

**NOTIONS ON HOMOGENEITY AND HETEROGENEITY OF A
GLOBAL ECONOMY:**

**International Accounting Standards and their Impact on
Economic Governance and Organizational Knowledge**

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NOTIONS ON HOMOGENEITY AND HETEROGENEITY OF A GLOBAL ECONOMY:

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Abstract

This paper explores the relevance of ‘generally accepted’ accounting standards (IFRS, US-GAAP) for a deeper understanding of homogeneity and heterogeneity within a global architecture of finance. Within global finance standardized accounting rules open up new horizons of observance, evaluation and comparability, if and when organizations adapt their financial communication according to the same accounting rules. While the debate on globalization tends to consider these forms of regulation as a way to generate a strong element of global order that results in homogeneity among organizations, the paper criticizes an overemphasis of global homogenization. Instead, it will explore both how organizations converge in terms of standardized financial communication and how they differ at the same time in using their non-standardized freedom. Here, the paper asks for the margin of non-standardized, un-marked spaces of accounting such as the ‘GAAP Gap’ of financial information in relation to intangibles or creative forms of accounting and governance such as ‘earnings management’. Particularly in view of the increasing importance of knowledge as an economic resource it becomes apparent that accounting rules not only allow for more transparency, they also result in obscurity since organizational knowledge remains for the most part invisible. For these purposes the paper investigates *the impact of accounting rules on economic governance and organizational knowledge* and thereby juxtaposes the standardized with the non-standardized, the non-financial with the financial, and transparencies with obscurities. Although the paper primarily accentuates obscurities and diversities beyond standardized financial communication, the prominence of both is assumed: homogeneity *and* heterogeneity within global finance.

1. Introduction

Accounting systems and their standardization have come to achieve a vital significance in the functioning of economic organizations and within the broader context of global finance. While economic organizations structure their activities around diverse calculative practices – e.g. cost-benefit calculations, value added accounting, discounted cash flow analyses, standard costing, or financial risk calculation –, the financial economy relies on their standardization to open up global horizons of observance, evaluation and comparability. In search of a global accounting regulation the financial economy has in the meantime engendered two prevalent bodies of rules that are regarded as *generally accepted*: the International Financial Reporting Standard (IFRS) and the US-American Generally Accepted Accounting Principles (US GAAP). Leaving aside the fact that these two accounting systems claim different origins and compete against each other in some respect, both of them are capable to supersede national accounting systems and both aim to provide financial information that is useful to a wide range of users in making economic decisions. The emergence of generally accepted accounting standards is commonly thought to facilitate co-ordination and cooperation on a

global scale that comes along with similarity and homogeneity among the standard-following organizations. This argument obviously refers to the debate on globalization as a process of homogenization that prevails over locality (Ritzer 1993). This understanding is not only strengthened, because ‘standardized’ and ‘uniform’ are often treated as synonymously in everyday language, but also for the reason that social scientists have often focused their research on processes of homogenization. For instance Dobbin and Zorn (2003) argue that economic organizations go through a common series of changes in structure and strategy over time, corresponding to the norms that financial market actors favor. Intended or not, the result of adapting to standards and norms is thought to be that many organizations will resemble each other in appearance and behavior.

Contrary to such a strong emphasis on homogeneity as a result of disseminating rules that are taken for granted, I assume that processes of standardization and the standard-following organizations generate both homogeneity and heterogeneity at the same time. Both sides of the coin have to be considered, firstly, because standards make existing diversity more visible. “The fact, that actors follow standards enables us to see how they differ from each other” (Brunsson 2000: 148). Processes of standardization can therefore be understood as a response to organizational diversity that is sought to be visualized. Only if economic organizations differ in some respect, it seems reasonable to evaluate and to compare them. Secondly, the prevalent bodies of rules are strictly confined to financial information and thus standardized financial communication. Non-financial aspects like the firm’s intellectual capital, the employees knowledge or organizational competencies remain for the most part invisible. According to this reporting gap of financial information in relation to intangible assets accounting systems engender a derived problem – the paradox of visibility – insofar, as the claim of transparency inevitably comes along with obscurity and indeterminacy of financial statements. Aspects beyond the balance-sheet such as organizational knowledge remain invisible, incalculable and incomparable. Thirdly, accounting standards are necessarily applied in conditions which are local and thereby subject to creative interpretation (Power 2002). In this regard the elegance of financial figures conceals the various and sometimes fraudulent ways and means of its creation, and thus the underlying accounting and management practices. Accounting failures like Enron/Anderson or fraudulent cases of earnings management exemplify that albeit investors and auditors carefully look for warning signals, it is beyond their power to draw the curtain of corporate disclosure.

Based on the assumption that processes of homogenization as well as diversities beyond the balance-sheet have to be taken into account, the paper explores how economic organizations converge in terms of standardized financial communication and at the same time differ in using their non-standardized freedom. Therefore the next chapter investigates how economic organizations are situated in a world of standards and linked to a global architecture of finance (section 2). Hence, accounting standards and reporting procedures are shown to carry along different meanings and implications depending on the level of analysis. Having explored both domains – finance and organizations – separately, interrelations and interdependencies can be

identified. Here, the question is if and to what extent a self-referential domain of global finance might exert pressure on business enterprises. One approach to this question is to examine the complex interplay between calculative practices and ways of managing and governing economic life (section 3). In this context, three lines of discussion will be outlined: the discussion drawing on Chandler (1997) that was further developed by studies ranging from how corporate control changes over time to the apprehension that business might have been captured by finance; the second discussion draws upon Foucault's studies on governmentality offering some intriguing suggestions on how calculative practices are involved in economic governance; the third perspective focuses on accounting's constructive capacity and suggests an understanding of governance as a minimization of difference (Luhmann 1988). A further approach chosen to investigate the non-standardized, non-marked spaces of accounting accentuates the relation of financial accounting, organizational knowledge and intellectual capital accounting (section 4). Since financial accounting systems tend to neglect non-monetary aspects of economic life, accounting's capacity to prevail over non-financials will be examined. Without suggesting a rash conclusion of clashing financials and non-financials, I argue that both economic resources – knowledge and finance – change the logic of business enterprises in quite different ways. In order to contribute to a deeper understanding of standardized accounting rules and their role within contemporary society the concluding remarks resume the explored perspectives and accentuate the issue of homogeneity and heterogeneity within a 'standardized' economy (section 5).

