituent criteria; hence both approaches were under fire from the opposite side respectively. Since the nexus between property, residual rights to income and residual rights to control is a given fact in both concepts, the detailed critics should not be discussed further for the theoretical frame of reference to be developed.

Another relevant aspect to be taken up is the relationship between transfer of control and the capital structure of an entity. Relevant supporters of this nexus are

Zender (1991) and Aghion and Bolton (1992). Also Hart stated, that “...viewing capital structure as a transfer of control mechanism seems potentially fruitful in understanding the sorts of securities firms issue and how votes are allocated across these securities.” (Hart (1988): 473). According to Zender (1991) debt and equity contracts are optimal financial statements, because they both distribute the cash flows generated by the entity and the state-contingent control rights respectively. The major contribution of Zender’s study is the fact that in each state the agent, who owns the residual control rights, is also the owner of the residual cash flow. Therefore two critical features of debt contracts – a fixed payment and the state-contingent transfer of control – are of main interest (Zender (1991): 1646, 1661-2).

Based on the premise of incomplete contracts Aghion and Bolton (1992: 474, 490-1) developed a capital structure focusing control rights. The owner’s decision about the raising of funds is a function of weighing the marginal costs of the dilution of its control rights through new shareholders and the marginal costs of debt and default. Hence the choice between the issuance of voting-shares and debt is in fact a decision about the allocation of ownership between the various contracting parties. Even if the model underlies certain restrictions (see Aghion and Bolton (1992): 491; critically Hart and Moore (1998): 29), the main finding, that voting rights are an instrument of control should be put forward for the purpose of this paper.

5. A nominal definition of equity

Definitions are the foundations of knowledge and in their general form they follow the formula

Definiendum = D_f Definiens.

The combining element D_f – the definition copula – establishes the equivalence between the definiendum and the definiens by assigning the meaning of the definiens on the definiendum. A nominal definition cannot be verified nor falsified, because it establishes its “correctness”, if the majority of the relevant scientific community considers it to be correct. Hence the acceptance of a nominal definition lies in an explicit terminological convention (Pawlowski (1980): 30). For the purpose of this paper a regulative nominal definition is developed that embodies a neutral understanding but still includes the terminological foundations of common accounting literature. Moreover the definition follows the positive intension by identifying subset D by the means of criterion α (differentia specifica) out of superset M (genus proximum). Hence the nominal definition is

$$D \subseteq M :\Leftrightarrow \forall x (x \in D \rightarrow x \in M).$$

$$D = \{ x \in M \mid \alpha(x) \}.$$

It seems to be useful to take a theoretical scientific objective as basis and read the definition from the right to the left: this means not to ask “what is equity” but how certain financial contracts with specific peculiarities should be denominated. The first step must be the verbalisation of the nominal definition of equity based on the main hypotheses of the property rights theory as starting point for further research questions. As the entity view is chosen as relevant conceptual foundation the prevalent definition of equity as a residual in international accounting has to be abandoned. Consequently the interpretation of the credit side of the balance sheet as the source of funds is obsolete. According to the neoinstitutionalistic approach financial contracts are specific combinations of rights and opportunities for investors; hence they are specific feature bundles. The constituent criteria of a financial contract

F are the acquired claim for future payments p and a combination of particular rights and opportunities r (e. g. right of cancellation) (Schmidt, 1986, p. 190ff).

$$F = \sum p + r .$$

(Equation 1.1)

The credit side of the balance sheet (C) is therefore the sum of all claims for future payments and the corresponding bundles of rights:

$$C = \sum F .$$

(Equation 1.2)

As financial contracts understood as specific feature bundles include both equity and liabilities it is necessary to identify the differentia specifica α with recourse to the property rights theory and its interpretation of ownership P as a bundle of property rights b_{pr} :

$$P = \sum b_{pr} .$$

(Equation 1.3)

According to Grossmann (2001) property rights are efficient, if the holder controls the allocation of a resource and the resulting risks and rewards out of this allocation (Grossmann (2001): 347). This coincides with the criterion of residual rights to control, as these residual rights entitle the holder to exclude others from the use and to the resulting surplus generated by the asset (Gans (2005): 433). Hence an efficient property right transfers control c :

$$b_{pr} = c .$$

(Equation 1.4)

