RESEARCH INSTITUTE OF
INDUSTRIAL ECONOMICS

IFN Working Paper No. 768, 2008

Globalization, Transparency and Economic Growth: The Vulnerability of Chinese Firms to Macroeconomic Shocks

Lars Oxelheim

Research Institute of Industrial Economics
P.O. Box 55665
SE-102 15 Stockholm, Sweden
info@ifn.se
www.ifn.se

2009-06-02
Forthcoming in *Journal of Asian Economics*

Globalization, Transparency and Economic Growth: The Vulnerability of Chinese Firms to Macroeconomic Shocks

Lars Oxelheim

Lund Institute of Economic Research
Lund University, P.O.Box 7080, 220 07 Lund, Sweden
E-mail: Lars.Oxelheim@telia.com

and

The Research Institute of Industrial Economics, P.O. Box 55665, 102 15 Stockholm, Sweden
E-mail: Lars.Oxelheim@ifn.se

Abstract

The process of globalization encompasses economic and financial integration. The abolition of capital controls and the dismantling of barriers of different kinds will expose previously sheltered companies to shocks on the global economic arena. Policy-makers in already globalized countries have learned that market participants should be prepared in due time to meet the new exposure to fluctuating rates of exchange, interest and inflation. China has recently adopted a version of the International Financial Reporting Standards (IFRS) in an effort to improve the quality of information available for risk management and for pricing of risk. This paper analyzes the gains in transparency from the implementation of IFRS in Europe as of January 2005 and reports no improvements in regard to the macroeconomic impact on firms. Based on this experience, improvements for Chinese adoption are suggested. The paper presents a framework for how to understand and measure the impact of different scenarios on corporate performance. It also elaborates on how to communicate the macroeconomic effects to external stakeholders of the firm in a way that should foster further economic growth in China.

Key words: International Financial Reporting Standards, transparency, economic growth, macroeconomic impact, globalization

JEL: E22, E32, E44, F15, F23, F37, G18, G32, L25, M21, M48

Financial support from the Marianne and Marcus Wallenberg Foundation is gratefully acknowledged.

Globalization, Transparency and Economic Growth: The Vulnerability of Chinese Firms to Macroeconomic Shocks

1. Introduction

Globalization involves economic and financial integration. The abolition of capital controls and the dismantling of barriers has exposed previously sheltered Chinese companies to global economic shocks. These firms' first taste of globalization will materialize in the aftermath of fluctuating rates of exchange, interest and inflation. Policy-makers in globalized countries, however, have already learned that market participants should be made prepared to meet the new exposure to macroeconomic variables in due time, prior to the dismantling of capital controls (Oxelheim, 1996). Some market actors will require education and guidance in order to weather the new situation. The quality of the information available for assessment and pricing of risk should be improved. Uncertainty about the impact of macroeconomic fluctuations on corporate performance will leave managers, investors and politicians confused. The price of this confusion is an increased cost of capital and a lower level of investment on a national level than it would otherwise obtain (Oxelheim, 2006).

China has recently adopted a version of the International Financial Reporting Standards (IFRS) in an effort to improve the quality of information available for the management and pricing of risk. Yet not enough time has passed to make an empirical analysis of its success. In order to gain some guidance on the potential success of China's recent IFRS, however, this paper analyzes the implementation of IFRS in Europe as of January 2005. Based on a reported lack of success considered together with China's current phase of transition, we claim that Chinese implementation will necessitate harsher requirements on disclosure within the IFRS framework. We present a new framework for how to understand and measure the impact of different scenarios on corporate performance. We also elaborate on how to communicate the macroeconomic effects to external stakeholders of the firm in order to increase transparency and foster further economic growth in China. While the analysis will focus on corporate transparency, the issue of the transparency of local and national policies is discussed as policy-makers form the macroeconomic playing field.

Although the terms *transparency* and *economic growth* occur frequently in any discussion of political economy, research on the link between these two phenomena is limited to only a few published studies. Interest in economic growth has a long history, while the concept of transparency has only recently appeared in both public debate and research. As an example of the increasing scientific interest in transparency, only 32 instances of the word appeared in working papers published by the National Bureau of Economic Research during 1974-2005, the first only occurring in 1993 and most appearing in working papers published after 2000 (Forssbaeck & Oxelheim, 2006). Usage increased parallel with the development of information technology.

While the meaning of the word can vary from one situation to the next, that lack of transparency involves information asymmetry is common to all. In the political context, this asymmetry often entails a difficulty in understanding current policy and an uncertainty as to what the next step may be. The price for this lack of transparency occurs as a political risk premium, which can be translated quantitatively into unrealized growth. Consequently, increased transparency in policy-making results in reduced political risk, a lower risk premium as part of the cost of capital, higher investment and increased economic growth for society as a whole (Oxelheim, 1996). Here, political risk is viewed as a macroeconomic phenomenon that affects all parties, although vulnerability may vary from one enterprise to the next.

Yet in exposure to political risk, not only vulnerability but also the risk itself can be firm-specific. This exposure occurs when politicians intervene with programs tailored to the specific needs of enterprises, aimed for instance at attracting a specific enterprise to the country. The politicians' conduct generates an uncertainty among competitors as to who is next in line to receive such treatment, resulting in potentially radical changes in a company's competitive circumstances (Oxelheim, 2008).