2. Organizations in a World of Standards

While accounting research as well as studies on how rules are created and implemented didn't cross the boundaries of organizations for a long time, researchers are now giving greater weight to the fact that organizations do not exist in a vacuum, but in a wider context of society. Asking for the societal context in which accounting systems and processes of standardization have come to play a major role requires first of all the basic distinction between the organization and its environment. But how can this distinction be described more precisely? And what can be said about the world organizations are situated in? Without doubt, business operations relate to a wide range of fields in their environment: they tend to conform business activities to their specific view on sales markets, financial markets, technical developments, the efficiency of suppliers, management fashions or competitor's business activities. However, business enterprises are also situated in a world of general rules and standards, which have become an increasingly prominent justification for how things are done – for instance, how companies should report their financial transactions, how contracts should be worded, how organizations should be structured, and so forth (Brunsson 2000). To figure out to what extent a world of standards and a global architecture of finance might shape economic organizations the following subchapters outline different perspectives on accounting and finance as well as distinct perceptions on understanding the interaction of organizations and their environments.

2.1 Standards within a Global Architecture of Finance

The contemporary global architecture of finance unfolds its quality through various structural elements inter alia generally accepted accounting standards. Standards are commonly thought to “generate a strong element of global order in the modern world, such as would be impossible without them. People and organizations all over the world follow the same standards. Standards facilitate co-ordination and co-operation on a global scale. ... They are instruments of control.” (Brunsson & Jacobsson 2000: 1). As for the architecture of global finance a broad set of standards operates as a form of regulation that goes far beyond the boundaries of the nation-state. To illustrate the multitude of financial standards the following table shows a set of standards that the Financial Stability Forum has identified as “key for sound financial systems”:

	Key Standard	Issuing Body
Macroeconomic Policy and Data Transparency		
Monetary and financial policy transparency	Code of Good Practices on Transparency in Monetary and Financial Policies	IMF
Fiscal policy transparency	Code of Good Practices in Fiscal Transparency	IMF
Data dissemination	Special Data Dissemination Standard/ General Data Dissemination System	IMF
Institutional and Market Infrastructure		
Insolvency	Principles and Guidelines on Effective Insolvency and Creditor Rights Systems	World Bank
Corporate governance	Principles of Corporate Governance	OECD
Accounting	International Financial Reporting Standards (IFRS)	IASB
Auditing	International Standards on Auditing (ISA)	IFAC
Payment and settlement	Core Principles for Systemically Important Payment Systems Recommendations for Securities Settlement Systems	CPSS CPSS/IOSCO
Market integrity	The Forty Recommendations of the Financial Action Task Force/ 8 special Recommendations Against Terrorist Financing	FATF
Financial Regulation and Supervision		
Banking supervision	Core Principles for Effective Banking Supervision	BCBS
Securities regulation	Objectives and Principles of Securities Regulation	IOSCO
Insurance supervision	Insurance Core Principles	IAIS

Albeit the key standards vary in terms of their degree of international endorsement, they are broadly accepted as representing minimum requirements for good practice and operate as a

form of regulation beyond the borders of the nation-state. The rule-making involves international organizations, such as the World Bank or the International Monetary Fund, as well as private sector bodies like the International Accounting Standards Board (IASB) or the International Federation of Accounting (IFAC). With a view to the subject of accounting and leaving aside further details on standard-setting-processes, a broad trend towards international adjustments of accounting rules can be observed. This trend includes the IFRS as well as the US-American accounting rules US-GAAP. Nonetheless both accounting systems claim different origins and even compete against each other in some respect, they both follow an analogous purpose: their objective is to provide information about the financial position, performance and changes in financial position of a business enterprise that is useful to a wide range of users in making economic decisions. On the basis of disclosed financial information financial analysts, banker and broker, specialized journalists, institutional and private investors, rating agencies and auditors observe, evaluate and compare organizations, branches of trade and even national economies. These options for quantification, surveillance and evaluation and rely on standardized financial information, and therefore generally accepted accounting rules have become to play a crucial role within global finance. Economic organizations are juxtaposed to both interrelated aspects of global finance – the emergence of a global accounting regulation and the associated horizons of evaluation and surveillance. But how are economic organizations attached to and engaged in their environment? In order to answer this question, the interrelation of economic organizations and the financial economy has to be clarified.

2.2 *The Neo-Institutional and the Alternative Perspective on Accounting*

The most prominent sociological approach that attaches great importance to how organizations are shaped by their environment is certainly the new institutionalist approach (Caruthers 1995, Covalleski & Dirsmith 1988, Fligstein 1990, Meyer 1994). According to the conceptual framework that traces back to Meyer and Rowan (1977) and DiMaggio and Powell (1991), accounting can be understood as a part of the cultural apparatus, as an element in the ‘myth structure’ of rationalized societies. The societal environment of organizations is thus seen as a supplier of the cultural material for organizing: “Environments create organizational elements such as accounting and accountants, make it easy and necessary for organizations to use them, and treat organizations that have them as by definition more legitimate than others” (Meyer 1994:122). It is consequently assumed that organizations incorporate accounting rules not only to enhance effectiveness, but also to ensure conformity with their institutional environments. From this angle, organizations transform their formal structures in line with powerful external institutional rules (“*isomorphism*”). Processes of isomorphism – to continue the argument – produce homogeneity in so far as organizations resemble each other and obtain the same general form since they are embedded in a similar environment. How general rules give rise to convergence among organizations ought to be explained by means of a diffusion model (Meyer et. al. 1997). The concept of diffusion is used both to describe a processes whereby similarities arise, and to identify the result of these processes – the existence of simi-

lar forms and practices at different places at a certain point of time (Brunsson 1998: 262). Another central claim within the new institutional approach is that formal organizational structure is *decoupled* from actual organizational practice. “Formal structure has much more to do with the presentation of organizational-self than with how things actually transpire within the organization. Formal structure is mythical and ceremonial, a kind of symbolic window-dressing. Thus, much more effort is expended in devising official statements of procedures than in subsequently adhering to them” (Carruthers 1995: 315). Relating to financial statements the figure of decoupling accentuates accounting as an organizational form rather than an organizational practice, it seems to be more about organizational “talk” than about “action” (Brunsson 1989). Accordingly, accounting standards can be considered as norms for talk that structure and restrict the way organizations communicate in terms of financial statements.

But to what extent do accounting procedures matter if they are confined to organizational forms and marked down to symbolic window-dressing? And does not the figure of decoupling deny accounting’s capacity to effect organizational practice? In this respect some critical comments on the new institutional perspective on accounting are to be addressed: First, the figure of decoupling does not allow to address adequately the complex interplay of financial accounting, organizational knowledge and economic governance. From a new institutional perspective financial accounting results in the assumption of symbolic window-dressing and thus accountings’ formative capacity remains unclear. Second, while the issue of homogeneity as a consequence of disseminating rules is explored in-depth, it is not taken into account that accounting rules also give rise to diversity. Third, new institutional researchers argue that organizational forms are shaped by the cultural apparatus of society that includes rules, ideas and institutional patterns of action – but do these rules and patterns come from?

