

EUROPEAN BUSINESS LAW REVIEW



Wolters Kluwer

Law & Business

Editorial Board

- Guido Alpa** *General Editor*, Professor, La Sapienza, Rome, President of the Italian Bar.
Mads Andenas *General Editor*, Professor, University of Oslo, Director of the Centre of Corporate and Financial Law, Institute of Advanced Legal Studies, University of London.
Giuseppe Conte Professor of Law, University of Florence.
Francesco Capriglione Professor, Luiss University, Rome.
Jan Dalhuisen Professor, King's College, London, and University of Utrecht.
Duncan Fairgrieve Sciences-Po, Paris and the British Institute of International and Comparative Law, London.
Laurence W Gormley Barrister, Professor of European Law, University of Groningen.
Stefan Grundmann Professor, Humboldt University, Berlin.
Renato Nazzini Reader, University of Southampton.
Barry A K Rider Director of the Institute of Advanced Legal Studies and Professor of Law, University of London; Tutor and Fellow, Jesus College, Cambridge; Barrister, England and Wales.
Jukka Snell Professor, School of Law, University of Swansea.
Jan Wouters Professor, University of Leuven.

Editorial Advisory Board

- Sir Christopher Bellamy**, Slaughter and May, London.
Sir William Blair, Royal Courts of Justice, London.
John Board, Professor, University of Reading.
Stephan Breidenbach, Professor, Europa University Viadrina of Frankfurt (Oder).
Sir Ross Cranston, Royal Courts of Justice, London.
Paul L Davies, Professor, University of Oxford.
Jacqueline Dutheil de la Rochère, Professor, University of Paris II.
Carmen Estevan de Quesada, Professor, Universidad de Valencia.
Walter Baron van Gerven, Professor, Leuven and Maastricht.
Roger Goebel, Professor, Fordham University School of Law.
Sir Roy Goode QC FBA, Norton Rose Professor of Law, Oxford.
Christos Hadjiemmanuil, Reader, London School of Economics.
Gerard Hertig, Professor, ETH Zürich.
Klaus J Hopt, Professor, Director of the Max-Planck-Institut of Comparative and International Private Law, Hamburg.
Guy Horsmans, Professor, University of Louvain la Neuve, Brussels.
Kåre Lilleholt, Professor, University of Oslo.
John Lowry, Professor of Law, University College London.
The Rt Hon Lord Mance, Supreme Court of the United Kingdom.
Michel Menjucq, Professor, University of Paris I.
Giuditta Cordero Moss, University of Oslo.
Peter-Christian Müller-Graf, Professor, University of Heidelberg.
Dr Lazaros Panourgias, European Investment Bank, Luxembourg.
Sir Richard Plender, Royal Courts of Justice, London.
Sir Bernard Rix, Royal Courts of Justice, London.
Roberta Romano, Professor of Law, Yale Law School.
Marco Roscini, Reader, University of Westminster.
David Vaughan CBE QC London.
Erik Werlauff, Professor of Law, Aalborg Universitet.

Book Review Editor:

Duncan Fairgrieve,
Sciences-Po, Paris, and
the British Institute of
International and
Comparative Law,
London.

Assistant Editor:

Dr Iris Chiu,
Senior Lecturer,
University College
London.

Distribution

In North, Central and South America,
sold and distributed by Aspen Publishers Inc.
7101 McKinney Circle
Frederick MD 21704
United States of America

In all other countries, sold and distributed by
Turpin Distribution
Stratton Business Park
Pegasus Drive, Biggleswade
Bedfordshire SG18 8TQ
United Kingdom

Subscriptions

European Business Law Review is published bi-monthly. Subscription prices for 2011 [Volume 22, Numbers 1 through 6] including postage and handling:
Print subscription prices: EUR 799/USD 1065/GBP 587
Online subscription prices: EUR 740/USD 986/GBP 544
(covers two concurrent users)

This journal is also available online at www.kluwerlawonline.com. Sample copies and other information are available at www.kluwerlaw.com. For further information please contact our sales department at +31 172 641562 or at sales@kluwerlaw.com.

Advertisements

For advertisement rates please contact our marketing department at +31 172 641525 (Marina Dordic) or at marketing@kluwerlaw.com.

Information

Contributions should be emailed to Iris Chiu, Assistant Editor, at EBLRditorial@gmail.com.

This journal may be cited as [2011] EBLR 119-260.

Book Reviews

Book reviews may be sent to Iris Chiu, Assistant Editor,
European Business Law Review at EBLRditorial@gmail.com.

Copyright

© 2011 Kluwer Law International

ISSN: 0959-6941

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers.

Permission to use this content must be obtained from the copyright owner. Please apply to: Permissions Department, Wolters Kluwer Legal, 76 Ninth Avenue, 7th floor, New York, NY 10011, United States of America. E-mail: permissions@kluwerlaw.com.

Visit our website at www.kluwerlaw.com

Corporate Risks, Risk Bearing Ability and Equity

LUKAS HANDSCHIN*

Abstract

There is a relation between corporate risks, risk bearing ability and equity. In order to assess the risk bearing ability of a corporation, one reference figure is equity, understood as the sum of legal capital and reserves, free reserves and accrued profits. Equity shows the risk bearing ability related to the risk of asset reduction as well as the ability of the corporation to attract new liquidity by increasing debts, in case of a negative free cash flow. Equity is the risk reserve of the corporation. The relation between equity and risk bearing ability allows defining the necessary amount of equity by analyzing the corporate risks. Furthermore, it leads to rules for the valuation of assets, the creation of reserves and as to the board's duty of care on how to pursue the corporate strategy.

A. Introduction

1. *Non-Liability for Shareholders and Corporate Risk Bearing*

Most jurisdictions provide for corporation-forms where shareholders are not liable for the debts of the corporation.¹ This means that the “owners” of the corporation can use the corporation to bear risks, which they would not take, if they were fully liable. They can reduce their control efforts and costs and can share their holdings with other investors thus spreading the risks.² This legal concept was developed in the 19th century,³ and was a major driver for economic growth and the development of efficient capital markets ever since.⁴

* Full Professor for Corporate and Accounting Law, University of Basel.

I thank Andreas Steffen, LL.M., Indre Steinemann, LL.M. and Tobias Steinemann for their expert research assistance and Kim Farragher for her support with the drafting of this essay in English. None of them bear responsibility for any remaining errors of fact or judgment.

¹ This essay is entirely comparative in the sense, that it does not describe the legal situation in a specific legislation, but concentrates on general and universal principles of corporate and accounting law and refers to rules and principles of specific legislations primarily to show different legislative approaches to the posed questions.

² Frank H Easterbrook and Daniel R Fischel, ‘Limited Liability and the Corporation’ (1985) 52 *University of Chicago Law Review* 89, 93.

³ Esthelle Rothweiler and Stefan Geyer, ‘Paul Davies and Gower’s Principles of Modern Company Law’ in, Walter Bayer and Mathias Habersack (eds), *Aktienrecht im Wandel: Entwicklung des Aktienrechts* (Volume I, Mohr Siebeck, Tübingen 2007) at 40–43.

⁴ Janet C Alexander, ‘Unlimited Shareholder Liability Through A Procedural Lens’ (1992) 106 *Harvard Law Review* 387, 390.

