ECONSTOR

WWW.ECONSTOR.EU

Der Open-Access-Publikationsserver der ZBW – Leibniz-Informationszentrum Wirtschaft The Open Access Publication Server of the ZBW – Leibniz Information Centre for Economics

Herrmann-Pillath, Carsten

Working Paper

A 'third culture' in economics? An essay on Smith, Confucius and the rise of China

Working paper series // Frankfurt School of Finance & Management, No. 159

Provided in cooperation with:

Frankfurt School of Finance and Management

Suggested citation: Herrmann-Pillath, Carsten (2011): A 'third culture' in economics? An essay on Smith, Confucius and the rise of China, Working paper series // Frankfurt School of Finance & Management, No. 159, http://hdl.handle.net/10419/45025

${\bf Nutzungsbedingungen:}$

Die ZBW räumt Innen als Nutzerin/Nutzer das unentgeltliche, räumlich unbeschränkte und zeitlich auf die Dauer des Schutzrechts beschränkte einfache Recht ein, das ausgewählte Werk im Rahmen der unter

→ http://www.econstor.eu/dspace/Nutzungsbedingungen nachzulesenden vollständigen Nutzungsbedingungen zu vervielfältigen, mit denen die Nutzerin/der Nutzer sich durch die erste Nutzung einverstanden erklärt.

Terms of use:

The ZBW grants you, the user, the non-exclusive right to use the selected work free of charge, territorially unrestricted and within the time limit of the term of the property rights according to the terms specified at

→ http://www.econstor.eu/dspace/Nutzungsbedingungen By the first use of the selected work the user agrees and declares to comply with these terms of use.



Frankfurt School - Working Paper Series

No. 159

A 'Third Culture' in Economics? An Essay on Smith, Confucius and the Rise of China

by Carsten Herrmann-Pillath



Sonnemannstr. 9–11 60314 Frankfurt am Main, Germany Phone: +49 (0) 69 154 008 0 Fax: +49 (0) 69 154 008 728 Internet: www.frankfurt-school.de

Abstract

China's rise drives a growing impact of China on economics. So far, this mainly works via the force of example, but there is also an emerging role of Chinese thinking in economics. This paper raises the question how far Chinese perspectives can affect certain foundational principles in economics, such as the assumptions on individualism and self-interest allegedly originating in Adam Smith. I embark on sketching a 'third culture' in economics, employing a notion from cross-cultural communication theory, which starts out from the observation that the Chinese model was already influential during the European enlightenment, especially on physiocracy, suggesting a particular conceptualization of the relation between good government and a liberal market economy. I relate this observation with the current revisionist view on China's economic history which has revealed the strong role of markets in the context of informal institutions, and thereby explains the strong performance of the Chinese economy in pre-industrial times. I sketch the cultural legacy of this pattern for traditional Chinese conceptions of social interaction and behavior, which are still strong in rural society until today. These different strands of argument are woven together in a comparison between Confucian thinking and Adam Smith, especially with regard to the 'Theory of Moral Sentiments', which ends up in identifying a number of conceptual family resemblances between the two. I conclude with sketching a 'third culture' in economics in which moral aspects of economic action loom large, as well as contextualized thinking in economic policies.

Keywords: Confucianism, Adam Smith, physiocracy, collectivism and individualism, social relations in China, morality, economy of Imperial China.

JEL classification: B11, B12, Z1

ISSN: 14369753

Contact:

Prof. Dr. Carsten Herrmann-Pillath Academic Director, East-West Centre for Business Studies and Cultural Science Frankfurt School of Finance and Management Sonnemannstraße 9-11 60314 Frankfurt am Main, Germany

Email c.herrmann-pillath@fs.de

Content

1	Towards the sinicization of economics?	4
2	China and cosmopolitanism: A view on the Chinese origins of modern economic though	t.7
3	China's traditional market economy	10
4	The essence of Chinese culture: The view from modern behavioral sciences	13
5	Confucian family resemblances in Adam Smith's thought	16
6	Conclusion: Defining the 'Third Culture' in economics	21
R	eferences	23

1 Towards the sinicization of economics?

Concomitant with China's rise as an economic power, we observe an increasing impact of China on economic thinking. Currently, this happens mostly by the force of example. China's rise questions some established standards in economic theory, especially in contrast to certain basic assumptions in the so-called Washington consensus of development economics (Rodrik 2006). China's experience was an important input into the careful revision of certain assumptions about strategies of development, summarized in the "Report on Growth" (Commission on Growth and Development 2008), which has been also recognized by the World Bank, the major foreign adviser to Chinese economic policy after 1978. This special role of China was also reflected in the appointment of a Chinese economist as World Bank Chief Economist, Justin Lin Yifu, who is currently promoting a 'New Structural Economics' as a framework for development economics (Lin 2010). Beyond this power of example, recently China also has begun to submit proposals for reforms of the international economic order, especially with regard to the international monetary system.

These observations raise the question whether China can also emerge as a major source of ideas about economics and economic policy in the near future. This question can be framed in two different ways. One is to ask whether Chinese economists will contribute to the development of economic science, as it stands. This will necessarily happen, and certainly already happens, reflecting the increasing internationalization of Chinese scholarship as a result of the past history of the massive 'studying abroad' phenomenon, among other factors. The other perspective on the question refers to the deeper level of the underlying philosophy and ideology of economics. For a long time, this question would have been seen in the light of the traditional and now obsolete contrast between modern economics and Marxism. Today, the ideological foundations of modern Chinese economic development are obscure, and mostly seen as non-existent, in the sense of an endemic pragmatism and, possibly, even political cynicism, since what seems compatible with maintaining the current political system, seems also acceptable as economic policy, as long as the policy fosters economic growth.

In this paper, I wish to focus on an even deeper level. This is the question how far Chinese culture could be a source of novelties in modern conceptions about the fundamentals of economics and economic policy (for my approach to Chinese culture in general, see Herrmann-Pillath 2006, 2009a). This inquiry is different from the search for specific economic ideas emerging from reflections on the rise of China, because if refers to both the domain of economic and philosophical thinking and the domain of general values and conceptions of economic life as embedded into society (for an anthropological view on this relation, see Gudeman 1986). The latter dimension is of interest in the context of economics, because one of the commonplaces of cultural analysis in economics is the assignment of China to the set of so-called collectivist cultures in the world. The distinction between individualism and collectivism is standard lore in the management sciences (Hofstede 1991), but has been also introduced into economics, especially in the context of research into the long-run determinants of economic development (Greif 1994, Greif and Tabellini 2010). This notion does not refer to ideological components of Chinese culture, but mainly to behavioral patterns, in the sense of a confluence of social-psychological tendencies and social-structural facts.

Behavioral patterns have been in the focus of many theories about economic development, such as Max Weber's famous protestantism hypothesis. Very often, they are seen as building blocks of general sets of cultural values which ultimately also find expression in ideologies, such as economic liberalism, which emphasizes the importance of individual liberty and entrepreneurship. Recently, many economists are therefore inclined to see long-run legacies of past endowments with institutions, such as different patterns of colonial rule, and therefore seem to tend towards a theory of cultural determinism in economic development (Acemoglu et al. 2001, Guiso et al. 2006; with reference to China: Landes 2006).

There is no doubt that China is undergoing landslide social changes which will also affect those behavioral patterns, and that there is a lively exchange of ideas between China and the world. In this paper, I wish to explore the potential of these changes as far as China's role as a source of inspiration in economic thinking is concerned, in the sense of basic conceptions of economic policy and the relation between the economy and society (that is, I do not talk about economics as a scientific discipline in the first place). So, I do not venture to identify the existing impact of China, but I explore the field in a creative way, as a project in transcultural communication and synthesis. My question is whether we can imagine a 'third culture' in economics, in the sense how this term is used in the theory of cross-cultural communication (Casmir 1999; for an earlier attempt, see Herrmann-Pillath 2010). However, this creative exploration builds on a series of facts about China which seem to be neglected especially in those approaches which emphasize collectivism as a major cultural feature. I put together two perspectives on China. One is the behavioral perspective on collectivism. This mainly refers to fundamental conceptions about economic behavior and social interaction in Chinese popular culture, especially in the rural society, i.e. the 'little tradition' in anthropological parlance. Considering social change in China today, the dominating force is urbanization and rural change, which will also increase the impact of traditional ways of life on the modern economy, for example, in the context of family business (and not just trigger the modernizing force of urbanization, to which rural society would passively adapt). The other perspective sheds light on the 'great tradition', that is, in a very broad sense, the meaning of Confucianism in the context of the economy. There is a revival of Confucianism in China today, but this might mostly reflect political expedience and the search for national identity after Marxism lost its legitimacy. My interest in classical Chinese thinking flows from my project of creative interpretation: Can we imagine to make sense of certain Confucian principles in the modern world? This exercise is similar to Amartya Sen's (2009) approach to employ terms from classical Indian philosophy to build a modern theory of justice. Such an approach aims at writing a de-centered intellectual history of the world, that does not claim actual lines of impact in the history of ideas, but that reconstructs this history in search for commonalities, shared questions and the potential for future conceptual innovations that arise from those ideational discoveries. That being said, it is important to recognize that common views on 'modernization as Westernization" systematically misperceive the factual impact of flows of ideas from East to West throughout history (Hobson 2004).

How can we succeed in both endeavours and establish a common framework? There are few theoretical approaches that fuse intellectual history and behavioral analysis, in the sense of historical anthropology and social history. One of them is the work by the sociologist Norbert Elias (1969), who argued that changing patterns of behavior in Western Europe eventually also resulted into principled conceptions about the separating line between the individual and 'society' as an abstract conception. Once those conceptions were established, they also resulted into corresponding narratives about large-scale social and intellectual changes, which

always come close to teleological ideas about progress towards modernity, liberty and democracy. In this context, intellectual history was also implicitly crafted to reflect this self-conception of the West.

A foremost example is Adam Smith, whom I also put into the center of this paper, for that very reason. Smith is regarded to be the father of modern economic thinking, especially also in terms of its ideological foundations, i.e. individualistic liberalism. At the same time, Smith was a behavioral scientist, and his ideas about the economy were rooted in empirical observations about human behavior, especially of the moral kind. Recently, economists have revived their interest in Smith as a behavioral scientist, and have therefore re-disvovered his magistral 'Theory of Moral Sentiments' (Ashraf et al. 2005; Smith 1759). Indeed, in the history of economic thought we notice a bias, if not distortion in claiming Smith as the father of economics, as he was a moral philosopher in the first place. The complexity of his behavioral theory stays in stark contradiction with his reception in economics, and was perceived as the 'Adam Smith problem' for long (finally settled in the 1976 Glasgow edition, see Rafael and Macfie 1976). I interpret the history of the Adam Smith problem as an indicator of the fundamental issue how far the reception of past ideas is actually a part of the narrative that renders current developments meaningful. If that is the case, a new question looms large: How far can we reach a reassessment of Western intellectual history if we see it in the light of an entirely different and mostly autonomous culture? In other words, reading Smith through the lense of Confucius, what do we see? And what we see, how far can this contribute to conceptual innovation in the future? Especially, what are the implications for the idea of a liberal economy and society?

Classical Chinese thinking was mainly moral philosophy, and so we may ask what are the commonalities and differences between Confucianism and Smith, the moral philosopher? The results of this inquiry are also important for analyzing the behavioral aspects of Chinese culture. In a first step, we can ask in which way Smith's notions of morality were compatible with related conceptions in Chinese popular culture. In the second step, we have to notice the complex interaction between 'little tradition' and 'great tradition' in China. Here, the meanings of Confucianism are ambivalent, reaching from certain elements of popular culture to the philosophical viewpoints of different groups of scholars and eventually to the official ideology of the Chinese empire. On all levels, Confucianism is a construct which in fact synthesizes different ideas stemming from Daoism, Buddhism or the ancient doctrine of legism with different weights and meanings, respectively. Official Confucianism adapted elements from popular culture, but often also stood in contrast to it, aiming at the moral transformation of society (for example, regarding the family, see Ebrey 1991). These tensions were part and parcel of Chinese folk religion and popular beliefs about society (see e.g. Feuchtwang 1992).

In this paper, for limited space I can only sketch a rough argument. I begin with presenting an inspiring, but controversial recent contribution by a Chinese economist and intellectual, who argues that China's rise may be linked with the global transition to cosmopolitanism, and that this has historical roots in classical Chinese thinking, which he sees as a direct precursor to modern economics as it has been seminally shaped by Adam Smith. In the next section, I put these reinterpretations of classical Chinese thought in the context of our current revisionist view on Chinese economic and social history, which describes Imperial China as a market economy and society sui generis. Then I sketch the cultural legacy of this historical structure for the 'little tradition' in rural China today. Finally I pull all those threads of the argument together in a synopsis of family resemblances between Confucianism and Adam Smith. I con-

clude with some observations about the 'third culture' in economics that can be discerned from these observations.