As the fruits of the allocation of a resource are embodied in an efficient property right, risk R must be the second determinant of the nominal definition. As Knight (2006: 294) puts it more generally: "...when control is accurately defined and located,

the functions of making decisions and assuming the responsibility for their correctness will be found to be one and indivisible". According to the neoinstitutionalistic financial theory risk is finally the central parameter resulting in diverging financial contracts.

$$b_{pr} = c + R.$$

(Equation 1.5)

Uniting equation 1.3 and 1.5 leads to the new interpretation of ownership

$$P = \sum (c + R).$$

(Equation 1.6)

Considering the stated axiom and equation 1.1 the nominal definition of equity E ends in

$$E = \sum (p + c + R).$$

(Equation 1.7)

In line with the theoretical scientific objective equation 1.7 must be read as following: claims for future payments with a specific combination of control and risk should be named equity. At this point control and risk should be understood as basic terms, which are specified within the limits of the theoretical frame of reference elaborated in the following section.

6. Deduction of the theoretical frame of reference

The identified relevant hypotheses of the property rights theory serve now as basis for the deduction of the theoretical frame of reference with the main aim to specify the basic terms of control and risk and to identify the basic relations between equity and ownership. As the developed approach should be underpinned by a

theoretical scientific objective it is not relevant to determine “who is the owner?” but to define the criteria of a financial contract that puts the holder of the instrument on a par with an owner regarding the risks and rewards out of the investment. So in line with the chosen entity view it is a question of identifying those financial contracts, which form the financial foundation of the entity.

The nominal definition of equity consists of three basic terms: the acquired claim for future payments, risk and control. As equation 1.1 shows, each financial contract embodies such a claim, so it is debatable, if p is a conceptually sound classification criterion. As briefly outlined before, IAS 32 is primarily based on the settlement criterion: if the entity has no unconditional right to avoid delivering cash or another financial asset, the financial contract has to be classified as liability. As long as distributions to the holder of an instrument are at the discretion of the entity, the liability criterion of IAS 32.19 is not fulfilled. Therefore accounting practice developed so-called perpetual bonds with interest payments linked to the decision to pay dividends, which lead to the classification of the whole instrument as equity. Because of its high manipulability and the resulting ambiguity, criterion p should not be specified as classification principle.

According to the definition of residual rights to control by Gans (2005: 433), a nexus exists between control and risk, whereupon the latter indicates the participation in a positive as well as in a negative value development. This idea is also embodied in the residual rights to income concept of Alchian and Demsetz (1973). The neuralgic point in property rights literature is the absent definition of control, especially in the case of the newer literature stating a clear relation between residual rights to control and residual rights to income (Foss and Foss (1999): 7; Hansmann,

(2000): 12; Zender (1991): 1646). To avoid the tautology of both concepts and to take account of the difficulty of separation of ownership and control in modern enterprises control is defined by the means of the hypotheses of Fam and Jensen (1983); hence it is necessary to distinguish between decision management and decision control. If risk is separated from decision management, decision control and decision management are also split, whereupon the holder of decision control is also bearing the residual risk. In the case of a stock corporation decision control is at the first sight completely transferred and the single stockholder has no active possibility to control management. Nevertheless also the individual stockholder obtains control through its freedom to sell the shares or – as it is the case in partnerships or mutuals – through redemption features (Fama and Jensen (1983): 302ff). According to the theory of incomplete contracts voting rights are an instrument of control. Hence following equations can be formulated:

$$\textit{Decision management} + \textit{Decision control} = \textit{Residual risk}$$

Equation 2.1

$$\textit{Decision management} \neq \textit{Decision control} + \textit{Residual risk}$$