In the business world, lack of transparency often transpires in communications between those who hold special insight into a company's dealings (insiders) and those who have interests at stake in a company but otherwise lack insight (outsiders). The theory on the supply and demand for company-specific information, however, is weak (Bushman et al, 2004), and this criticism applies to an even greater degree when supply and demand is linked to economic growth (Oxelheim, 2006). Basically, access to information is regarded as a central determinant in effective decisions on resource allocation and growth (Levine, 1997).

The cost of the lack of corporate transparency appears as an agency cost and risk premium that result in a lower valuation of the company, a higher cost of capital and lower investment than it would otherwise obtain. Individual companies use various methods—including international cross-listing and/or internationalization of the board of directors—to improve their transparency relative to their competitors and lower their global cost of capital in the process (Oxelheim, 2001, Reese & Weisbach, 2002, Oxelheim & Randöy, 2003). Small and medium-size enterprises (SMEs) in developed countries as well as most enterprises in developing countries often cannot work in this manner. Politicians have therefore an interest in reducing information asymmetry at both the national and the regional level. They can work to improve transparency through the national or regional regulatory framework; if other aspects do not change, this will in turn lead to higher growth. The introduction of International Financial Reporting Standards in the EU in 2005 and in China in 2007 has been such an attempt. As a step towards improved transparency, all listed consolidated companies (with very few exceptions) in the EU and China had to change their accounting practices to conform to IFRS.

This paper analyzes optimal transparency for companies in transitional countries in general and in China in particular. The combination of the current financial crisis with the opening up of China's capital account within its new economic role makes Chinese development essential for global prosperity. Like most politicians in transitional countries, Chinese politicians are assumed to be inexperienced in "reading" corporate vulnerability to macro policy changes under changing institutional settings. Indeed, this is why transparency is so important. To what extent can the current Chinese IFRS improve transparency, thereby lowering costs due to information asymmetry, improving costs of capital, increasing investment and, in turn, spurring higher economic growth? The full and immediate implementation of IFRS in China is exceptional, deviating from a deregulation process that has been experimental in design and gradual in terms of its sequencing (following the old Chinese proverb "for unfamiliar rivers, touching the stone at the river bed is the best strategy to cross the river", Child 2001). Yet, since there is currently no information regarding the success of the IFRS implementation in China, an empirical analysis of China has to be secondary to an analogous study of the EU's implementation. The paper focuses on a specific phenomenon: how much of the company's performance is intrinsic rather than the result of macroeconomic fluctuations during the accounting period. Apart from the many different approaches of accounting theory, this paper describes the communication of significant information for understanding a company's intrinsic competitiveness and future income generating possibilities.

The paper is organized in the following way. Section 2 discusses the concept of optimal corporate transparency. In Section 3, Chinese accounting standards are presented.

Section 4 addresses the link between transparency of the macroeconomic impact on corporate performance and corporate competitiveness. In Section 5, transparency is discussed in terms of accounting standards. Section 6 introduces the MUST-analysis and discusses outsider stakeholders' information need. Section 7 concludes with remarks on the link between transparency of Chinese firms and the economic growth in China.

2. Optimal corporate transparency

A lack of transparency was often cited as the prime explanation for the many large corporate scandals (Enron, Tyco, WorldCom, and Parmalat) in the early 2000s. Some regulatory steps were undertaken. However, these actions did not hinder the current financial crisis; having reached incredible proportions, the turmoil has caused politicians and regulators worldwide to call for more transparency. For example in February 2009, the new US administration under President Barack Obama unveiled a bank stress testing program. The results for 19 major US banks were reported in May 2009 as a means to regain trust in the banking system via increased transparency. What then is the adequate way to improve transparency in the corporate sector?

In the debate on lack of transparency, the implicit assumption has been that *the more information disclosed by the company, the better.* Yet just how reasonable such an assumption is can be seriously questioned (Morris & Shin, 2002). Before the receiver is drowned in information and left utterly confused, there exists a point of *optimal transparency* (Oxelheim, 2006). In this case, "optimal" refers to the receiver of information, i.e. the outside stakeholders' interest, which we can represent here as the shareholder without insight.

However, "optimal" can also apply to the company's supply of information—if too much information is disclosed, competitors could obtain sensitive details connected to the company's profit opportunities (Verrecchia, 2001). "Optimal" as seen from these two perspectives can converge in a longer-term perspective. The external shareholder has to revise his/her view of the demand for information bearing in mind the damage that sensitive information can cause the company.

In a third perspective on “optimal” transparency, management may have the degree of transparency reflect its own interests. The theory of corporate finance and corporate governance is very cynical in this respect, finding numerous reasons for management’s optimal information disclosure to deviate from both of the above-mentioned perspectives (Jensen & Murphy, 1990). Corporate scandals throughout the world have also resulted in recommendations and legislation, such as the Sarbanes-Oxley Act in the US and the EU Transparency Directive. The implementation of IFRS is expected to contribute to increased transparency in both Europe and China.