2 China and cosmopolitanism: A view on the Chinese origins of modern economic thought

In order to entice the reader to open up her mind to what follows, I wish to introduce a viewpoint that was developed by the Chinese economist Sheng Hong in the past two decades (Sheng 2010). Until recently, Sheng Hong was Director of the Unirule Institute at Beijing, an autonomous think tank in economics. The Unirule Institute was established in 1993 by a number of leading Chinese intellectuals and economists under the leadership of Mao Yushi, himself an economist with focus on the United States and an influential voice in the Chinese public, who heralded the need to find a synthesis between economic growth and moral principles, both in his writings and in his many grassroots activities. The name of the institute is more expressive in Chinese, Tianze yanjiusuo. The use of tianze 天则refers to the 'principles of the heaven' and is inspired by a citation from one of the oldest Confucian classics, the Shijing: tian sheng zheng min, you wu you li 天生烝民, 有物有则, which roughly translates as "Heaven generates humankind, with matter and rules", meaning that all human beings follow naturally endowed rules. The use of the term tianze in the title of an economics research institute signals the idea that there are natural principles according to which the economy operates, and which should not be disturbed by external interventions, beyond the establishment of institutions, which are mainly seen as evolving endogenously. In this sense, the name of the institute reflects a liberal position in economic policy, with a special emphasis on the perspective of institutional economics. Even more so, the philosophical implications of the motto come close to fundamental principles of the Scottish enlightenment.

In his works, Sheng Hong consistently strives to reconcile Chinese tradition with modern economic development and modern economics. His recently published book makes some of his papers accessible which were published in the 1990s in influential journals such as Du shu ('Reading') and Guanli shijie ('Management World'), so reaching a broad audience in the intellectual elites. In these papers, Sheng argues that classical Chinese thinking was not only compatible with modern economics, but even presaged it and exerted impact on it. Sheng boldly asserts that certain fundamental notions of modern economics stemmed from China, at least implicitly and indirectly.

I do not want to discuss the philological validity of these propositions (but see a few remarks below). What is important is that an influential Chinese scholar discusses in much detail the question of a possible synthesis between Chinese thinking and the Western tradition, especially with regard to basic notions such as a liberal economic order. Sheng proposes that this synthesis could be a transcultural exchange in a multicultural world, which would not assign the exclusive status of modernity to one of them. He calls this synthesis 'ecumenical'. The word 'ecumene' is sometimes used in English translations of the Chinese tianxia 天下, which Sheng refers to in his call for tianxia zhuyi, hence ecumenical thinking, which he confronts with 'globalism' shijie zhuyi. In European history, the term 'ecumene' shows a similar vacil-

lation of semantics as the Chinese tianxia, with denoting the reach of human civilization in Greek times, and the empire in Roman times. To avoid these semantic repercussions, and yet without stretching the argument, I would propose to translate tianxia zhuyi as 'cosmopolitanism', in the sense of the current debate, especially in the context of Adam Smith (Forman-Barzilai 2010). This is because in the etymology of the term, the word tianxia refers to two overlapping, but different meanings. Originally the term referred to the land that was controlled by the Chinese emperor, including the territories that were aligned via tribute relations. Later, the term turned more abstract and referred to the reach of human civilization. This is also the sense of the famous dictum tianxia wei gong 天下为公 in the calligraphy by Sun Yatsen, which became part of the staple of catchwords in the global green movement (here, implying that 'the Earth belongs to all'). Sheng uses the term in this broader sense, so that we can say that tianxia zhuyi is the idea of a global civilization that encompasses a diversity of cultures. In fact, this interpretation matches with the historical evolution of the Chinese empire, which was a multiethnic body politic based on certain universal civilizational principles and artefacts such as the Chinese script (Schmidt-Glintzer 1997).

It is essential to recognize why Sheng makes that distinction. He claims that globalism, which is a Western term, is actually violating basic principles of economic liberalism in opting for trade liberalization but containing international migration. So, globalism is a conceptual framework which still builds on the conception of the nation state and hence economic nationalism. Sheng argues that Chinese traditional culture was embracing cosmopolitanism, but had to develop into nationalism in order to fence off Western nationalisms. He distinguishes between Western 'expansionary nationalism' and Chinese 'defensive nationalism', and is worried about the legacy of the latter for the future development of China. The tension between traditional cosmopolitanism and nationalism left China in an awkward position, and the only solution would be the realization of cosmopolitanism of a truly global scale, which he hopes will happen with the rise of China. With such grand views on secular trends, Sheng stands in the tradition of influential Chinese thinkers of the late and early 20th century: For example, the Confucian intellectual Liang Shuming (who even experienced the first decade of Chinese economic reforms and passed away in 1988) had argued in the 1920s that China can only survive if the world is 'sinicized' in cultural terms, which would also help to overcome the many deficits of Western culture which were so obvious to Chinese intellectuals after the tragedy of World War I (Alitto 1979). Ideas about the transition from the 'nation state' to a new political order based on culture and civilization continue to flourish among Chinese intellectuals until today (e.g. 21 shiji jingji daobao 2004).

In this context, Sheng also discusses economics. The bridge between economic liberalism and cosmopolitanism, Chinese style, is built when the fact is recognized that, according to Sheng, China actually played an important role in shaping modern economic thought. In this he referred to the work by Quenays, Despotisme de la Chine, well aware of the fact that Adam Smith did not see China in the same light. Smith already manifests the incipient change in the perception of China during the later stage of the enlightenment. Whereas the early thinkers saw China even as a model government, already in Smith we see the emphasis on relative decline (e.g. Smith 1976: 111ff.). In Smith, this was related with the paramount policy issue with which Smith himself was also concerned, namely the liberalization of foreign trade. Smith recognized the high level of economic productivity China had achieved, but also argued that with different institutions that level could have been surpassed.

China was stuck in a stationary situation, just because it could rely on a large internal market. In contrast, Quesnay emphasized the benevolent despotism of China, which was open to economic activity, and so contributed to prosperity. He realized that Chinese practice was close to the physiocratic analysis of the economic process, and exploited China as a model (Priddat 2001: 87ff.). After all, his nickname was the 'Confucius of Europe'. Quesnay's viewpoints reflected a broad tendency in the Enlightenment to see China as model for good government which Europe should emulate (for a survey, see Mungello 1999: 87ff.).

Sheng does not claim that there was a Chinese impact in the details, but saw a strong relevance of the Chinese notion of a natural order on physiocratic thought, and in this respect, also on Adam Smith, as far as the laissez-faire doctrine is concerned. With the stylized picture of China that was crafted in the early enlightenment, certain fundamental notions emerged of a natural process in the economy that should not be disturbed by strong interventions of government. The hypothesis that European economic thinking was influenced by China has been confirmed recently in attempts to write a global intellectual history (Hobson 2004). As today, this worked mainly via the example of China, which was not only reported in many influential Jesuit texts and compilations of geographic knowledge, but was also visually present in millions of pieces of Chinese porcellain depicting the Eastern Arcadia. The Chinese doctrine of wu wei 无为was a conceptual centerpiece of physiocratic movements and was presumably put into practice for the first time in the newly established Swiss federation, in a transformation which was achieved, among others, by the influential writer of Staatsromane (novels of government) Albrecht von Haller in extending the wu wei principle to commerce (Gerlach 2005). So, we have evidence on a diffuse, yet broad impact of Chinese ideas on economics and even on policies on the even of European industrialization.

In his argument, Sheng concentrates on specific concepts in modern economics which he traces back to classical Chinese thought in the Warring States period and puts together a syncretic view of different authors, reaching from Master Kong to Lao Zi. In this he makes a very strong claim, namely that classical Chinese thought already presaged many concepts of modern institutional economics. He starts out from one point that certainly deserves attention: This is the concept of the limits of knowledge, which is especially strong in Daoist thought, and which he interprets also as a precursor of the Scottish views on the limitations to human constructivist rationality. Further, he points out that the early thinkers already emphasized the importance of property rights in a peaceful society, and that government has the responsibility to protect them. Differences among people are essential for society, which Sheng interprets as an early indication of the division of labour, and indeed, in classical conceptions the notion of universal cooperation based on reciprocity looms large. The government is obliged to prepare the preconditions for that, and at the same time has to refrain from claiming to many resources from the people. By this, the government would contribute to maintaining the natural order of society. So, Sheng concludes that there is much common ground between classical Chinese thought and modern economics, which he sees as a precondition for China and Chinese economists becoming a force of transforming globalism into cosmopolitanism in the future.

Sheng Hong's viewpoint certainly highlights important and neglected points in the interpretation of the classical literature, but also seems to blur the semantical boundaries between the traditional views on inequalitity and distinctiveness in social hierarchies and the modern notion on diversity in the division of labour and the marketplace. He also downplays the distinctions between physiocratic thinking, both Chinese and European style, and modern economics. In our context, these issues are not as important as the more basic point: In principle, it is

possible to create a reconciliation between institutional, which means, ultimately, Smithian economics and classical Chinese thought. In a creative, if not provocative argument, Sheng shows the way how a 'third culture' in economics might look like, which would reflect a truly cosmopolitan perspective on fundamental principles and values underlying economics as a science.

3 China's traditional market economy

A few remarks seem to be in place to clarify the historical background of Chinese thinking about the economy during Imperial times. When Western observers often emphasize the role of Confucianism in Chinese political culture and society, this presents a very distorted picture of historical facts. It is amazing to notice that until the late 20th century, the fundamental tension in Chinese political culture was that between progressivist etatism and conservative liberalism. This leitmotif was firmly established in one of the most influential economic texts in Imperial China, the 'Discourses about Salt and Iron' Yantie lun (Loewe 1974: 93ff.; Mende / Vogel / Schefold 2002) which reports about a policy debate at the Han court taking place in the year 81 BC. Here, the legist view recommended state monopolies on salt and iron and an eleborate system of government intervention into markets in order to increase the prosperity of the people and the riches of the Empire. Legist thought was also in favour of industry and commerce, albeit with strong government regulation. These ideas continued to exert strong impact of government practice throughout the Empire, and they were still implicit to modernist thought in the 20th century. The Confucians strongly criticized this approach and argued that government should refrain from interfering with natural processes in the economy, especially if this would be also connected with the explicit pursuit of wealth on part of the Imperial administration (which establishes a family resemblance with the anti-mercantilist thinking of Quesnay and Smith). For them, government should be based on moral order, and the economy should be left in a natural state, in which agriculture is the only source of economic riches (agriculture as the root, nongben 农本).

As we see, compared with Europe, the uniqueness of the Chinese ideological development lies in the combination between liberalism and conservatism on the one hand, and modernism and etatism on the other. The Smithian combination between modernism and liberalism did not occur in China, and even today seems to be relatively weak. However, as we shall see, this assessment calls for second thoughts. One is to recognize the convergence between Smithian and Confucian views on the role of morality in human society, which I will discuss in the subsequent sections. The other is to relate the ideological development in Imperial China with the factual historical changes that took place until China was confronted with Western imperialism.

In the past four decades, our views about the socioeconomic structure of the Chinese empire have undergone a revision, if not a revolution, heralded by Mark Elvin's (1973) magistral analysis of the 'medieval economic revolution' under the Song emperors (these revisions have been synthesized in brilliant early surveys by the doyen of American China studies, John King Fairbank 1978 and summarized in his posthumously published 'new history' of China, 1992, but they continue to be worked out until today, e.g. Zelin 2009). Previously, our views were directly shaped by Chinese historiography which provided a 'great tradition' view on Chinese history. That is, political and social change was interpreted in the light of Confucian orthodoxy, and hence, mainly from the view of the government, which even includes a distorted picture of its own legist practice (so, for example, the eminent French historian Etienne Balazs 1964: 13ff. spoke of China as a 'permanently bureaucratic society', although he already was aware of the upcoming revisions of the historical picture). Today, we have a much more precise view on popular culture and socioeconomic structure (e.g. Eastman 1988), which have also changed our ideas about the relation between the 'great' and the 'little tradition'. This went also hand in hand with the increasing recognition of geographical and subcultural diversity in Imperial China, for example, in emphasizing the uniqueness of the Jiangnan region as the most socio-economically advanced region in China (Naquin and Rawski 1988).

This is not the place to discuss details, but we need to recognize that the classical debate about 'Salt and Iron' was already a modern one in the sense that it was centered around the phenomenon of declining feudalism and the emergence of market relations during the preceding Warring States period. The conservativism of Confucius was directly opposing these social changes, while recognizing beneficial aspects on general prosperity. Other thinkers emphasized other aspects of these changes, but eventually one ideological conflict remained in the center of the further intellectual developments of the Chinese empire, between Legism (often, but wrongly translated as 'legalism') and Confucianism, which was even invoked again under Mao's rule. Legism was the philosophical foundation of authoritarian bureaucratic rule, with a deep mistrust against human nature, whereas Confucians started out from the primacy of a natural moral order as the foundation of government.