Equation 2.2

$$\textit{Decision control} = \textit{free tradability/redemption feature}$$

Equation 2.3

$$\textit{Decision control} = \textit{voting right}$$

Equation 2.4

Based on the stated nexus between control and risk is apparent, the basic term risk has to be further specified. The risk of a financial contract is mainly the loss of the claim for future payments and its chance lies in the participation in a surplus generated. The question is which reference should be taken for specification of the

risks and rewards: accounting profits or losses would lead to a circular reasoning because of the interdependence of balance sheet classification in equity and liabilities and the income statement, as income and expenses are defined as changes in assets and liabilities. Hence the economic performance of the entity should be applied as criterion with a short-term and long-term dimension. An economic profit/loss is defined as any increase/decrease in the entity's value, which can be determined by discounting the probable future cash flows. The immanent uncertainty in estimating future developments and hence in economic performance is not relevant for classification purposes, because only the classification is based on this criterion and not the determination of the exact amounts.

As a result of the specification of the basic terms risk and control a theoretical frame of reference can be developed, which serves as deduction basis for equity classification rules as shown in Figure 2.

7. Deduction of an equity classification approach

7.1. Classification principle and specification

According to the newer property rights literature ownership is a bundle of residual rights to control r_c and residual rights to income r_i . So equation 1.6 can be specified correspondingly:

$$P = \sum (r_c + r_i).$$

Equation 3.1

In line with equation 3.1 and with the premise formulated in section 2 the classification principle underlying the new approach has to be specified. Therefore

equity is given, if the instrument entitles the holder with the same risks and rewards as an owner, i. e. the holder equals an owner in its residual rights to control and residual rights to income.

The approach has two underlying premises: the going-concern assumption and the substance-over-form principle. The assumption of the going-concern is relevant, because in case of the entity's liquidation or insolvency the division line between equity and liabilities become indistinct (Kopcke and Rosengren (1989): 2). In accordance with the focused interdisciplinarity and neutrality of the approach the substance-over form principle means, that classification bases upon the instrument's terms and conditions. Given that these are not provided, the underlying legal norm should be referred to for classification purposes.

In compliance with the neoinstitutionalistic financing theory risk is the dominant factor to explain the emergence of diverging financing contracts. As risk manifests itself primarily in the residual rights to income, these should serve as central criterion on a first level, whereas the residual rights to control are the second layer of the classification approach and are responsible for the fine adjustment within equity. The unidimensionality on the first level minimizes the complexity of multi-criteria approaches and thus considers the corresponding negative correlation to the perception of the information provided. Beyond that the vertical one-dimensional approach in the hierarchic structure considers the stakeholders preference for less detailed accounting as financial statements are not free of cost.

7.2. Operationalisation of the residual rights to income as primary classification criterion

Risk is the primary determinant for the existence of diverging financial contracts and should be understood as the positive as well as the negative participation in the entity's value. As outlined in section 6 the economic performance of the entity should serve as reference value in the classification process by verifying if the instrument participates in the entity's development based on its terms and conditions. Hence participation means the linkage of the instrument's return to the entity's economic performance. Even though the perpetuity of the funds provided has to be refused as main classification criterion because of its high manipulability and ambiguity, the time factor is inherent in differentiating in a long-term and short-term dimension of participation in the economic performance. This is also in line with the chosen entity view and its premise to identify the financial foundation of the entity.

The long-term component of residual rights to income consists of the participation in the economic substance of the entity reflecting the positive dimension of risk and of the residual status in the sum of claims for future payments against the entity as negative component. The positive dimension of risk is given, if the terms and conditions of a financial contract stipulate the participation in a generated goodwill and/or in undisclosed reserves in the case of its redemption. The negative dimension is the residual status of a financial contract as measured by the sum of all claims against the entity. As shown in section 2 the definition of equity as residual is prevalent in accounting. It seems to be problematic to define the frame of reference for the determination of the residual status (e. g. national insolvency law, corporate law). Given equation 1.2 the credit side of the balance sheet is the sum of all financial contracts. As each financial contract incorporates a claim for future payment

the credit side is accordingly the sum of all claims for future payments against the entity. Therefore the status of a financial contract has to be compared with the whole system of claims against the entity. The residual status is given, if the financial contract has no priority over other claims in terms of its satisfaction. Thus several classes of equity can exist in parallel with the same residual status, because absolute subordination is not required.