3. Chinese accounting standards

The Chinese accounting standards date back to 1992, when the Ministry of Finance (MoF) of People’s Republic of China (PRC) launched a completely new set of standards for domestic companies, known as “Accounting Standards for Business Enterprises” (ASBE). Prior to these reforms, China’s accounting rules had been adapted to a planned economy system similar to that found in Eastern Europe. The rapid growth of the Chinese economy since the Open Door Policy coupled with international investment interest has pressured the Chinese authorities to reform the earlier standards and adapt them to market-driven economic forces.

Although the first ASBE were very general—leaving many gaps compared to the International Accounting Standards (IAS)—they marked a new era for corporate transparency and the accounting profession in China. The authorities realized that if a new set of standards were applied to Chinese companies, international transactions would stand to gain and would potentially increase. Similarly, higher quality financial statements would improve the ability to evaluate managers' performance, a significant problem during China's transition from state control to a market economy.

Despite these first reforms, according to Ball, Robin and Wu (2001), the quality of domestic financial statements was insufficient for international investors for the following reasons:

- While the ASBE are generally based on IAS, they are different in several important aspects. The ABSE ignore the rule that inventories are valued at either cost or market price and do not report if the value of land, buildings and equipment becomes non-recoverable.

- Under the first ASBE, international users were not assured that financial statements would conform to internationally acceptable standards, nor did they receive an indication of the extent of any divergence.

- The financial statements of domestic companies reporting under the first ASBE were audited by domestic audit firms whose independence had been questioned. The staff that worked in the audit firms were former employees of the companies they had to audit; their relationship with and obligations to former colleagues in their client companies made them anything but unbiased and neutral.

Due to these quality gaps in the first ASBE, the MoF launched a second set of accounting standards, which were gradually developed from 1997 to 2001. Called "Generally Accepted Accounting Practice in People's Republic of China" (GAAP PRC), they were developed by the newly established "China Accounting Standards Committee (CASC)," an advisory body under the MoF. The GAAP PRC consisted of 16 final accounting standards that gave a fuller picture of a company's situation in comparison to the first ASBE. However, this new set of standards did not oblige companies to include any kind of information related to macroeconomic exposures, risk management policy, or hedging positions. Despite the higher quality and better specificity of standards compared to the first ASBE, the GAAP PRC still differed substantially from the IRFS and IAS. The MoF had a lot of work ahead of it before Chinese accounting standards could be considered comparable to international standards (Deloitte, 2006a).

However, it was not long after the issue of the last GAAP PRC standard that the CASC took another step in the right direction and launched the third generation of accounting standards in China. On February 15, 2006, the MoF and the "International Accounting Standards Board" (IASB) announced that the Chinese accounting standards would agree even further with the IFRS. In that vein, it issued a new generation of ASBEs, consisting of a new Basic Standard and 38 Specific ASBEs (China-Orbit 2008). The new ASBE embrace nearly all of the topics under the current IFRS literature; as of January 1, 2007, it became mandatory for all listed Chinese enterprises. Instead of being phased in gradually over time as were many other countries' adoption of standardized procedures, China adopted the main standards in essentially one go.

Specifically, the IAS 1 is very similar in content to its counterpart in ABSE (ABSE Basic Standard and ASBE 30). The only notable difference lies in the ABSE's prudence condition. The ABSE specifies that an enterprise shall exercise prudence in the recognition, measurement and reporting of transactions or events for accounting purposes. It shall not overstate assets or income nor understate liabilities or expenses. However, under the IASB's framework for the preparation and presentation of Financial Statements, prudence is only one of the qualitative characteristics of financial statements. The other is the neutrality of the statements, a condition not included in the new ASBE (Deloitte, 2006a).

Compared to the old GAAP PRC, there are two important features related to risk management that the new ABSE include. First, the new ABSE specify that comparative information shall be disclosed in respect to the previous period for all amounts reported in the financial statements. Second, the enterprise shall prepare a statement of changes in equity and present minority interests separately, instead of preparing a statement of profit appropriation only. Both these conditions compel firms to describe a company's situation in more detail compared to what was required under GAAP PRC (Deloitte, 2006b).

There are indeed other standards in the new ASBE concerning macroeconomic exposure and risk management accounting that were excluded earlier. These encompass "Foreign Currency Translation (Standard 19)", "Recognition and Measurement of Financial Instruments (Standard 22)", "Direct Insurance Contracts (Standard 25)", "Segment Reporting (Standard 35)" and "Presentation of Financial Instruments (Standard 37)". Taken together, all of these standards necessitate the company to give shareholders and investors a broader description of its position in its sector and geographical area (Standard 35), the currency risk that the company is exposed to (Standard 19), the risk management policies/strategies that the company has adopted and the financial instruments it uses in order to hedge against those risks (Standards 22 and 37) and the different insurance contracts it uses as a compliment in hedging, where new risks are introduced and defined (Standard 25) (Deloitte, 2006a). More specifically, Standards 22 and 37 are revolutionary within Chinese accounting because they oblige companies for the first time to define their risk management policies, to classify and describe the different financial instruments they use in their hedging strategies, and to calculate the value of these instruments (Deloitte, 2006a).

In regard to its treatment of macroeconomic fluctuations, the Chinese version of IFRS does not deviate from the European version. Hence, it is possible to evaluate its potential success based on what has been concluded about Europe's own implementation. We should keep in mind, however, that Chinese actors are not trained in interpreting and reacting to the new risks that follow the dismantling of different capital controls. China's recent admission of global economic influences makes the demand for information about macroeconomic impact on Chinese corporate performance even bigger than in already globalized countries.