Interestingly, although Confucianism looked down on merchants in moral terms, in fact it proposed a duality of moral values for the 'gentleman' junzi and the ordinary people xiao ren, the 'little ones'. Economic activity of ordinary people is legitimate, and the government even has to protect and support it, a claim that was firstly made by Mencius in a systematic fashion. Indeed, in the history of Confucianism there were significant strands of thought in which markets and their social context were seen in a very positive light, such as the Zhejiang school of Confucianism, which, until today, is one of the Chinese provinces with the highest share of private entrepreneurship in the economy. Interestingly, this so-called 'pragmatic' (shigong xue 事功学) school already emerged during Song times, simultaneously with the establishment of the Neo-Confucian orthodoxy, and branched out into different strands which remained especially strong in the Jiangnan region (Wang Xiaoyi et al. 1996: 10ff.; at today's Ningbo city, there is a museum devoted to this school). The recognition of markets as a fundamental organizational principle in society also affected government policies, which became much less interventionist under the Qing emperors, and there was a shift from direct to indirect policies, for example, even in emergency action taken against floods and famines, such as providing relief not in kind but in specie so that markets would have done the job of allocating the resources where those were in need (Will 1990). The Imperial bureaucracy was highly professional in assessing the relative efficiency of markets and administrative measures in particular contexts.

These ideological developments reflected an economy and society which looked very different from the picture of 'oriental despotism' that was dominant in Western perceptions until the 1960s, and in many popular conceptions until today (for an excellent overview, see Zelin 1990, and for a systematic exposure of faulty contrasts between Europe and China in terms on institutions and marketization, see Pommeranz 2000). Considering Sheng's arguments, which did not refer to historical developments, they may make much more sense in reference to those historical facts than in the interpretation of the early thinkers. This is essential for the grand view of global trends, which recently emphasises the reemergence of China as a leading economy of the world, after almost two centuries of social havoc, internal strife, foreign invasions and war. On the height of her endogenous development, China had a government which aimed at minimizing the burden for her citizens, explicitely keeping taxes low and striving for the rationalization of procedures. Merchants may not have counted much in the 'great tradition', but were in fact highly regarded elites in local communities, with the lineage (i.e. the Chinese form of the extended family) as the primordial unit which integrates different social roles and strata, especially scholar-officials and merchants (a landmark volume triggering this shift of perspective was Esherick and Rankin 1990). Self-organization in townships and cities became increasingly important, with local government officials mainly playing the role as coordinators and moral leaders. Even essential government functions such as taxation were delegated to self-organizing bodies of local merchant communities (Mann 1987).

In fact, economic historians today do no longer see strong and interventionist bureaucratic government as main cause of the failed transition to industrialization, but an increasingly weak government which could not provide for the necessary public infrastructure (Jones 1988). This relative inactivity directly reflects the classical preferences for indirect rule, mainly relying on the natural order, against the background of increasing demographic and ecological strains on infrastructure (Robertson 1999: 16ff.). In the economy, the government did not directly regulate private activities, which were guided by informal customary law (Huang 2006a,b). But the government heeded attention to this customary law and actively contributed to its enforcement. Traditional China was a contractarian society to a much higher degree than Europe in its past (Hansen 1995). All important matters were regulated by private contracts following customary law, and if necessary, those contracts were enforced also by the local courts (for a view on the contemporary relevance of these customs, see Cohen 1992). This customary law was the breeding ground for the unfolding of a division of labour that was again and again described by Western travellers to China, who until the late 18th century emphasized the relative prosperity of China as compared to Europe.

Classical thinking saw the family at the center of the society. Interestingly, Sheng Hong also argues that familism can be the foundation for cosmopolitanism, opposing to nationalism. Yet, throughout the 20th century, the family was recognized as the breeding ground of Chinese entrepreneurship, but also as a major obstacle to modernization, because it allegedly blocked the transition to the modern corporation. Again, our picture is undergoing significant changes (surveyed in Zelin 2009). The traditional Chinese family unit included large scale corporate entities, the lineages and their funds, which underwent an autonomous transition to more professional and accountable forms of governance and professional management. Lineage organization with shareholding arrangements also served as a pattern that was followed by non-kin-based merchant organizations.

In acknowledging these facts, it is increasingly difficult to assign causal primacy to cultural factors in China's failed endogenous modernization, especially when considering the endemic instability of the government under pressure from foreign impact. Further, it is essential to differentiate between political and ecological factors in China's development, and institutional ones: Recent revisionist economic history has emphasized the former against the latter, and highlighted the similarity of market mechanisms between China and Europe (e.g. Raski 1989, Pommeranz 2000). In other words, past assessments of Chinese development were distorted by the limited view on the collapse of the 'great tradition', and the systematic neglect of the 'little tradition'. However, the term 'little tradition' may be misleading in this context, as we refer in fact to relatively homogenous features of Chinese culture which unified society across all strata, and which was inherited across generations also in the 20th century, especially in the rural areas (Herrmann-Pillath 2009b).

To summarize, we can say that Imperial China was a market economy with a strong reliance on endogenously evolving institutions and relatively weak direct government intervention, which was supportive to markets. This economy was driven by entrepreneurial activity in the context of highly differentiated local, regional and national market systems. Especially, Chinese agriculture was commercialized to a high degree, with the most prosperous Jiangnan region as the developmental spearhead. Given this historical pattern, what are the implications for the reconstruction of Chinese culture with regard to the value foundations of behavior and social action?

4 The essence of Chinese culture: The view from modern behavioral sciences

What is the core of Chinese culture, especially in relation to the economy and social interactions? I will analyze this question in two steps. First I give an overview about certain principles of social intercourse and behavioral patterns which have been established in recent anthropological research, social psychology and cognitive sciences (for a more extensive treatment, see Herrmann-Pillath 2009c). In doing this, I criticize the common uses of the term 'collectivism' in economics and emphasize the individualistic and entrepreneurial values in popular culture, which have been characteristic for China over centuries, if not millenia. In the next section, I move on to interpret these observations in a grand synthesis of Adam Smith and Confucius, which, as I have said, is intended to be a transcultural synthesis in a similar vein as Sheng Hong's.

In recent research in cognitive and social psychology, the standard notion of collectivism has been questioned (for a survey, see Brewer and Chen 2007). Today, a minimal distinction is that between 'relational collectivism' and 'categorial collectivism' (my term, Brewer and Chen use 'group collectivism' which I find confusing). In both cases, the collective refers to a group, but with essentially different characteristics. In relational collectivism, the group consists of people with whom an individual interacts in a particular context. Categorial collectivism refers to abstract collectives such as the nation or the company. Clearly, the categories can overlap in concrete cases, because the company is also a set of people who interact. But

almost always, and even in this case, the two groups are not co-extensive (we only interact with a subset of employees of a company). In cross-cultural comparisons, the importance of this distinction results from the fact that the two collectivisms run across standard dual oppositions. So, for example, Americans may score high in individualism (e.g. entrepreneurship) but also in categorial collectivism (e.g. loyalty to the company). This observation shows that the Western emphasis on individualism may be misleading because individualism cannot be defined independently from the proper delineation of the boundaries between the individual and the group; which is cultural phenomenon of its own.

Regarding China, the interesting observation is that relational collectivism corresponds with earlier philosophical and sociological characterizations of Chinese culture being a culture of interdependent individualism or personalism (Metzger 1977, King 1994). The resulting ambiguity reflects certain features of traditional conceptions of social relations which can be best understood when analyzing the ubiquitious role of guanxi in Chinese society, namely particularistic webs of relations which can be exploited for mutual gain (for a recent collection of research papers on guanxi, see Gold et al. 2002). This analysis starts with a caveat: The scholarly treatment of guanxi reaches from its elevation to a fundamental principle to its treatment as a transitory phenomenon in communist China (Yang 1994 versus Guthrie 1998), and also in Chinese indigenous conceptualizations these different attitudes can be found, both scholarly and in folk culture (see the discussion in Chang 2010). Yet, the concept is of sufficient generality so that its analysis is useful to identify some general structural features which eventually are also independent from this concept in the narrow sense; this is why it also plays a central role in recent attempts to characterize Chinese business behavior (Li 2007). Therefore, subsequently I will no longer use the term, but just speak of 'social relations' as reflected in indigenous conceptions (for a discussion of contemporary transformations of guanxi, see Wank 1996, 2002).

What makes Chinese social relations special, in comparison with the Western conceptions, is the emphasis on embeddedness and relatedness as primary forces of social action (Gabrenya and Hwang 1996; for consequences in management, see e.g. Chua et al. 2009). This is accompanied by the notion of concentric circles, with family and friendship at the core, and their expansion with decreasing degrees of familiarity and mutual trust. However, these circles are not naturally determined, beyond the inner circles, but can be actively shaped in social interaction. The central determinant is a specific mix between emotions and instrumental reason (Jacobs 1982, Kipnis 2002). A stable social relation is grounded in shared emotions, mostly based on perceived similarities among individuals, and common interests in reciprocal exchange. The emotional basis is the precondition for the long-term sustainability of the relation which at the same time allows for the decoupling of reciprocity. A stable social relation builds on imbalanced reciprocity and the moral commitment to exchange benefits through time. Until very recently, in Chinese villages these abstract norms were cast into an explicit system of social accounts. Social relations are managed with great effort by everybody, and they are also public to a certain degree. They are embodied in a flow of gifts at the many occasions throughout the life cycle of an individual (Kipnis 1996, Yan 1996).

Against this background, it is essential to recognize two aspects. The first is that the individual stands at the center of its unfolding social relations. The second is that the individual invests into social relations, so that relations are often linked with shared endeavours (Chen and Chen 2004). Both aspects stay in stark tension with traditional views on collectivism. In Chinese conceptions, the Ego is not simply entangled in a web of social relations which dominate

his interests (I use his by intention, as there are certainly gender differences in this respect), but plays an active role in shaping them. Especially, the set of relations is not a given, but there is much space for social creativity in starting new relations. In that sense, managing social relations is an entrepreneurial activity that comes close to invest into the formation of social capital (actually, Chang 2010 reports that the farmers at her fieldsite call the management of social relations as 'raising pigs', yang zhu). This is most evident from the calculatory nature of the relations, which, in spite of being emotionally grounded, are conceived in instrumental terms.

When considering the public nature of social relations, this refers to their observability in terms of embodied signs, in particular the flow of gifts. But even more so, the public character results from the moral framework in which they take place. Chinese language distinguishes between two kinds of emotions, the individual feelings ganging 感情and the socially approved emotional commitments, the renqing 人情. So, all social relations are guided by a moral code which makes the measure of fulfilment public. This is why the flow of gifts is also called the exchange of renging, even referring to cash as renging (Wilson 1997). The public nature of social relations is also evident from the pivotal role of 'face' in Chinese social interactions, where a clear distinction between social status mianzi 面子and moral reputation lian 脸is made (Hwang 2006). The exchange of renging is a matter of moral reputation. For our subsequent discussion of Smith, it is essential to recognize that in Chinese social interaction, the concern for face encompasses both Ego and Alter, that is, not only does Ego care for his face, but Ego also cares for the face of Alter. The latter presupposes the capacity to take Alter's position. This switch of positions is a major precondition for implicit communication, which has been consistently emphasized as a hallmark of East Asian cultures in general (see Hall's 1976 notion of high-context cultures).

In traditional rural society, this role of social relations was mainly focused on non-agnatic kinship, which always, and today increasingly, included non-kin as 'quasi kin' (Chang 2010, Xiao 2010). The common picture of China as a patriarchal Confucian society fails to depict in sufficient detail the fact that a major expansion of social relations takes place via marriage. In this context, Skinner's (1964/65) seminal analysis of traditional Chinese society as a market centered – in opposition to a village centered – society is of central importance. Very often, marriage relations transcended village borders and were mediated via the market towns. So, non-agnatic social relations also followed the market based patterns of interactions.

In her most recent extensive ethnography of a Chinese village, Chang (2010) has developed a conceptual framework which goes beyond the conception of guanxi, the lishang wanglai 礼尚往来 model. This highlights two essential elements of popular wisdom about social relations in China. One, the wanglai, refers to the idea that social relations are created and emerge from recurrent social interchange, without preconceived positions of the individuals involved. These interactions are embedded into lishang, which are the local conceptions of propriety. What is proper behavior, is not simply determined by a given codex, but can be further analyzed in terms of different sources of justification, such as human feelings (the renqing) or rational calculation. This can result into different forms of social relations, such as generous, expressive or instrumental. Guanxi are just a subset of this comprehensive set of possible kinds of relations. It is important to recognize that this framework even includes religious behavior, as people also maintain social relations with their ancestors. So, on the one hand the individual is seen as being entangled in vast web of clearly specified relations, but at the same time it remains at the center of these relations and can shape them actively.