However, the non-liability for shareholders does not allow the corporation or more precisely its management to do whatever they want. The management is bound by the duty of care and has to act prudent.⁵ These management duties can be understood as duties owed to the shareholders or creditors⁶ of the corporation or to the corporation itself.⁷

Whichever theory one may follow: the corporation cannot take any risks⁸; on the contrary, it can only take risks corresponding to its risk bearing ability. The risk bearing ability concerns all aspects of corporative behaviour; the management has to verify if the corporation has the personal, know-how and financial resources to pursue the planned business.⁹ Hence, the management has to constantly assess the personal, technical (know-how related), reputational and financial risk bearing abilities of the corporation. Consequently, if the management does involve in a business exceeding its risk bearing ability, the management breaches its duty to act prudent.¹⁰

2. Financial Risks

The first risk which comes to ones mind, when discussing financial risks, is the liquidity- or financing risk.¹¹ It is the risk, that the corporation does not have the

⁵ Switzerland: Obligationenrecht [OR, Swiss Code of Obligations] arts 717 and 754; Germany: Aktiengesetz [AktG, Stock Corporation Act] para 93 s 1; France: Code de commerce [CCom, Commercial Code] arts L 225–251 and L 225–257; United Kingdom: Under s 172 ss 1 (a) of the Companies Act 2006 [Companies Act] a director must not take from his subjective point of view risks that endanger the company's long-term success; Goeffrey Morse et al (eds), *Palmer's Company Law: Annotated Guide to the Companies Act 2006* (reprint, Sweet & Maxwell 2008) at 167: 'The directors must make decisions that are calculated to be for the long-term benefit of the members [of the company] as a whole.'

⁶ Switzerland: art 754 s 1 OR; Harry G Henn and John R Alexander, *Laws of Corporations and Other Business Enterprises* (Hornbook series, 3rd edn, West Publ. St. Paul, Minnesota 1987) at 612.

⁷ Switzerland: OR art 756 para 1; Germany: AktG para 93 s 2; France: CCom art L 225–251; United Kingdom: Companies Act, s 170 ss 1; *Multinational Gas and Petrochemical Co v Multinational Gas and Petrochemical Services Ltd* [1983] Ch 258 CA; *Peskin v Anderson* [2001] 1 BCLC 372 CA; Morse (n 5), 164: Only the company itself can bring in an action for a breach of duty; also Derek French, Stephen W Mayson and Christopher L Ryan, Mayson, *French & Ryan on Company Law* (Oxford University Press 2009) at 16.3.3; Goeffrey Morse, *Charlesworth's Company Law* (17th edn, Sweet & Maxwell, London 2005) at 298–299: Only under special circumstances fiduciary duties arise which place directors in a fiduciary capacity towards shareholders or creditors.

⁸ David Kershaw, 'Involuntary Creditors and the Case for Accounting-based Distribution Regulation' (2009) 2 *Journal of Business Law* 140, 144.

⁹ Paul L Davies, Sarah Worthington, Eva Micheler, *Gower and Davies' Principles of Modern Company Law* (8th edn, Sweet & Maxwell, London 2008) at 11–15.

¹⁰ 'Among the duties defined by the business judgment rule is the rule that no excessive risks can be taken. Gerd Krieger and Viola Sailer in *Karsten Schmidt and Marcus Lutter (eds), Aktiengesetz: Kommentar; [AktG]* (O Schmidt, Cologne 2008) at 1061. 'As it is the case in the financial sector, the adequate risk distribution is also a duty of the board of a corporation.' Schweizerisches Bundesgericht [Bger, Swiss Federal Court] 7 April 1987, *Entscheidungen des Schweizerischen Bundesgerichts* [BGE, Decision of the Swiss Federal Court] 113 II 57.

¹¹ 'Liquidity is the essential *conditio sine qua non* which has to be ensured at all times, if the risk of illiquidity and as a consequence bankruptcy has to be avoided.' Henner Schierenbeck, *Grundzüge der Betriebswirtschaftslehre* (16th edn, Oldenburg, Munich, Vienna, 2003) at 60.

necessary financial resources to continue business operations,¹² or more specifically that the free cash flow¹³ is negative and the cash reserves are reduced to a level which does no longer enable the corporation to fulfil its obligations. If the corporation runs out of liquidity, it has to be wound up. The liquidity risk is more immediate than any other financial risk. Liquidity problems usually start with a negative operative cash flow, and become existentially dangerous in case the disinvestments cannot compensate the operative cash-drain.

The second financial risk is the risk of an asset reduction. Asset reductions are often a consequence of a cash-drain. However, a cash-drain is not the only conceivable reason for this development. Asset reductions can also result from the revaluation of assets. Asset reductions may lead to an over-indebtedness of the corporation. This occurs when all assets of the corporation are reduced to a value below the value of the debts. In that case the corporation may still have enough liquid assets to continue its business, yet has to file for bankruptcy due to the over-indebtedness. This risk becomes even more significant where accounting rules allow a valuation of assets, which tries to close the gap between the book and the real value, as this is the case with all bookkeeping standards allowing or requiring true and fair valuations, such as IFRS¹⁴ or US GAAP.¹⁵

Liquidity- and asset reduction risks go often hand in hand and business decisions often affect both.

B. Cash-Drain Risks

1. Introduction

Cash is absolutely essential for the operation of a corporation. A corporation with not enough cash does not have the necessary financial resources to continue its business operations.¹⁶ Consequently, it runs out of money and has to terminate its operations. The cash situation of a corporation is stated in the cash flow statement

¹² Paul L Davies, 'Legal Capital in Private Companies in Great Britain' (1998) *Die Aktiengesellschaft* 346, 353–355.

¹³ *Infra B.1.*

¹⁴ International Financial Reporting Standards (IFRS) are Standards, Interpretations and the Framework (in the absence of a Standard or an Interpretation) adopted by the International Accounting Standards Board (IASB, <<http://www.iasb.org/home.htm>>).

¹⁵ US GAAP (US Generally Accepted Accounting Principles) are accounting rules, which include local applicable Accounting Framework, related accounting law, rules and Accounting Standards. For public and private companies the highest authority in establishing generally accepted accounting principles is the Financial Accounting Standards Board (FASB, <<http://www.fasb.org/home>>).

¹⁶ Davies (n 12), at 353–354.

where the cash flow from operations,¹⁷ investments¹⁸ and financing¹⁹ is shown separately. The aggregate sum of the cash flow from operations and investments is described as the free cash flow.²⁰ The free cash flow or the net free cash flow reveals the cash potential of a corporation, which can be distributed to shareholders and debtors related to the financing of the corporation such as dividends and interests, the pay back of equity and debts. Provided that the free cash flow is positive the corporation has the liquidity to make payments to shareholders and debtors related to the financing of the corporation. In the case of a negative free cash flow the corporation needs additional financing through debt or equity in order to avoid a cash-drain. A cash-drain can hit the corporation existentially, leading to a reduction of the liquidity reserves which no longer enable the corporation to fulfil its obligations now and in the future.

The cash flow statement is part of the financial report of the corporation, presenting the cash flow and how it was achieved (income from operations or from disinvestments, etc.). Nevertheless, the cash flow statement shows a retroactive picture, looking from the present to the past, hence reducing its significance. The cash requirements of a corporation are future-oriented; the management has to assess the future cash requirements. This is done through a liquidity plan which extrapolates the cash flow statements into the future.²¹

In the event of a negative free cash flow the corporation needs to obtain additional financing from either the shareholders or a creditor to avoid a cash-drain. The shareholder is not obliged to fund the corporation,²² and the management of the corporation should not rely on such contributions unless there are binding promises in this respect. To determine the cash-drain risk correctly the management of the corporation has to analyze the situation under the assumption that no additional funds can be made available from the shareholders.

