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Global Accounting Convergence and the Potential Adoption of IFRS by the U.S. (Part I): Conceptual Underpinnings and Economic Analysis

Luzi Hail, Christian Leuz, and Peter Wysocki

SYNOPSIS: This article is Part I of a two-part series analyzing the economic and policy factors related to the potential adoption of IFRS by the United States. In this part, we develop the conceptual framework for our analysis of potential costs and benefits from IFRS adoption in the United States. Drawing on the academic literature in accounting, finance, and economics, we assess the potential impact of IFRS adoption on the quality and comparability of U.S. reporting practices, the ensuing capital market effects, and the potential costs of switching from U.S. GAAP to IFRS. We also discuss the compatibility of IFRS with the current U.S. regulatory and legal environment, as well as the possible macroeconomic effects of IFRS adoption. Our analysis shows that the decision to adopt IFRS mainly involves a cost-benefit trade-off between (1) recurring, albeit modest, comparability benefits for investors; (2) recurring future cost savings that will largely accrue to multinational companies; and (3) one-time transition costs borne by all firms and the U.S. economy as a whole, including those from adjustments to U.S. institutions. In Part II of the series (see Hail et al. 2010), we provide an analysis of the policy factors related to the decision and present several scenarios for the future evolution of U.S. accounting standards in light of the current global movement toward IFRS.

Keywords: accounting regulation; standard setting; U.S. equity markets; mandatory disclosure; political economy; convergence; harmonization.

JEL Classifications: F50; G15; G38; K22; M41; M48; O51.

Luzi Hail is an Assistant Professor at the University of Pennsylvania, Christian Leuz is a Professor at The University of Chicago, and Peter Wysocki is an Associate Professor at the University of Miami.

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INTRODUCTION

This article is the first of a two-part series analyzing the economic and policy factors related to the potential decision by the U.S. Securities and Exchange Commission (SEC) to mandate that publicly listed U.S. companies prepare and file financial reports in accordance with International Financial Reporting Standards (IFRS). To assess the consequences of such a decision for U.S. firms, investors, other stakeholders, and the economy as a whole, we draw on the academic literature on disclosure, corporate governance, standard setting, and regulation in accounting, finance, and economics. We consider, in particular, empirical findings related to the voluntary and mandatory adoption of IFRS by firms and countries around the world that have already switched and discuss their relevance for IFRS adoption in the United States.

The economic analysis in Part I is organized as follows. We start by delineating, in general terms, the conceptual underpinnings for our analysis. First, we discuss the costs and benefits of improving the quality and comparability of firms' financial reporting and disclosure practices. Next, we discuss the role of accounting standards, relative to other factors, for achieving high-quality and comparable financial reporting. Together, these two discussions form an economic framework that we then apply to the question of IFRS adoption in the United States. After highlighting the unique institutional features of the U.S. setting, we analyze the potential costs and benefits of IFRS adoption to U.S. firms and investors and examine the macroeconomic consequences of such a move. Part I concludes with a summary of the key insights of our economic analysis. In Part II of this two-part series (see Hail et al. 2010), we extend our analysis to related policy and political issues, present several scenarios for the future evolution of U.S. accounting standards, and outline opportunities for future research on U.S. and global accounting standards and regulation.

CONCEPTUAL UNDERPINNINGS

This section provides the conceptual underpinnings for our study. As the case for IFRS adoption in the United States and in other countries is generally made on the basis of improvements in reporting quality and comparability across firms and countries, we focus on these two concepts and their economic consequences. First, we describe how financial reporting and disclosure quality, in general terms, are linked to important economic outcomes, i.e., market liquidity, firms' costs of capital, and corporate decision making. Second, we discuss how better comparability of reporting across firms and countries can affect these economic outcomes. Third, we emphasize that there are direct and indirect costs to improving corporate reporting and that these costs need to be traded off against the benefits of reporting improvements. It is important to note that, in this section, we use the terms "reporting" and "disclosure" in a very broad sense, encompassing the wealth of corporate information that firms provide to investors and other outside parties through various channels (not just the financial statements). Moreover, the terms "reporting" and "disclosure" refer to firms' *practices*, rather than the standards that govern them. We discuss the role of accounting standards once the conceptual underpinnings have been laid out.

Effects of Improved Reporting and Disclosure Quality

Corporate reporting can have many economic consequences and it is impossible to enumerate all of them.¹ Moreover, not all effects are well understood and supported by evidence. The one that is probably best supported by theory and evidence is the effect of reporting quality on market

¹ This section draws heavily on Leuz and Wysocki (2008).

liquidity.² The idea is that information asymmetries among investors introduce adverse selection into securities markets, i.e., less-informed investors are concerned about trading with better-informed investors. As a result, less-informed investors lower (increase) the price at which they are willing to buy (sell) a security to protect against the losses from trading with better-informed counterparties. Similarly, information asymmetry and adverse selection reduce the willingness of uninformed investors to trade. Both effects reduce the liquidity of securities markets, i.e., the ability of investors to quickly buy or sell shares at low cost and with little price impact. Corporate disclosure can mitigate the adverse selection problem and increase market liquidity by leveling the playing field among investors (Verrecchia 2001). Empirical studies support this argument and provide evidence that better disclosures reduce information asymmetry and increase market liquidity (e.g., Welker 1995; Healy et al. 1999; Leuz and Verrecchia 2000; Bushee and Leuz 2005).

In addition, better reporting and disclosure have the potential to change a firm's cost of capital. First, there is the notion that investors require a higher return from less-liquid securities, which is in essence a liquidity premium (e.g., Amihud and Mendelson 1989; Chordia et al. 2000; Easley et al. 2002). Second, better disclosure can lower estimation risk, i.e., make it easier for investors to estimate firms' future cash flows. Lower estimation risk directly reduces the required rate of return of an individual security as well as the market risk premium of the entire economy (e.g., Easley and O'Hara 2004; Lambert et al. 2007, 2008). Third, better disclosure has the potential to improve risk sharing in the economy, either by making investors aware of certain securities or by making them more willing to hold them, which again reduces the cost of capital (Merton 1987; Diamond and Verrecchia 1991, respectively). Empirical studies generally support the existence of a statistically and economically significant link between reporting or disclosure quality and firms' costs of capital (e.g., Botosan 1997; Botosan and Plumlee 2002; Hail 2002; Francis et al. 2004, 2005; Hail and Leuz 2006; Leuz and Schrand 2009), although some of the evidence is still debated (e.g., Liu and Wysocki 2007; Core et al. 2008; Leuz and Wysocki 2008).

It is also conceivable that better reporting improves corporate decision making, for example the efficiency of firms' investment decisions. The idea is that higher-quality reporting reduces information asymmetries that otherwise give rise to frictions in raising external capital. For instance, high-quality reporting facilitates monitoring by outside parties, such as institutional investors and analysts, which may in turn reduce inefficiencies in managerial decisions (e.g., Bushman and Smith 2001; Lombardo and Pagano 2002; Lambert et al. 2007). The evidence on the effects of reporting quality on corporate decisions is still in its early stages, but there are a number of studies suggesting that better reporting leads to higher investment efficiency (e.g., Bens and Monahan 2004; Biddle and Hilary 2006; Bushman et al. 2006; Biddle et al. 2009).

Finally, it is important to note that the effects of reporting and disclosure often extend beyond the firm providing the information (e.g., Dye 1990; Admati and Pfleiderer 2000; Leuz and Wysocki 2008). The disclosure of one firm provides not only useful information to other firms for decision-making purposes, but can also help to reduce agency problems in other firms. For example, the disclosure of operating performance and governance arrangements provides useful benchmarks that help outside investors to evaluate other firms' managerial efficiency or potential agency conflicts and, in doing so, lower the costs of monitoring. While the incremental contribution of each firm and its disclosures is likely to be small, these information transfers could carry

² We note that "reporting quality" is hard to define and a concept with multiple (possibly conflicting) dimensions. We use it as a placeholder for desirable properties of corporate reporting, in particular, the usefulness of corporate information to outside investors for decision making and contracting. See Dechow et al. (2009) for more discussion on the definition and a survey of the evidence.

substantial benefits for the market or the economy as a whole. Empirically, the aggregate effects of such information transfers and governance spillovers are still largely unexplored, but this does not imply that they are less real or irrelevant.