Thus it appears that the functioning of accounting in the context of economic organizations has to be conceived more clearly. For these purposes one can usefully draw on the sociologically oriented accounting research, that was initially formulated by Burchell et al. (1980) and Hopwood (1983). Contrary to the ‘traditional’ economic literature where accounting has been thought to consist of a set of neutral devices for recording economic transactions, Burchell et al. (1980) conceive accounting as a technology to create particular patterns of organizational visibility. In a similar way Miller (1990) thinks of accounting “as a process of attributing financial values and rationales to a wide range of social practices, thereby according them a specific visibility, calculability and operational utility (Miller 1990: 316f). Accounting standards can thus be considered as rules for creating organizational visibility and calculability by abstracting the monetary value of social and organizational practices. This broad understanding of accounting clarifies that the use of monetary numbers presumably shapes economic life in so far as non-monetary aspects of economic transactions tend to be neglected. The exclusive use of monetary numbers has been uncritically and generally accepted due to accounting’s capacity to achieve high degrees of ‘epistemic values’ (Suzuki 2003) such as generality, comparability, balance, coherence and simplicity. These are exactly the values that apparently structure financial communication. Financial communication relies on opportunities to ob-

serve, evaluate and compare financial values across organizations, branches of trade and even whole economies. Increasingly, these opportunities can only be used, if standardized accounting systems generally become the dominant official mode of economic description. In other words: economic descriptions like financial statements can only be compared, if and when the underlying criteria of self-description are the same. The ways and means how to evaluate and compare financial statements, to explain prices of financial assets and investors' behavior, this is certainly a classical field of accounting and finance theory. But from a sociological perspective the main focus relies on how organizations are attached to global horizons of evaluation and surveillance in contemporary economy.

2.3 *Financial Economy and Economic Organizations as Self-Referential Systems*

For a deeper understanding of how economic organizations are attached to global finance, one needs to distinguish precisely between the financial economy that is in search for generalized rules on the one hand, and economic organizations that follow the rules on the other. A well-elaborated distinction of both domains is founded on a system-theoretical perspective (Luhmann 1988) where finance and organization are conceived as self-referential systems that refer to nothing else but themselves. In case of the financial system it is a matter of nothing but financing, the purchase and sale of money, the provision of finance for the sake of finance. To carry on this argument from a post-modern point of view, finance can be regarded as a hyper-real game and as a cultural phenomenon of post-modern society (McGoun 1997).

However the financial system may be labeled, accounting standards certainly carry along other meanings and implications in the context of a hyper-real finance than in their context of their application. Within the financial system accounting rules create global horizons of observance, evaluation and comparability by structuring and shortening communication to financial ratios. In case of organization systems accounting is a matter of creating particular patterns of visibility, calculability and operational utility. Both systems finance and organization operate in a self-referential mode and as a consequence there is no input-output relation and no direct exchange with the environment. The environmental world is explicitly not understood as taken for granted, but instead each system enacts its own environment. Both systems create their own view of the world. Instead of talking about the 'external environment' the phrase 'enacted environment' (Weick 1969) is more adequate since it draws attention to the process of creating the environment to which the system then adapts. Organizations do not react to given environment, they enact it. It is this created environment that is worked upon by organizations.

However, despite their self-referential operation mode organizations generate a specific openness to the financial system by means of financial statements, stock exchange quotations, disclosure requirements, investor relations, profit expectations, and so on. But still there is no direct connection between organizations and financial markets. It is more about creating an own view of the financial system to which the organization then adapts. In this context of creating perceptions of the economic landscape financial markets play the role of a mirror, in which

business enterprises and key actors of financial markets observe themselves and others (White 1981).

But in what respect do these comments contribute to a deeper understanding of accounting and reply to the question of how organizations are located in a world of standards? What can certainly be observed is that the financial system while searching for a global accounting regulation is heavily based on standards. But at the time I conceive organization and finance as self-referential systems, general statements about the world organizations are situated in don not seem to be reasonable. General statements about the convergence of organizations' behavior and appearance cannot be made either. Rather than exploring the convergence of organizational behavior and appearance the system-theoretical approach directs the attention to how organizations create diversities by adapting to their specific view on and anticipate expectations of shareholders and other decision-makers in the mirror of financial markets. To elaborate this argument the following chapter investigates how a financial economy while relying on quantification and comparability forms the interplay of accounting and economic governance.

3. Governance by Numbers: The Capture of Business by Finance?

Tackling the question of how finance might shape the way of managing and governing economic life at least two distinctive lines of arguments can be identified. One important line of discussion is based on Chandler (1977) and was carried out by studies ranging from how corporate control changes over time up to the apprehension that business might have been captured by finance. In addition to Chandler's (1977) studies on the managerial revolution in American business, Fligstein's (1990) work on the transformation of corporate control, Johnson and Kaplan's (1987) "Relevance Lost: The Rise and Fall of Management Accounting", as well as recent studies on how financial markets reshape the American business (Zorn & Dobbin 2003) have to be mentioned here. The second line of discussion draws upon Foucault's studies on governmentality offering some intriguing suggestions about how calculative practices are involved in economic governance. Here, accounting's involvement in governing economic life is seen as a technology of creating visibility and calculability that allows for "the calculated management of life" (Miller & O'Leary 1994b: 4). Both discourses contribute to a profound understanding of changing conceptions of governance over time and on calculative practices as a technology of government. A third perspective focusing on accounting's constructive capacity in terms of management innovations will be outlined. Drawing on the system-theoretical approach governance is understood as a 'minimization of difference' (Luhmann 1988) for instance between expected and actual economic and financial figures. Conceiving economic governance along these line results in the assumption that regulatory statues might act as a source of new organizational practices to evade regulations.

3.1 *The Finance Conception of Governance*

The first line of discussion drawing on Chandler's (1977) historical narrative which claims that the evolution of business enterprises towards modern multi-unit industrial corporations run by managerial hierarchies was accompanied by an evolution of management accounting techniques helping to manage increasingly complex businesses by numbers (Vollmer 2003). While Chandler accentuates the rise of management by numbers Fligstein illustrates more than twenty years later a shift towards the *finance conception of governance* that comes along with changes in organizational strategy and structure as well as changes in anti-trust laws. He observed an increasing dominance of finance personnel in the control of large business corporations and states that "the finance view of efficiency dominates the corporate world today" (Fligstein 1990: 298). This view was not shaped by the necessities of production or the desire to sell more products, but rather promoted by managers trained in finance and accounting. However, Fligstein refuses a technological determinism of accounting technologies transforming organizational structure. Instead, he points at a complex set of institutional structures enabling the finance conception to flourish. The gradual capture of management accounting systems and ways of governing businesses by finance is also emphasized by Johnson and Kaplan (1987). They claim that following the golden age the demands of financial accounting have gradually come to dominate the accounting systems of most business enterprises and as a consequence sharply excoriate contemporary accounting systems: "Today's management accounting information, driven by the procedures and cycle of the organization's financial reporting system, is too late, too aggregated, and too distorted to be relevant for manager's planning and control decisions" (Johnson & Kaplan 1987:1).