¹⁷ ‘Operating activities are the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.’ (IAS 7.6). ‘The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the entity have generated sufficient cash flows to repay loans, maintain the operating capability of the entity, pay dividends and make new investments without recourse to external sources of financing. Information about the specific components of historical operating cash flows is useful, in conjunction with other information, in forecasting future operating cash flows.’ (IAS 7.13).

¹⁸ ‘Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash Equivalents.’ (IAS 7.6). ‘The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows.’ (IAS 7.16).

¹⁹ ‘Financing activities are activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.’ (IAS 7.6). ‘The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the entity.’ (IAS 7.17).

²⁰ Free Cash Flow is not a defined term under IFRS or US Generally Accepted Accounting Principles (US GAAP) and the term is not used consistently. In this essay the term refers to the cash flow which remains after the cash flow from operations and investments has been determined.

²¹ Louis Perridon, Manfred Steiner and Andreas W Rathgeber, *Finanzwirtschaft der Unternehmung* (15th edn, Vahlen, Munich 2009) at 657.

²² Switzerland: OR arts 620 para 2 and 680 para 1; Germany: AktG para 54 s 1; France: CCom art L 225-1; United Kingdom: Davies (n 9), at 2–3.

2. *The Relation of the Cash Potential and the Equity of a Corporation*

Equity is the sum resulting from the deduction of the debt capital from the assets of a corporation. The gap between the debts and the assets of a corporation is the corporation's equity. Equity is composed by the statutory or legal capital, the free and legal reserves and accrued profits. Oftentimes the term equity refers only to the legal capital or the legal capital and reserves and is used in connection with the question of equity protection. However, the term equity is broader and includes also free reserves and accrued profits. Therefore, the system of equity protection is two-tier, protecting the first-tier equity (legal capital or legal capital and legal reserves) and the second-tier equity (free reserves and accrued profits) with different rules.²³

As long as no additional funds can be made available from the shareholders, the potential to get new liquidity in this situation depends entirely on the corporation's ability to increase the debts. In turn, the ability of the corporation to increase the debts depends on the structure and amount of pre-existing debts and assets.

The first example shows corporation "A" with a low and corporation "B" with a high amount of equity. It is self-evident, that corporation B has a better potential to raise new cash.

Table 1

Corporation A		Corporation B	
Assets	Value	Assets	Value
Bank Account	1,000	Bank Account	1,000
Debtors	2,000	Debtors	2,000
Stock	1,500	Stock	1,500
Real Estate	<u>2,000</u>	Real Estate	<u>2,000</u>
All Assets	6,500	All Assets	6,500
Liabilities		Liabilities	
Bank Debts	5,000	Bank Debts	3,000
Reserves	<u>500</u>	Reserves	<u>500</u>
All Liabilities	5,500	All Liabilities	3,500
Equity		Equity	
Legal Capital and Reserves	500	Legal capital and reserves	1,500
Accrued Profits	<u>500</u>	Accrued profits	<u>1,500</u>
All Equity	1,000	All Equity	3,000

²³ *Infra F.2.*

Naturally, not only the amount, but also the structure of the assets is relevant. For instance, the amount of equity can be lower and still bear the potential to raise a specific amount of cash in cases where the assets can be liquidated easily or can be used as collateral.

3. *The Equity of the Corporation as Indicator for its Cash Potential*

Many jurisdictions refer to the equity of the corporation as an indicator for the going concern ability of the corporation.²⁴ This approach has been widely criticized,²⁵ since it would ignore the liquidity-situation being a much more reliable indicator. This criticism, however, overlooks that equity is not only an indicator for the over-indebtedness of a corporation, but also for the ability of the corporation to make up for negative free cash flow. In fact, equity is an indicator for both financial risks of a corporation: the cash-drain risk as well as the risk of asset reductions and over-indebtedness.

Accordingly, the universal applicability of equity as a reference figure for the overall financial risk bearing ability shows the superior function of equity in corporate law, irrespective of the legislation regarding the minimal legal capital.

4. *Management Duties regarding the Cash-Drain Risk*

To determine the amount of the necessary equity, the management has to evaluate the risks of cash-drain based on the relevant business plans and liquidity planning. The assessment of the risk bearing ability in due consideration of the cash-drain risk is a permanent duty of the management of the corporation.²⁶ This monitoring goes in two directions and is an interactive procedure looking from the equity to the planned business decisions and vice versa. If the available equity is too low in regard to the planned business, the management has two options. Either it tries to get the shareholders to increase the equity, for example, through a capital increase or it defines a new corporate strategy and adjusts its plans to align the corporate

²⁴ Switzerland: OR art 725; Germany: Insolvenzordnung [InsO, Insolvency Statute] paras 16 et seq; France: CCom art L 225–248.

²⁵ See Jonathan Rickford (ed), 'Reforming Capital – Report of the Interdisciplinary Group on Capital Maintenance' (2004) 15 *European Business Law Review* 919; John Armour, 'Share Capital and Creditor Protection, Efficient Rules for a Modern Company Law' (2000) 63 *Modern Law Review* 355.

²⁶ Germany: The Management Board (Vorstand) has to report to the Supervisory Board (Aufsichtsrat) all transactions which are of increased significance for the profitability or the liquidity of the corporation. AktG para 90 s 1 No 4. Switzerland: Michael Wegmüller, *Die Ausgestaltung der Führungs- und Aufsichtsaufgaben des schweizerischen Verwaltungsrates: Unter Berücksichtigung der Verhältnisse in Deutschland und England* (Staempfli, Bern 2008) 126; Christoph Sarasin, 'Ausgestaltung und Grenzen der Haftung des Verwaltungsrates aus aktienrechtlicher Verantwortlichkeit gemäss Art. 754 OR' (Doctor iuris thesis, University of Basel 1995) at 89; Peter Böckli, *Schweizer Aktienrecht: Mit Fusionsgesetz, internationalen Rechnungslegungsgrundsätzen IFRS, Börsengesellschaftsrecht, Konzernrecht und Corporate Governance* (3rd edn, Schulthess, Zurich 2005) at 1619.

risks with the financial risk bearing ability as defined by the equity of the corporation.

C. Risk of Asset Reduction

1. Introduction

The reduction of net assets can result from numerous reasons: cash-drain, new liabilities, new risks which require the creation of reserves and provisions,²⁷ and the revaluation of assets. The revaluation of assets can become necessary to compensate their aging and corresponding loss of value,²⁸ a sudden loss in value due to a damage or destruction of the asset, bankruptcy or bankruptcy-risk of creditors or changed market conditions. Where the depreciation of an asset can be planned and included in the business plans and balance sheet budgets, the risk to revalue assets is more difficult to assess. The reduction of assets reduces the ability of the corporation to increase the liquidity through additional debts,²⁹ and may lead to an over-indebtedness of the corporation, meaning that all assets of the corporation are reduced to a value below the amount of the debts.³⁰ In that case the corporation still may have enough liquid assets to continue the business, yet has to file for bankruptcy due to the over-indebtedness.³¹ Similar to these rules of creditor

²⁷ 'A contingency (provisions included) is defined as an existing condition, situation, or set of circumstances involving uncertainty as to possible gain (hereinafter a 'gain contingency') or loss (hereinafter a 'loss contingency') to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the acquisition of an asset or the reduction of a liability or the loss or impairment of an asset or the incurrence of a liability.' (US GAAP SFAS-5.1; further US GAAP standards, such as SFAS 48, SFAS 88, SFAS 143, SFAS 146 use partially different definitions). IAS 37 defines provisions as liabilities of uncertain timing or amount.