4. Transparency and corporate competitiveness

Uncertainty concerning a company's intrinsic or sustainable performance can have many sources and can exist among many categories of interested parties. As mentioned in the introduction, we focus here on the uncertainty arising from changes in a company's macroeconomic environment. When these effects on performance are not clarified or filtered out, exchange rates, interest rates or price developments with positive (negative) effects for a company may inflate (lower) its performance in a way that falsely signals a *company's competitiveness*.

With regard to the various categories of interested parties, we distinguish those who have insight into company operations and thus have information to report—such as the CEO, senior management, the board of directors and its chairman—from those who lack insight and require information—such as analysts, pension fund managers equity investors and politicians. In order to simplify the discussion, the management of the company will represent the *supply of* company-specific information, and the shareholders (without insight) will represent the *demand for* company-specific information.

Uncertainty about the impact of macroeconomic fluctuations on corporate performance and competitiveness will be detailed here as a communication problem between the management and the shareholders of a firm. In the worst case, uncertainty could even apply to the management and the board if they have failed to devote sufficient attention and effort to analyzing the distorting impact of macroeconomic factors on the company's actual performance and competitiveness. In this case—which unfortunately seems to occur far too often—there is not much to report to shareholders. At best, a warning can be issued about what effects may occur. At worst, reports may (unintentionally) mislead shareholders.

In today's economically and financially integrated world, it is difficult to pinpoint an example of a company *not* impacted by global economic developments. After the abolition of Chinese capital controls, there will be no excuse for a Chinese company not having a suitable analysis of the interplay between the company and its macroeconomic environment. Financial theory is cynical, and points to many possibilities for management to use effects of macroeconomic fluctuations to its own advantage. Regardless of the communication strategy, it is equivalent to a breach of duty if a chairman of the (supervisory) board fails to ask management for a detailed analysis of the company's performance—with macroeconomic fluctuations filtered out. In other words, every company should have comprehensive data to report.

5. Transparency as expressed by accounting standards

Let as assume that management has made a suitable analysis. How much of its outcome should the company then pass on to shareholders through press releases and documentation? What information is the "informed" shareholder seeking? What should be regarded as "optimal transparency" in information disclosed by a company to shareholders? The implementation of IFRS in Europe as well as in China can be regarded as representing a proxy for the demand side of this exchange of information. In fact, a break with tradition concerning the demand for information on the impact of macroeconomic factors can be discerned in Europe in the 1997 revision of the International Accounting Standard 1. Paragraph 8 of this standard *encourages* companies to present an analysis of the impact of its external operating environment on its performance. The standard advises companies to pin-point these factors and determines how large their effects would be on performance; moreover, companies are enjoined to describe what strategy the company will use to handle the risks attached to these factors. As is often the case with rules and recommendations strongly influenced by lobby groups, the results were less impressive than intended.

The fact that a quantitative analysis of the effects was not explicitly required explains the weak response to the implementation of this standard in terms of improved transparency. A study of the global automotive and paper industries shows that the "recommendations" in most cases merely resulted in explanations of the sweeping type: "unfavourable" development of important exchange rates has had a negative impact on performance (Oxelheim, 2003). There was at best an *ad hoc* mention of one or two macroeconomic variables. As far as the magnitude of the impact on performance was concerned—in those few cases when variables were actually mentioned—no figures were provided, describing only that the effect would be large, small or negligible. To merely mention the variables as various categories and then speak of large or small effects can be seen as no more than an "excuse" for a poor result, providing no information-value for a shareholder interested in the prospects of the firm. In summary, none of the 62 companies in the study provided information that would enable an outside shareholder to draw conclusions as to the "sustainability" of its performance—after the impact of macroeconomic fluctuations has been filtered out.

5.1 The potential impact of IFRS/IAS 1

IAS 1, as formulated in IFRS and implemented in 2005 within the EU and in 2007 in China, contain similar “recommendations” as above, though they are weaker still. Companies are no longer explicitly *encouraged* to provide information; instead, Paragraph 9 (comparable with Paragraph 8 of IAS 1997 rev.) merely suggests the practice by mentioning that many companies provide the information detailed above. On the other hand, Paragraph 116 sets clear *requirements* for this information. The company must impart details of its most important assumptions for the future and describe other factors of uncertainty which may be of significance for assets and liabilities in coming years. Paragraphs 117-124 provide more detailed guidance but also give possibilities for exceptions. Paragraph 120 should be seen as the most important addition. It specifies that the information referred to in Paragraph 116 must be provided in a manner that assists the reader of financial statements in understanding management's assessment of the future, its view of various sources of uncertainty in the economy and its evaluation of the impact. Expectations of improved information distribution become somewhat deflated in Paragraph 121, however, which maintains that it is not necessary to provide budget information or forecasts as part of the requirements set in Paragraph 116. The weakness remains that there is no explicit requirement for *quantitative* assessment of the effects.

5.2 What has IFRS implied for the transparency of European firms?

Due to the IFRS’ short period of implementation in China, we are forced to base our discussion about the appropriate form to foster optimal transparency on an evaluation of the success in Europe. This also constitutes a rather short period, however.