The relevance of these social structures and interactional patterns for economic processes comes to the for in many ways. One example is the role of embedded governance in the provision of public goods in Chinese villages, which has been empirically scrutinized by Tsai (2002, 2007). Tsai shows that the degree of accountability of local cadres managing infrastructure differs vastly across Chinese villages, even if 'all else is close to equal', i.e. with similar levels of development, close proximity etc., depending on the strength and structure of traditional social interactions, such as in lineages and temple organizations. A central intermediating variable is the role of of moral reputation and the resulting commitment of cadres towards the local community. Indeed, popular religion and its related social interaction patterns also played a significant role in Taiwanese economic development and business organization (Pennarz 1992).

To summarize and generalize, recent research into the psychology and sociology of Chinese social interaction has clearly shown that the individualism / collectivism divide is seriously misleading. Chinese culture features a complex pattern of relational collectivism and interdependent individualism, which is revealed in anthropological studies on rural society. On a more abstract level, the differences between China and Western societies may be located in differences of cognitive style, which in turn interact with differences of social ecology (Nisbett 2003). This leads us back to differences in the intellectual history of the West and the East. Chinese cognition scores highly in indicators of field-dependence, which means is context-sensitive and holistic, whereas the average Western individual tends to be more field-independent and analytic. This has consequences for the perception of social relations, as field-dependence evidently relates with relational collectivism and interdependent personalism, whereas field-independence implies more emphasis on categorial separations (for corresponding experiments on different cognitive stances towards semantic classification, see Ji et al. 2004).

So far, my claim is that Chinese culture reflects a co-evolution of behavioral patterns and structural characteristics of the Imperial market economy, which provides the scaffold on which the rise of China as an economic power could firmly rely. Confucianism as a moral and political worldview was a part of this long-run historical process. These two dimensions, the research into behavioral patterns and the view on intellectual history, can now be merged in our discussion of Adam Smith, the moral philosopher. China's 'great tradition' always interacted with her 'little tradition', and so we can ask whether eventually the economic success of Chinese business all over the world, which is deeply rooted in her little tradition, may also be an indicator for a Smithian dimension in classical thought, which has been pinpointed by Sheng Hong's provocative ideas.

5 Confucian family resemblances in Adam Smith's thought

It is straightforward to put the previous sections together into one single picture in which the historical fact of a Chinese market economy corresponds with behavioral patterns which emphasize the entrepreneurial management of social relations. Chinese popular culture is com-

patible with a market based society, as it was emerging in China already during the times of Confucius. Now, can we see Confucius in the light of Adam Smith, and vice versa?

Recently, Adam Smith received a lot of attention in China, even on the highest level of government, with Premier Wen Jiabao referring to Smith repeatedly (see e.g. (http://www.fmprc.gov.cn/eng/zxxx/t535971.htm). There are extensive commentaries on Smith (e.g. Luo Weidong 2005). The reason is the ongoing reception of the 'Theory of Moral Sentiments'. Indeed, a closer look demonstrates that the TMS reveals many commonalities between Smithian and Confucian thinking. When I use the latter term, I do not refer to Confucius himself, but to the amalgam of ideas that can be seen as being constitutive for the 'great tradition', in a similar vein as in Sheng Hong's argument. This can include, for example, notions from Buddhism in later times.

The common ground between the two lines of thought is naturalism. Smith does not deduce moral principles from first principles, either established by reason or by religious fiat, but claims to ground them in observations of human nature. This is essentially a Confucian viewpoint, which also implies that there is a natural inclination of human beings to behave in a moral way. It is also fascinating to notice that the ancient Chinese notion of 'Heaven' tian comes very close to Smith's deism, which actually depersonalizes the role of the Creator to the largest possible degree, while keeping the idea that nature follows certain principles that were ultimately established by him, in the sense of nature being the causal root of all human behavior, but being directed towards a final end which is transcendental, hence divine (Long 2006). Both the Confucians and Smith would agree, however, that for the understanding of human life it is not necessary to rely on the Creator himself or itself, but on those principles. In this sense, moral philosophy is based on natural facts.

Smith and the Confucians add the important idea of education and individual development. Fully developed morality is the result of moral development in real social interactions. Here, Smith even concurs with the Confucians in seeing the family as the natural and most important domain where this development takes place. Indeed, Smith clearly has the notion of circles of sympathy, which provide the context for morality, such that the link between the potential universalistic standpoint of the impartial spectator and the specific cultural context is never fully broken (Forman-Barzilai 2007).

Based on naturalism, Smith starts his moral theory with the fundamental concept of sympathy. Sympathy is a special and well developed notion which in this detail does not seem to have a direct correspondence with Chinese concepts (for penetrating analyses, see Sugden 2002 and Broadie 2006). On the other hand, the notion introduces a perspective which is in fact much closer to Chinese ideas than the abstract conceptions of egoistic individualism which were highlighted in European intellectual discourse later. In Smith, sympathy reflects the fundamental sociality of human nature, and it denotes the capacity to take the position of others. I propose to relate this idea to the fundamental Confucian notion of ren \Box . Ren refers to the essential two-someness of any form of human existence, and it relates with the capacity to act together.

According to recent philological research (Ge Zhaoguang 2001: 95ff.), ren is a simplified merger of the two characters for 'heart' and 'body', which was later streamlined into the combination of the radical 'man' and the character 'two'. So, two different semantic fields are activated. One is, in the original meaning, that one can understand the body through the heart,

and the other, that human existence is always twosome. Both meanings connect with each other, as the heart is seen as enabling a human being to be together with others via a fundamental capacity for mutual understanding. This meaning should be contrasted with the many Western attempts at translating the concept, sometimes ending up with notions such as 'love', whereas more careful translators refrain from giving too much content, such as 'humanity' (Chan 1967). Clearly, whereas the former directly transfers Western meanings into the Eastern concept, the latter is overly broad. I venture to propose that Smithian 'sympathy' might be a proper translation of ren, if we exclude later Neoconfucian extensions of the term into the metaphysical unity of subject and object.

Ren shares with sympathy one important property: It is not just sympathy in the modern sense, and it is not unconditional altruism. In the Confucian framework, ren is abstract and concrete at the same time. Its concreteness stems from the fact that in Chinese social thinking, sociality is always a concrete phenomenon, as we have seen in the discussion of relational collectivism. That is, there is no reference to any sort of abstract collective, but primordially to the system of social circles centering around an individual, with the family at the core. That is, even though ren is an abstract principle, it cannot serve directly as a conceptual tool to derive moral obligations. This presupposes a specific social context. However, it is also important to notice that in Chinese thinking, ren also emerges as a universalistic principle, because all Confucian concepts are ultimately rooted in certain metaphysical and cosmological conceptions, which relate to the cosmos as such and human civilization as a part of it (in the sense of tianxia). Of course, civilization itself served as a benchmark to distinguish between the humans and the barbarians, as in all other high cultures, including the Western ones until most recently. But in principle all human beings are seen as being equal in terms of the potential for moral and civilizational development. Then, in Chinese thinking, the moral order of society is directly reflected in the natural order of the cosmos, which implies the universality of the moral order. This is why moral failure, in particular of the rulers, causes disruptions of natural processes, such as floods. Smith, as an empiricist, does not have such magical beliefs about nature and society, but at the same time adopts a special version of deism which assigns an almost metaphysical role to order, akin to a sort of prestabilized harmony which has been imposed by Him in defining the starting points of the process of evolution, especially human nature.

However, given the multiplicity of particular values and behaviors, ren does not suffice as an absolute benchmark for morality. Smith and the Confucians converge in the view that the complementary fundamental principle is justice. In classical Chinese, there were two concepts jointly defining the semantic field of justice, and which both show close resemblance to Smithian notions (Roetz 1992). One is yi 义, the other is gong 公. Gong is the opposite of si 私 and in modern Chinese can be found in composites such as public ownership (gong you) versus private ownership (si you). In the original meaning, gong comes very close to impartiality as opposing partial interest si. For example, these concepts were applied in the recurrent discourse about irrigation systems and water control in China thoughout Imperial times, with gong reflecting the interest of local and regional communities in maintaining lakes and reservoirs for water management, whereas si referred to the equally essential partial interest in expanding agricultural land by impoldering (Schoppa 1989).

So, the classical Chinese notion of justice was directly referring to the notion of impartiality, which stands at the center of Smith's thought. gong appears in most modern words referring to justice, such as gongzheng, zhengyi or gongping. In comparison, yi has a stronger compo-

nent of contextuality, especially in the sense that in the classical Chinese view, equal treatment has to be modified by social structure, such that social actions are valued differently from the viewpoint of different social roles, such as father and son (if the son murders the the father, this is of different moral value than when the father murders the son, such that 'equality' would imply different punishments). Again, there is a related concept in Smith, which is 'propriety'. Yet, the conjunction of the two concepts also implies that there is a transition possible to universalistic notions of equality. In this sense, the Chinese conception of morality builds on the conception of a plurality of perspectives, though materialized in the specifically Chinese social setting, and which can be synthesized into a universalistic view via moral development.

At this point, the distinction between conventional and post-conventional morality comes into play (Roetz 1992). One the one hand, justice, especially as yi, relates with the notion of ritual, li ‡L, which reflects the hierarchical nature of society, so that justice implies the unequal treatment of different positions and perspectives. But on the other hand, the majority of Confucian thinkers believed that the resultant social order is only just in the sense of gong if it serves the interests of everybody, thus being impartial in terms of the ultimate outcomes. This is the use of gong in Sun Yatsen's calligraphy tianxia wei gong.

In the Confucian view, sociality is based on reciprocity, and the terms of reciprocity are guided by ritual (as we see, the folk wisdom epitomized in the lishang wanglai conception actually reflects Confucian thinking). Reciprocity is conceived as direct reciprocity in the terms of exchange, especially retribution, denoted as bao 报. In the unfolding of Chinese thinking, this was later merged with Buddhist ideas about retribution (Yang 1957). However, reciprocity is also extended into the Chinese version of the Golden Rule (denoted with the term shu 恕), which implies a universalization in the sense of Kant's. This transition can be seen as showing family resemblances with Smith's conception of the Impartial Spectator, even though the latter is a much more complex notion (on its Kantian dimensions, see Tugendhat 2004). This is because the evolution of the spectator's position is based on the reciprocal evaluation of symphatic feelings of resentment and the implied calculation of relative weights of actions and counter-actions in moral behavior. This calculatory venue towards impartiality is similar to the moral accounting which is involved in the ideas about retribution in China. As we have seen, in folk customs this is directly applied on evaluating the flow of gifts, which is partial, but at the same time is seen as constitutive for the the local community as a universalistic reference.

There is clearly a much stronger rule of the rites in China, compared to Smith. Classical Chinese thinking accepts natural hierarchies in society, and it defines reciprocity relative to them. However, when reading Smith in detail, this thinking does not appear to be strange to him. This is for two reasons. The first is that the Chinese approach actually means that morality cannot be defined independently from the social context. This is a major unresolved issue in Smith's conception of the Impartial Spectator, as ultimately this inner voice cannot be independent from any reference to the established moral norms in a given society. In this sense, the circles of sympathy necessarily stay in tension with an entirely universalistic impartiality. For Smith, eventually this means that he adopted a critical, if not pessimistic attitude about society. On the one hand, he saw moral development in the context of concrete societies. But at the same time he believed that the driving force of emulation will misguide individual behavior, as social status does not necessarily coincide with moral status: So, Smith implicitly distinguished between social status (mianzi) and moral status (lian), and proposed an ethics of

virtue, which is certainly Confucian in essence (though Aristotelian in terms of the genesis of ideas, see Hanley 2006). The most dangerous force working against a moral order is deceit (Gerschlager 2005): High status individuals display signs of status, society strives to attain them, and eventually follows wrong moral standards. The disjunction between moral status and social status was the most critical issue in Smith's thinking, which, in the end even induced him to think in pessimistic terms about the market society. Only two forces could stop this downward spiral. One is that elites take the responsibility of moral leadership, the other is the establishment of law and institutions that contain the negative effects, especially via competition, which contains the accumulation of power (and, of course, even creates the positive drive for economic growth).