²⁸ 'Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.' (IAS 16.6, 38.8). 'An entity shall assess at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the entity shall estimate the recoverable amount of the asset.' (IAS 36.9). 'Depreciation is a systematic and rational process of distributing the cost of tangible assets over the life of assets.' (US GAAP Accounting Research Bulletin [ARB] No 43, chapter 9C, para 5).

²⁹ See *supra* B.2, table 1.

³⁰ Switzerland: OR art 725: ¹ If the last annual balance sheet shows that half of the share capital and the legal reserves are no longer covered, the board of directors shall without delay call a general meeting of shareholders and propose a financial reorganization. ² In case of substantiated concern of overindebtedness, an interim balance sheet must be prepared and submitted to a licensed auditor for examination. If the interim balance sheet shows that the claims of the Company's obligees are neither covered if the assets are appraised at on-going business values nor at liquidation values, then the board of directors shall notify the judge unless obligees of the Company subordinate their claims to those of all other Company obligees to the extent of such insufficient coverage.

Germany: InsO para 19, Definition in s 2: An over-indebtedness is assumed if the assets of the debtor no longer cover the debts.

³¹ 'One of the fundamental obligations of the management board is to file a petition for the commencement of insolvency proceedings if the corporation becomes insolvent or in the event of overin-

protection in Germany and Switzerland, under English law, Section 214 of the Insolvency Act of 1986 protects creditors by imposing liability on directors who negligently decide to continue trading.³² The risk of over-indebtedness does not necessarily – other than the cash-drain risk – endanger the company as an organization. It is conceivable that the operative business continues to exist based on specific insolvency rules;³³ creditors and shareholder, however, may have to bear significant losses in those situations.

2. *Revaluation Risks*

The revaluation risk is the risk that the initial valuation of the assets is wrong or that developments after the initial valuation of the assets make it necessary to reduce the value of the respective assets. The reasons for such value reductions are manifold, for example, technical developments, changed market requirements and conditions, bankruptcy of debtors, etc.

In civil law countries this risk is reduced by valuation rules which focus on prudence, rather than on a true and fair valuation. For instance, according to the rules of the commercial codes of most civil law countries,³⁴ fixed assets can only be valued at their production or purchase value after the necessary depreciations have been made. Value increases of fixed assets after the purchase are as a rule not possible.³⁵ In consequence, the risk to overvalue assets is generally lower, if a corporation applies accounting rules based on civil law commercial codes.

3. *Increased Revaluation Risks due to True and Fair Valuations*

Modern accounting rules such as the IFRS-Rules³⁶ which are standard for consolidated statements also in civil law countries and evidently the US GAAP³⁷ put less

debtedness, i.e. if the asset of the company no longer cover the liabilities.’ Frank Dornseifer, *Corporate Business Forms in Europe: A Compendium of Public and Private Limited Companies in Europe* (Staempfli, Bern 2005) at 252.

³² If a director knew or ought to have concluded that there was ‘no reasonable prospect for the company avoiding insolvent liquidation’ and such a person failed to take every step with the view to minimizing the potential loss to the company’s creditors that he ought to have taken, then the court may, upon the application of the liquidator, declare him to make such contribution to the company’s assets as the court thinks proper (Insolvency Act 1986, s 214).

³³ US: ‘Successful rehabilitation of a business under Chapter 11 generally requires the continued operation of the business. No court order is necessary in order to operate the debtor’s business after the filing of a Chapter 11 petition.’ David G Epstein, *Debtor-Creditor Law in a Nutshell* (4th edn, St. Paul West Pub. Co, Minnesota 1991) at 336. Similar rules exist in civil law countries: Switzerland: Bundesgesetz über Schuldbetreibung und Konkurs [SchKG, Swiss Debt Enforcement and Bankruptcy Law] arts 293 et seq, Nachlassstundung; Germany: InsO paras 217 et seq, Insolvenzplan.

³⁴ Switzerland: OR arts 665 and 666; Germany: Handelsgesetzbuch [HGB, Commercial Code] paras 252, 253 and 255; France: CCom art L 232–1 in conjunction with art L 123–18.

³⁵ For example, the only possible revaluations in Swiss law refer to the revaluation of real estate and holdings and is only possible in order to eliminate an over-indebtedness (OR arts 670 and 671b).

³⁶ *Supra* n 14.

³⁷ *Supra* n 15.

emphasis on prudence, but rather try to close the gap between the book and the real value by demanding a true and fair valuation. True and fair based rules require, for example, the revaluation of fixed assets to the real value, even if the real value is higher than the production or purchase value. Furthermore, true and fair asset valuation is often based on capitalized income value or cash flow and not on its substance value or production cost. While traditional Continental European book-keeping and valuation rules try to evaluate the value of an asset by looking at the past (substance, value or production costs), the true and fair rules assess the value of an asset by looking into the future, in particular by estimating the future income the asset can generate. It is self evident that the risk of valuation errors is higher, when basing the valuation on an analysis of the future, rather than on established figures of the past such as production costs etc. The more valuation rules try to depict the real value, the larger the risk that a revaluation will be necessary. The valuation of the assets of a corporation is complicated and mistakes can occur.

Even if the initial true and fair valuation is correct, true and fair valued assets are more vulnerable to changed conditions. This risk becomes evident when prospects for the future take a downturn, requiring a reassessment of the profit and cash flow potentials. In fact, an insignificant worsening of these future potentials can lead to a considerable revaluation of the asset and consequently to losses.

The reassessment of the valuation of the assets based on changed future prospects implies that the assets must be revaluated to a lower value, ignoring the positive future potential. In lieu of the positive future potential, the negative future potential has to be considered. The corporation falls twice: from optimism to zero and from zero to pessimism. It follows that in a time of crisis not only the positive future potential is eliminated from the valuation, but also pessimistic future prospects have to be included. This results in a double correction of the values and therefore, leads to a consolidation of the correction effect.

4. Management Duties related to the Risk of Asset Reduction

To monitor the risk of asset reduction the management and the board have to evaluate the revaluation risks. They have to constantly analyze the structure of the assets and determine whether the valuations are still correct considering new technical developments, changed market requirements and conditions or financially unstable debtors, requiring reserves for possible bankruptcy. In as far as future cash and other income potentials are part of a true and fair valuation, the management has to assess if these assumptions regarding the future prospects are still accurate or if they have to be adjusted. Therefore, the management and the board have to understand the valuation rules which were applied,³⁸ and that the valuation of the assets depends on the assumed future prospects.

³⁸ Böckli (n 29) 1545 and 1619; Holger Fleischer, in Gerald Spindler and Eberhard Stitz (eds), *Kommentar zum Aktiengesetz* (CH Beck, Munich 2007) at 906.

In a civil law prudence driven accounting environment the permanent assessment of the asset structure can be done by an average competent management, especially, where the management applies the prudence principle excessively and reduces the risk of overvaluation by strong depreciations and value corrections. In true and fair accounting, however, the demands on the management in this respect are much higher. It has to be financially literate in terms of all applied valuation rules and assumptions in order to ensure the ability to react in case the underlying future prospects change.