Effects of More Comparable Reporting Practices

Another important dimension of corporate reporting is its comparability across firms. Firms are considered to have comparable corporate reporting if, for a given set of economic events, these firms produce similar financial statements (e.g., De Franco et al. 2009). Making it easier and less costly for investors and other stakeholders to compare across firms has the potential to make corporate reporting more useful, even if the quality of reporting is held constant. For example, more comparable reporting may make it easier to differentiate between less and more profitable firms or low-risk and high-risk firms, which in turn reduces information asymmetries among investors and lowers estimation risk. These improvements resulting from greater comparability can also increase market liquidity and reduce firms' costs of capital (aside from the cost savings for investors in processing and analyzing information). Similarly, more comparable reporting across firms from different countries facilitates cross-border investment and the integration of capital markets. Recent evidence supports this notion (e.g., Aggarwal et al. 2005; Leuz et al. 2009). Making it easier for foreigners to invest in a country's firms could again improve the liquidity of the capital markets and enlarge firms' investor bases, which in turn improves risk sharing and lowers cost of capital (Stulz 1981; Cooper and Kaplanis 1986).

In addition, better comparability may also have effects on corporate decisions and, in particular, gains from trade. More comparable reports allow firms to make better-informed investment choices due to a better understanding of competing firms, both within a country and across countries. Moreover, firms that have comparable financial reports can more efficiently contract with suppliers and customers in other countries. It may also enable them to bid more easily on government contracts in another country.

Comparability can also be viewed from a network perspective. Increasing the number of firms with directly comparable financial reports increases the number of two-way communication linkages in the "financial reporting" network, which enhances the value of the overall network to both investors and firms (e.g., Waehrisch 2001; Meeks and Swann 2009). As the network perspective emphasizes, one firm's adoption of more comparable reporting practices creates externalities on other firms. That is, other firms may benefit from an individual firm's reporting choices.³ However, firms themselves may not consider the aggregate positive externalities that arise from their own reporting choices. Therefore, this well-known property of externalities could lead to an economy-wide underinvestment in more comparable financial reports, and provides a rationale for creating a (private or public) standard setter who will mandate certain reporting provisions to internalize the positive externalities.

Generally speaking, there is little empirical evidence on the capital market effects of reporting comparability (e.g., De Franco et al. 2009). Most archival studies that speak to comparability effects have been conducted in the context of firms' accounting standard choices. We review these studies in more detail below.

Cost-Benefit Trade-Off Related to Firms' Reporting Quality and Comparability Choices

It is important to note that, despite the aforementioned benefits of better and more comparable reporting and disclosure, there are also direct and indirect costs to improving or changing corporate reporting. The direct reporting and disclosure costs come in many forms and include the

³ The possible costs for a firm arising from greater comparability are discussed in the next subsection.

preparation, certification, and dissemination of accounting reports. These costs can be substantial, especially considering the opportunity costs of those involved in the process. Moreover, these costs are likely to have fixed components, making certain reports or disclosures particularly burdensome for smaller firms. There are also indirect disclosure costs to the firm because other parties (e.g., competitors, labor unions, regulators, tax authorities, etc.) can use information provided to capital market participants (e.g., Verrecchia 1983; Feltham et al. 1992). For example, detailed information about line-of-business profitability may reveal proprietary information to competitors (e.g., Hayes and Lundholm 1996; Leuz 2004; Berger and Hann 2007).

In light of these costs and the cost-benefit trade-offs that firms face, it may not be optimal to strive for the highest-quality reporting regime. In fact, forcing firms to provide certain disclosures can have net costs to firms, especially smaller firms (e.g., Bushee and Leuz 2005; Gomes et al. 2007; Leuz et al. 2008). Thus, regulators and standard setters need to carefully weigh the confluence of costs and benefits to firms, investors, and other parties in the economy. Moreover, it is important to recognize that the net benefits of high-quality and more comparable reporting vary significantly across firms, industries, markets, and countries. For example, a firm that raises the majority of its capital from banks or other private sources may realize few benefits from reporting rules that require expansive disclosures geared toward investors in public capital markets.

ROLE OF ACCOUNTING STANDARDS FOR HIGH-QUALITY AND COMPARABLE REPORTING

As discussed above, higher quality and more comparable reporting and disclosure can have economy-wide benefits and positive externalities. Thus, it makes economic sense for standard setters and policymakers to assess the current reporting environment within a market or country (including private incentives and other institutional and regulatory forces) to determine if changes to the reporting environment could move reporting quality and comparability closer to socially optimal levels (net of costs). However, if this is the goal, it is important that standard setters and policymakers consider how these changes can be achieved and what role the accounting standards play in inducing high-quality and comparable reporting *practices*. The evidence discussed in the previous section indicates that capital markets and investors reward higher transparency and high-quality reporting. However, this evidence does not pinpoint the quality of the accounting *standards* as the primary source of these benefits. To the contrary, the evidence from academic studies suggests that the role of standards in shaping reporting practices is limited.

To substantiate this important point, we first draw on relevant empirical work from the international accounting literature, which highlights the role of reporting incentives and countries' institutional frameworks in shaping firms' reporting practices. Second, we draw on the notion of complementarities to illustrate that changing solely the accounting standards is likely to have limited effects and, in some cases, can even have undesirable effects. The concept of reporting incentives and the notion of complementarities form an important basis for our subsequent analyses. Finally, we review arguments on the suggested effects of IFRS reporting and discuss whether the evidence from voluntary and mandatory IFRS adoptions around the world supports these arguments.

Incentives as a Key Determinant of Reporting Quality and Comparability

A number of recent studies challenge the premise that changing the accounting standards alone leads to more informative or more comparable corporate reporting. This literature highlights the importance of firms' reporting incentives as a key driver of observed reporting quality (e.g., Ball et al. 2000, 2003; Leuz et al. 2003; Ball and Shivakumar 2005; Burgstahler et al. 2006). These studies recognize that accounting standards give firms substantial reporting discretion because the application of the standards involves considerable judgment. For example, accounting

measurements rely on management's private information and involve an assessment of the future, making them subjective representations of management's information set.

Managers are given reporting discretion for a good reason (e.g., Watts and Zimmermann 1986). On one hand, reporting discretion allows managers to use their private information to produce reports that more accurately reflect firm performance and are more informative to outside parties. On the other hand, whether managers use their reporting discretion in this way depends on their reporting incentives. Managers may also have incentives to obfuscate economic performance, achieve certain earnings targets, avoid covenant violations, underreport liabilities, or smooth earnings—to name just a few. Given managers' information advantage, even *vis-à-vis* the auditors and enforcement agencies, it is difficult to constrain such behavior. But the issue is not just a matter of proper enforcement of the accounting standards. While strict enforcement limits the amount of discretion that managers have, it does not eliminate it. Even in a hypothetical world with perfect enforcement, observed reporting behavior will differ across firms as long as the accounting standards offer discretion, and there are differences in reporting incentives across firms (Leuz 2006).

In general, managers' reporting incentives are shaped by many factors, including a country's legal institutions (e.g., the rule of law), the strength of the enforcement regime (e.g., auditing), capital market forces (e.g., the need to raise outside capital), product market competition, a firm's compensation, ownership and governance structure, and its operating characteristics. While the extent to which we have evidence differs across factors, recent empirical studies clearly support the importance of managerial reporting incentives for observed reporting and disclosure practices (e.g., Ball et al. 2000; Fan and Wong 2002; Leuz et al. 2003; Haw et al. 2004; Burgstahler et al. 2006).⁴ Particularly relevant for the IFRS debate are studies showing that even when firms are subject to the same accounting standards, reporting practices differ considerably across firms and countries (e.g., Ball et al. 2003; Ball and Shivakumar 2005; Burgstahler et al. 2006; Lang et al. 2006).

Overall, this evidence implies that moving to a single set of accounting standards (e.g., IFRS) is not enough to produce comparability of reporting and disclosure practices, even if these standards are strictly implemented and enforced. Observed reporting practices are still predicted to differ because reporting incentives still vary systematically across firms, industries, stock exchanges, countries, and political regions. Convergence in financial reporting outcomes is unlikely unless there is convergence in other factors shaping firms' reporting incentives (e.g., Bradshaw and Miller 2008; Joos and Wysocki 2007; Leuz 2010). More generally, the evidence implies that the role of accounting standards is much more limited than often thought. They are just one of many factors shaping actual reporting and disclosure practices.

Complementarities among the Elements of Countries' Institutional Frameworks

Accounting standards are one of many important institutional elements affecting financial reporting practices in a country.⁵ In well-functioning economies, these elements are likely to be complementary to each other. For example, accounting information plays an important role in financial contracting (e.g., Watts and Zimmermann 1986). Financial claims and control rights are often defined in accounting terms: e.g., financial ratios specify when a corporate borrower is in (technical) default or how much the borrower can pay in dividends. Investors in public equity

⁴ The literature on earnings management also supports the notion of reporting incentives. See Healy and Wahlen (1999) and Dechow and Skinner (2000).