After all, the over-reliance on a finance conception of control results in an "excessive focus on achieving short-term financial performance" (Johnson & Kaplan 1987:195). Thus, it becomes apparent that management accounting should be separated from financial accountings systems and that non-financial indicators should be taken into account. Carrying on the argument of changing concepts of corporate control over time Zorn and Dobbin (2003) examine the effect of the growing importance of global financial markets on the strategy and structure of over 400 large American firms for the period 1963-2000. They document the rise of a new finance model of corporate governance which contributed to the increasing attentiveness of firms to financial markets and observe that: "as investors systematically increased their scrutiny of individual firms and evaluated the prospects of firms in terms of how financial markets would value them in the future, firms became acutely aware of the norms for corporate governance that financial markets were developing. As a result, firms became increasingly sensitive to how key actors in financial markets viewed and valued them" (Zorn & Dobbin 2003: 20). In short, they argue that large firms go through a common series of changes in structure and strategy over time, corresponding to the norms that financial markets favor – for instance making the CFO (Chief Financial Officer) a popular member of the top management team.

While Zorn and Dobbin (2003) focus on the rise of a new finance model of governance, they seem to assume implicitly a shift from numbers in general towards financial numbers in particular. In this respect I would rather follow Kaplan and Johnson (1987) who they argue that economic governance in general is still *not* a function of how comprehensively businesses are financialized (Vollmer 2003). Moreover, in terms of the ‘enacted environment’ the very question of financial markets shaping the structure and strategy of organizations has to be reconsidered. While I certainly agree with the growing importance of global financial markets, I reject a determinism of financial markets’ capacity to shape businesses directly. The theoretical approach chosen here stresses that business companies draw their own picture of the world of finance. Within the mirror of financial markets they observe financial analysts, banker and broker, specialized journalists, institutional and private investors observing, valuing and comparing them and their competitors. Therefore it can be assumed that business companies increasingly become *attentive to their own perception* of how key actors of financial markets view and value them. This perspective sets boundaries to the supposed convergence of organization’s structures and strategies in so far, as organizations rely on nothing else but their very own and specific view to which they adapt by various ways of governance. Accordingly, the main focus relies on the diversity of managing and governing organizational and social life, which is not exclusively framed by a finance conception of governance.

3.2 *Accounting as Disciplinary Technology*

The second line of discussion is based on the Foucauldian perspective within the alternative accounting discourse. The main focus of this research are networks of social relations, practices and technical devices through which particular types of accounting emerge (Mennicken 2002). The emergence of multiple and dispersed practices of economic calculation is studied as a historically contingent phenomenon. Concerning this matter Miller and Napier (1993) have proposed studying genealogies of calculation. They take the promotion of discounted cash flows for investment decisions, the emergence of accounting for value added and the construction of standard costing as examples to show, that “accounting changes in both content and form over time” (Miller & Napier 1993: 631). This illustrates that “new techniques are invented, or transferred from one domain to another, and new meanings and significance are attributed to existing techniques” (Miller & Napier 1993:631). Drawing the attention on how accounting techniques are related to the social relations they form and seek to manage, accounting is seen as a disciplinary technology which plays a central role in the governance of economic life. In this regard business enterprises are seen as sites of situated practices in which economic realities are actively created rather than just mechanically reflected (Vollmer 2003, Miller & O’Leary 1994b).

Accordingly, accounting techniques create particular patterns of organizational visibility, calculability and operational utility in terms of governance (Miller 1990). By attributing financial values and rationales to a wide range of social practices, accounting translates qualities into quantities (Porter 1994). Accounting translates diverse activities and processes to the end

point of the single figure and at the same time it construes comparable entities – such as profit centers, cost centers, or strategic business units (Miller 1994:3). “The labor efficiency variance, the return on investment of a division, and the net present value of an investment opportunity all share the elegance of the single figure. The objectivity and neutrality widely accorded to numbers achieves its most developed form” (Miller 2002:2). Accounting practices thus transform business enterprises into what Latour calls (1987) ‘*centers of calculation*’, surrounded by a network of alliances. These centers of calculation accumulate inscriptions that have been produced elsewhere in order to act upon sites of their production. Correspondingly, it is argued that management accounting numbers are ‘fabrications’ that allow for ‘*action at a distance*’, linking the sites of their creation to places where they are accumulated and made subject to calculation (Baxter & Chua 2003, Latour 1987). In this respect accounting expresses a form of “decentralized governance relying on the spread and multiplication of calculative technologies creating diverse and fragmented, yet selectively interconnected, calculable spaces. Accounting numbers link factory floors to offices, enterprises to state governments or financial markets, financial markets to investors” (Vollmer 2003: 364). They “make present what is distant and at the same time render it calculable and gradually manipulable” (Vollmer 2003: 363).

How specific accounting practices like standard costing transform conceptions of economic governance is intriguingly shown by Miller and O’Leary (1994a). They illustrate that standard costing and budgeting have been located as one component within the scientific management movement that sought to make the actions of individuals visible and calculable. Standard costing practices engendered the individual within the firm to be surrounded by calculative norms and standards of action. “Between the worker and the boss was interposed a calculative apparatus that claimed neutrality and objectivity. Imperatives of efficiency could henceforth be traced back to this calculative apparatus, rather than to the will of the boss.” (Miller & O’Leary 1994a: 112). On this note accounting technologies provide for a “new way of thinking and intervening” within the business enterprise (Miller & O’Leary 1994a).

Another crucial point of calculative practices like standard costing seems to be the *ambition to shape the future*. Standard costing aims to govern future actions of individuals according to set standards and deviation from an economic norm. Standard costing as well as net present value calculations or discounting techniques sought to render “the future knowable, calculable, and amenable to control. In different ways, they sought to bring the future into the present. Techniques of discounting applied to predict future cash flows are the clearest expression of this capacity of accountancy to calculate and act upon the future” (Miller 2002:6). Accounting constructs business units as “streams of discounted cash flows, costs of varying types, and collections of assets with varying rates of return” (Miller 2002: 7) in order to increase efficiency, to promote economic growth, to improve decision making or to enhance competitiveness. Consequently, accounting techniques shape the way of understanding, representing, and acting upon events and processes – that is as for contemporary accountancy in

terms of financial figures. This reminds us again of what Fligstein (1990) has called the ‘finance conception of control’, a collection of assets evaluated by financial criteria.