A management which applies valuation rules it does not understand is not able to control and monitor the valuation risks, hence not in compliance with its duty of care.³⁹ To cure this situation it has to either become financially literate or (if possible) apply valuation rules it understands or change the structure of the assets, for example, replace a, complex asset based security, where the valuation and the definition of the underlying assets is difficult by an easy to understand bond.

5. *The Relation of Equity and the Risk of Asset Reduction*

(a) *Low Risk of Asset Reduction*

There is a direct relation between the risk of asset reduction and the equity of a corporation. This relation can best be demonstrated with the following balance sheet examples. The first example presents a corporation with a low risk of asset reduction. The column “book value” shows the book values of the assets. The column “Asset Reduction Risk” shows the potential downward revaluation risks.

Table 2

Asset	Book Value	Asset reduction risk
Bank Account	1,000	0
Debtors	2,000	100
Stock/Bonds	1,500	100
Real Estate	2,000	200
All Assets	6,500	
Liabilities		
Bank Debts	5,000	
Reserves	500	
All Liabilities	5,500	
All Asset Reduction Risks		400
Equity		
Legal Capital and Reserves	500	
Accrued Profits	500	
All Equity	1,000	

³⁹ See *supra* A.1.

The assets of the corporation bear only a small asset reduction risk due to the prudent (low) valuation of the assets or a very low risk related to the value of the assets. In the balance sheet example the prudent management evaluates the asset reduction risk at 400, a figure which is below the equity of the corporation.

(b) High Risks of Asset Reduction

The second example shows a corporation with a high risk of asset reduction:

Table 3

Asset	Book Value	Asset reduction risk
Bank Account	500	0
Debtors	2,000	500
Stock/Bonds	1,500	500
Real Estate	2,500	400
All Assets	6,500	
Liabilities		
Bank Debts	5,000	
Reserves	500	500
All Liabilities	5,500	
All Asset Reduction Risks		1,900
Equity		
Legal Capital and Reserves	500	
Accrued Profits	500	
All Equity	1,000	

The assets of the corporation bear a high asset reduction risk. The reason for this can be an aggressive (high) valuation of the assets and high risks related to the value of the assets such as bad creditors, stock with a high yield (and risk potential) and a high market valuation of real estate. Furthermore, there is a potential for additional provisions due to law suits directed against the corporation, thus of involuntary creditors, where the risk of a payment is below 50%.⁴⁰

The prudent management would have to assess the asset reduction risk at 1900, a figure above the equity of the corporation, meaning, that the equity is insufficient to bear the financial risks of the corporation. The management would have to try to

⁴⁰ 'For a liability to qualify for recognition there must be not only a present obligation but also the probability of an outflow of resources embodying economic benefits to settle that obligation. For the purpose of this Standard (46), an outflow of resources or other event is regarded as probable if the event is more likely than not to occur, i.e. the probability that the event will occur is greater than the probability that it will not. Where it is not probable that a present obligation exists, an enterprise discloses a contingent liability, unless the possibility of an outflow of resources embodying economic benefits is remote.' (IAS 37.23). For the United Kingdom: Financial Reporting Standard [FRS] 12, which conforms to the international standard (IAS 37).

increase the equity by attracting new funds from the shareholders or changing the asset structure to include assets with a lesser revaluation risk (and profit potential).

D. Equity as Risk Reserve

1. Introduction

As shown above there is a direct connection between the amount of the equity and the risk bearing ability of a corporation. This relation has an effect on the cash-drain risk, the risk of asset reductions and over-indebtedness. In fact, it is the essential function of equity to provide for a buffer or a reserve to cope with these risks. Therefore, the term “risk reserve” is to be preferred to describe the function of equity.⁴¹

2. The Amount of Equity as Criterion for Financial Risk Bearing Ability

On behalf of the corporation, the management may only take on risks the corporation can endure. It has to adhere to the standard of care and act prudent.⁴² The corporation cannot incur all risks. On the contrary, it must only run risks which equal its risk bearing ability. Hence the management has to assess the risk bearing ability for each business operation.

The financial risk bearing ability which is related to both the cash-drain risk and the risk of asset reduction and over-indebtedness is determined by the amount of equity. The board has to constantly monitor the risk of asset reductions or the cash-drain risks.⁴³ As a result, the financial risk potential depends on the amount of equity or, in other words, the risk reserve. In turn, the management of a corporation has to define a corporate strategy and may only engage in business activities where the revaluation and cash-drain risks are bearable in view of the assets of the corporation⁴⁴.

The connection between the financial risk potential and the amount of equity is an interacting relation, whereby the financial risk potential is a criterion to determine the correct amount of equity. The corporation has to fix the equity (or the risk reserve) at a level high enough to cover the cash-drain risk and the risk of over-indebtedness. The lower these risks are, the lower the equity can be and on the other hand the higher the risks are, the higher the equity should be.

⁴¹ Lukas Handschin, ‘Das Eigenkapital als Risikoreserve’ in Peter V Kunz and Roland von Büren (eds), *Wirtschaftsrecht in Theorie und Praxis: Festschrift für Roland von Büren* (Helbing Lichtenhahn, Basel 2009) at 80.

⁴² *Supra*, text to n 5–8.

⁴³ *Supra* B.4, text to n 26.

⁴⁴ As for the creditors it remains unequal whether an increased risk is caused by reduction of capital or by way of increased corporate risk taking: Kershaw (n 8), at 141–143.

E. Determination of the correct Amount of Equity of a Corporation

1. Introduction

Equity respectively risk reserve determines the financial risk bearing ability of a corporation. If the equity decreases, the corporation's financial risk bearing ability lessens. As a consequence, the corporation has to structure its assets in way, which reduces the risk of a revaluation of the assets and furthermore apply a business-plan with stable revenues and a low cash-drain risk.

The practical relevance of the relation between the amount of equity and the financial risk bearing ability exists also the other way round. The necessary amount of equity depends on the aspired financial risk bearing ability of the corporation.⁴⁵

Since the 1980s the US-doctrine and later on also the legal doctrine in civil law countries has discussed the correct amount of equity and how regulation should work to achieve it. The difficulties arising thereby led to a more general discussion, questioning the concept of equity and equity protection at all, referring especially to US-models such as the rules in the Solvency Test.⁴⁶

The concept of equity as risk reserve and the resultant rule, demanding that the correct amount of equity should be based on the financial risk bearing ability of the corporation, has the potential to include specific guidelines to determine the equity based on the particular situation of each corporation. As a result, the central disadvantage of the system of equity and equity protection, which is seen in the inadequate rules to define its amount⁴⁷, could be overcome.

⁴⁵ 'First, company laws normally set one (as in the UK) or a small number of minimum capital rules (for example one for private and another for public companies), but in fact, to be effective, the minimum capital requirement ought to be related to the riskiness of the business which the company undertakes. General minimum capital requirements tend either to be too low effectively to protect creditors (as in the case of the current British requirement) or too high, in which case they simply reduce competition (by discouraging new entrants into the field) whilst over-protecting creditors. However, adjusting capital requirements to the riskiness of the company's business would be a complex and continuing activity, as is shown by the special regulation necessary to implement such a principle in those industries, for example banking and insurance, where capital adequacy requirements are taken seriously.' Davies (n 12) at 263.