⁵ A country's institutions include the public and private human-made organizations and conventions that shape economic behavior. These institutions include the legal system, banking system, taxation system, regulatory and enforcement agencies, industry associations, standards bodies, networks of professionals, etc.

markets also use financial statements to monitor their claims, make investment decisions, or exercise their rights at shareholder meetings. Thus, it is reasonable to expect that corporate reporting evolves in concert with other institutional factors to facilitate, among other things, financial transactions and contracting. Moreover, standardizing reporting, either by regulation or private standard setting, can reduce transaction costs compared to negotiating what is to be reported on a contract-by-contract basis (e.g., Ross 1979; Ball 2001). Crafting accounting standards for the informational and contracting needs of key parties in an economy increases these transaction cost savings. The key parties in the economy are also active participants in the political process, which affects mandated reporting policies and other economic regulations (see also Part II of this study). Moreover, accounting standards likely reflect ownership and financing patterns in a country. Conversely, accounting standards have the ability to influence financial contracting (e.g., leases, performance-based compensation, off-balance sheet financing). Due to these interdependencies, a well-designed set of accounting standards and other elements of the institutional infrastructure should be complementary, i.e., fit and reinforce each other. The notion of complementarities implies that countries with different sets of institutional endowments are likely to select different accounting standards and that diversity in accounting standards is an expected outcome of diversity in countries' institutional infrastructures.

To illustrate this notion, consider two (stylized) financial systems (e.g., Leuz and Wüstemann 2004; Leuz 2010): One, in which firms rely heavily on public debt or equity markets in raising capital, and corporate ownership is dispersed and largely in the hands of consumers that invest their savings directly or indirectly via mutual funds in public debt or equity markets. Thus, investors are at arm's length from firms and do not have privileged access to information. In such a system, corporate disclosure is crucial as it enables investors to monitor their financial claims and exercise their rights. We, therefore, expect that the reporting system focuses on outside investors ensuring that they are reasonably well informed and, hence, willing to invest in the public debt and equity markets.

In contrast, consider another stylized financial system in which firms establish close relationships with banks and other financial intermediaries, rely heavily on internal financing instead of raising capital in public equity or debt markets, and in which corporate ownership is concentrated. In this system, the key parties have privileged access to information through their relationships, and information asymmetries are resolved primarily via private channels, rather than public disclosure (e.g., Ball et al. 2000). In such a system, the role of accounting is not so much to publicly disseminate information, but to facilitate relationship-based financing, for instance, by limiting the claims of outside shareholders to dividends, which protects creditors and promotes internal financing. The key point is that the two stylized financial systems are likely to have very different reporting regimes, including the accounting standards.

The notion of institutional complementarities has a number of important implications for this study. First, it implies that changes in the accounting standards cannot be considered in isolation from other elements of the institutional infrastructure. The existence of complementarities implies that changing one element may make the system (or economy) worse off even when the element itself improves along a particular quality dimension. Thus, it is not obvious that a country should adopt a new set of accounting standards even if this set is unambiguously "better" than the existing one. Institutional fit should be part of the consideration. Another implication is that even if countries harmonize their accounting standards at a given point in time, it is questionable that this harmonization is stable over time. The new set of standards will be subject to the same institutional and market pressures that shaped the old set of standards in the first place. Thus, unless other institutional factors across countries are converging, countries starting with a common set of accounting standards are likely to drift apart over time, e.g., due to local adaptation and interpretation or even the introduction of new standards that are not desirable in all countries.

Effects of IFRS Adoption on Reporting Quality and Comparability

In this section, we discuss several hypotheses about the effects of IFRS reporting. We then review the empirical evidence on voluntary and mandatory IFRS adoption in various countries around the world and discuss the extent to which it supports the hypothesized IFRS effects. In much of the IFRS debate, the arguments are presented in general terms and not tailored to a particular country. We will, therefore, revisit these arguments and the evidence later when we apply them to the issue of IFRS adoption in the United States.

General Arguments on the Effects of IFRS Adoption

Most of the arguments in favor of IFRS adoption focus on the effects on capital markets and investors. One argument is that the adoption of IFRS improves financial reporting to outside investors. To support this argument, proponents point out that IFRS are more capital market oriented and, hence, more relevant to investors as well as more comprehensive, especially with respect to disclosure, than most local GAAP.⁶ If the switch to IFRS does, in fact, improve corporate reporting and disclosure, then, as previously discussed, prior analytical and empirical studies suggest that mandatory IFRS reporting should be associated with an increase in market liquidity as well as a decline in firms' costs of capital.⁷

A related argument is that IFRS reduce the amount of reporting discretion relative to many local GAAP and, in particular, compel firms toward the bottom of the quality spectrum to improve their financial reporting. Consistent with this argument, Ewert and Wagenhofer (2005) show that tightening the accounting standards can reduce the level of earnings management and improve reporting quality. However, as discussed earlier, reducing the amount of reporting discretion also makes it harder for managers to convey their private information through the financial statements. Thus, the effect of changes in discretion on reporting quality is *a priori* not obvious.⁸

Another argument suggesting favorable capital market effects is that IFRS reporting makes it less costly for investors to compare firms across markets and countries (e.g., Covrig et al. 2007; Yu 2009; Armstrong et al. 2010). As previously discussed, greater comparability may make financial reports more useful to investors and other stakeholders, even if the quality of corporate reporting does not improve. Moreover, using the same set of accounting standards across firms from different countries likely improves outsiders' ability to detect earnings management and accounting manipulations, as it limits the set of permissible accounting treatments, which in turn should improve firms' reporting incentives. Thus, if the switch to IFRS does, in fact, improve the comparability of firms' reports, it has the potential to improve market liquidity and reduce cost of capital.

Differences in the accounting standards are also viewed as an impediment to cross-border investment (e.g., Bradshaw et al. 2004; Aggarwal et al. 2005). Thus, the global movement toward IFRS reporting may facilitate cross-border investment and the integration of capital markets (e.g., Covrig et al. 2007; Florou and Pope 2009; Yu 2009). Although the magnitudes of the effects are unclear (e.g., Beneish and Yohn 2008), making it easier for foreigners to invest in a country's firms should in principle improve market liquidity and enlarge firms' investor bases, which in turn should improve risk sharing and lower firms' cost of capital (e.g., Merton 1987).

⁶ See, e.g., Daske and Gebhardt (2006) for evidence on the perception of disclosure quality. See, e.g., Ding et al. (2007) and Bae et al. (2008) for evidence that IFRS are more comprehensive than most local GAAP.

⁷ This argument assumes that firms were previously mandated to report under "lower-quality" standards that resulted in relatively poor reporting and disclosure outcomes. The argument is, therefore, less applicable to countries like the United States, which already have high-quality accounting standards.

⁸ Note that, for the United States, the argument often goes the other way around. That is, a switch to IFRS is seen as *increasing* accounting discretion relative to U.S. GAAP. See, also, SEC 2008.

However, there is also a set of arguments that make substantial capital market effects from IFRS adoption *per se* less likely or plausible. IFRS, like any other set of accounting standards, provide firms with substantial discretion and, hence, the reporting incentives argument applies. Firms that oppose the switch to IFRS or toward more transparency are unlikely to make material changes to their reporting policies (e.g., Ball 2006; Nobes 2006; Christensen et al. 2007; Daske et al. 2009). This concern applies not only to recognition and valuation rules, where firms are known to have substantial discretion, but also to footnote disclosures, which firms can also provide in a more or less informative manner.⁹ Thus, even if the standards themselves mandate superior accounting practices and require more disclosures, it is not clear whether firms implement these requirements in ways that make the *reported* numbers more informative. The same argument applies for comparability.

This incentives-based view suggests that countries' institutional structures and changes therein play an important role for the capital market effects around IFRS adoption. All else equal, countries with stricter enforcement regimes and institutional structures that provide strong reporting incentives are more likely to exhibit discernable capital market effects around the introduction of IFRS reporting, if indeed there are substantial differences between IFRS and the local GAAP. Stricter enforcement and better reporting incentives imply that firms are less likely to get away with adopting IFRS merely as a label, i.e., without materially changing their reporting practices (for related evidence, see Daske et al. 2008).¹⁰

Evidence from Voluntary IFRS Adoptions around the World

Empirical studies on the effects of IFRS reporting fall into two categories, depending on whether they analyze voluntary or mandatory adoptions. At present, there are fewer studies that analyze the effects around the introduction of mandatory IFRS reporting; most studies examine firms' voluntary decisions to adopt IFRS. This and the following section review the evidence in both categories.¹¹

Empirical studies on the economic consequences of *voluntary* IFRS adoptions generally analyze direct capital market effects, such as liquidity or cost of capital, or the effects on various market participants, such as the impact on analyst forecast properties or on the holdings of institutional investors. Leuz and Verrecchia (2000) examine German firms that adopt IAS or U.S. GAAP and find that those firms exhibit lower bid-ask spreads and higher turnover compared with German GAAP firms. Using implied cost of capital estimates, Cuijpers and Buijink (2005) do not find significant differences across local GAAP and IFRS firms in the European Union (EU). Daske (2006) examines voluntary IAS adoption by German firms and finds that they exhibit a higher cost of equity capital than local GAAP firms. Karamanou and Nishiotis (2009) show positive shortwindow abnormal returns around the announcement of IAS adoption. Daske et al. (2009) analyze liquidity and cost of capital effects around voluntary IFRS adoptions. They show that only firms with concurrent changes in their reporting incentives or reporting practices experience liquidity and cost of capital benefits to highlight the endogeneity of IFRS adoptions.