3.3 *Accounting as a Technology to Adjust a Difference*

Accounting systems undoubtedly have come to achieve a vital significance in the contemporary economy since economic organizations structure their activities around various forms of numerical presentation such as: cost-benefit calculations, value added accounting, discounted cash flow analyses, standard costing, or financial risk calculation. The two discourses outlined above shed light on how these calculative practices could be involved in managing and governing economic life. To continue these arguments it is worth to take a closer look at *accounting’s ambition to shape the future* and accounting’s capability to translate diverse and complex processes into *financial numbers that link enterprises to financial markets*. With a view to the formative power of accountancy I suggest a supplementary perspective that adds force to the idea of accounting as a repository for various management practices as well as creative accounting. Bringing the system-theoretical approach into play again, governance is nothing but the *minimization and adjustment of difference* (Luhmann 1988). Business enterprises generate various differences whereto all sorts of nominal/ actual value comparisons belong – for instance the differences of expected value/ net present value or expected profit/ actual profit. Needless to say, these patterns of visibility and calculability are created by technologies of accounting. But keeping in mind that not all forms of quantification are monetarized and not all forms of calculation are accounting (Power 2002), other records beyond financial figures can also be the subject of governance such as the status of employee’s illness or customer’s satisfaction. Despite their dissimilarities they all depend on forms of visualization to ensure a certain degree of operational utility.

However, in a broad sense and based on a system-theoretical approach economic governance relates to all measures that are grasped to adjust differences, and for the most part these are measures designed to shape business enterprise’s future prospects. Particularly in view of firm’s increasing attentiveness to their perception on how financial market actors view and value them it becomes apparent that business companies can be very creative and ingenious in the course of adjusting differences. Thus, various forms of management and accounting practices have to be taken into account. Even though these are presumably non-abusive in the majority of cases, abusive forms such as earnings management, or the fraudulent creation of special purpose entities have to be considered likewise. Taking earnings management as an example it becomes very clear that business enterprises deliberately push the boundaries of generally accepted accounting rules, even to the point of outright fraud – and once uncovered the monetary losses can be staggering. In this respect former SEC Chairman Arthur Levitt (1998: 3) expresses in his “Numbers Game” speech that “companies try to meet or beat Wall Street earnings projections in order to grow market capitalization and increase the value of stock options. Their ability to do this depends on achieving the earning expectations of analysts. And analysts seek constant guidance from companies to frame those expectations” (Levitt 1998).

Seemingly, companies use earning management techniques to ‘smooth’ earnings in order to meet internally or externally imposed earnings forecasts and analyst’s expectations – a process that is usually rewarded in the stock market. “Managers engage in income smoothing activities because they know that volatile earnings streams typically lead to lower market valuations” (Maghrat & Weld 2002: 2).

Without overusing the example of exploiting accounting rules’ pliancy I argue that the financial community’s self-imposed touchstones – transparency and comparability – must not belie one crucial point: the elegance of the single financial figure conceals the various ways and means of its creation, and thus the underlying accounting and management practices. Although investors and auditors look carefully for warning signals, it is beyond their power to draw the curtain of corporate disclosure. How business enterprises use their non-standardized freedom remains opaque, and this actually is the diversity beyond standardized accounting systems. As Law and Akrich (1994: 215) suggest, accountancy may be “merely another addition to ramshackle technologies of modern governmentality, the latest wheeze of modernism as it performs diversities and fragmentations while dreaming of an impossible order”. From my point of view it is the abstractness of delineating governance as an adjustment of differences that directs our attention to performed diversities and fragmentations. The question of various types of differences and related measures designed to adjust these might contribute to understand the emergence of specific governance configurations and derived problems. Therefore, it seems reasonable to scrutinize those configurations, that exemplify what happens when economic calculations turn financial, when non-financial and financial calculations clash, or when standards collide with the non-standardized.

4. Accounting and Knowledge: The Clash of Financials and Non-Financials?

Exploring the issue of financial accounting in the context of an emerging knowledge economy, I assume that accounting technologies engender a derived problem – the *paradox of visibility*. Accounting systems create paradoxical effects in so far, as their claim for transparency and comparability goes hand in hand with obscurity and indeterminacy. As soon as accounting creates patterns of visibility and calculability, everything beyond the balance-sheet inevitably remains invisible, incalculable and thus incomparable. Therefore, non-financials can be considered as the blind spot of corporate accounting systems that drift towards the financial scale. Since non-monetary aspects of economic life tend to be neglected when economic calculations turn financial, one can speculate about accountings’ capacity to prevail over the non-financial, and thus about a supposable clash of financials and non-financials. To draw near this issue the blind spot of accounting has to be rendered more precisely and this certainly is a matter of accounting in relation to knowledge.

4.1 *The GAAP Gap and Intellectual Capital Accounting*

Taking the emerging knowledge economy into consideration as well as organizations that are largely founded on, and fostered by intangibles, corporate failures coupled with apparent inadequacy of accounting standards and practice have mobilized political and public opinion in the cause of reform. In this context, Arthur Levitt (1999) states that “the dynamic nature of today’s capital markets causes issues that increasingly move beyond the bright line of black and white. New industries, spurred by new services and new technologies, are creating new questions and challenges that must be addressed. Today, we are witnessing a broad shift from an industrial economy to a more service based one; a shift from bricks and mortar to technology and knowledge. This has important ramifications for our disclosure and financial reporting models. We have long had a good idea of how to value manufacturing inventory or assess what a factory is worth. But today, the value of R&D invested in a software program or the value of a user base of an Internet shopping site is a lot harder to quantify. As intangible assets continue to grow in both size and scope, more and more people are questioning whether the true value – and the drivers of that value – is being reflected in a timely manner in publicly available disclosure.”

That the prevalent financial reporting systems fail at describing important assets and activities as intellectual capital and knowledge work can be exemplified by the restrictive definition of intangible assets (IFRS/ IAS 38). According to the International Financial Reporting Standard IAS 38 an intangible asset should be recognized initially, at cost, in the financial statements, if, and only if: (a) the identifiable asset is controlled and clearly distinguishable from an enterprise's goodwill; (b) it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise; and (c) the cost of the asset can be measured reliably. In a nutshell this standard basically codifies the traditional accounting approach that excludes ‘assets’ that cannot be directly linked to revenue streams (Zambon et. al. 2003). And since excluded ‘assets’ like knowledge have become the main economic resource for many businesses (Willke 1997), the assumption that accounting provides for the ‘true and fair view’ of businesses and a ‘truthful’ representation of economic reality tumbles down. In other words: the target of financial statements to give useful information to a wide range of users in making economic decisions seems to be missed.

The resultant reporting gap of financial information in relation to knowledge – also referred to as the “GAAP Gap” (Litan & Wallison 2000) – is recurrently thought to be proved by the huge market-to-book ratios, that have increased dramatically for knowledge intensive organizations. These are based on the difference between the company’s market value (stock market capitalization) and its net accounting value (financial statement) which is supposed to be equal to the intangible asset value (Zambon et. al. 2003). In a similar way the so-called “Q” method – “Q” stands for the ratio between the company’s market value and the replacement cost of its intangible assets – developed by James Tobin claims to reveal the intellectual capital. Albeit suchlike Intellectual Capital measurement methods are offset by several problems

associated with their use, these are widely accepted as evidence of the emerging knowledge economy where immaterial rather than material assets are the sources of value creation (Bell 1976, Drucker 1993, Reich 1991, Willke 1997).