In our study of the 80 largest European firms, we find that no single firm provided information in 2007 that helped the outsider stakeholder to evaluate the intrinsic performance of the firm after having considered (filtered out) the impact of changes in the macroeconomic environment. In terms of the three major pillars of the IFRS—the description of a firm's most relevant macroeconomic variables, their impact, and a detailing of the firm's policy for managing them—the following changes were found in the 80 European firms between 2000 (i.e. prior to the first outline of IFRS) and 2007 (i.e. after the introduction of IFRS). The study is based on annual accounts for 2001 and 2006.

In analyzing the information provided by the annual reports, we use the following four categories (two non-quantitative and two quantitative) to shed additional light on the current status of corporate transparency:

1. *Non-quantitative response 1:* No specification of macroeconomic variables, the magnitude of their influence, or strategies for handling them.
2. *Non-quantitative response 2:* The variables, the magnitude of their influence and the strategies are given in general terms but without much detailed specification (i.e., the reporting continues in the way that has become most common today). Typical explanations are: "The results for the period have been influenced negatively by currency fluctuations" or "The lower interest rate levels have had a positive influence on the result."
3. *Quantitative response 1:* The giving of some, but not all, information about the most significant variables, the magnitude of their influence, and the appropriate strategies for handling these variables. This alternative is undeniably a step in the right direction, as long as the information provided is correct. But if only one coefficient is given, the coefficient for this variable should be estimated by considering its relationship to the other non-given relevant variables to be correct. Moreover, in case there are more than one relevant (not reported) variable, the information provided under this alternative is

insufficient as a basis for weeding out the noise of historical profits and assessing the true performance prospects of the company.

4. *Quantitative response 2:* The most satisfactory response to the standards proposed in IAS 1 paragraph 9 is a complete specification of significant macroeconomic variables, the sensitivity coefficients for these variables estimated in a multivariate framework, and the company's strategy for handling fluctuations in these variables in the past and in the future. This information release is congruent with the information content of the output of a MUST analysis, which is briefly described in the next section.

The analysis shows that more than half of the firms (44 out of 80) improved their transparency (moving to a higher category as stated above) by identifying in their annual report the *most important macroeconomic variables*. This occurred, however, on a partial basis. Since 44 out of 80 already reported these variables, 85% firms were partially transparent about which variables they are exposed to. 4% (3 out of 80) decreased their transparency over the period.

Yet improvement is low in terms of the disclosure of the *impact of macroeconomic variables* on corporate performance. Only 26% of the firms (21 out of 80) moved from no useful information (1 or 2) to partial information (3). Another 11% (9 of 80 firms) already provided partial information prior to 2000. Hence, only about 1/3 of the firms provided a (partial) measure of their vulnerability to changes in their macroeconomic environment. 5% decreased their transparency over the period.

Almost 50% (37 out of 80) of the firms improved (from no useful information to partial) their disclosure of *strategies for handling macroeconomic variables.* 24% already had partial disclosure prior to 2000, which means that 70% of the firms provided partial (3) information in 2007. 4% (3 out of 80) decreased their transparency over the period.

It appears (McNemar tests) that firms improve, providing partial (3) though not full information (4) about relevant macroeconomic variables and strategies for handling these variables. However, no such significant support is found for improved transparency regarding macroeconomic impact on the firm. Full disclosure, i.e. information release that allows an outsider stakeholder to understand how intrinsic competitiveness develops in a turbulent macroeconomic environment, was not provided by any of the 80 firms in the sample. Moreover, when partial information was provided, it was always uncertain whether this information was generated in a multivariate context or estimated in a uni-variate context that disregards the interdependence of macroeconomic variable. To sum up, the analysis of the impact of IFRS in Europe shows no improvement in the transparency of firms' vulnerability to macroeconomic shocks. It remains at an unsatisfactory low level. Because China is in transition and therefore requires a high level of transparency, we argue in favor of a stronger version of IFRS.

5.3 Will the supply of information match the demand under IFRS?

What does optimal transparency look like from an outsider shareholder's viewpoint? For the shareholder, optimal transparency involves understanding intrinsic or sustainable performance, that is to say performance that remains after the impact of macroeconomic fluctuations is filtered out. To achieve this in China—and to meet the explicit requirements of inter-temporal comparability and input in Standards 22 and 37—a more demanding version of the original IAS 1 formulation is required.

Accordingly, a clear identification of which macroeconomic variables are most significant is needed. An outside shareholder can only obtain this information by means of his or her own fundamental analysis of the company's operations. In most cases, however, links exist between different parts of the firm that in turn reduce the possibility of an outside shareholder effectively carrying out this analysis without support from the company.

After the most important variables are made available, the shareholder then desires the coefficients that describe what impact an unexpected change to the respective variable would have on performance. To meet this demand, the company must execute an analysis to make the coefficients available in a format in which they are free of effects connected to other identified macroeconomic variables. Armed with this knowledge, the outsider shareholder can then form an opinion about the magnitude of the risk exposure of the firm. Finally, the shareholder wants information on what risk policy the company practices and intends to practice.