The short-term dimension of residual rights to income is the participation in the current contributions to the substance of the entity. Each financial contract embodies a certain risk, but the main difference is, whether only the value of a claim is reduced or if the existence of the claim itself is uncertain. The criterion of the short-term dimension is given, if the claim for future payments is linked to the current contributions to the substance of the entity in its existence and also in the determination of its value. For classification purposes it is only relevant, whether the terms and conditions of the financial contract link the abstract amount of the claim to the short-term economic performance. Hence at this level it is not necessary to determine the exact amounts but only the abstract amounts.

As the intensity of the exposure to the risks and rewards diverge between the long-term and the short-term dimension of the residual rights to income, it is necessary to rank the long-term criterion before the short-term component, constituting the primary and the secondary risk carrier. Figure 3 recapitulates the dimensions of the residual rights to income as primary classification criterion.

7.3. Operationalisation of the residual rights to control as secondary classification criterion

The residual rights to control consist of the two dimensions of decision management and decision control. Decision management embodies the active decision taking but not necessarily including the management authorisation, therefore general partners always hold decision management. According to the theory of incomplete contracts also voting rights are an abstract instrument of decision management. Decision control is less distinct in its effect and embodies rights as for example control rights or information rights. In modern corporations decision control is separated additionally from the residual claimants. In line with the hypotheses of Fama and Jensen (1983: 302ff) redemption features or the free tradability as well are substitutes for the lacking active decision control.

7.4. The necessity to define a tertiary risk carrier

Equation 3.1 defines ownership as the combination of residual rights to income and residual rights to control. As the residual rights to income form the primary classification criterion, it raises the question how financial contracts, whose terms and conditions convey residual rights to income but lack the residual rights to control criterion, should be treated. Thus it is necessary to define a tertiary risk carrier with the main scope of derivatives. The relevant question in the classification of such contracts must be, whether it is the aim of the contract to reach the status of a superior risk carrier, namely the status as primary or secondary risk carrier. Further differentiation within this group is necessary: if the terms of a financial contract link its value to the value of the entity's own shares and therefore cause its fair value to change equally with the fair value of the entity's own shares, the contract has to be classified as a first rank tertiary risk carrier. This is given, if the contract follows the

“fixed-for-fixed” rule meaning that the financial contract will or may be settled by exchanging a fixed amount of cash or another financial asset for a fixed number of the entity’s own shares. Hence the financial instrument’s terms and conditions equate the holder of the instrument with the risks and rewards of a proprietor. The value development in the same direction is – in contrast to the participation in the negative current contribution at the secondary risk carrier – no compulsive criterion; therefore financial contracts lacking fixed-for-fixed conditions can nevertheless be part of the tertiary risk carrier as long as the instrument’s aim is to reach a superior risk carrier status.

7.5. The Property Rights Equity Concept (PREC)

7.5.1. Primary risk carrier

To qualify as primary risk carrier, a long-term dimension criterion of residual rights to income must be given combined with one component of residual rights to control. The first rank within this group are those financial contracts fulfilling all identified criteria. This is in line with the hypotheses of Fama/Jensen, whereupon decision management combined with decision control is inseparably aligned with the residual risk. Classic examples of the first rank primary risk carrier are common shares and general partnership interests. In the case of common shares the participation in the substance of the entity is given forasmuch as the value of the share has to be seen as approximation of the entity’s value. Further it is debatable, whether terms and conditions that provide for a redemption amount based on book value fulfil the criterion of participating in the entity’s substance. This has to be approved insofar, as in the case of redemption the compensation amount normally

will approximate fair value by the means of the supplementary interpretation of the partnership agreement.

The second rank within the primary risk carrier group misses the dimension of decision management. According to Fama and Jensen (1983) the separation of decision management and decision control transfers the decision control to the holder of the residual risk. Hence the second rank of a primary risk carrier is given if the instrument provides for the participation in the entity's substance combined with an instrument of decision control as it is the case with a limited partnership interest. As the residual status is measured by the sum of all claims against the entity also the limited partnership interest fulfils the criterion, because it is not necessary to be subordinate to all other classes of claims but to have no priority over other claims in terms of their satisfaction. Hence the general partnership and the limited partnership interest can be subsumed under the primary risk carrier in parallel.