Associated with the reporting gap of financial accounting in relation to non-financials there has been an intensive debate on how to explain intellectual capital and how to provide frameworks for measurement and reporting. Since the mid-1980s when Karl-Erik Sveiby introduced the concept of intangible assets to managers in Northern Europe and Scandinavia several accounting approaches have been proposed so that our understanding of intangibles has taken a big step forward (Allee 2000). One of the first models designed to measure and manage intangibles – the *Skandia Navigator* – was developed in the early 1990s by Leif Edvinsson when he acted as the company’s Chief Knowledge Officer (Edvinsson & Malone 1997). Round about the same time and having the same origins as the Navigator Karl-Erik Sveiby (1997) presented his *Intangible Assets Monitor* that incorporates non-financial dimensions as external structure, internal structure and competence. Developed in the USA Robert S. Kaplan and David P. Norton proposed for the first time in 1992 the *Balanced Scorecard* in a well-known article where they state that “traditional financial accounting measures like return-on-investment and earnings-per-share can give misleading signals for continuous improvement and innovation activities in today’s competitive environment. The traditional financial performance measures worked well for the industrial era, but they are out of step with the skills and competencies companies are trying to measure today” (Kaplan & Norton 1992: 71). According to this the Balanced Scorecard basically suggests to place alongside traditional financial variables several non-financial operating measures, which are likewise drivers of future financial performance. Another influential contributor to the Intellectual Capital discussion is Baruch Lev (2001), who has produced a variant of the scorecard, known as the *Value Chain Board*. This method aims to identify the ways in which knowledge is developed, integrated, transformed, and employed. While these concepts mainly operate within the framework of the enterprise, the emergence of *Triple Bottom Line Accounting* refers to three key dimensions of business performance: financial performance, environmental sustainability and social responsibility. Here, the responsibility of an enterprise is being enriched with the impact of management’s activity on both the environment and society (Zambon et. al. 2003, GRI 2000). Apart from these endeavors there are many accounting standard bodies in the USA and Canada as well as the OECD and countries such as Denmark, Sweden and Israel exploring ways to address intangibles.

4.2 *Intellectual Capital Statements and Knowledge*

Without going into detail of the various models to explain, measure and evaluate intellectual capital the addressed concepts can be considered as an *addition to the conventional financial reporting*, because they allow certain non-financials numbers to be part of a firm’s reporting system. Particularly in view of the growing importance of knowledge as a crucial economic resource the inadequacy of the prevalent accounting systems becomes apparent, and vice

versa the brickbat at financial accounting enables intellectual capital reporting to flourish. Juxtaposing both accounting for finance and knowledge, it firstly becomes apparent that financial accounting is subject to processes of standardization on a global scale, while the emergence of non-financial reporting systems that goes back to the endeavours of practitioners and researchers is characterized by its plurality and diversity. Up to now, noteworthy efforts to standardize the existing intellectual capital reporting systems are not identifiable, intellectual capital statements are not part of the official disclosure requirements, and thus they are far from being regarded as generally accepted. The accounting regulation of global finance is basically confined to financial information while neglecting non-financial aspects of economic life. For this reason the prevalent accounting standards not only allow for more transparency, they also result in extending obscurity. In response to a global architecture of finance which seems to disclaim the fundamental conditions of a knowledge-based economy numerous businesses regarding themselves as founded on and fostered by intangibles add intellectual capital statements to their financial reporting systems.

Secondly, along with indications for a GAAP gap accounting technologies' inadequacy to represent economic reality comes to the fore. At the same time obscurity and mistrust seems to come along with financial calculations in so far, as non-financials tend to be explicitly neglected. As a consequence thereof, corporate disclosure is not assumed to correspond with the reality that it purports to present. However, while the 'traditional' literature has dwelt on accounting systems as a set of neutral devices for recording economic reality (Porter 1995), I would rather agree with the *constructivist accounting literature*. This literature has clarified some of the social and constitutive aspects of accounting that contribute to the construction of economic reality. In this context, accounting is often explored with a notion of patterns of organizational visibility as well as on rhetorical aspects of accounting (accounting as a symbol of communication) (Suzuki 2003). From this point of view it can be assumed that neither financial accounting systems nor intellectual capital reporting systems provide for a more 'truthful' representation of economic reality. Instead, both engender specific patterns of visualization, narration and quantification – not in the sense of mirroring the unbiased truth of economic life but rather constructing social and organizational relations and thereby enabling particular courses of management.

Hence, I thirdly draw the conclusion that intellectual capital statements are not about knowledge per se, they are more about actions and activities that are put in place in the name of knowledge (Suzuki 2003). This statement can be clarified by looking at the *relation of intellectual capital reporting and knowledge management* that has been explored by Mouritsen, Larsen and Bukh (2001) on the basis of three case studies. While referring to aspects of the actor-network theory they suggest to understand the intellectual capital statement as a center of calculation, that mobilizes knowledge management via three interrelated elements: "First, they have some form of knowledge narrative – a scenario, which is a story line of the capabilities of the firm, and thus of how it is good at doing something. ... Second, intellectual capital statements identify a set of knowledge management challenges, which are the efforts

management puts in place to develop and condition the firm's knowledge resources. ... Third, there is a report which combines numbers, visualization and the narrative in a composition, designed to show the development of the firm's knowledge resources" (Mouritsen et. al. 2001: 745f.). By this means, intellectual capital statements report on non-financial operating measures to make knowledge manageable. As a result, intellectual capital statements tend towards telling a 'local story', that concerns making knowledge manageable in economic terms and allowing it to be oriented towards organizational ends. Writing the story locates and mobilizes employees, customers, processes and technologies, while the statement for itself is a means of 'dis-locating' knowledge resources making them amenable to intervention (Mouritsen et. al. 2001: 735).

However, if and when intellectual capital statements are not about knowledge per se the formerly posed question on how to understand the alleged clash of financials and non-financial comes up again. This applies as well to the problem, if calculations prevail over the non-financial when they drift towards the financial scale. With regards to both issues it is almost needless to mention that business enterprises are primarily keen to sustain and improve their economic survivability. Along these lines, financial resources play a crucial role, since liquidity is fundamental to ensure existence, and likewise financial insolvency entails losing the means of existence. Nonetheless, I repeat the argument that knowledge has become the decisive factor of production and the most important source of added value, that changes the logic of business enterprises and economies (Willke 1997). This not only seems to be relevant for knowledge-based organizations placing intelligent products and services on the market, but also for accounting as an abstract system of knowledge and accountants as knowledge workers (Covaleski et. al. 2003). Due to these interwoven relations of accounting, knowledge and finance, we cannot simply assume that financial accounting might overshadow organizational knowledge. But a few notions on organizational knowledge might provide a basis for identifying distinctive features of knowledge and finance.