⁴⁶ 'Too much emphasis is often placed on the amount of a company's share capital, rather than on its net assets when considering a company's financial position. We therefore consider that much time and expense could be avoided if the court had no longer to be concerned in a reduction of a company's capital. A certificate of solvency given by the directors should be sufficient in most cases.' The Institute of Chartered Accountants in England and Wales, 'Tech 3/99: Modern Company Law for a Competitive Economy, The Strategic Framework' (1999) at http://www.icaew.com/index.cfm/route/121530/icaew_ga/pdf, 6.

⁴⁷ 'It is very questionable whether the theory [of share capital as an identifiable fund available for creditors] achieves the stated objective of creditor protection in practice and this has been much questioned in recent academic literature. The theory does not provide a proportionate or adequate response to the problem it seeks to address. The levels of minimum capital required, even though implemented at higher levels in some Member States, are trivial in comparison with the actual need for working capital of a public company (nor would it be possible to fix a set minimum amount which would be

2. *Starting Point: Formal Rules regarding the Legal Capital*

Most jurisdictions require a certain minimal amount of equity as a minimal legal capital when setting up a corporation (Germany: € 50,000;⁴⁸ Switzerland: CHF 100,000;⁴⁹ United Kingdom: £ 50,000 for public companies⁵⁰ and none for private companies⁵¹; France: € 225,000 for listed public companies and € 37,000 for other public companies.⁵²). Over time political discussions in all jurisdictions led to a reduction of the legal capital in order to achieve a low entry level to establish corporations, thus stimulating economic activity.⁵³ The critics of the concept of equity and equity protection question these formal rules and point out that these rules cannot satisfy the purpose of the protection of shareholders, creditors and the company.⁵⁴ In particular, it is criticized that the equity-based rules are static with no regard of the size nor the riskiness of the operation business run by the company, and thus for many companies ineffective.⁵⁵

The criticism is justified as long as it concerns the inadequacy of the formal rules regarding the legal capital. However, the formal rules regarding the legal capital of a corporation are only the starting point. The legal rules on equity go beyond these legal thresholds. The rule, demanding the management only to engage the corporation in businesses for which it has the financial risk bearing ability, leads directly and immediately to binding legal rules regarding the amount of the equity of a corporation. The corporation has to define the amount of the equity (or risk reserve) by assessing the corporate risks and the target risk bearing ability. These rules are general and flexible, but nevertheless binding and offer a guideline to define the amount of the equity. The critics of the equity concept ignore these relations.

3. *Assessment of the Corporate Risks and the adequate Risk Reserve*

(a) *Introduction*

Since both financial risks, the cash-drain and the revaluation risk, relate to the equity, the management has to analyze these risks and try to quantify them. Insofar as the cash-drain risk is concerned, the management is compelled to produce a

appropriate for all such companies). The real effect is merely to attach a slight deterrent (easily evaded) to incorporation as a public company.' Rickford (n 25) at 931.

⁴⁸ AktG para 7.

⁴⁹ OR art 621.

⁵⁰ Companies Act s 763 ss 1 (a).

⁵¹ Kershaw (n 8) at 144.

⁵² CCom art L-224-2.

⁵³ Whether the legal capital of, eg Euro 37,000 for other public companies (France, CCom art L-224-2) or Euro 50,000 (Germany, AktG para 7) is an entry barrier to an own corporation respectively a negative economic stimulant is to be challenged. The reduction of tax and bureaucratic hurdles related to the set-up and the operation of a corporation would probably be more effectual.

⁵⁴ Rickford (n 25) at 931; Davies (n 9) at 11–14.

⁵⁵ Interdisciplinary Group Report, 'Reforming Capital' (2004) 15 *European Business Law Review* 919, 931–933.

liquidity plan in which it projects the past cash flows into the future, based on business plans and all other information available to the management.

The management is bound by diverse rules when defining the risk reserve. Regulated businesses such as banks have specific rules on equity.⁵⁶ In addition, there are accounting rules and principles which require or allow the creation of specific reserves that try to control the valuation risk (revaluation reserves⁵⁷).

In most other situations, however, the rules are unspecific; they only offer guidelines and define objectives. They allow the management a great amount of discretion, when assessing the risks and defining the risk reserve. This flexibility and discretion of the management is an advantage of these rules. It makes them universal and they do not withdraw the management's flexibility.

(b) Regulated Markets

Regulations on the correct rate between assets and debts as a consequence of corporation risks exist only in a few, mostly regulated, fields, particularly in the banking sector.⁵⁸ In this field the developments of the recent past have produced extensive material regarding the connection between equity and the risk potential of a corporation.

These regulations require that banks back their credit assets with equity. Thereby the percentage of equity backing relates to the revaluation risk of the assets; the higher the revaluation risk the larger the equity backing.⁵⁹ Equity rules for banks specify the general rule concerning the definition of equity for the financial sector. The specific rules for banks regulate the relation between revaluation risk and equity, thus confirming the general principal proposed in this essay.

(c) Revaluation Reserves or Revaluation Surplus as Equity

A further set of rules, relating to the amount of the equity and its connection to valuation risks, can be found in the accounting rules. If the value of an asset is

⁵⁶ See *infra* n 58.

⁵⁷ *Infra* E.3.(c).

⁵⁸ See Basel Committee on Banking Supervision, International convergence of capital measurement and capital standards: A revised framework (Updated November 2005, Bank for International Settlements, Basel 2005) <<http://www.bis.org/publ/bcbs107.htm>> [Basel II]: The Basel II Framework describes a more comprehensive measure and minimum standard for capital adequacy that national supervisory authorities are now working to implement through domestic rule-making and adoption procedures. It seeks to improve on the existing rules by aligning regulatory capital requirements more closely to the underlying risks that banks face. In addition, the Basel II Framework is intended to promote a more forward-looking approach to capital supervision, one that encourages banks to identify the risks they may face, today and in the future, and to develop or improve their ability to manage those risks.

⁵⁹ Basel II (n 58): Revised international capital framework, Part 2: The First Pillar – Minimum Capital Requirements, I. Calculation of minimum capital requirements, B. Risk-weighted assets: 'Total risk-weighted assets are determined by multiplying the capital requirements for market risk and operational risk by 12.5 (ie the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of risk-weighted assets for credit risk.'

increased to an amount above the initial valuation, there are two possibilities to book the difference between the initial and the new value of the asset.

Some accounting rules allow booking the difference as profit. For example:

- Trading securities (US GAAP⁶⁰),
- Financial assets through profit and loss (IAS 39.9),
- Construction contracts (IAS 11.22⁶¹).

Other accounting rules demand that the difference between the initial and the new value of the asset is not booked as profit, but has to be allocated to a specific revaluation reserve or surplus. This concept is widespread in civil law bookkeeping. Moreover it is also required by the IFRS and US GAAP for certain assets, for example:

- Property, plant and equipment (IAS 16.39⁶²),
- Intangible assets (IAS 38.85⁶³),
- Investment property (IAS 40.62),
- Available for sale securities (FAS 115⁶⁴).

⁶⁰ ‘Securities that are bought and held principally for the purpose of selling them in the near term (thus held for only a short period of time) shall be classified as trading securities. Trading generally reflects active and frequent buying and selling, and trading securities are generally used with the objective of generating profits on short-term differences in price.’ (FAS 115.12a). ‘Unrealized holding gains and losses for trading securities shall be included in earnings.’ (FAS 115.13).