Focusing on reporting quality, Barth et al. (2008) analyze changes in the properties of reported earnings around the voluntary adoption of IFRS and present evidence that firms' reporting quality increases. Hung and Subramanyam (2007) examine a sample of German firms that adopt

⁹ See, e.g., the evidence in Gallery et al. (2008) on disclosure differences around IFRS adoption in Australia.

¹⁰ Conversely, one could argue that countries with better reporting practices before the introduction of IFRS should experience smaller capital market effects. This argument, however, rests on the presumption that changing the accounting standards alone improves firms' reporting practices and ignores institutional reasons why firms in these countries have better reporting quality to begin with.

¹¹ See, also, the surveys by Leuz and Wysocki (2008) and Soderstrom and Sun (2007).

IAS between 1998 and 2002. They compare accounting numbers reported under German GAAP with those under IAS for the same firm years, and find that total assets and book values of equity are significantly higher under IAS. In addition, they document that the IAS adjustments to book value are generally value relevant, while the adjustments to net income are not.

There are also a few studies on the reaction of market participants to voluntary IFRS adoptions. Cuijpers and Buijink (2005) find an increase in analysts following around IFRS, but the effect is not robust to controls for self-selection. Ashbaugh and Pincus (2001) show that analyst forecast errors are positively related to differences in accounting standards between IFRS and various local GAAP, and that the accuracy of these forecasts improves after firms adopt IFRS. Covrig et al. (2007) document that foreign mutual fund ownership is significantly higher for IFRS adopters compared to local GAAP firms and that the difference in mutual fund holdings increases for firms in poor-information environments and with low visibility, suggesting that IFRS reporting helps firms attract foreign institutional investment.

In sum, the evidence on *voluntary* IFRS (or IAS) adoptions is somewhat mixed, but on balance suggests that voluntary adopters experience positive capital market effects. However, these results have to be interpreted carefully due to concerns about self-selection. As firms choose whether and when to adopt IFRS, it is difficult to attribute any observed economic consequences to the accounting standards *per se*. It is possible, if not likely, that the effects are attributable, at least in part, to the factors that gave rise to the IFRS adoption decision in the first place. As a result, the evidence informs us about the potential costs and benefits of IFRS for firms with particular characteristics but cannot provide a rationale for an IFRS mandate or a switch to IFRS.

Evidence from Mandatory IFRS Adoptions around the World

Studies on *mandatory* IFRS reporting either examine the stock market reactions to key events associated with the EU's movement toward mandatory IFRS reporting or analyze the effects around the introduction of mandatory IFRS financial statements in certain countries.¹² Studies in the first group try to infer whether the adoption of IFRS in the EU has net benefits (or costs) to firms from their stock market reactions to key events that made IFRS reporting more or less likely. Such event studies depend crucially on the identification of key events and the extent to which regulatory actions are anticipated by the market.

The event study evidence on IFRS adoptions is mixed. Comprix et al. (2003) examine abnormal returns of EU firms on four "core" event dates in 2000 that increased the likelihood of mandatory IFRS reporting. They find a weakly significant, but negative, market reaction to the four event dates. However, firms that are audited by a Big 5 auditor, located in countries that are expected to have greater improvements in reporting quality due to IFRS adoption, or subject to higher legal enforcement, experience significantly positive returns on some of the event dates. Armstrong et al. (2010) examine the reactions to 16 events between 2002 and 2005 associated with the adoption of IFRS in the EU. They find a positive (negative) reaction to events that increase (decrease) the likelihood of IFRS adoption, suggesting that European investors view the introduction of IFRS as (net) beneficial. They also document that the reaction is more positive for firms from lower-quality information environments, with higher pre-adoption information asymmetry, and for firms that are domiciled in common law countries. The latter result could reflect concerns about IFRS implementation in code law countries, while the former associations are consistent with investors expecting informational benefits from IFRS adoption. Christensen et al. (2007) analyze the market reactions of U.K. firms to announcements of mandatory IFRS reporting

¹² There are also studies that compare the quality and economic outcomes of IAS/IFRS reporting with those of U.S. GAAP reporting in particular market settings. We review these studies in the following subsection titled "Specifics of the U.S. Economy and Institutional Framework."

in the EU and find that the average U.K. market reaction is small, but that there is substantial heterogeneity in how markets react. Using the degree of similarity with German voluntary IFRS or U.S. GAAP adopters as a proxy for U.K. firms' willingness to adopt IFRS, they find that this proxy is positively (negatively) related to the stock price reaction around news events increasing (decreasing) the likelihood of mandatory IFRS reporting. This result is consistent with the notion that firms' reporting incentives are central to interpret observed effects around IFRS adoption (see also Daske et al. 2009).

Studies in the second group analyze the effects of mandated IFRS using data from the first few annual reports released under the new regime. Platikanova (2009) analyzes measures of liquidity and information asymmetry in four European countries. She finds heterogeneous liquidity changes for these countries, but shows that the liquidity differences across countries become smaller after the adoption of IFRS, which is consistent with comparability effects. Christensen et al. (2009) analyze whether reconciliations between IFRS and U.K. GAAP around the IFRS introduction convey new information to the markets, and find that market reactions are concentrated among early announcers and among companies for which covenant breaches are expected to be more costly. They interpret their findings as suggesting that mandatory IFRS adoption can lead to wealth transfers between shareholders and lenders due to changes in the likelihood of breaching covenants. More broadly, the paper illustrates that it is important to also consider the contracting role of accounting when evaluating an IFRS mandate. Capkun et al. (2008) find that earnings reconciliations of EU firms in the transition year are value relevant. As with all value relevance studies, we do not know whether this result reflects that IFRS reconciliations provide new information to the markets or that they simply contain information, which is also contained in prices. Horton et al. (2008) and Wang et al. (2008) examine firms' information environment surrounding the mandatory introduction of IFRS and find that analyst forecast properties like forecast accuracy, analyst following, and forecast dispersion, as well as the relative information content of earnings announcements, improve after the mandatory adoption of IFRS. However, the documented effects vary substantially by firms, industries, and countries. Daske et al. (2008) examine the capital market effects around the mandatory introduction of IFRS reporting in 26 countries using a variety of proxies. They find an increase in market liquidity after mandatory IFRS reporting. They also show a decrease in firms' costs of capital and a corresponding increase in equity valuations (measured as Tobin's q), but only when accounting for the possibility that these variables adjust prior to the official IFRS adoption date. Most importantly, the study shows that the liquidity and cost of capital effects do not occur in all countries. The capital market benefits exist only in countries with strict enforcement regimes and in institutional environments that provide strong reporting incentives. Li (2010) confirms this finding for EU firms. Alves et al. (2008) provide evidence on short-term liquidity effects around earnings announcements, suggesting that IFRS earnings by EU firms are viewed as more informative than prior local GAAP earnings.

In interpreting the results of Daske et al. (2008), it is important to note that the aforementioned capital market effects for mandatory (or forced) adopters are relative to local GAAP benchmark firms that are not required to adopt IFRS or have not yet switched. Firms that have already switched to IFRS voluntarily, prior to the mandate, are an alternative group against which one could benchmark the effects around mandatory IFRS adoption. Daske et al. (2008) document capital market benefits for (early and late) voluntary adopters in the year of the mandated switch to IFRS. The magnitude of these benefits often exceeds the corresponding effects for mandatory adopters, indicating that, relative to voluntary adopters, mandatory adopters do *not* gain in market liquidity or market value around the IFRS mandate. As the latter group already reports under IFRS, one explanation for this result is that mandatory adopters confer positive externalities on voluntary adopters by increasing the set of comparable firms. Daske et al. (2008) provide a test for this comparability explanation using differences in voluntary adoption rates across industries. The results of this test point toward comparability effects playing some role but are statistically insignificant, possibly due to low power of the test. Another explanation for capital market effects of voluntary adopters around the IFRS mandate are concurrent changes in the institutional environment, e.g., in enforcement, governance, or auditing. Such changes apply to all firms in the economy and, hence, could explain why there are changes in market liquidity for voluntary adopters around the IFRS mandate. Moreover, as voluntary adopters likely have better reporting incentives to begin with, they are expected to be more responsive to such institutional changes, which in turn would explain why they exhibit larger effects than mandatory adopters. This explanation questions whether the capital market effects for mandatory adopters can be attributed solely or even primarily to the adoption of IFRS (rather than changes in other institutional factors).