Adam Smith is a true Confucian in his emphasis on moral leadership. Confucians did not uphold hierarchy and rites at any price. To the contrary, a central concern of Confucius himself was moral disorder, which he perceived as the dissociation between assigned status and moral essence. Rites without moral essence are without value, and in this sense the rites even obtain a critical potential (in claiming the 'rectification of names'). For this very reason, Confucians throughout Chinese history acted as critics of the Emperor even on the highest level, and they displayed deep mistrust against the concentration of power. The ideal-typical person of high moral standing, the junzi, would always keep a distance to the powerful, and his main task is to uncover moral failure in society, especially in the highest ranks. In this context, its also significant to realize that Smith concurs with Confucian views in rejecting 'utility' as a possible justification of ethical statements (Shaver 2006). There is a parallelism between the Confucian acceptance of the ordinary interest in prosperity and the Smithian appraisal of material progress, but also in the juxtaposition between 'utility' and virtue, and the exclusive focus on the latter when the moral foundation of human society is at stake.

This brief comparative sketch reveals many family resemblances between Smith and classical Chinese thinking. I did not discuss Smith's economics in the narrow sense, as we certainly can discover many parallels in the sense of Sheng Hong's reconstruction. What is essential is that the view from Confucianism puts Smith back into the right proportions between economic and moral reasoning. Smith saw morality as an essential and defining element of a civil society centering on the market (Evensky 2005). His focus on individual interest in the 'Wealth of Nations' reflects a complex philosophical position in which the question is raised, on which constellation of interests can institutional development in complex societies be based (compare the discussion by Mehta 2006)? That is, reference to partial interest is justified by public interest, or, justice. Confucians agree on that in expecting the government to heed attention to particular interests, and even taking their fulfilment as a yardstick to assess good governance. But government itself cannot be based on any kind of conjunction of partial interests.

6 Conclusion: Defining the 'Third Culture' in economics

By way of conclusion, let me now venture to sketch a conceptual synthesis of Smith and Confucius, asking for the relevance of both the 'little' and 'great tradition' of China for a global conception of a market-based society, or, in Sheng Hong's sense, market-based cosmopolitanism. The core concepts of this perspective are embeddedness and contextuality, which have both a positive and a normative dimension. In the positive dimension, Chinese popular culture highlights a fact that has been rediscovered by economics only in the past three decades, namely that trust and social capital matter most for entrepreneurial success and the sustainability of the market society (Platteau 1994). Relational collectivism and interdependent personalism emphasize the social nature of individual entrepreneurship. Against the background of the never-ending series of regulatory failures and governance problems in modern capitalism, the Chinese tradition emphasizes personal responsibility, moral commitment and highlights the role of the family as a unit of society and business. Especially in the context of emerging markets and catch-up processes, this role of the family business deserves much more attention also in economics and economic policy.

Asking how trust and social capital can be generated, the role of moral leadership is especially salient (Casson 1991). This is very significant against the background of the strong interaction between the New Institutional Economics and Management Science in the recent decades, which start out from the Williamsonian view on opportunism as a fundamental human feature (Ghoshal 2005). Confucians disagree, in the sense that, together with Smith, they have an optimistic view on human malleability through education. Economic theory as well as management science and education have to include morality into their framework. It is important to emphasize that this is not endogenous morality, which is mostly emphasized by individualistic social theory, claiming that markets create the morals that they need (Baurmann 1996). Both Smith and the Confucians believe that markets are a hotbed for moral failure. Thus, morality is exogenous to the market society.

The emerging 'Third Culture' in economics has also consequences for policy conceptions and policy design. The infamous Chinese pragmatism can be re-interpreted as contextualism in the sense of the cognitive science concept of field-dependence. Following a distinction that has been made recently by Armatya Sen (2009), the Chinese view and the Western approach of the past can be seen as juxtaposing 'realization-focused comparisons' on the one hand and 'transcendental institutionalism' on the other hand. The latter emphasizes reference to idealized and theoretical conceptions of systems, whereas the former puts progress relative to the status quo into the center of attention. This leads us back to the initial observations about development economics. The naïve version of the Washington consensus were mainly decontextualized, reflecting the belief of economists into the universality of their theories. There was a lack of medium-level theorizing that links theory with specific circumstances in time and place (compare Little's 1992 philosophy of science view on Chinese studies). This does not imply to question fundamental tenets of economics, but, in the sense of Justin Lin's (2010) 'New Structural Economics', to heed attention to changing conditions of application in the course of economic development. This implies a cautious approach to government inter-

vention, mainly because of the awareness that the informational requirements for targetting policies are complex and rarely possible to fulfil. So, a 'third culture' in economic policies does not put most emphasis on criteria of efficiency, but, as Sheng Hong emphasizes, on the limits of knowledge. The measure of success in policy making is not how we make best use of what we now, but how we minimize possible damage from what we do not know.

A 'third culture' in economics will also rethink the notion of consumer sovereignty. This question was raised recently in the context of behavioral economics, leading towards notions of 'libertarian paternalism' and related ideas about how to influence consumption decisions to the best of the imperfectly informed consumer plagued by so-called 'anomalies' in rational decision making (McFadden 2006, Thaler and Sunstein 2009). A Smithian and Confucian view emphasises personal development towards responsibility through education, which includes a critical approach to consumption, which is always seen as a possible source of moral failure through deceit and self-delusion.

These are some flashlights on a 'third culture' in economics. The main task in this endeavour is to recognize the plurality of developmental trajectories today, and to aim at putting this into a truly cosmopolitian view on the history of ideas on the economy, the polity and society. Economic policies, especially in complex fields such as health care or the regulation of public utilities, are always guided by certain foundational conceptions about values and principles. In this domain, we enter the realm of philosophy. In this domain, reflection upon past thinkers can be an extremely powerful source for new ideas.

References

- 21 shiji jingji daobao, ed. (2004), Zhongguo shiji. Xin de kaishe he jiyu, Hong Kong.
- Acemoglu, Daron / Johnson, Simon / Robinson, James A. (2001): The Colonial Origins of Comparative Development: An Empirical Investigation, American Economic Review 91(5): 1369-1401.
- Alitto, Guy S. (1979): The Last Confucian. Liang Shu-ming and the Chinese Dilemma of Modernity, Berkeley, Los Angeles, London: University of California Press.
- Ashraf, Nava, Colin F. Camerer and George Loewenstein (2005): Adam Smith, Behavioral Economist, Journal of Economic Perspectives 19(3): 131-146.
- Balazs, Etienne (1964): Chinese Civilization and Bureaucracy. Variations on a Theme, New Haven and London: Yale University Press.
- Baurmann, Michael (1996) Der Markt der Tugend. Recht und Moral in der liberalen Gesellschaft. Eine soziologische Untersuchung. Tübingen: Mohr Siebeck.
- Brewer, Mailynn, B. / Chen, Ya-Ru (2007): Where (Who) Are Collectives in Collectivism? Toward Conceptual Clarification of Individualism and Collectivism, Psychological Review 114(1): 133-151.
- Broadie, Alexander (2006): Sympathy and the Impartial Spectator, in: Haakonssen (2006): 158-189.
- Casmir, Fred (1999): Foundations for the Study of Intercultural Communication Based on a Third-Culture Building Model." International Journal of Intercultural Relations, 23(1):91-116.
- Casson, Mark (1991): The Economics of Business Culture. Game Theory, Transaction Costs, and Economic Performance, Oxford: Clarendon.
- Chan, Wing-Tsit (1967): "The Story of Chinese Philosophy, In The Chinese Mind. Essentials of Chinese Philosophy and Culture, edited by Charles Moore, Honolulu: The University Press of Hawaii, 31-76,.
- Chen, Xiao-Ping / Chen, Chao C. (2004): On the Intricacies of the Chinese Guanxi: A Process Model of Guanxi Development, Asia Pacific Journal of Management 21: 305-324.
- Chua, Roy Y.J. et al. (2009): Guanxi vs. Networking: Distinctive configurations of affect- and cognition-based trust in the networks of Chinese vs American managers, Journal of International Business Studies 40: 490-508.
- Cohen, Myron (1992): Family Management and Family Division on Contemporary Rural China, The China Quarterly 130: 357-377.
- Commission on Growth and Development (2008): The Growth Report. Strategies for Sustained Growth and Inclusive Development. Washington: World Bank http://www.growthcommission.org.

- Eastman, Lloyd E. (1988): Family, Fields, and Ancestors. Constancy and Change in China's Social and Economic History, New York and Oxford: Oxford University Press.
- Ebrey, Patricia (1991): The Chinese Family and the Spread of Confucisn Values, in: Rozman (1991): 45-83.
- Elias, Norbert. Über den Prozeß der Zivilisation. Soziogenetische und psychogenetische Untersuchungen. Erster Band: Wandlungen des Verhaltens in den weltlichen Oberschichten des Abendlandes. Frankfurt: Suhrkamp, 1969/1990.
- Elvin, Mark (1973): The Pattern of the Chinese Past, Stanford: Stanford University Press.
- Esherick, Joseph W. / Rankin, Mary Backus, ed. (1990): Chinese Local Elites and Patterns of Dominance, Berkeley, Los Angeles and Oxford: University of California Press.
- Evensky, Jerry (2005): Adam Smith's Theory of Moral Sentiments: On Morals and Why They Matter to a Liberal Society of Free People and Free Markets, Journal of Economic Perspectives 19(3): 109-130.
- Fairbank, John K. (1978): Introduction: The Old Order, in: The Cambridge History of China Vol. 10, Cambridge et al.: Cambridge University Press: 1-34.
- Fairbank, John K. (1992): China. A New History, Cambridge and London: Belknap.
- Feuchtwang, Stephan (1992): The Imperial Metaphor. Popular Religion in China, London and New York: Routledge.
- Forman-Barzilai, Fonna (2006): Smith on 'connexion', culture and judgment, in: Montes and Schliesser (2006): 89-114.
- Forman-Barzilai, Fonna (2010): Adam Smith and the Circles of Sympathy. Cosmopolitanism and Moral Theory, Cambridge: Cambridge University Press.
- Gabrenya, William K. and Hwang Kwang-Kuo (1996): Chinese Social Interaction: Harmony and Hierarchy on the Good Earth, in: Bond (1996b): 309-21.
- Ge Zhaoguang (2001): Zhongguo sixiang shi. (The History of Thought in China). Shanghai: Fudan daxue chubanshe, 2001.
- Gerlach, Christian (2005): Wu-Wei in Europe: A Study of Eurasian Economic Thought. LSE Department of Economic History Working Paper 12/05.
- Gerschlager, Caroline (2005): Beyond Economic Man: Adam Smith's Concept of the Agent and the Role of Deception, Cahiers d'économie politique 49, Spring, 31-49, 2005.
- Ghoshal, Sumantra (2005): Bad Management Theories Are Destroying Good Management Practices, Academy of Management Learning & Education 4(1): 75-91.
- Gold, Thomas / Guthrie, Doug / Wank, David, eds. (2002): Social Connections in China. Institutions, Culture, and the Changing Nature of Guanxi, Cambridge et al.: Cambridge University Press.
- Greenblatt, Sidney / Wilson, Richard W. / Wilson, Amy Auerbacher, eds. (1982): Social Interaction in Chinese Society, New York: Praeger.
- Greif, Avner (1994): Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies, in: Journal of Political Economy, Vol. 102, No. 5, 912-950.

- Greif, Avner / Tabellini, Guido (2010): Cultural and Institutional Bifurcation: China and Europe Compared, American Economic Review: Papers and Proceedings 100: 135-140.
- Gudeman, Stephen (1986): Economics as Culture. Models and Metaphors of Livelihood, London, Boston and Henley: Routledge and Kegan Paul.
- Guiso, Luigi / Sapienza, Paola / Zingales, Luigi (2006): Does Culture Affect Economic Outcomes? Journal of Economic Perspectives 20(2): 23-48.
- Guthrie, Doug (1998): The Declining Significance of Guanxi in China's Economic Transition, The China Quarterly 154: 254-282.
- Haakonssen, Knud, ed. (2006): The Cambridge Companion to Adam Smith, Cambridge: Cambridge University Press.
- Hall, Edward T. (1976): Beyond Culture, New York et al.: Doubleday.
- Hanley, Ryan Patrick (2006): Adam Smith, Aristotle and Virtue Ethics, in: Montes and Schlieser (2006): 89-114.
- Hansen, Valerie (1995): Negotiating Daily Life in Traditional China: How Ordinary People Used Contracts, 600-1400, New Haven: Yale University Press.
- Herrmann-Pillath, Carsten (2006): Cultural Species and Institutional Change in China, in: Journal of Economic Issues XL(3): 539-574.
- Herrmann-Pillath, Carsten (2009a): China's Path-dependent Transition: Culture Mediating Between Market and Socialism, in: Janos Kornai and Qian Yingyi, ed., Market and Socialism in the Light of the Experiences of China and Vietnam, International Economic Association conference volume 146, London: Palgrave, 110-134.
- Herrmann-Pillath, Carsten (2009b): Social Classes in "Old Society" (before 1949), in: David Pong et al., eds. Encyclopedia of Modern China, Gale Cengage.
- Herrmann-Pillath, Carsten (2009c): Social Capital, Chinese Style: Individualism, Relational Collectivism and the Cultural Embeddedness of the Institutions-Performance Link, in: The China Economic Journal, Volume 2(3): 325 350.
- Herrmann-Pillath, Carsten (2010): Adam Smith and Confucius. A Tour d'Horizon Towards a Transcultural Foundation of Institutions, Fudan Journal of the Humanities and Social Sciences 3(3): 91-126.
- Hobson, John M. (2004): The Eastern Origins of Western Civilization, Cambridge: Cambridge University Press.
- Hofstede, Geert (1991): Cultures and Organizations. Software of the Mind, London et al.: McGraw-Hill.
- Huang, Philip C.C. (2006a): Civil Adjudication in China, Past and Present, Modern China 32(2): 135-180.
- Huang, Philip C.C. (2006b): Court Mediation in China, Past and Present, Modern China 32(3): 275-314.
- Hwang, Kwang-Kuo (2006): Moral Face and Social Face: Contingent Self-Esteem in Confucian Society, International Journal of Psychology 41(4): 276-281.