The question remains whether IFRS and IAS 1 in their current form can lead to optimal transparency in China with regard to the significance of macroeconomic variables for the development of companies' "sustainable" profit and intrinsic competitiveness. Will companies regard it optimal to satisfy the outside shareholder's need for information? It would be doubtless too sensitive in some sectors to provide complete information on vulnerability to changes in the macroeconomic environment. This could, for example, apply to companies with standard products and world market prices, i.e. companies that have very limited possibilities of compensating for unexpected macroeconomic fluctuations (pass-through) by changing their product prices.

In addition to individual companies' decisions, the legislator's dilemma—that many interest groups must approve legislation—also poses an obstacle. Large companies will likely leverage their influence and negotiate a transparency level that is advantageous for companies rather than shareholders. A more conspiratorial interpretation exists in addition to this "soft" interpretation of power controlling legislation; it emphasizes the principal-agent problem, in which politicians, as agents, have an interest in retaining power in order to gain personal advantage by so doing (Fisman, 2001). This strand of literature points out how a government may have a stake in maintaining a weak accounting culture. Apart from the conspiratorial interpretation, other considerations have resulted in making IFRS a collection of standards that do not reflect optimal transparency from the shareholder’s perspective. When applied in China, it would be necessary to improve relevant parts of IFRS (Paragraph 9 and 116 of IAS 1) by adding an explicit mandatory requirement of quantitative information.

6. MUST analysis and shareholder’ information needs

The information in demand by shareholders—as expressed by IFRS but in quantitative form—should be included in the management’s own decision support as the outcome of a Macroeconomic Uncertainty Strategy (MUST) analysis (Oxelheim and Wihlborg, 2008). The MUST analysis provides exactly the information needed by shareholders to assess the company’s future performance, its value, company management achievements, and whether these achievements deserve to be rewarded with bonuses.

6.1 MUST-analysis and availability of information

The MUST-analysis begins with a fundamental analysis through which relevant macroeconomic variables for the individual firm are identified as a response to a set of questions such as:

1) Where does the company produce?

2) Where does it purchase its inputs from?

3) On what markets does the company sell its goods and services?

4) Which are the company’s most important competitors?

5) Where do these competitors produce?

6) Where do they purchase their inputs from?

7) On what markets do these competitors sell?

8) In what currencies are the company's liabilities and financial investments?

Applying a comparable set of questions to major competitors is an important part of the fundamental analysis. Far too many companies only list the currencies appearing in their own accounts, thereby ignoring the indirect effects of macroeconomic variables occurring because of their competitors. Another important dimension of the analysis concerns the impact on demand resulting from interest rate fluctuations; the latter should not only be considered in their effect on borrowing cost or return on financial investments. Most companies have a clear commercial interest rate exposure without paying it any attention!

Once all variables exerting a potential influence on corporate performance have been identified, the next step is to examine them to discover which have the greatest impact. Identifying the most important variables within the framework of a multivariate technique constitutes a vital part of the MUST-analysis; it is indeed crucial to take into consideration the fact that exchange rate changes, interest rate changes and price changes (inflation) are interrelated through a number of equilibrium relationships. Applying a multiple regression analysis enables us to obtain sensitivity coefficients for partial impact on performance. These coefficients will tell us the impact on performance of an unexpected one percent change in each of the variables identified, i.e. the impact net of the effect of other variables identified.

With the help of this procedure, management can "filter out" temporary influences from the macroeconomic environment. What remains after filtering is the measure which should be used in the company's decision-making process—and which comprises an important part of the shareholders' information needs.

A MUST-analysis also helps identify the company’s exposure to macroeconomic risks by indicating the magnitude of macroeconomic influences and thereby the uncertainty concerning their future impact. This can spotlight the need for a risk management strategy. Traditional exposure coefficients are static and limited and can be directly misleading in the decision-making process. A MUST-analysis contributes therefore to improved risk awareness by making a collection of exposure coefficients available (those mentioned above), which can simply be converted to hedging contracts on financial markets. Reporting these coefficients assists the shareholder in not only filtering reported results and undertaking scenario analyses, but also in understanding the company’s risk exposure.

There may be a shortage of relevant data for some firms, making a multivariate analysis impossible. These problems occur in companies that have just begun doing business, for example, or among those that have recently changed their business platform. However, the existence of estimation problems does not imply that the firm must revert to traditional ways of providing no information at all. Rather, they should follow the framework outlined here and furnish stakeholders with a report of macroeconomic influences on performance by having sensitivity coefficients assessed and updated by means of internally available information. Scenario analysis may be one way to move forward until enough data for a multivariate analysis is available.

6.2 Optimal transparency for shareholders – an example

External reporting that delivers the outcome of a MUST-analysis fulfils the demand for optimal transparency from the shareholders’ perspective. The quantification is also necessary for the IFRS to have an impact in China. The following is a simple example showing what this part of the external reporting should include. The example contains a forecast for performance over the next period, but is equally illustrative for a situation without a forecast.

The fundamental analysis, described briefly above, has resulted in a limited number of macroeconomic variables that could potentially impact a Chinese firm's performance. The three most important variables in our example are: the RMB/Euro exchange rate, short-term interest rate in Japan, and producer prices in the US. A depreciation of the Renminbi versus the Euro would have a positive impact on the Chinese company's performance, just as an increase in interest rates would reduce performance. Higher product prices in the US would have a positive impact on the performance of the company.