At present, there is no direct evidence for the explanation that concurrent changes in the institutional environment are responsible for observed capital market outcomes. However, Daske et al. (2008) show that capital market effects around the introduction of mandatory IFRS reporting are not evenly distributed across countries. First, in countries with weak legal regimes and reporting incentives, market liquidity and firm value remain largely unchanged around the IFRS mandate. Second, the effects around mandatory adoption are most pronounced for countries that exhibit large local GAAP/IFRS differences *and* have strong enforcement (or strong reporting incentives). This evidence suggests that the strength of countries' enforcement regimes and firms' reporting incentives play a major role for the documented capital market effects. Viewed more broadly, this evidence is also in line with the notion of complementarities, in that the effects of IFRS adoption seem to depend on *other elements* in countries' institutional infrastructure. Consistent with this notion, recent studies by the Big 4 audit firms examining the implementation and compliance of IFRS in the first year under the new mandate conclude that, despite substantial convergence, IFRS financial statements retain a strong national identity (e.g., KPMG 2006; Ernst & Young 2007a).

In sum, there is evidence of positive capital market outcomes around the IFRS mandate in some countries. However, there is considerable heterogeneity in the effects across firms and countries. Moreover, as with the evidence from voluntary adoptions, it is not clear to what extent the documented effects can be attributed to IFRS, i.e., changes in the accounting standards *per se*.

COSTS AND BENEFITS OF IFRS ADOPTION IN THE UNITED STATES

In this section, we apply the economic framework presented above to evaluate the potential adoption of IFRS in the United States. We start by recognizing that the U.S. economy and institutional framework are unique in several respects. Thus, even if switching to IFRS has been beneficial for some countries, it is not obvious that the same would be true for the United States. We then ask whether the switch from U.S. GAAP to IFRS changes the quality or comparability of U.S. corporate reporting practices to gauge the potential capital market effects from IFRS adoption in the United States. Recognizing the importance of institutional complementarities between the accounting standards and other country features, we next assess the compatibility of IFRS with key elements of the U.S. institutional framework (e.g., the litigation system, taxation, etc.), and discuss the relevance of existing IFRS/U.S. GAAP accounting differences. Finally, we discuss various other macroeconomic effects, including the potential impact on the competitiveness of U.S. capital markets, service providers, trade flows, and foreign direct investments.

Specifics of the U.S. Economy and Institutional Framework

The U.S. economy and institutional framework are unique in several important respects. First, the United States is by far the largest economy of the world and the size of its public equity markets exceeds those of all other countries. Based on data for the year 2007 from World Bank, the U.S. gross domestic product, market capitalization of listed companies, and total value of

stocks traded are more than double the amounts for the next largest individual country. Having large and active stock markets, among other things, likely affects firms' capital structure (e.g., Demirgüç-Kunt and Maksimovic 1999) and the choice between public and private financing (e.g., Rajan and Zingales 1995). U.S. firms typically rely heavily on publicly traded external finance, which is provided in arm's length transactions (e.g., La Porta et al. 1998). In response, U.S. firms face intense scrutiny by the capital market and its intermediaries (e.g., financial analysts, institutional investors, and the media). The market forces likely create a strong demand for transparent reporting (e.g., Ball et al. 2000; Bushman et al. 2004; Burgstahler et al. 2006).

Consistent with the important role of organized capital markets in the United States, a much larger fraction of U.S. households, either directly or indirectly through mutual funds, hold debt and equity securities compared to households in most other countries. These holdings by U.S. households represent a large fraction of their retirement savings. To support this financial system, there is a heavy emphasis on outside investor protection in securities regulation and also in the accounting standards (e.g., Securities Act of 1933; FASB Concepts Statement No. 1). As such, current securities laws and U.S. GAAP are primarily (but not exclusively) geared toward facilitating arm's length financing and supporting public debt and equity markets. In fact, these laws, regulations and institutions are considered major factors for the development of U.S. capital markets and the success of the U.S. economy (e.g., La Porta et al. 1998, 2000). Moreover, in spite of a wave of U.S. accounting scandals, the bulk of the evidence in the international accounting literature suggests that the U.S. reporting system, in conjunction with other U.S. institutions, has led to highquality financial reporting that meets the needs of outside stakeholders (e.g., Lang 2003). Given this evidence and the role of capital markets for the U.S. economy, the potential capital market effects of IFRS adoption, including the impact on investors, should receive special attention (and feature prominently in our analysis below).

Second, the U.S. economy and its capital markets are diverse and one cannot treat all publicly traded firms as a homogeneous group.¹³ There are several thousand micro-cap firms in the over-the-counter markets, such as the OTC Bulletin Board or the Pink Sheets that have to file U.S. GAAP financial statements with the SEC (e.g., Bushee and Leuz 2005). These firms provide financial statements that are quite different from those of large-cap multinationals. More broadly, the reporting incentives view suggests that firms from different industries, trading venues, and with different ownership and financing structures are likely to exhibit substantial heterogeneity in their reporting practices, despite the fact that they all report under U.S. GAAP. Thus, U.S. investors are accustomed to considerable reporting firms that are cross-listed on U.S. exchanges and report under IFRS, effectively allowing two different accounting standards for publicly traded firms in the United States.¹⁴ Moreover, U.S. investors have extensive portfolio investments abroad, suggesting that U.S. investors can and do deal with different reporting regimes and accounting standards.

Third, reporting outcomes under U.S. GAAP are generally considered of high quality, e.g., reflecting economic events in a timely manner, in particular, when it comes to bad news events (Ball et al. 2000; Hung 2001), and producing numbers that are transparent and less susceptible to

¹³ For instance, the majority of U.S. listed firms are relatively small and domestically oriented. Out of the nearly 7,000 U.S. public firms with data available in Worldscope for the year 2005, more than 50 percent have total assets below \$200 million, and only about 25 percent report generating sales outside the United States. The variation in size (measured as total assets) and degree of internationalization (measured as proportion of firms with foreign sales) for the U.S. sample is similar to the size variation and internationalization of the much larger worldwide sample comprising 22,000 non-U.S. public firms across many countries, illustrating the heterogeneity of U.S. public firms.

¹⁴ In its release of the rule, the SEC clearly stated that it is only referring to IFRS as issued by the IASB in order to prevent further jurisdictional versions of IFRS (e.g., caused by carve outs of particular standards).

earnings management (Lang et al. 2003; Leuz et al. 2003). Hence, the properties of U.S. accounting numbers are often used as a benchmark for other countries' accounting practices (e.g., Alford et al. 1993; Ali and Hwang 2000). However, it is important to note that these results and the quality of U.S. reporting not only reflect the accounting standards but also other elements of the institutional framework that influence firms' reporting incentives. This is the key message of our economic framework and the reporting incentives view.

Fourth, the intensity of public enforcement efforts in the United States is unparalleled in the world, not just in terms of rules and regulation (La Porta et al. 2006), regulators' staffing levels and budgets (Jackson and Roe 2009), but even more so in terms of actual enforcement actions and sanctions imposed (Coffee 2007). The public enforcement system is complemented by strong private enforcement, threatening litigation, and potentially substantial monetary penalties for managers, directors, and corporations that engage in reporting misdeeds. These pressures are important when considering the reporting incentives of U.S. firms and the potential consequences of IFRS adoption because, in contrast to U.S. GAAP, IFRS have not evolved under similar forces.

Finally, the ultimate authority to set accounting rules and reporting requirements rests with the U.S. Congress, the SEC and, as is typical for a common law regime, the rulings set out by the courts. These legislative bodies have a long-standing tradition of intervening with financial reporting, most prominently in times of crisis (e.g., Zeff 2003a, 2003b; Watts 2006; Ball 2009). Thus, the setting of accounting standards in the United States is not limited to one authoritative body (e.g., the FASB), but influenced by various bodies.

In sum, there are several idiosyncrasies that must be kept in mind when assessing the economic consequences of IFRS adoption in the United States, notably strong capital markets, already high reporting quality, effective public enforcement, and a strong threat of private litigation.

Capital Market Benefits of IFRS Reporting in the United States

Based on the conceptual underpinnings that we laid out earlier, the capital market effects of IFRS adoption in the United States depend crucially on whether the quality or the comparability of U.S. firms' reporting practices *change* following the switch to IFRS. We therefore discuss whether such changes in reporting quality or comparability are likely to occur and which direction they might take, applying the previously developed reporting incentives framework and drawing on recent empirical evidence on IFRS adoption in other countries.

Does Reporting Quality Increase with IFRS Adoption?