- Jacobs, J. Bruce (1982): The Concept of Guanxi and Local Politics in a Rural Chinese Cultural Setting, in: Greenblatt et al. (1982): 209-236.
- Ji Li-Jun / Nisbett, Richard E. / Zhang, Zhiyong (2004): Is It Culture or Is It Language? Examination of Language Effects in Cross-Cultural Research on Categorization, Journal of Personality and Social Psychology 87(1): 57-65.
- Jones, Eric R. (1988): Growth Recurring, Oxford: Oxford University Press.
- King, Ambrose Yeo-chi (1994): Kuan-hsi and Network Building: A Sociological Interpretation, in: Tu Weiming, ed. (1994): The Living Tree. The Changing Meaning of Being Chinese Today, Stanford: Stanford University Press.: 109-126.
- Kipnis, Andrew (1996): The Language of Gifts: Managing Guanxi in a North China Village, Modern China 22(3): 285-314.
- Kipnis, Andrew (2002): Practices of Guanxi Production and Ganqing Avoidance, in: Gold et al. (2002): 21-36.
- Landes, David S. (2006): Why Europe and the West? Why Not China? Journal of Economic Perspectives 20(2): 3-22
- Li, Peter Ping (2007): Guanxi as the Chinese Norm for Personalized Social Capital: Toward an Integrated Duality Framework of Informal Exchange, in: Henry W.-C. Yeung, ed., Handbook of Research on Asian Business, Cheltenham / Northampton: Edwar Elgar, 62-83.
- Lin, Justin Linyi (2010): New Structural Economics. A Framework for Rethinking Development, Policy Research Working Paper 5197, Washington: The World Bank.
- Little, Daniel (1992): Understanding Peasant China. Case Studies in the Philosophy of Social Science, New Haven and London: Yale University Press.
- Loewe, Michael (1974): Crisis and Conflict in Han China 104 BC to AD 9, London: Allen & Unwin.
- Long, Brendan (2006): "Adam Smith's Natural Theology of Society." The Adam Smith Review 2: 124-148.
- Luo Weidong (2005): Qinggan, zhixu, meide. Yadang Simi de lilun xue shijie (Sentiments, Order, Virtue. The World of Ethics in Adam Smith). Beijing: Zhongguo renmin chubanshe.
- Mann, Susan (1987): Local Merchants and the Chinese Bureaucracy 1750-1950, Stanford: Stanford University Press.
- McFadden, Daniel (2006): Free Markets and Fettered Consumers, American Economic Review 96(1): 5-29.
- Mehta, Pratap Bhanu (2006): Self-Interest and Other Interests, in: Haakonssen (2006): 246-269.
- Metzger, Thomas A. (1977): Escape From Predicament. Neo-Confucianism and China's Evolving Political Culture. New York: Columbia University Press.
- Montes, Leonidas / Schliesser, Eric (2006): New Voices on Adam Smith, London and New York: Routledge.

- Mungello, David E. (1999): The Great Encounter of China and the West, 1500-1900, Lanham et al.: Rowman & Littlefield.
- Naquin, Susan and Evelyn Rawski (1988): Chinese Society in the Eighteenth Century. New Haven and London: Yale University Press.
- Nisbett, Robert (2003): The Geography of Thought: How Asians and Westerners Think Differently...and Why, New York: Free Press.
- Pennarz, Johanna (1992): Mazu, Macht und Marktwirtschaft. Die religiöse Organisation im sozialen und ökonomischen Wandlungsprozeß der ländlichen Gesellschaft Taiwans, München: Akademischer Verlag.
- Platteau, Jean-Philippe (1994): Behind the Market Stage Where Real Societies Exist Part I: The Role of Public and Private Order Institutions, and Part II: The Role of Moral Norms, in: Journal of Development Studies 30/3 + 4, S. 533-577, 753-817.
- Pommeranz, Kenneth (2000): The Great Divergence. China, Europe, and the Making of the Modern World Economy, Princeton and Oxford: Princeton University Press.
- Priddat, Birger P. (2001): Le concert universel: Die Physiokratie. Eine Tranformationsphilosophie des 18. Jahrhunderts, Marburg: Metropolis.
- Raphael, D.D. / Macfie, A.L. (1976): Introduction, in: Smith, Adam (1759/1976): The Theory of Moral Sentiments. Oxford: Oxford University Press, 1-52.
- Rawski, Thomas G. (1989): Economic Growth in Pre-War China, Berkeley, Los Angeles and Oxford: University of California Press.
- Robertson, Philip (1999): Economic Change in China, c. 1850-1950, Cambridge: Cambridge University Press.
- Rodrik, Dani (2007): One Economics, Many Recipes. Globalization, Institutions, and Economic Growth, Princeton and Oxford: Princeton UP.
- Roetz, Heiner (1992): Die konfuzianische Ethik der Achsenzeit. Eine Rekonstruktion unter dem Aspekt des Durchbruchs zu postkonventionellem Denken. Frankfurt: Suhrkamp.
- Rozman, Gilbert, ed. (1991): The East Asian Region. Confucian Heritage and Its Modern Adaptation, Princeton: Princeton University Press.
- Schefold, Betram / Mende, Erling v. / Vogel, Hans Ulrich (2002): Huan Kuan. Yantie lun. Vademecum zu dem Klassiker der chinesischen Wirtschaftsdebatten, Düsseldorf: Verlag Wirtschaft und Finanzen.
- Schmidt-Glintzer, Helwig (1997): China: Vielvölkerreich und Einheitsstaat. Von den Anfüngen bis heute, München: Beck.
- Schoppa, R. Keith (1989): Xiang Lake Nine Centuries of Chinese Life, New Haven and London: Yale University Press.
- Sen, Armatya (2009): The Idea of Justice, Cambridge: Belknap.
- Shaver, Robert (2006): Virtues, Utility, and Rules, in: Haakonssen (2006): 189-213.
- Sheng Hong (2010): Wei wan shi kai taiping. Creating Peace Forever. Yi ge jingji xuejia dui wenming wenti de sikao, Beijing: Zhongguo fazhan chubanshe.

- Skinner, G. William (1964/65): Marketing and Social Structure in Rural China, Journal of Asian Studies 24: 3-43, 195-228, 363-399.
- Smith, Adam (1759/1976): The Theory of Moral Sentiments. Oxford: Oxford University Press.
- Smith, Adam (1776/1976)An Inquiry Into the Nature and Causes of the Wealth of Nations, Oxford: Oxford University Press.
- Sugden, Robert (2002): Beyond Sympathy and Empathy: Adam Smith's Concept of Fellow-Feeling, Economics and Philosophy 18: 63-87.
- Thaler, Richard H. / Sunstein, Cass R. (2009): Nudge. Improving Decisions about Health, Wealth, and Happiness, London: Penguin.
- Tsai, Lily L. (2002): Cadres, Temple and Lineage Institutions, and Governance in Rural China." The China Journal 48: 1-28.
- Tsai, Lily L. (2007): Accountability without Democracy, Solidary Groups and Public Goods Provision in Rural China, Cambridge: Cambridge University Press.
- Tugendhat, Ernst (2004): Universalistically Approved Intersubjective Attitudes: Adam Smith, The Adam Smith Review 1: 88-104.
- Wang Xiaoyi and Zhu Chengbao (1996): Zhongguo xiangcun de minying qiye yu jiazu jingji. Zhejiang sheng Cangnan xian Xiangdong cun diaocha, Dangdai Zhongguo de cunzhuang yu cunluo wenhua congshu, Vol. 5, edited by Chen Jiyuan and He Mengbi (Carsten Herrmann-Pillath). Taiyuan: Shanxi jingji chubanshe.
- Wank, David (1996): The Institutional Practice of Market Clientilism: Guanxi and Private Business in a South China City, The China Quarterly 144: 820-838.
- Wank, David (2002): Business-State Clientilism in China: Decline or Evolution? In: Gold et al. (2002): 97-115.
- Will, Pierre-Etienne (1990): Bureaucracy and Famine in Eighteenth-Century China, Stanford: Stanford University Press.
- Wilson, Scott (1997): The Cash Nexus and Social Networks: Mutual Aid and Gifts in Contemporary Shanghai Villages, The China Journal 37: 91-115.
- Xiao Lou (2010): Xia cun shehui. Zhongguo Jiannan nongcun de richang shenghuo he shehui jiegou (1976-2006), Shanghai: Sanlian chubanshe.
- Yan, Yunxiang (1996): The Culture of Guanxi in a North China Village, The China Journal 35: 1-26.
- Yang Kuo-shu (1996): The Psychological Transformation of the Chinese People as a Result of Societal Transformation, in: Bond (1996b): 479-498.
- Yang Lien-sheng (1957): The Concept of Pao as a Basis for Social Relations in China, In Chinese Thought and Institutions edited by John K. Fairbank, Chicago: University of Chicago Press, 291-309.
- Yang, Mayfair Mei-hui (1994): Gifts, Favours and Banquets: The Art of Social Relationships in China, Ithaca: Cornell University Press.

- Yang, Mayfair Mei-hui (2002): The Resilience of Guanxi and its New Deployments: A Critique of Some New Guanxi Scholarship, The China Quarterly 170: 459-476.
- Zelin, Madeleine (1990): The Structure of the Chinese Economy During the Qing Period: Some Thoughts on the 150th Anniversary of the Opium War, in: Kenneth Lieberthal, ed. Perspectives on Modern China, ???
- Zelin, Madeleine (2009): The Firm in early Modern China, Journal of Economic Behavior & Organization 71: 623-637.