The quantitative part of the MUST-analysis has also provided us with sensitivity/vulnerability coefficients for each of these three individual variables. The coefficients, which are estimated in a multivariate framework, measure the change in "performance" resulting from a one percentage point unexpected change in the respective macroeconomic variable. The third column of Table 1 shows the magnitude of the coefficients.

Table 1
Example of optimal transparency with regard to the macroeconomic impact on performance

Forecast: Performance will increase next quarter by 13 percent compared to the preceding quarter. The seasonal effects represent 3 percentage points of that increase. The company's policy is not to work with hedging operations of any kind on external financial markets.		
Variables identified	Forecast based on the following assumptions	Sensitivity coefficient: one percentage point increase as compared to the anticipated change will impact the performance by
RMB/Euro	**2 %**	**2 %**
Short-term rate in Japan	**1 %**	**-3 %**
Producer prices in the US	**1 %**	**3 %**

Since we provide a forecast in this example, we need to include the assumptions used in this forecast (Column 2) as input within the framework of optimal transparency. Given the information in the table, the shareholders themselves can calculate the impact resulting from a different scenario than the one presented by management. Something may have happened which makes the management scenario obsolete; in that case; the shareholders can develop a new one.

A breakdown of the management scenario is as follows: the macroeconomic impact is expected to be [2x2 + 1x(-3) + 1x3]% = 4%. The growth assumptions inherent in the forecast are therefore [13 - 4- 3]% = 6%.

Equipped with the transparency provided by the table, shareholders can now calculate the impact of their own scenario. Our shareholder will know therefore the outcome in a scenario in which the RMB depreciates by 4 percentage points against the Euro (compared with the management's assumption of a 2 percentage depreciation), the short-term rate in Japan decreases one percentage point (compared to a 1 percentage increase) and producer prices in the US rise by 2 percentage points (compared with management's assumption of about a 1 percent increase). With the help of the sensitivity coefficients in the third column, we can calculate the impact on the outcome under the new macroeconomic assumptions. The expected performance in this new scenario would be an increase of [4x2 + (-1)x(-3) + 2x3 + 6 + 3] = 26% over the previous period.

Let us now assume that the actual increase in performance was 16% when macroeconomic developments proved to be exactly as assumed by the shareholder. When compared without further analysis to the original forecast of 13%, those extra 3 percentage points of growth would likely be interpreted as an indication of improved competitiveness. Yet since the shareholder's macroeconomic forecast proved correct, further analysis of the outcome indicated that the growth should have been 26% based on the actual development of the relevant macroeconomic variables. Hence, the company has not only missed its growth target, but has in fact experienced negative growth. Its intrinsic performance and competitiveness has dropped.

The management would therefore not enjoy the fruits of an unexpected improvement in performance—an improvement which could without closer examination justify higher bonuses, wage increases and higher dividends—but would instead be compelled to provide an explanation. There could be a simple explanation; some competitor, for example, could have carried out a strong marketing campaign during the period concerned. If no acceptable explanation is provided, however, management should be required to describe how it plans handle this signal of lowered competitiveness. Moreover, information should be given as to how the company will regain its lost competitiveness, perhaps by increasing support for product innovations and innovations in the production process, for example. Clearly, transparency of this sort gives outside interested parties a better possibility to analyze and later form an opinion about how a company is managed. Increased transparency thus paves the way for improved dialogue between the principal and the agent—shareholders and management—which should result in lower agency cost and risk premium. In addition, it furnishes politicians and regulators with insight into the effect of policy changes on large market players.

7. Concluding remarks concerning transparency, IFRS and economic growth in China

In this paper we have emphasized the need for high levels of transparency in countries in transition. Within the framework of optimal transparency, we have suggested that optimal information release reveals the impact of changes in the global macroeconomic environment to outsider stakeholders like investors, creditors and politicians. Most of these stakeholders are inexperienced in “reading” macroeconomic signals and interpreting impacts on corporate performance due to the only recent abolition of capital controls in China. Many shareholders (and their analysts still more) are no doubt tempted to conduct a MUST-analysis of their own. But it is difficult to execute this analysis without the assistance of the company; shareholders and analysts need the company to provide information such as that in Table 1 in order to carry out the analysis.

Due to the short period of IFRS implementation in China, we have evaluated the success of these standards in Europe as of January 2005. Our analysis for 2005-2007 indicates that the level of transparency concerning macroeconomic impact on corporate performance remains at a level that fails to meet the information demand of outsider stakeholders. In the best case, financial statements include a sensitivity coefficient or two. In most cases, the impact of exchange rate changes is reported as a lump sum, based on the assumption of *unchanged* exchange rates. The impact of interest rate changes on business operations goes simply unmentioned.

Seen from the perspective of an outside shareholder, the situation in Europe after a couple of years with IFRS may still seem far from optimal transparency; the question has not been given the priority by the board that it deserves, and management simply does not have more sophisticated information to report than what we currently see in financial statements. Another explanation could be that companies regard optimal transparency to be not disclosing too much of its vulnerability to competitors, a position which is by extension consistent with optimal transparency from the shareholders' perspective. In this case, the shareholders must depend upon the management not having a better understanding of developments. However, full trust of management and viewing the firm as a "black box" seem unrealistic. The lack of transparency will also in this case give rise to a risk premium and eventually to lower investments.