Much of the debate about whether the adoption of IFRS in the United States would change reporting outcomes focuses on the standards themselves.¹⁵ In this standards debate, proponents argue that IFRS are now of a similar quality compared with U.S. GAAP and that the remaining differences are small. Both sets of accounting standards have essentially the same underlying philosophy, a capital market orientation, and roots based in an Anglo-American common law tradition. In studies comparing the recognition, measurement and disclosure rules between IFRS and various local GAAP, the United States belongs to the group of countries with the fewest local GAAP-to-IFRS differences (Ding et al. 2007; Bae et al. 2008).¹⁶ Moreover, the IASB and the FASB have engaged in numerous convergence activities actively trying to reduce the differences between IFRS and U.S. GAAP. In 2002, the two standard-setting bodies issued a Memorandum of

¹⁵ See, e.g., Deloitte (2007); Ernst & Young (2007a, 2007b); PwC (2007); KPMG (2008).

¹⁶ Both studies rely on data for the year 2001, and, therefore, do not take into account the ongoing convergence initiative between the IASB and the FASB. In an earlier study, Harris and Muller (1999) reach a similar conclusion by showing that reconciliation amounts from IAS earnings and book values to U.S. GAAP numbers prepared by a sample of cross-listed firms in their Form 20-F filings are smaller than the reconciliation amounts from various other countries' national GAAP to U.S. GAAP.

Understanding ("Norwalk Agreement") agreeing to make the two financial reporting standards more compatible and to coordinate their future work programs in order to maintain compatibility. Since then, IFRS and U.S. GAAP have converged in a number of areas, bringing the two sets of standards even closer together. In addition, proponents argue that IFRS are more principles-based and cheaper to implement than U.S. GAAP, which are often perceived as being too detailed and complex (e.g., PwC 2007). The arguments outlined above suggest that U.S. adoption of IFRS yields similar reporting practices compared to U.S. GAAP and few changes in reporting quality, and might even offer long-run cost savings to firms.

An alternative view in the debate focused on the standards is that IFRS adoption would imply major reporting changes and likely lead to lower reporting quality in the United States. This view is based on arguments that many important differences between the two standards remain (e.g., Benston et al. 2006); that IFRS offer more discretion and less guidance and, hence, more room for earnings management; and that they are less tested and comprehensive than U.S. GAAP.¹⁷

However, focusing on standards alone, it is difficult to decide which of the two viewpoints has the upper hand. Moreover, based on our economic framework, a simple debate over the "which standards are best" is likely to miss other more important factors that influence the quality and comparability of firms' reporting practices. Standards are only one of many factors determining reporting outcomes, and even if IFRS were an unambiguous improvement, it does not immediately follow that IFRS adoption is beneficial in the United States, as the issue of institutional compatibility needs to be considered. Thus, in our view, a sole focus on accounting standards is not appropriate and the standards debate is misguided.

Our economic framework, drawing heavily on the reporting incentives view, suggests that the U.S. adoption of IFRS is unlikely to have a major impact on reporting quality. To the extent that U.S. firms currently optimize their reporting strategies, they are expected to resist mandated changes that are not in their interest by using the flexibility inherent in the standards. The reporting incentives that were at play in the United States before the introduction of IFRS will still be at play after the switch. For this reason, IFRS adoption alone is unlikely to increase reporting quality and yield substantial capital market benefits, even when IFRS are viewed as superior to U.S. GAAP (e.g., Ball 2006; Christensen et al. 2007; Daske et al. 2008, 2009). Conversely, it is difficult to force firms to reduce their reporting quality below its optimal level. Firms can always go beyond the required disclosures and provide further explanations or reconciliations in the notes. Thus, IFRS adoption in the United States is unlikely to decrease reporting quality, unless we believe that U.S. GAAP and the SEC disclosure regime significantly exceed the optimal level of reporting quality from a firm's perspective. If the current level of reporting quality is reasonably close to what investors demand and firms must provide to support outside financing needs and existing ownership structures, then firms will continue to face this demand for transparency and public information after the switch to IFRS. In addition, the relatively strong U.S. enforcement mechanisms will remain in force after a switch.

For the same reasons, more discretion in IFRS combined with less guidance will not necessarily lead to lower reporting quality.¹⁸ While it is possible that (some) firms use an increase in discretion to manipulate earnings (or to "reset" their balance sheets when transitioning to IFRS), more discretion also allows managers to convey a firm's economic performance to outsiders in a better or less costly way.¹⁹ Less guidance and fewer bright-line rules could imply that there is less

¹⁷ See, also, the views summarized in the Roadmap (SEC 2008) and, for example, the September 10, 2008, article by Marie Leone, "Regulator Rips Into Global Accounting Plan" at http://www.cfo.com/article.cfm/12202211.

¹⁸ We discuss in more detail later whether IFRS is, indeed, more principles-based and offers more discretion.

¹⁹ The results in Subramanyam (1996), for example, suggest that the majority of U.S. firms use discretion in a way to make earnings more informative and not for earnings management purposes. See, also, discussion in SEC 2008.

transaction structuring to obtain a specific accounting treatment (e.g., off-balance accounting for leases or special purpose vehicles). Again, how firms use the discretion largely depends on managers' reporting incentives and, unless these incentives change, major changes in reporting quality are unlikely. Moreover, the United States has aimed to shore up the implementation and enforcement of U.S. reporting rules in the wake of recent corporate scandals. For example, the Sarbanes-Oxley Act of 2002 had the goal to tighten firms' internal controls. Such efforts, if successful, should limit managers' incentives to engage in questionable financial reporting activities, even when standards allow greater reporting discretion.

Consistent with the above prediction that the switch to IFRS is unlikely to have a major impact on reporting quality, there are empirical studies that specifically compare the reporting outcomes under IFRS and U.S. GAAP. First, several studies analyze the properties of reported accounting numbers in settings where firms could choose between IFRS and U.S. GAAP for financial reporting purposes.²⁰ They find that earnings and book values differ little in terms of value relevance, timeliness, or earnings management (Bartov et al. 2005; Van der Meulen et al. 2007). Correspondingly, there is little evidence that markets or investors view the outcomes differently, as evidenced by similar market liquidity and information asymmetry across IFRS and U.S. GAAP firms in settings where other institutions (e.g., enforcement) are held constant (Leuz and Verrecchia 2000; Leuz 2003).

A second set of studies investigates foreign firms that are exchange-listed in the United States; prepare financial statements in accordance with IFRS; must provide reconciliations to U.S. GAAP; and are subject to SEC oversight (e.g., Pownall and Schipper 1999). The empirical findings are mixed. Using various measures of earnings quality and value relevance, there is no clear evidence that U.S. GAAP or IFRS numbers dominate, and in many cases the earnings properties across the two standards are indistinguishable (e.g., Harris and Muller 1999; Gordon et al. 2009; Barth et al. 2010).²¹ At the same time, reconciled U.S. GAAP numbers from Form 20-F filings seem to be subject to more earnings management, exhibit lower associations with share prices, and are less timely to recognize losses than numbers prepared by U.S. firms (Lang et al. 2006). However, this result likely reflects the influence of cross-listed firms' home-country reporting incentives and institutions, or incentives stemming from the act of reconciliation itself (Leuz 2006). Similarly, Barth et al. (2010) directly compare IFRS and U.S. GAAP earnings across a matched sample of non-U.S. and U.S. firms, and find evidence that IFRS numbers are of lower quality. Again, it is not clear that this evidence should be interpreted as suggesting that IFRS leads to lower quality financial numbers because firms outside the United States are generally subject to different reporting incentives and, hence, we would not expect them to exhibit the same properties as U.S. firms, even under the same set of standards. Consistent with this view, Lang et al. (2003) show that firms' local GAAP reporting improves around U.S. cross-listings, likely reflecting a change in reporting incentives when firms become exposed to the U.S. institutional environment.

In sum, given the quality of U.S. GAAP combined with strict enforcement and strong (market-based) reporting incentives already in place, IFRS adoption would be unlikely to improve reporting quality in the United States. Thus, it would be difficult to justify a move to IFRS on the basis of improvements in reporting quality and the associated capital market benefits. Moreover, there are likely limits to how much market liquidity and costs of capital can improve as a result of reporting quality increases. Such constraints are more likely to be binding for countries like the

²⁰ Examples of such settings were German exchange-listed firms after the 1998 enactment of the KapAEG law, former New Market firms in Germany, or exchange-listed firms in Switzerland after the 1991 revision of the company law.

²¹ See, also, Dechow et al. (2009) for a review of the empirical literature on earnings quality.

United States, where reporting quality is already high. At the same time, our analysis suggests that it is unlikely that reporting quality would substantially decline as a result of IFRS adoption.

Does the Comparability of Reporting Practices Increase with IFRS Adoption?