4.3 *Knowledge as an Economic Resource*

To conceptualize knowledge in the context of economic organization alludes to an insurmountable plurality of different epistemological approaches, management theories and organizational studies. Not including the richness of recent studies on organizations in the knowledge economy I suggest to narrow the perspective on three important contributions to understand knowledge as an economic resource: the difference between data, information and knowledge (Nonaka & Takeuchi 1995, Willke 1997), the concept of 'knowledge work' (Drucker 1993, Reich 1992, Bell 1976, Willke 1998), and the Hayekian idea of 'dispersed knowledge' (Hayek 1945):

Drawing a distinction between *data, information and knowledge* basically highlights the fact that organizational knowledge is not something that can be objectively recorded and stored in databases. "In order to obtain information from raw data, an organization must go through a process of organizing the data according to criteria. (...) Such information production proc-

esses could use data processing, database and data mining technological strategies. Information itself is not knowledge. Information must be embedded in experience if it is to produce knowledge. (...) Action learning, project learning and organizational learning are among the organizational strategies which can be used to produce knowledge from information” (Willke 1997). These distinctions underline that the process of knowledge production is an active process of ‘organizational sense-making’ (Weick 1995) that is based on observation and essentially related to ‘human action’ (Nonaka & Takeuchi). But in the course of knowledge production only a small part of knowledge can be explicated. The main part encompasses the implicit or “tactic” knowledge (Polanyi 1958) that seems to be a crucial source of sustainable competitive advantage because it is difficult for competitors to imitate. This very specificity of knowledge to be ‘intangible’ and incompletely ‘explicable’ stands vis-à-vis accounting systems that claim to visualize economic performance and contrary to the high grade of explicitness in contemporary economy.

Focusing on the intangibility of knowledge does not only shed light on limits of accounting systems, but also illustrates patterns of work that are basically founded on tactic knowledge. Alongside traditional patterns of industrialized work, *knowledge-based forms of work* seem to shape the current economic landscape. They are not confined to traditional academic professions and other educational attainments, but rather require abstract intellectual capabilities, systemic thinking, an experimental attitude towards the world and the ability to communicate and cooperate. Knowledge work can therefore be characterized by the continuous revision of its cognitive bases that is always improvable and not considered as ‘truth’ but as a relevant resource (Willke 1998). Such a concept of knowledge work – though difficult to explore empirically – can be endorsed and illuminated by Reich’s (1991) ‘symbolic analyst’: „Symbolic analysts solve, identify, and broker problems by manipulating symbols. They simplify reality into abstract images that can be rearranged, juggled, experimented with, communicated to other specialists, and then, eventually, transformed back into reality“ (Reich 1991: 178). While little is known about the dissemination of knowledge-based forms of work from an international perspective, a division of knowledge (Rammert 2000) can be assumed in analogy to the division of work in industrial society, whereby the knowledge production is achieved through a heterogeneous bundle of activities, actors and actants.

The idea of distributed or *dispersed knowledge* traces back to von Hayek (1945) and basically refers to the problem of the exploitation of knowledge that is not given to anyone in its totality: “The peculiar character of the problem of a rational economic order is determined by the fact that the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess.” (Hayek 1945: 519). That the constitution of knowledge is ‘de-centered’ particularly becomes apparent with a view to the specificity and diversity of activities, actors and actants, that can be enrolled in processes of knowledge production. The specific knowledge perspectives for instance of scientists and managers, marketing analysts and engineers, accountants and auditors as well as their hetero-

geneity illustrate the complex constellation of organizational knowledge under the aspect of elements and their inter-relations. As regards the constitution of inter-relations among diverse and specialized knowledge carriers, this very topic directly alludes to the question of governance conceptions, that allow for inter-connections between the relevant knowledge perspectives without destroying variety. However, this is exactly the challenge knowledge management has to meet: to maintain and foster dispersed and specialized knowledge activities while coping with the relational requirements of knowledge.

4.4 Juxtaposing Knowledge and Finance

As regards the variety of knowledge perspectives as well as the relational specifics of knowledge economic organizations establish ‘interactive networks of innovation’, ‘communities of practice’ and ‘internal rules for communication’ in order to get access to local knowledge and to share profit and risk of its global exploitation. The production and utilization of knowledge under conditions of its dispersion, specificity and connectivity directs the attention to characteristics of organizational knowledge that differ considerably from those of finance: while knowledge unfolds its quality through its elements and their inter-relations, finance aspires to perpetuate liquidity. Therefore, I presuppose that knowledge and finance are based upon differing modes of operation and suggest to search for *distinctive features* of both within the context of economic organizations.

	Accounting and Finance	Accounting and Knowledge
Distinctive Features		
pattern of visibility	financial statement	intellectual capital statement
accounting treatment	evaluation of discrete assets by financial criteria	evaluation of distributed, specialized and interconnected knowledge activities
connective capacity	linkage of business enterprises and financial market actors	linkage of heterogeneous, distributed and specialized knowledge carriers
associated management position	Chief Financial Officer	Chief Knowledge Officer
stage of standardization	high	low
Mode of Governance		
basic principle	decentralized governance relying on calculative technologies that create calculable spaces	decentralized governance relying on network relations of distributed and specialized knowledge
objective target	ability to meet financial obligations and to increase financial resources	innovative ability and organizational learning as core competencies
time dimension	focus on short-term financial performance	focus on long-term economic performance

For this purpose, I have juxtaposed financial and intellectual capital accounting in order to illustrate how they diverge in patterns of visibility, accounting treatment, connective capacity,

associated management positions and stages of standardization. Though the previous table is by far not exhaustive, it shows several important differences of knowledge and finance in relation to accounting. At the same time, a conceptual distinction between a finance conception of governance and a knowledge conception of governance is drawn. Basically, they both rely on a decentralized mode but whereas the finance conception creates discrete calculable spaces evaluated by financial criteria, the knowledge conception emphasizes network relations of dispersed and specialized knowledge. Considering the objective targets and temporal characteristics further distinctions come into view. As aforementioned the financial mode of governance mainly promotes business enterprises to meet or beat analyst's earning expectations with an obvious focus on short-term financial performance. Here the focus of governance bears on the relation of business enterprises and the expectations of financial market actors. The knowledge conception of governance, on the other hand, relies on ways and means to attain innovative ability and organizational intelligence as core competencies and aims for sustained economic growth.

Hence, juxtaposing knowledge and finance seems to reveal that both economic resources change the logic of business enterprises in quite different ways. While finance relates to monetary problems and in terms of accounting to *monetary forms of quantification*, knowledge engenders *qualitative new forms of production*. These new forms of production are thought to change economic organizations insofar, as information processing, symbolic analysis and expert systems take priority over the traditional productive factors as land, labor and capital (Willke 1997). Knowledge-based forms of production also seem to ensure high financial performance, so that claiming a clash of finance and knowledge has to be refused. Thus, financial forms of quantification and quality characteristics of knowledge are not to be understood as opposite aspects of economic organizations. Instead, due to its qualities knowledge can be regarded as the 'black box' of financial numbers.