On a global scale, there are indications that information disclosure is moving closer to what is needed and demanded by shareholders in accordance with Table 1 above. These indicators (invigorated by the speed of development of information technology and the current financial crisis) includes: a) the implementation of IFRS and similar efforts; b) increased financial analyst competence; c) the availability of MUST-analyses and similar analytical approaches; d) an increased interest in Value Based Management (VBM), which emphasizes the need to separate the value created by temporary factors from the "sustainable" value; e) an increased demand within banks and financial institutions for more information for risk assessment in line with Basel 2; f) an increased focus on environmental scanning requiring information suitable for scenario analysis; g) increased cross-border M&As in an integrated world with higher demand for information on sensitivity to macroeconomic fluctuations; h) a greater focus on information on vulnerability to macroeconomic fluctuations for listing on international securities exchanges; and i) the new rules against selective information disclosure adopted by the Securities and Exchange Commission in October 2000, which increase the significance of presenting the impact of macroeconomic fluctuations through traditional accounting channels such as the annual report in a comprehensive format.

It is important for outside interested parties, whether they are shareholders, analysts or creditors, to understand a company's sustainable performance and thereby its competitiveness and capacity to survive. At the national level, increased transparency should be a leading concern for a country's politicians, since a more precise definition of information provision in line with our concept of optimal transparency can be expected to lead to lower agency costs and risk premiums, lower cost of capital, higher investment and higher economic growth. The recent dismantling of capital controls and the exposure to global macroeconomic forces experienced by most Chinese firms should make the transparency of macroeconomic influences an issue of major concern for Chinese regulators and politicians. Considering the

IFRS' lack of success in improving transparency about the vulnerability of European firms to macroeconomic shocks, Chinese authorities could take a lead in the transparency race by adding an explicit requirement for information in quantified form in accordance with the principles discussed above. A failure to improve the 2007 Chinese IFRS along these lines will result in inferior transparency that will, in turn, challenge future Chinese economic growth.

References

Ball, R., Robin, A., & J. S. Wu (2001). *Accounting Standards in China*. Washington: World Bank

Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2004). What Determines Corporate Transparency. *Journal of Accounting Research* 42:2, pp. 207-252.

Child, J. (2001). China and international business. In A. Rugman and T. Brewer (Eds.), *The Oxford handbook of international business.* UK: Oxford University Press.

ChinaOrbit (2008). *China: China Accounting Standards*. www.chinaorbit.com/china-economy/chinese-accounting-standards.html

China Accounting Standard Committee (2008). *China Accounting Standards*. www.extranet.casc.gov.cn/internet/internet/en/ZZWJJ/jigoujianjie.html

Deloitte (2006a). *China's New Accounting Standards, a comparison with current PRC GAAP and IFRS.* http://www.acga-asia.org/public/files/China_New_Accounting_Standards_2006_Deloitte.pdf

Deloitte (2006b). *Chinese Accounting – New Era, New Challenge*, http://www.acga-asia.org/public/files/Clara_Yu_Deloitte_Sept_2006.pdf

Deloitte (2007). IFRS in your pocket 2007. http://www.deloitte.com/dtt/cda/doc/content//IFRSs%20in%20your%20pocket%202007.pdf

Fisman, R. (2001). Estimating the Value of Political Connections. *American Economic Review* 91, pp. 1095-1102.

Forssbaeck, J. & Oxelheim, L. (2006). Transparency, Capital Formation and Economic Growth. In L. Oxelheim (ed.) *Corporate and Institutional Transparency for Economic Growth in Europe.* Oxford: Elsevier.

Jensen, M. C. & Murphy, K. J. (1990). Performance Pay and Top-Management Incentives. *Journal of Political Economy* 98, pp. 225-264.

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature* 35, pp. 688-726.

Morris, S. & Shin, H.S. (2002). Social Value of Public Information. *American Economic Review* 92:5, pp. 1521-1534.

Oxelheim, L. (1996). *Financial Markets in Transition – Globalization, Investments and Economic Growth.* London: Routledge and Thomson International Press.

Oxelheim, L. (2001). Routes to Equity Market Integration - the Interplay between Politicians, Investors and Managers. *Journal of Multinational Financial Management* 11, pp. 183-211.

Oxelheim, L. (2003). Macroeconomic Variables and Corporate Performance. *Financial Analysts Journal* 59:4, pp. 36-50.

Oxelheim, L. (red) (2006). *Corporate and Institutional Transparency for Economic Growth in Europe.* Oxford: Elsevier.

Oxelheim, L. (2008). EU-China and the non-transparent race of inward FDI. *Journal of Asian Economics* 19:4, pp 358-370.

Oxelheim, L. & Randöy, T. (2003). The Impact of Foreign Board Membership on Firm Value. *Journal of Banking and Finance* 27, pp. 2369-2392**.**

Oxelheim, L. & Wihlborg, C. (2008). *Corporate Decision-making with Macroeconomic Uncertainty.* New York: Oxford University Press.

Reese, M., & Weisbach, M. (2002). Protection of Minority Shareholder Interests, Cross-Listings in the United States, and Subsequent Equity Offerings. *Journal of Financial Economics* 66, pp. 65-104.

Verrecchia, R. (2001). Essays on Disclosure. *Journal of Accounting and Economics* 31/32, pp. 97-180.