While we expect IFRS adoption to have relatively small effects on reporting quality, it is more likely to have an impact on the cross-border comparability of U.S. reports, especially now that many other countries have moved to IFRS reporting. As explained previously, if IFRS adoption makes financial reporting by U.S. firms more comparable to the reports of foreign firms, a number of positive capital market effects are likely to ensue. These comparability benefits could provide a rationale for switching to IFRS (even in the absence of major reporting quality effects).

However, there are several factors that limit the magnitude of comparability benefits from IFRS adoption in the United States. First, the reporting incentives view and the discretion argument apply equally, if not more, to reporting comparability. Consistent with this view, evidence from the adoption of IFRS in other countries suggests a tendency of firms to refer to their previous, local GAAP when making judgment calls and exercising discretion under IFRS (e.g., KPMG 2006; ICAEW 2007; Christensen and Nikolaev 2009). We expect U.S. firms to do the same. Thus, IFRS adoption around the globe is unlikely to achieve true comparability in reporting practices. However, using a common set of accounting standards could make reporting more comparable in the sense that it narrows the set of permissible accounting treatments. As such, IFRS adoption has the potential to improve reporting comparability.

Second, the magnitude of the comparability benefits is presumably a function of the closeness of local GAAP to IFRS (e.g., Bae et al. 2008; Daske et al. 2008). If true, the benefits in the case of the United States are likely to be modest, since IFRS already closely resemble U.S. GAAP in many areas. More importantly, this implies that many comparability improvements for U.S. firms should have already been realized when the bulk of countries with large accounting differences between prior local GAAP and either IFRS or U.S. GAAP switched to IFRS in recent years. In essence, the switch of other countries to IFRS should have already conferred positive externalities on U.S. firms.

Third, taking a network perspective, one could argue that the comparability benefits are largest for smaller countries that have idiosyncratic accounting standards and opt into a large network with a common set of accounting standards (e.g., Waehrisch 2001; Meeks and Swann 2009). As the U.S. capital markets are large and already offer many U.S. peers using the same set of accounting standards (i.e., U.S. GAAP), comparability benefits for U.S. firms from joining the "IFRS network" might be relatively small. On the other hand, given that the global "IFRS network" has now achieved a significant scale, the benefits for U.S. firms to joining such an established network will be larger compared to joining the underdeveloped IAS network of the 1990s. At this point, however, there is little evidence on comparability benefits from IFRS reporting that would allow us to gauge the magnitude of the associated capital market (or other) effects.

Taken together, we conclude that a positive impact from IFRS adoption in the United States likely arises from comparability and network effects. There are several factors that limit the magnitude of these benefits for U.S. firms and investors. But even if the benefits turn out to be modest, it should be noted that they are recurring in nature and, hence, accrue over the long run.²²

Costs of IFRS Adoption and Reporting Cost Savings to U.S. Firms

It follows from our previous discussions that the capital market benefits of IFRS adoption and the effects on U.S. reporting practices are likely to be limited. Nonetheless, there could be a

²² Moreover, some of the benefits occur at the level of the individual investor and, hence, need to be aggregated across investors, which could result in a sizeable aggregate effect.

significant impact on the reporting infrastructure as well as firms' reporting processes and systems. We therefore shift our focus to cost consequences of IFRS adoption, be they negative or positive. The largest increase in out-of-pocket costs would likely occur during the transition phase, and not on an ongoing basis. But a switch to IFRS could also have additional recurring costs if there are incompatibilities with the U.S. institutional environment. In contrast, firms that operate in multiple countries may realize long-run cost savings if they adopt IFRS for all their operations. These transitional and recurring cost consequences are discussed in more detail below.

Transition Costs

Many of the issues related to IFRS adoption are transitional in nature leading to one-time or short-term costs. Firms will have to adjust their accounting systems and processes and, as required under the Sarbanes-Oxley Act (SOX), update the documentation of internal control procedures. In the first year of publishing IFRS reports, they will also have to provide at least one year of comparative prior period financial information (IFRS 1), maybe even up to three years under existing SEC regulation. In addition, firms will need to train their employees in the preparation of IFRS financial statements, as well as familiarize outside stakeholders like analysts and investors with IFRS numbers. This includes but is not limited to hiring outside specialists and consultants due to lack of in-house knowledge and familiarity with IFRS; organizing conference calls and road shows for investors; preparing press statements explaining differences in accounting policies; and redesigning financial publications like annual and quarterly reports. It should be noted that, similar to the implementation of SOX, the transition costs for U.S. firms could translate into large additional revenues for financial reporting advisory and auditing firms. Not unexpectedly, many of these advisory firms, therefore, take a very positive stance regarding the potential adoption of IFRS by the United States.

In addition, IFRS adoption could affect government-regulated industries like utilities, telecommunications, and financial institutions that provide financial statements to their regulators. For example, capital requirements for financial institutions are often determined on the basis of or by reference to U.S. GAAP financial statements. Furthermore, a switch to IFRS requires a reevaluation of all explicit or implicit contracts with components tied to accounting numbers.²³ A switch to IFRS can also affect managerial compensation schemes tied to reported earnings performance as well as debt covenants with explicit references to GAAP numbers.²⁴ Although the impact of IFRS adoption on the magnitude of reported earnings of U.S. firms is ambiguous, studies from other settings suggest that earnings volatility could rise, in particular, if the switch to IFRS were to accelerate the use of mark-to-market accounting (e.g., Hung and Subramanyam 2007; Christensen and Nikolaev 2009; Muller et al. 2008). As a consequence, the likelihood of debt covenant violations could increase, requiring costly renegotiations between lenders and debtors (Christensen et al. 2009). Note, however, that contract implications seem most prevalent in the year of the transition, and are likely to abate over time.

Overall, we expect transition costs for U.S. firms to be substantial, and to contain a fixed component, thereby weighing more heavily on smaller firms. It is difficult to put a precise estimate on the aggregate or per-firm transition costs. Based on survey data for the 2005 mandatory transition to IFRS in the European Union, it is possible to construct a rough estimate of the first-time preparation costs of IFRS consolidated financial statements for publicly traded firms.

²³ From a mere legal perspective, the effects should, in many cases, be limited. If IFRS become generally accepted accounting principles in the United States, any explicit reference to U.S. GAAP-compliant numbers in contracts could extend to reports prepared in accordance to IFRS, and no change in terminology is needed.

²⁴ Large sample evidence in Dichev and Skinner (2002) suggests that about 40 percent of private corporate lending agreements in the United States contain at least one accounting-based covenant.

This evidence suggests per-firm estimates ranging from 0.31 percent of total sales for firms with sales below \$700 million to 0.05 percent of total sales for larger firms (ICAEW 2007), which amounts to an *average* one-time cost of \$420,000 for small firms and \$3.24 million for large firms.^{25,26} Based on these estimates, the aggregate transition costs would amount to at least \$8 billion for the U.S. economy as a whole.²⁷ In terms of the universe of affected firms, this estimate for the aggregate costs is conservative because Compustat does not cover many firms trading in the over-the-counter (OTC) markets and hence our estimate includes only exchange-listed firms. SEC-registered OTC firms will have to switch to IFRS (or at least partially adjust their reporting) and, in relative terms, the switch is likely to be even more costly for them (e.g., Bushee and Leuz 2005; Leuz et al. 2008). In addition, our estimate does not include financial institutions, for which total sales is neither available nor a good activity measure. Obviously, all these estimates are only as good as the survey input data and, hence, they should be interpreted very cautiously.²⁸ Finally, we note that the costs are likely to increase even further if the SEC requires firms to provide, for a limited period, IFRS reports together with reconciliations to U.S. GAAP (or vice versa), as outlined in Proposal B in the SEC Roadmap (SEC 2008).

Recurring Costs

Even though the one-time conversion costs are likely to be substantial, they by themselves are unlikely to justify maintaining the current U.S. GAAP regime. If there are (modest) benefits to IFRS adoption that continue to recur over the long run and are sufficiently large, they will eventually outweigh the start-up costs (assuming a reasonable discount factor). Hence, it is also important to ask whether there are any major recurring cost increases from IFRS adoption, as they could substantially alter the cost-benefit trade-off. Given that U.S. GAAP comprise a comprehensive set of rules and regulations, it is unlikely that on an ongoing basis the direct out-of-pocket costs for the preparation of IFRS reports exceed those under the current system. If anything, one might argue that the direct costs go down as a result of the lower complexity of IFRS. However, there may be recurring indirect costs arising from incompatibilities with the U.S. legal and institutional system. Such issues would not be easily fixed, as institutional changes take time and can result in substantial costs. In addition, there could be additional opportunity costs if IFRS adoption in the United States were to reduce the rate of innovation in standard setting because it essentially eliminates an important competing set of accounting standards. We discuss this issue in Part II of this study.