FRANKFURT SCHOOL / HFB – WORKING PAPER SERIES

No.	Author/Title	Year
158.	Boeing. Philipp / Sandner, Philipp The Innovative Performance of China's National Innovation System	2011
157.	Herrmann-Pillath, Carsten Institutions, Distributed Cognition and Agency: Rule-following as Performative Action	2011
156.	Wagner, Charlotte From Boom to Bust: How different has microfinance been from traditional banking?	2010
155.	Libman Alexander / Vinokurov, Evgeny Is it really different? Patterns of Regionalisation in the Post-Soviet Central Asia	2010
154.	Libman, Alexander Subnational Resource Curse: Do Economic or Political Institutions Matter?	2010
153.	Herrmann-Pillath, Carsten Meaning and Function in the Theory of Consumer Choice: Dual Selves in Evolving Networks	2010
152.	Kostka, Genia / Hobbs, William Embedded Interests and the Managerial Local State: Methanol Fuel-Switching in China	2010
151.	Kostka, Genia / Hobbs, William Energy Efficiency in China: The Local Bundling of Interests and Policies	2010
150.	Umber, Marc P. / Grote, Michael H. / Frey, Rainer Europe Integrates Less Than You Think. Evidence from the Market for Corporate Control in Europe and the US	2010
149.	Vogel, Ursula / Winkler, Adalbert Foreign banks and financial stability in emerging markets: evidence from the global financial crisis	2010
148.	Libman, Alexander Words or Deeds – What Matters? Experience of Decentralization in Russian Security Agencies	2010
147.	Kostka, Genia / Zhou, Jianghua Chinese firms entering China's low-income market: Gaining competitive advantage by partnering governments	2010
146.	Herrmann-Pillath, Carsten Rethinking Evolution, Entropy and Economics: A triadic conceptual framework for the Maximum Entropy Principle as applied to the growth of knowledge	2010
145.	Heidorn, Thomas / Kahlert, Dennis Implied Correlations of iTraxx Tranches during the Financial Crisis	2010
144	Fritz-Morgenthal, Sebastian G. / Hach, Sebastian T. / Schalast, Christoph M&A im Bereich Erneuerbarer Energien	2010
143.	Birkmeyer, Jörg / Heidorn, Thomas / Rogalski, André Determinanten von Banken-Spreads während der Finanzmarktkrise	2010
142.	Bannier, Christina E. / Metz, Sabrina Are SMEs large firms en miniature? Evidence from a growth analysis	2010
141.	Heidorn, Thomas / Kaiser, Dieter G. / Voinea, André The Value-Added of Investable Hedge Fund Indices	2010
140.	Herrmann-Pillath, Carsten The Evolutionary Approach to Entropy: Reconciling Georgescu-Roegen's Natural Philosophy with the Maximum Entropy Framework	2010
139.	Heidorn, Thomas / Löw, Christian / Winker, Michael Funktionsweise und Replikationstil europäischer Exchange Traded Funds auf Aktienindices	2010
138.	Libman, Alexander Constitutions, Regulations, and Taxes: Contradictions of Different Aspects of Decentralization	2010
137.	Herrmann-Pillath, Carsten / Libman, Alexander / Yu, Xiaofan State and market integration in China: A spatial econometrics approach to 'local protectionism'	2010
136.	Lang, Michael / Cremers, Heinz / Hentze, Rainald Ratingmodell zur Quantifizierung des Ausfallrisikos von LBO-Finanzierungen	2010
135.	Bannier, Christina / Feess, Eberhard When high-powered incentive contracts reduce performance: Choking under pressure as a screening device	2010
134.	Herrmann-Pillath, Carsten Entropy, Function and Evolution: Naturalizing Peircian Semiosis	2010
133.	Bannier, Christina E. / Behr, Patrick / Güttler, Andre Rating opaque borrowers: why are unsolicited ratings lower?	2009

132.	Herrmann-Pillath, Carsten Social Capital, Chinese Style: Individualism, Relational Collectivism and the Cultural Embeddedness of the Institutions-Performance Link	2009
131.	Schäffler, Christian / Schmaltz, Christian Market Liquidity: An Introduction for Practitioners	2009
130.	Herrmann-Pillath, Carsten Dimensionen des Wissens: Ein kognitiv-evolutionärer Ansatz auf der Grundlage von F.A. von Hayeks Theorie der "Sensory Order"	2009
129.	Hankir, Yassin / Rauch, Christian / Umber, Marc It's the Market Power, Stupid! – Stock Return Patterns in International Bank M&A	2009
128.	Herrmann-Pillath, Carsten Outline of a Darwinian Theory of Money	2009
127.	Cremers, Heinz / Walzner, Jens Modellierung des Kreditrisikos im Portfoliofall	2009
126.	Cremers, Heinz / Walzner, Jens Modellierung des Kreditrisikos im Einwertpapierfall	2009
125.	Heidorn, Thomas / Schmaltz, Christian Interne Transferpreise für Liquidität	2009
124.	Bannier, Christian E. / Hirsch, Christian The economic function of credit rating agencies - What does the watchlist tell us?	2009
123.	Herrmann-Pillath, Carsten A Neurolinguistic Approach to Performativity in Economics	2009
122.	Winkler, Adalbert / Vogel, Ursula Finanzierungsstrukturen und makroökonomische Stabilität in den Ländern Südosteuropas, der Türkei und in den GUS- Staaten	2009
121.	Heidorn, Thomas / Rupprecht, Stephan Einführung in das Kapitalstrukturmanagement bei Banken	2009
120.	Rossbach, Peter Die Rolle des Internets als Informationsbeschaffungsmedium in Banken	2009
119.	Herrmann-Pillath, Carsten Diversity Management und diversi-tätsbasiertes Controlling: Von der "Diversity Scorecard" zur "Open Balanced Scorecard	2009
118.	Hölscher, Luise / Clasen, Sven Erfolgsfaktoren von Private Equity Fonds	2009
117.	Bannier, Christina E. Is there a hold-up benefit in heterogeneous multiple bank financing?	2009
116.	Roßbach, Peter / Gießamer, Dirk Ein eLearning-System zur Unterstützung der Wissensvermittlung von Web-Entwicklern in Sicherheitsthemen	2009
115.	Herrmann-Pillath, Carsten Kulturelle Hybridisierung und Wirtschaftstransformation in China	2009
114.	Schalast, Christoph: Staatsfonds – "neue" Akteure an den Finanzmärkten?	2009
113.	Schalast, Christoph / Alram, Johannes Konstruktion einer Anleihe mit hypothekarischer Besicherung	2009
112.	Schalast, Christoph / Bolder, Markus / Radünz, Claus / Siepmann, Stephanie / Weber, Thorsten Transaktionen und Servicing in der Finanzkrise: Berichte und Referate des Frankfurt School NPL Forums 2008	2009
111.	Werner, Karl / Moormann, Jürgen Efficiency and Profitability of European Banks – How Important Is Operational Efficiency?	2009
110.	Herrmann-Pillath, Carsten Moralische Gefühle als Grundlage einer wohlstandschaffenden Wettbewerbsordnung: Ein neuer Ansatz zur erforschung von Sozialkapital und seine Anwendung auf China	2009
109.	Heidorn, Thomas / Kaiser, Dieter G. / Roder, Christoph Empirische Analyse der Drawdowns von Dach-Hedgefonds	2009
108.	Herrmann-Pillath, Carsten Neuroeconomics, Naturalism and Language	2008
107.	Schalast, Christoph / Benita, Barten Private Equity und Familienunternehmen – eine Untersuchung unter besonderer Berücksichtigung deutscher Maschinen- und Anlagenbauunternehmen	2008
106.	Bannier, Christina E. / Grote, Michael H. Equity Gap? – Which Equity Gap? On the Financing Structure of Germany's Mittelstand	2008

105.	Herrmann-Pillath, Carsten The Naturalistic Turn in Economics: Implications for the Theory of Finance	2008
104.	Schalast, Christoph (Hrgs.) / Schanz, Kay-Michael / Scholl, Wolfgang Aktionärsschutz in der AG falsch verstanden? Die Leica-Entscheidung des LG Frankfurt am Main	2008
103.	Bannier, Christina E./ Müsch, Stefan Die Auswirkungen der Subprime-Krise auf den deutschen LBO-Markt für Small- und MidCaps	2008
102.	Cremers, Heinz / Vetter, Michael Das IRB-Modell des Kreditrisikos im Vergleich zum Modell einer logarithmisch normalverteilten Verlustfunktion	2008
101.	Heidorn, Thomas / Pleißner, Mathias Determinanten Europäischer CMBS Spreads. Ein empirisches Modell zur Bestimmung der Risikoaufschläge von Commercial Mortgage-Backed Securities (CMBS)	2008
100.	Schalast, Christoph (Hrsg.) / Schanz, Kay-Michael Schaeffler KG/Continental AG im Lichte der CSX CorpEntscheidung des US District Court for the Southern District of New York	2008
99.	Hölscher, Luise / Haug, Michael / Schweinberger, Andreas Analyse von Steueramnestiedaten	2008
98.	Heimer, Thomas / Arend, Sebastian The Genesis of the Black-Scholes Option Pricing Formula	2008
97.	Heimer, Thomas / Hölscher, Luise / Werner, Matthias Ralf Access to Finance and Venture Capital for Industrial SMEs	2008
96.	Böttger, Marc / Guthoff, Anja / Heidorn, Thomas Loss Given Default Modelle zur Schätzung von Recovery Rates	2008
95.	Almer, Thomas / Heidorn, Thomas / Schmaltz, Christian The Dynamics of Short- and Long-Term CDS-spreads of Banks	2008
94.	Barthel, Erich / Wollersheim, Jutta Kulturunterschiede bei Mergers & Acquisitions: Entwicklung eines Konzeptes zur Durchführung einer Cultural Due Diligence	2008
93.	Heidorn, Thomas / Kunze, Wolfgang / Schmaltz, Christian Liquiditätsmodellierung von Kreditzusagen (Term Facilities and Revolver)	2008
92.	Burger, Andreas Produktivität und Effizienz in Banken – Terminologie, Methoden und Status quo	2008
91.	Löchel, Horst / Pecher, Florian The Strategic Value of Investments in Chinese Banks by Foreign Financial Institutions	2008
90.	Schalast, Christoph / Morgenschweis, Bernd / Sprengetter, Hans Otto / Ockens, Klaas / Stachuletz, Rainer / Safran, Robert Der deutsche NPL Markt 2007: Aktuelle Entwicklungen, Verkauf und Bewertung – Berichte und Referate des NPL Forums 2007	2008
89.	Schalast, Christoph / Stralkowski, Ingo 10 Jahre deutsche Buyouts	2008
88.	Bannier, Christina E./ Hirsch, Christian The Economics of Rating Watchlists: Evidence from Rating Changes	2007
87.	Demidova-Menzel, Nadeshda / Heidorn, Thomas Gold in the Investment Portfolio	2007
86.	Hölscher, Luise / Rosenthal, Johannes Leistungsmessung der Internen Revision	2007
85.	Bannier, Christina / Hänsel, Dennis Determinants of banks' engagement in loan securitization	2007
84.	Bannier, Christina "Smoothing" versus "Timeliness" - Wann sind stabile Ratings optimal und welche Anforderungen sind an optimale Berichtsregeln zu stellen?	2007
83.	Bannier, Christina E. Heterogeneous Multiple Bank Financing: Does it Reduce Inefficient Credit-Renegotiation Incidences?	2007
82.	Cremers, Heinz / Löhr, Andreas Deskription und Bewertung strukturierter Produkte unter besonderer Berücksichtigung verschiedener Marktszenarien	2007
81.	Demidova-Menzel, Nadeshda / Heidorn, Thomas Commodities in Asset Management	2007
80.	Cremers, Heinz / Walzner, Jens Risikosteuerung mit Kreditderivaten unter besonderer Berücksichtigung von Credit Default Swaps	2007

79.	Cremers, Heinz / Traughber, Patrick Handlungsalternativen einer Genossenschaftsbank im Investmentprozess unter Berücksichtigung der Risikotragfähigkeit	2007
78.	Gerdesmeier, Dieter / Roffia, Barbara Monetary Analysis: A VAR Perspective	2007
77.	Heidorn, Thomas / Kaiser, Dieter G. / Muschiol, Andrea Portfoliooptimierung mit Hedgefonds unter Berücksichtigung höherer Momente der Verteilung	2007
76.	Jobe, Clemens J. / Ockens, Klaas / Safran, Robert / Schalast, Christoph Work-Out und Servicing von notleidenden Krediten – Berichte und Referate des HfB-NPL Servicing Forums 2006	2006
75.	Abrar, Kamyar / Schalast, Christoph Fusionskontrolle in dynamischen Netzsektoren am Beispiel des Breitbandkabelsektors	2006
74.	Schalast, Christoph / Schanz, Kay-Michael Wertpapierprospekte: Markteinführungspublizität nach EU-Prospektverordnung und Wertpapierprospektgesetz 2005	2006
73.	Dickler, Robert A. / Schalast, Christoph Distressed Debt in Germany: What's Next? Possible Innovative Exit Strategies	2006
72.	Belke, Ansgar / Polleit, Thorsten How the ECB and the US Fed set interest rates	2006
71.	Heidorn, Thomas / Hoppe, Christian / Kaiser, Dieter G. Heterogenität von Hedgefondsindizes	2006
70.	Baumann, Stefan / Löchel, Horst The Endogeneity Approach of the Theory of Optimum Currency Areas - What does it mean for ASEAN + 3?	2006
69.	Heidorn, Thomas / Trautmann, Alexandra Niederschlagsderivate	2005
68.	Heidorn, Thomas / Hoppe, Christian / Kaiser, Dieter G. Möglichkeiten der Strukturierung von Hedgefondsportfolios	2005
67.	Belke, Ansgar / Polleit, Thorsten (How) Do Stock Market Returns React to Monetary Policy? An ARDL Cointegration Analysis for Germany	2005
66.	Daynes, Christian / Schalast, Christoph Aktuelle Rechtsfragen des Bank- und Kapitalmarktsrechts II: Distressed Debt - Investing in Deutschland	2005
65.	Gerdesmeier, Dieter / Polleit, Thorsten Measures of excess liquidity	2005
64.	Becker, Gernot M. / Harding, Perham / Hölscher, Luise Financing the Embedded Value of Life Insurance Portfolios	2005
63.	Schalast, Christoph Modernisierung der Wasserwirtschaft im Spannungsfeld von Umweltschutz und Wettbewerb – Braucht Deutschland eine Rechtsgrundlage für die Vergabe von Wasserversorgungskonzessionen? –	2005
62.	Bayer, Marcus / Cremers, Heinz / Kluß, Norbert Wertsicherungsstrategien für das Asset Management	2005
61.	Löchel, Horst / Polleit, Thorsten A case for money in the ECB monetary policy strategy	2005
60.	Richard, Jörg / Schalast, Christoph / Schanz, Kay-Michael Unternehmen im Prime Standard - "Staying Public" oder "Going Private"? - Nutzenanalyse der Börsennotiz -	2004
59.	Heun, Michael / Schlink, Torsten Early Warning Systems of Financial Crises - Implementation of a currency crisis model for Uganda	2004
58.	Heimer, Thomas / Köhler, Thomas Auswirkungen des Basel II Akkords auf österreichische KMU	2004
57.	Heidorn, Thomas / Meyer, Bernd / Pietrowiak, Alexander Performanceeffekte nach Directors Dealings in Deutschland, Italien und den Niederlanden	2004
56.	Gerdesmeier, Dieter / Roffia, Barbara The Relevance of real-time data in estimating reaction functions for the euro area	2004
55.	Barthel, Erich / Gierig, Rauno / Kühn, Ilmhart-Wolfram Unterschiedliche Ansätze zur Messung des Humankapitals	2004
54.	Anders, Dietmar / Binder, Andreas / Hesdahl, Ralf / Schalast, Christoph / Thöne, Thomas Aktuelle Rechtsfragen des Bank- und Kapitalmarktrechts I: Non-Performing-Loans / Faule Kredite - Handel, Work-Out, Outsourcing und Securitisation	2004
53.	Polleit, Thorsten The Slowdown in German Bank Lending – Revisited	2004
52.	Heidorn, Thomas / Siragusano, Tindaro	
	Die Anwendbarkeit der Behavioral Finance im Devisenmarkt	2004