⁶¹ ‘When the outcome of a construction contract can be estimated reliably, contract revenue and contract costs associated with the construction contract shall be recognized as revenue and expenses respectively by reference to the stage of completion of the contract activity at the balance sheet date. An expected loss on the construction contract shall be recognized as an expense immediately in accordance with paragraph 36.’ (IAS 11.22).

⁶² ‘If an asset’s carrying amount is increased as a result of a revaluation, the increase shall be credited directly to equity under the heading of revaluation surplus. However, the increase shall be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss.’ (IAS 16.39).

⁶³ ‘If an intangible asset’s carrying amount is increased as a result of a revaluation, the increase shall be credited directly to equity under the heading of revaluation surplus. However, the increase shall be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss.’ (IAS 38.85).

⁶⁴ ‘Investments not classified as trading securities (nor as held-to maturity securities) shall be classified as available-for-sale securities.’ (FAS 115.12b). ‘Unrealized holding gains and losses for available-for-sale securities (including those classified as current assets) shall be excluded from earnings and reported in other comprehensive income until realized except as indicated in the following sentence. All or a portion of the unrealized holding gain and loss of an available-for sale security that is designated as being hedged in a fair value hedge shall be recognized in earnings during the period of the hedge, pursuant to paragraph 22 of Statement 133. Paragraph 36 of FASB Statement No. 109, Accounting for Income Taxes, provides guidance on reporting the tax effects of unrealized holding gains and losses reported in other comprehensive income.’ (FAS 115.13).

In civil law countries,⁶⁵ in some US jurisdictions,⁶⁶ and in the United Kingdom,⁶⁷ the creation of the revaluation surplus has the effect that the revaluation of the asset does not result in a (distributable) profit, and that the equity of the corporation is increased by the same amount as the increase in value of the asset. In these jurisdictions dividends can only be paid out of the earned surplus and the revaluation profit is only realized after the concerned asset has been sold. The rule regarding the formation of revaluation surpluses affirms the understanding of equity as risk reserve. In these jurisdictions revaluation surpluses are first-tier equity. Other jurisdictions⁶⁸ allow in principle the distribution of legal reserves such as the unearned surplus (which includes the revaluation profit). In these jurisdictions the rules regarding the risk bearing ability and equity protection are especially important.

As far as true and fair accounting requires revealing the value of the assets correctly, it is correct to allow a revaluation of the assets when their value increases. On the other hand, the revaluation of an existing asset is generally less reliable than the valuation of a new asset (where for example a purchase or manufacturing price is available), thus enhancing the risk of revaluation.

The bookkeeping rules which require the formation of revaluation surpluses as first-tier equity take into account the valuation risk of the asset and demand the creation of equity in the specific amount. Hence, these rules specify and confirm the general principle that valuation risks have to be covered by increased equity. It should be considered to generally treat all revaluations of non-liquid assets according to these rules, hence strengthening the equity and the sustainability of corporations.

(d) Hidden Reserves as hidden Equity in Civil Law Bookkeeping

Civil law bookkeeping permits to value assets below their true and fair value, thereby allowing to create hidden reserves. Hidden reserves reduce the amount of assets, consequently lessening the risk of value reductions. They are – in fact – equity.⁶⁹ In the legal doctrine of civil law countries hidden reserves are justified as a possibility to reduce the revaluation risk.⁷⁰ If the management adheres to the rules of true and fair accounting, making use of the valuation potential, it increases the valuation risks which in turn should lead to an increase of the equity. As a result, the (hidden) equity (of civil law accounting), arising from the undervalued asset, is made transparent (by true and fair accounting rules) by increasing both the value of the asset *and* the equity (revaluation surplus) in order to cover the valuation risk.

⁶⁵ Switzerland: OR arts 675 para 2 and 798; Germany: AktG para 58 s 4.

⁶⁶ Eg DEL GEN CORP L para 170; NY BUS CORP L para 510 lit b.

⁶⁷ Companies Act s 829 et seq; French and Ryan (n 7), 10.5.2.

⁶⁸ Eg CAL CORP CODE s 507; FLA STAT para 06401; WASH BUS CORP ACT chapter 23B.06 s 23B.06.400 and WASH BUS CORP ACT chapter 189 s 1.7 and s 12.

⁶⁹ Hidden reserves are resources not listed on a balance sheet, such as land or a building shown at a value less than its market value. This valuation difference is a hidden element of corporation's equity.

⁷⁰ Böckli (n 26), 905; Franc Vischer and Fritz Rapp, *Zur Neugestaltung des Schweizerischen Aktienrechts* (Staempfli, Bern 1972) at 30.

(e) Provisions for future Risks?

In traditional civil law book keeping it is allowed to create provisions for future risks, among others for future investments in assets.⁷¹ These rules are criticized by apologists of true and fair valuation,⁷² for provisions can only be formed for uncertain future asset-reductions, though not for future risks and investments. Such provisions are considered to be hidden reserves and therefore, not compliant with true and fair bookkeeping according to IFRS standards.⁷³

Similar rules allowing provisions for future risks exist under US GAAP. Partly these rules compensate impairment rules which allow a revaluation of assets only if the loss is not recoverable.⁷⁴ This broader understanding of provisions in civil law bookkeeping and US GAAP is consistent with the concept of equity as risk reserve, as it creates (first-tier⁷⁵) equity with regard to future financial risks.

(f) Definition of Risk Groups

The specific rules described above reveal how legislations have tried to cope with certain aspects of the financial risk bearing ability of corporations. These rules confirm the general principle, that there is a relation between corporate risks and the necessary equity of a corporation. This general principle has to be further specified, so that reliable rules can be derived to determine the correct amount of equity. Whether this specification should lead to additional generally abstract norms which are more precise or certain patterns from mathematical models can not be answered at this point. Nevertheless, the failure of mathematical models for the risk assessment in the recent past does not speak in favour of them, as long as they should be the only indicator. Therefore it would probably be a better idea to establish generally abstract norms which define the relation between risk, risk reserve and equity, not excluding discretionary judgments, but requiring it.

Such rules could, for instance, define that assets with a high risk of false evaluation (for example goodwill) require more equity backing than assets with a low valuation risk.⁷⁶ Investments with a high risk to be rated incorrectly would need a higher equity-backing than assets with a low or inexistent valuation risk. Similar considerations can also be made for the risk of cash-drain. For example, methods which relate the

⁷¹ Switzerland: 'For purposes of replacement, the board of directors may take additional depreciation, make value adjustments and provisions and refrain from dissolving provisions which are no longer justified.' OR art 669 para 2.

⁷² Peter Bökli, 'Nachbesserungen und Fehlleistungen in der Revision des Aktienrechts' (2008) 104 Schweizerische Juristenzeitung 333, 342.

⁷³ 'A provision should be recognized when: (a) an enterprise has a present obligation (legal or constructive) as a result of a past event (45); (b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and (c) a reliable estimate can be made of the amount of the obligation. If these conditions are not met, no provision should be recognized.' (IAS 37.14).

⁷⁴ 'An impairment loss shall be recognized only if the carrying amount of a long-lived asset (asset group) is not recoverable and exceeds its fair value.' (FAS 144.7).

⁷⁵ *Infra* F.2.

⁷⁶ *Supra* C.5.(b), text to table 3.

historical or planned yearly cash flows to the liquidity reserves for the planned cash flows, etc.