In the case of the third rank of the primary risk carrier group only the participation in the substance of the entity is combined with a component of decision control. One characteristic example would be preferred shares, which lack a residual status compared to the ordinary shares and are therefore classified as third rank within the category of primary risk carrier. The only existence of a residual status combined with a dimension of decision control does not constitute a primary risk carrier, because otherwise the classification criterion of residual rights to income could be undermined by simple subordination agreements (e. g. subordinated shareholder loans).

7.5.2. Secondary risk carrier

The terms and conditions of a financial contract must provide for a participation in the current contributions to the substance of the entity as well as for a dimension of decision control to be classified as secondary risk carrier. An inalienable criterion is the participation in the negative contributions of the entity's activities, as the classification principle requires the equivalence regarding the risks and rewards of an owner. The claim for future payments must be linked to the current contributions in its existence and also in the determination of its value. Hence the only linkage to positive current contributions would not lead to the classification as secondary risk carrier reducing the manipulability and the resulting ambiguity of the criterion. Perpetual bonds with interest payments linked in its existence and in its amount to the decision to pay dividends would therefore not qualify for classification as equity, because the negative dimension of risk is not given.

7.5.3. Tertiary risk carrier

The criteria for the tertiary risk carrier group should be applied to freestanding and embedded options respectively. In the latter case the concept of split accounting is adopted. A tertiary risk carrier is given, if the aim of the contract is to reach the status of a superior risk carrier. As the analogue value development with the entity's own shares is required for the classification as tertiary risk carrier of first rank, rules for diverging settlement conditions are obsolete. The option changes in the same direction as the fair value of the entity's own shares only, if fixed-for-fixed terms and gross physical settlement are given. Net cash settlement will not lead to a classification as tertiary risk carrier, because it is obviously not the aim of the instrument to reach the status of a superior risk carrier. In the case of net share

settlement the instrument's value will not change in the same direction as the entity's own shares but it will provide for a status as primary or secondary risk carrier and is therefore classified as second rank tertiary risk carrier.

8. Concluding Remarks

The Property Rights Equity Concept constitutes an alternative approach to define equity in the context of international accounting and stands out due to the independent and conceptually sound classification principle. According to that equity is given, if a financial contract entitles its holder with the same risks and rewards as an owner, i. e. the holder equals an owner in its residual rights to income and residual rights to control. The approaches discussed by the international standard setting bodies have one premise in common with the PREC: the nexus between equity and ownership. Whilst the approaches of the IASB/FASB lack a consistent classification principle based on this nexus, the PREC formulates a clear and distinct principle based on an independent and interdisciplinary frame of reference. Furthermore the PREC seeks to forge links between the entity and the proprietary view by primarily focusing the entity view's interpretation of "ownership equities" and integrating aspects of the proprietary view. It is not – in contrary to the favoured Basic Ownership Approach (BOA) by the FASB – to ask "who is the owner" but to identify those financial contracts that form the financial foundation of the entity by equalizing the holder of the instrument with an owner in its risks and rewards. Even if risk is the generally accepted primary determinant for the existence of diverging financial contracts and is also integrated indirectly in IAS 32 by the required subordination criterion in IAS 32.16A or also in CON6, neither approach operationalizes risk as classification criterion as it is realized with the PREC. A further novelty is the integration of information and control rights in a classification approach that are

incorporated in the PREC by the dimension of decision control. In IAS 32.16A (c) only financial criteria are relevant for classification purposes of puttable instruments. Also the principle of “nascent equity” is included in the development of the PREC with the tertiary risk carrier group. In opposition to the complex and partly arbitrary classification criteria for derivatives in international accounting standards the PREC follows once again one clear classification principle: whether it is the aim of the instrument to reach the status of a superior risk carrier or not.

It was the aim of the paper to develop a conceptually profound equity definition focusing an interdisciplinary approach that is characterized by a high operability and tries to reduce the possibilities of manipulation and arbitrary accounting. Based on the theoretical results empirical research will be performed based on the question of how markets perceive hybrid financing and gain additional information regarding the classification of hybrid instruments.

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