51.	Schütze, Daniel / Schalast, Christoph (Hrsg.) Wider die Verschleuderung von Unternehmen durch Pfandversteigerung	2004
50.	Gerhold, Mirko / Heidorn, Thomas Investitionen und Emissionen von Convertible Bonds (Wandelanleihen)	2004
49.	Chevalier, Pierre / Heidorn, Thomas / Krieger, Christian Temperaturderivate zur strategischen Absicherung von Beschaffungs- und Absatzrisiken	2003
48.	Becker, Gernot M. / Seeger, Norbert Internationale Cash Flow-Rechnungen aus Eigner- und Gläubigersicht	2003
47.	Boenkost, Wolfram / Schmidt, Wolfgang M. Notes on convexity and quanto adjustments for interest rates and related options	2003
46.	Hess, Dieter Determinants of the relative price impact of unanticipated Information in U.S. macroeconomic releases	2003
45.	Cremers, Heinz / Kluß, Norbert / König, Markus Incentive Fees. Erfolgsabhängige Vergütungsmodelle deutscher Publikumsfonds	2003
44.	Heidorn, Thomas / König, Lars Investitionen in Collateralized Debt Obligations	2003
43.	Kahlert, Holger / Seeger, Norbert Bilanzierung von Unternehmenszusammenschlüssen nach US-GAAP	2003
42.	Beiträge von Studierenden des Studiengangs BBA 012 unter Begleitung von Prof. Dr. Norbert Seeger Rechnungslegung im Umbruch - HGB-Bilanzierung im Wettbewerb mit den internationalen Standards nach IAS und US-GAAP	2003
41.	Overbeck, Ludger / Schmidt, Wolfgang Modeling Default Dependence with Threshold Models	2003
40.	Balthasar, Daniel / Cremers, Heinz / Schmidt, Michael Portfoliooptimierung mit Hedge Fonds unter besonderer Berücksichtigung der Risikokomponente	2002
39.	Heidorn, Thomas / Kantwill, Jens Eine empirische Analyse der Spreadunterschiede von Festsatzanleihen zu Floatern im Euroraum und deren Zusammenhang zum Preis eines Credit Default Swaps	2002
38.	Böttcher, Henner / Seeger, Norbert Bilanzierung von Finanzderivaten nach HGB, EstG, IAS und US-GAAP	2003
37.	Moormann, Jürgen Terminologie und Glossar der Bankinformatik	2002
36.	Heidorn, Thomas Bewertung von Kreditprodukten und Credit Default Swaps	2001
35.	Heidorn, Thomas / Weier, Sven Einführung in die fundamentale Aktienanalyse	2001
34.	Seeger, Norbert International Accounting Standards (IAS)	2001
33.	Moormann, Jürgen / Stehling, Frank Strategic Positioning of E-Commerce Business Models in the Portfolio of Corporate Banking	2001
32.	Sokolovsky, Zbynek / Strohhecker, Jürgen Fit für den Euro, Simulationsbasierte Euro-Maßnahmenplanung für Dresdner-Bank-Geschäftsstellen	2001
31.	Roßbach, Peter Behavioral Finance - Eine Alternative zur vorherrschenden Kapitalmarkttheorie?	2001
30.	Heidorn, Thomas / Jaster, Oliver / Willeitner, Ulrich Event Risk Covenants	2001
29.	Biswas, Rita / Löchel, Horst Recent Trends in U.S. and German Banking: Convergence or Divergence?	2001
28.	Eberle, Günter Georg / Löchel, Horst Die Auswirkungen des Übergangs zum Kapitaldeckungsverfahren in der Rentenversicherung auf die Kapitalmärkte	2001
27.	Heidorn, Thomas / Klein, Hans-Dieter / Siebrecht, Frank Economic Value Added zur Prognose der Performance europäischer Aktien	2000
26.	Cremers, Heinz Konvergenz der binomialen Optionspreismodelle gegen das Modell von Black/Scholes/Merton	2000
25.	Löchel, Horst Die ökonomischen Dimensionen der 'New Economy'	2000
24.	Frank, Axel / Moormann, Jürgen Grenzen des Outsourcing: Eine Exploration am Beispiel von Direktbanken	2000

34

23.	Heidorn, Thomas / Schmidt, Peter / Seiler, Stefan Neue Möglichkeiten durch die Namensaktie	2000
22.	Böger, Andreas / Heidorn, Thomas / Graf Waldstein, Philipp Hybrides Kernkapital für Kreditinstitute	2000
21.	Heidorn, Thomas Entscheidungsorientierte Mindestmargenkalkulation	2000
20.	Wolf, Birgit Die Eigenmittelkonzeption des § 10 KWG	2000
19.	Cremers, Heinz / Robé, Sophie / Thiele, Dirk Beta als Risikomaß - Eine Untersuchung am europäischen Aktienmarkt	2000
18.	Cremers, Heinz Optionspreisbestimmung	1999
17.	Cremers, Heinz Value at Risk-Konzepte für Marktrisiken	1999
16.	Chevalier, Pierre / Heidorn, Thomas / Rütze, Merle Gründung einer deutschen Strombörse für Elektrizitätsderivate	1999
15.	Deister, Daniel / Ehrlicher, Sven / Heidorn, Thomas CatBonds	1999
14.	Jochum, Eduard Hoshin Kanri / Management by Policy (MbP)	1999
13.	Heidorn, Thomas Kreditderivate	1999
12.	Heidorn, Thomas Kreditrisiko (CreditMetrics)	1999
11.	Moormann, Jürgen Terminologie und Glossar der Bankinformatik	1999
10.	Löchel, Horst The EMU and the Theory of Optimum Currency Areas	1998
09.	Löchel, Horst Die Geldpolitik im Währungsraum des Euro	1998
08.	Heidorn, Thomas / Hund, Jürgen Die Umstellung auf die Stückaktie für deutsche Aktiengesellschaften	1998
07.	Moormann, Jürgen Stand und Perspektiven der Informationsverarbeitung in Banken	1998
06.	Heidorn, Thomas / Schmidt, Wolfgang LIBOR in Arrears	1998
05.	Jahresbericht 1997	1998
04.	Ecker, Thomas / Moormann, Jürgen Die Bank als Betreiberin einer elektronischen Shopping-Mall	1997
03.	Jahresbericht 1996	1997
02.	Cremers, Heinz / Schwarz, Willi Interpolation of Discount Factors	1996
01.	Moormann, Jürgen Lean Reporting und Führungsinformationssysteme bei deutschen Finanzdienstleistern	1995

FRANKFURT SCHOOL / HFB - WORKING PAPER SERIES CENTRE FOR PRACTICAL QUANTITATIVE FINANCE

No.	Author/Title	Year
27.	Detering, Nils / Weber, Andreas / Wystup, Uwe Return distributions of equity-linked retirement plans	2010
26.	Veiga, Carlos / Wystup, Uwe Ratings of Structured Products and Issuers' Commitments	2010
25.	Beyna, Ingo / Wystup, Uwe On the Calibration of the Chevette. Interest Rate Model	2010

24.	Scholz, Peter / Walther, Ursula Investment Certificates under German Taxation. Benefit or Burden for Structured Products' Performance	2010
23.	Esquível, Manuel L. / Veiga, Carlos / Wystup, Uwe Unifying Exotic Option Closed Formulas	2010
22.	Packham, Natalie / Schlögl, Lutz / Schmidt, Wolfgang M. Credit gap risk in a first passage time model with jumps	2009
21.	Packham, Natalie / Schlögl, Lutz / Schmidt, Wolfgang M. Credit dynamics in a first passage time model with jumps	2009
20.	Reiswich, Dimitri / Wystup, Uwe FX Volatility Smile Construction	2009
19.	Reiswich, Dimitri / Tompkins, Robert Potential PCA Interpretation Problems for Volatility Smile Dynamics	2009
18.	Keller-Ressel, Martin / Kilin, Fiodar Forward-Start Options in the Barndorff-Nielsen-Shephard Model	2008
17.	Griebsch, Susanne / Wystup, Uwe On the Valuation of Fader and Discrete Barrier Options in Heston's Stochastic Volatility Model	2008
16.	Veiga, Carlos / Wystup, Uwe Closed Formula for Options with Discrete Dividends and its Derivatives	2008
15.	Packham, Natalie / Schmidt, Wolfgang Latin hypercube sampling with dependence and applications in finance	2008
14.	Hakala, Jürgen / Wystup, Uwe FX Basket Options	2008
13.	Weber, Andreas / Wystup, Uwe Vergleich von Anlagestrategien bei Riesterrenten ohne Berücksichtigung von Gebühren. Eine Simulationsstudie zur Verteilung der Renditen	2008
12.	Weber, Andreas / Wystup, Uwe Riesterrente im Vergleich. Eine Simulationsstudie zur Verteilung der Renditen	2008
11.	Wystup, Uwe Vanna-Volga Pricing	2008
10.	Wystup, Uwe Foreign Exchange Quanto Options	2008
09.	Wystup, Uwe Foreign Exchange Symmetries	2008
08.	Becker, Christoph / Wystup, Uwe Was kostet eine Garantie? Ein statistischer Vergleich der Rendite von langfristigen Anlagen	2008
07.	Schmidt, Wolfgang Default Swaps and Hedging Credit Baskets	2007
06.	Kilin, Fiodar Accelerating the Calibration of Stochastic Volatility Models	2007
05.	Griebsch, Susanne/ Kühn, Christoph / Wystup, Uwe Instalment Options: A Closed-Form Solution and the Limiting Case	2007
04.	Boenkost, Wolfram / Schmidt, Wolfgang M. Interest Rate Convexity and the Volatility Smile	2006
03.	Becker, Christoph/ Wystup, Uwe On the Cost of Delayed Currency Fixing Announcements	2005
02.	Boenkost, Wolfram / Schmidt, Wolfgang M. Cross currency swap valuation	2004
01.	Wallner, Christian / Wystup, Uwe Efficient Computation of Option Price Sensitivities for Options of American Style	2004

HFB – SONDERARBEITSBERICHTE DER HFB - BUSINESS SCHOOL OF FINANCE & MANAGEMENT

No.	Author/Title	Year
01.	Nicole Kahmer / Jürgen Moormann	
	Studie zur Ausrichtung von Banken an Kundenprozessen am Beispiel des Internet	
	(Preis: € 120,)	2003

Printed edition: € 25.00 + € 2.50 shipping

Download:

Working Paper: http://www.frankfurtschool.de/content/de/research/publications/list_of_publication/list_of_publication CPQF: http://www.frankfurt-school.de/content/de/cpqf/research_publications.html

Order address / contact

Frankfurt School of Finance & Management Sonnemannstr. 9–11 ■ D–60314 Frankfurt/M. ■ Germany Phone: +49(0)69154008-734 • Fax: +49(0)69154008-728

eMail: e.lahdensuu@fs.de Further information about Frankfurt School of Finance & Management may be obtained at: http://www.fs.de