Nevertheless, the distinctive features of knowledge and finance can become part of conflicts. This becomes apparent as soon as economic organizations are seen as arenas in which people and groups participate with a diversity of interests. By using accounting systems to articulate and promote particular interests financial numbers as well as intellectual capital statements can become part of political processes. And the management of these political processes seems to be a question of how information and accounting systems are designed, because their design helps to "shape what is regarded as problematic, what can be deemed a credible solution and, perhaps most important of all, the criteria which are used in their selection" (Burchell et.al. 1980: 17).

In addition, Burchell et. al. (1980) argue that accounting systems are not only oriented towards the provision of information for decision making, but that they also influence the criteria by which other information is screened, marshaled and evaluated. By this means accounting systems frame the process of organizing data, the process of generating information and therefore the process of knowledge production. While this certainly applies to the production

of accounting knowledge, if and how financial calculations might influence other dispersed and specialized knowledge-activities has to remain a question of further research. Concerning this matter and without suggesting a rash answer in terms of finance prevailing over knowledge I suggest the following as a suitable setting for empirical research: the inter-relations of financial accounting and knowledge-based forms of production, the implications of different forms of governance as well as the involvement of accounting in political processes. In the end, tackling these questions might contribute to understand if and how financial accounting systems are linked up with processes of knowledge production, and how their global emergence relates to a 'standardization of knowledge' under conditions of its distribution.

5. Concluding Remarks: Homogeneity and Diversity within a 'Standardized' Economy

With the purpose of gaining deeper insights into relations of homogeneity and heterogeneity the arguments presented in this paper attend to some initial reflections on accounting standards and their impact on economic governance and organizational knowledge. These reflections draw on the idea that economic organizations are somehow related to a global architecture of finance and this very nexus seems to be heavily based upon *accounting's connective capacity*. In this regard accounting seems to function as a calculative apparatus that enables economic organizations to act in their environment. By creating calculable spaces economic organizations become attentive to how key actors in financial markets view and value them. But accounting numbers not only link enterprises to financial markets they also draw a distinction between monetary forms of quantification and qualitative forms of production. By these means economic organizations produce and reproduce the marked and non-marked, the standardized and non-standardized, the financial and non-financial spaces of accounting. At this instant *accounting's disjunctive capacities* seems to be at work.

Due to the double functioning of accounting –to unfold both connective and disjunctive qualities at the same time – one attains a rather different way of understanding homogeneity and heterogeneity than the debate on globalization suggests. While the research on globalization tends to emphasize processes of homogenization that prevail over locality, two key dichotomies seem to underlie the discussion: homogeneity/ heterogeneity as well as globality/ locality are basically conceived as mutually exclusive concepts in each case. Contrary thereto, this paper attempts to transcend dichotomous perceptions and sets out some tentative thoughts on *homogeneity and heterogeneity as interrelated concepts*. In this regard and against the background of the outlined arguments on accounting rules, economic governance and organizational knowledge, one may identify at least two distinctive perspectives on how to catch on interrelations between both concepts. One concerns the *degree of transparency* that is achieved by means of standardization. Accounting is consequently thought to visualize existing diversity if and when organizations are following the same rules. But the question whether and how accounting is involved in economic governance and organizational knowledge has to remain unsettled. In view of this question the paper discusses varied interpretations ranging

from accounting as a kind of ‘symbolic window-dressing’ to the ‘capture of business by finance’. In doing so, the attention has been directed to how organizations converge in terms of standardized financial communication and differ at the same time in using their non-standardized freedom. This leads to the second point which concerns the *degree of complexity*. As I have argued above, standardized accounting systems are inevitably linked up with the non-standardized freedom and non-financial aspects of economic organizations. Within these non-marked spaces of accounting economic organizations are free to decide whether and how far they engage in creative accounting such as ‘earnings management’ and how they cope with the ‘GAAP gap’ of financial information in relation to intangible assets.

Conceiving homogeneity and heterogeneity along these lines results in a series of questions about the functioning of an evolving global accounting regulation and its ramifications in a wider context of contemporary economy. As discussed in the previous chapters, accounting rules have achieved a vital significance to the contemporary economy, since they unfold global horizons of mutual observance and comparability among economic organizations and key actors of financial markets. But these overlapping layers of observation and surveillance that constitute a global architecture of finance not only provide for social order. I argue, that they also function as a source of *new diversities boosting the degree of complexity and interactions within contemporary economy*. And the diversity of organizational practices that comes along with standardized accounting systems presumably entails new regulatory, knowledge-related and temporal patterns, whose formation and dynamics constitute crucial issues for further research.

One suitable field of further research may rely on *regulatory questions* that come up due to general concerns about the quality of financial numbers and associated accounting pathologies like fraudulent cases of creative accounting. These concerns direct the attention to a whole set of organizational strategies to exploit regulatory gaps and ambiguities within the regulatory framework (Vollmer 2003). Whether accounting standards claim their origins in national or international institutions, they “are necessarily applied in conditions which are irredeemably local and thereby subject to creative interpretation, bias, fraud and error” (Power 2002: 193). In this regard Clarke et. al. (1997: 29) actually assert that the “departure of standards is, as often as not, the only way to produce data likely to accord with the financial facts.” The assumption, that all types of rules might cause new practices and strategies to evade regulations has already been described by Edward Kane’s (1988) well-known regulatory dialectic. The assumed interaction of regulation with innovation seems to be worth exploring further: at this point one may possibly look at the diversity of organizational strategies to cope with regulatory statutes and vice versa investigate how regulatory bodies respond to apparent accounting pathologies.

Another set of possible questions for further sociological research relates to the emerging *knowledge economy* which in many respects seems to open up a vast field of research. Concerning the vital significance that has been assigned to knowledge as a source of value crea-

tion, one might explore in more detail to what extent both monetary forms of quantification and qualitative forms of production transform the logic of business enterprises. One issue that I have briefly mentioned while juxtaposing finance and knowledge involves distinct temporal dimensions of a global economy. Concerning this matter Saskia Sassen (1999) states for instance, that economic globalization is not a homogeneous or homogenizing process of overall acceleration. Instead, she portrays sharply different temporal orders, each embedded in a complex institutional world. By this means the temporality of dematerialized/ digitalized activities like financial services can be distinguished precisely from the temporal order of other economic sectors which still rely on materialized activities. Exploring the question of different temporal orders crisscrossing economic organizations might eventually contribute to a deeper understanding of knowledge-based forms of production and how they interact with a strong focus on short-term financial performances. Over and above distinct temporalities shaping the economic globalization several other issues might frame further inquiries. One possible angle of entry that has to be noted concerns the ideal of standard-setters to provide for transparency and comparability while the field of accounting illustrates diversity and inconsistency.

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