F. Equity Protection (Conclusion)

1. Introduction

The last question remaining is the question of equity protection. In practically all legislations which require a legal capital the system of equity protection is two-tier, protecting the first-tier equity (legal capital or legal capital and legal reserves) and the second-tier equity (free reserves or free reserves and reserves and accrued profits) differently.

2. First-Tier and Second-Tier Equity

The first-tier equity is mainly protected by rules concerning the distribution of profits. A profit distribution may only be undertaken as far as the legal capital, the legal reserves and the liabilities remain covered by assets. In these jurisdictions first-tier equity consists of legal capital and legal reserves. Those legal reserves include the reserves required by accounting such as revaluation surpluses.⁷⁷ Provisions which are created to cover the risks of future outflows of resources⁷⁸ are generally listed in the balance sheet as liabilities. From an economic perspective, they are also first-tier equity, being a specific legal form of a risk reserve. First-tier equity exists also in legislations with no minimal requirements regarding the legal capital. These legislations allow profit distribution only as far as the legal reserves and the liabilities remain covered by assets.

A profit-distribution is only possible in the amount of accrued profits and the free reserves. Corporations which allocate more assets to the shareholder have to consistently reduce the legal capital. Thereby, specific formal rules have to be followed, which ensure that the remaining equity is sufficient. At first glance the protection of the first-tier equity is stronger than the protection of the second-tier equity, since the profit-distribution rules are more formalized.

The equity protection of the second-tier equity (accrued profits and free reserves or reserves) is less formalized, nonetheless relevant. The assertion that accrued profits and free reserves can be distributed freely among the shareholders is certainly wrong. This applies also to jurisdictions which do not require a specific solvency test before making profit distributions. For example, a motion of the board regarding the proposed dividends is not compliant, if the liquidity situation of the corporation does not allow the distribution of all of the accrued profits.⁷⁹

⁷⁷ *Supra E.3.(c)*.

⁷⁸ *Supra E.3.(e)*.

⁷⁹ Switzerland: 'The auditor shall examine whether the motion of the board of directors to the general assembly of shareholders regarding the approbation of the balance sheet profit complies with

Further, the board of the corporation has to maintain the equity (first- and second-tier equity) necessary in view of the risk bearing ability of the corporation. A board which decides or brings forward a motion to the general assembly of shareholders, requiring a dividend payment which reduces the equity to an undersized level violates its duty of care and is potentially liable. Accordingly, even if a corporation realizes a high profit, the auditor would have to make a statement in the audit report, in case the equity of the corporation is too low for the proposed dividends.⁸⁰ The same must apply, if the dividends reduce the equity to a level too low for the aspired risk bearing ability of the corporation. Also in civil law jurisdictions liquidity related tests have to be made before retained profits can be distributed.

3. *Towards unified Rules on Equity Protection?*

With regard to the risk bearing ability of a corporation it does not matter whether assets are backed by first-tier or second-tier equity. Concerning their ability to bear the cash-drain and revaluation risks first-tier and second-tier equity are equal.

The question is whether equity as risk reserve should be protected by first-tier or second-tier equity rules. First-tier equity rules seem more efficient, since they rely on formalized figures and not so much on the discretion of the board. The application of these rules on all equity would necessitate further rules, causing the board to create first-tier equity in the amount of the risk reserve needed for the aspired risk bearing ability. Such rules would have to cover the legal capital and the legal reserves. Regarding the legal reserves, formal rules reflecting certain corporate risks⁸¹ are already in place. These rules on legal reserves, especially related to the valuation risk⁸² could be the pivot point for additional legislative action in order to strengthen the equity base of corporations. For example, establishing a rule that certain revaluation profits would have to be allocated to a specific valuation reserve and not result in (distributable) profit.

The other question is if the board should be required to either set the legal capital to a level where the first-tier capital covers the corporate risks or to adjust the corpo-

the provisions of the law and the articles of incorporation.’ OR art 728a. In other legislations, which do not specify this duty of the auditor, the auditor has to examine the proposed dividend distribution under the aspect of the going concern ability of the corporation. International Auditing and Assurance Standards Board, ISA 570: International Standard on Auditing: Going Concern (International Federation of Accountants, 2009) <http://web.ifac.org/download/ISA_570_standalone_2009_Handbook.pdf> 5, no 6: ‘The auditor’s responsibility is to obtain sufficient appropriate audit evidence about the appropriateness of management’s use of the going concern assumption in the preparation and presentation of the financial statements and to conclude whether there is a material uncertainty about the entity’s ability to continue as a going concern.’

⁸⁰ This test is less formalized than the solvency test, but serves the same purpose.

⁸¹ Eg rules on revaluation surplus, *supra* E.3.(c) or on provisions for past and future (*supra* E.3.(e)) risks.

⁸² *Supra* E.3.(c).

rate strategy. There arises the question whether such formalism makes sense. There are two reasons speaking against it: Firstly, in structuring the financing of the corporation the flexibility of the board would be reduced; as long as the funds remain in the corporation and are not distributed to shareholders, it does not matter if the accrued profits are high and the legal capital is low or the other way round. Secondly, the board would be required to create first-tier equity in the amount of the necessary risk-reserve. A default in complying with the rule would lead to a breach of contract, however, to no real but only a hypothetical damage. The time gap between the breach of duty and the occurrence of the damage can be long leading to the risk of prescription as well as making it difficult to provide evidence for the causality between the breach of duty and the damage.

As a result, it makes more sense to focus on the moment, when the equity could be reduced below the level it should have based on the risk bearing ability of the corporation. There are basically two situations where this could occur:

- (1) The first situation is the planned dividend distribution to the shareholders. The board has to put forward a respective motion to the shareholders. When proposing a dividend to the shareholders, the board has to assess, if the equity remains sufficient after the distribution of the dividend based on the risk bearing ability of the corporation.
- (2) The second situation does not refer to a specific moment in time, but is permanent. The board has to constantly assess on the one hand the risk bearing ability of the corporation, and, on the other hand, whether the equity or risk reserve of the corporation is still sufficient for the aspired business strategy. In case the board concludes that the equity should be increased, the board either has to cause the shareholders to support an increase of the equity or, if this is impossible, restructure the assets and reevaluate the business strategy, bringing the two in line with the risk bearing ability of the corporation.

A unified concept of equity protection focuses rightly on the moment, when the equity is needed in view of the pursued and aspired business risks. Equity is based on a socket which is formed by first-tier equity. The relevant binding rules in this respect are the accounting rules related to the creation of reserves and the rules regarding the profit distribution. The rules on the definition of the legal capital are of lesser importance. On top of this first-tier equity socket, there is the second-tier equity. The latter is only protected by the rules regarding the corporate risk bearing. Addressee of these rules is primarily the board of the corporation and secondarily the auditor, who testifies the financial reports and the compliance of the motion regarding the dividends.

The relation of the socket or first-tier equity and the full equity depends on how much flexibility the shareholders bestow on the board as to the financing of the corporation. If they choose to be on the safe side, they elect a board, which defines a corporate strategy that provides for high reserves, thus setting a high legal capital. As

a consequence, the profitability on their shares will be reduced. In contrast, if they want to realise the profit potential of the stock of the corporation, they approve of a small socket, entrusting the preservation of equity to the board. In that case, the board enjoys a larger autonomy in financing the corporation. Nevertheless, it is still bound by the rules regarding the corporate risks, the risk bearing ability and the equity.