²⁵ We obtain these numbers using data from Compustat North America in 2005. Out of 6,822 individual firms with total sales numbers available, 5,006 firms fall below the \$700 million threshold, and 1,816 are above. We then compute transition costs based on average total sales for each group, i.e., \$136 million × 0.31 percent ≈ \$0.42 million (or 5,006 × \$0.42 ≈ \$2,110 million) for small firms, and \$6,484 million × 0.05 percent ≈ \$3.24 million (or 1,816 × \$3.24 ≈ \$5,890 million) for large firms, respectively.

²⁶ To compare these numbers to those outlined in the SEC Roadmap (SEC 2008, 70,848, estimated at \$32 million per company eligible for early IFRS adoption over the first three years of IFRS reporting), we also apply our approach to the 200 U.S. firms with the largest sales numbers in 2005. Based on average total sales for this group, the first-year transition cost estimate increases to \$17.98 million (i.e., \$35,954 million \times 0.05 percent). In the following years, the recurring costs of preparing IFRS financial statements are estimated on the range of 0.06 percent of total sales for small firms to 0.008 percent of total sales for very large firms (ICAEW 2007). Hence, we add \$2.88 million (i.e., \$35,954 million. More generally, our computations show that the estimated costs vary considerably by firm size and, hence, one has to be careful with comparisons of average estimates.

²⁷ It should be noted that some of the transitional costs for U.S. firms translate into incremental revenues for financial reporting advisory firms. Therefore, switching to IFRS will likely result in a redistribution of wealth among parties in the economy. A potential concern for U.S. policymakers is whether a significant amount of the wealth is redistributed to non-U.S. parties including foreign financial reporting advisory firms with pre-existing expertise in IFRS implementation. We discuss this issue in more detail below.

²⁸ Another caveat is that the transition costs of EU firms may not be representative for U.S. firms that operate in a different institutional environment.

Cost Savings Arising from a Single Global Reporting System

U.S. firms with operations around the world may realize cost savings from using a single set of standards for their financial reporting systems around the world. The foreign subsidiaries of U.S. multinationals often have to comply with the domestic reporting standards of their domicile (e.g., for statutory reporting or tax purposes). This requirement introduces duplication of reporting systems and translation costs for U.S. multinational firms. In particular, each foreign subsidiary would either (1) maintain and track its primary accounts in compliance with U.S. GAAP (but then have to translate its reports to the domestic GAAP of its domicile); or (2) maintain and track its primary accounts in compliance with the domestic GAAP of its domicile but then translate or reconcile these accounts to U.S. GAAP for consolidation with the U.S. parent company's accounts. As many countries have moved to IFRS reporting for consolidated accounts but not yet for statutory purposes (or the parent-only accounts), a foreign subsidiary of a U.S. multinational may have to maintain (or reconcile) three sets of accounts, i.e., U.S. GAAP, IFRS, and domestic GAAP. In these cases, switching to IFRS reporting by the U.S. multinational could eliminate one set of accounts and, hence, could produce cost savings.²⁹ Furthermore, there is the prospect that IFRS become the global set of accounting standards for statutory and parent-only accounts as well, in which case IFRS adoption by the United States would enable U.S. multinationals to maintain and track a single set of accounts, eliminating duplication and leading to reporting cost savings.³⁰ Thus, the magnitude of the cost savings of IFRS adoption by U.S. multinationals depends, among other things, on the *future* use of IFRS for statutory reporting around the world (as well as the future acceptance of U.S. GAAP in foreign jurisdictions). Aside from the cost savings, a switch to IFRS by a U.S. multinational could improve within-firm reporting comparability across its subsidiaries to the extent that translated or reconciled U.S. GAAP numbers prepared by the subsidiaries for the parent are not of the same quality as primary accounts in IFRS.

There are two additional points related to the possible cost savings from a single global reporting system that are worth emphasizing. First, purely domestic U.S. companies are unlikely to realize any international reporting cost savings from using IFRS compared to U.S. GAAP. Thus, the costs and benefits from IFRS are not evenly distributed—an issue that we discuss in the next section. Second, foreign multinationals that use IFRS will also realize incremental savings if the United States adopts IFRS because their (publicly listed) U.S. subsidiaries will no longer have to create duplicate financial reports that comply with U.S. GAAP. Therefore, the adoption of IFRS by the United States can decrease the costs to foreign multinationals from either establishing or purchasing a U.S. subsidiary.

Which Firms Are Likely to Have Larger Net Benefits (or Costs) from IFRS Adoption?

Empirical studies show that the costs and benefits of IFRS adoption are distributed heterogeneously among firms (e.g., Daske et al. 2008, 2009). In this section, we discuss which U.S. firms are likely to benefit the most (or have the smallest net costs). We start with existing evidence on the determinants of voluntary IFRS adoption around the world to predict which U.S. firms would likely incur larger net benefits (or smaller net costs) from adopting IFRS. The underlying assump-

²⁹ Certain jurisdictions also allow the use of IFRS for statutory purposes. In addition, it should be noted that foreign jurisdictions typically accept U.S. GAAP for financial reporting purposes. Thus, as an alternative, it would be possible to eliminate one set of accounts by moving the subsidiary to U.S. GAAP.

³⁰ IFRS reporting for statutory and parent-only accounts is still heavily debated around the world and, hence, this prospect may be far in the future. One might, therefore, argue that these cost savings should not be given much weight in the decision of whether the United States adopts IFRS. The counterargument is that IFRS adoption by the United States could substantially increase the chances of IFRS becoming the global set of standards for all kinds of reporting.

tion is that firms voluntarily switch to IFRS only if, in expectation, the benefits exceed the costs.³¹ Prior research reveals that voluntary IFRS adopters are larger, more likely to have international cross-listings, more extensively rely on outside funding, have geographically dispersed operations, more diffuse ownership, and are more likely domiciled in countries with low-quality local reporting (e.g., Dumontier and Raffournier 1998; Ashbaugh 2001; Leuz 2003; Cuijpers and Buijink 2005; Christensen et al. 2007). However, many of the aforementioned empirical determinants of voluntary IFRS adoptions stem from contexts in which adopting IFRS could improve reporting quality (relative to local GAAP reporting). As this improvement is unlikely in the United States, we have to exercise caution when interpreting these studies in a U.S. context. Similarly, the argument that firms switch to IFRS to reduce information asymmetries and, hence, improve their ability to satisfy current and future financing needs does not really apply to U.S. firms. The majority of U.S. firms can satisfy their financing needs by tapping into the domestic capital market.

Nevertheless, it is plausible that U.S. multinational firms would be among the primary beneficiaries of IFRS adoption in the United States, consistent with the notion of comparability benefits.³² We broadly define "multinationals" as firms with foreign subsidiaries or operations; firms that derive a significant portion of their sales abroad; firms considering international expansion; firms with foreign suppliers or customers; and firms with a more international investor base. For these firms, benefits could come in the form of avoiding costly dual reporting when foreign authorities allow or require IFRS financial statements for statutory reporting purposes. However, most countries have not yet moved to IFRS for statutory reporting. The latter is typically based on the so-called individual (or parent-only) accounts under local GAAP, rather than based on IFRS consolidated accounts (e.g., Nobes 2008, for a classification of European countries that still require national GAAP for unconsolidated accounts). Benefits could also arise from the removal of formal or informal trade barriers that prevent foreign firms, investors, governments, and other parties from transacting with non-IFRS compliant U.S. firms, or at least make it more costly to do so.³³ In a similar vein, U.S. firms with cross-listings outside the United States might benefit from a move to IFRS if it eliminates the requirement to prepare a separate set of financial statements.³⁴

Another group of potential beneficiaries from IFRS adoption are large firms and those with Big 4 auditors. Since switching to IFRS likely involves a fixed-cost component, larger firms will be at an advantage. Big 4 audit firms are already experienced in implementing and auditing IFRS reports and can draw on their international network of professionals for special issues. This gives them a comparative advantage over local, non-affiliated auditors. On the other end of the size

³¹ It should be noted that the overall proportion of voluntary IFRS adopters is small, averaging only about 6 percent of the total Worldscope population between 1988 and 2004 (see Daske et al. 2009, Appendix A). This suggests that the large majority of international firms did not expect to incur net benefits from voluntarily adopting non-local GAAP.

³² Another important group of potential beneficiaries are U.S. investors who want to diversify their portfolios abroad and would no longer need to invest in understanding both U.S. GAAP and IFRS. But in this section, our discussion focuses on firms.

³³ Note that we can turn the "trade barriers" argument on its head and use it from a protectionist's perspective *against* IFRS adoption by the United States, in particular, any formal or informal requirement of U.S. GAAP reporting imposes additional non-tariff costs impeding foreign firms from entering the United States and conducting business with U.S. clients, suppliers, investors, or creditors.

³⁴ The scope of the cross-listing argument is limited to requirements explicitly precluding U.S. GAAP reporting. On many international exchanges U.S. firms are already allowed to report in accordance with U.S. GAAP (e.g., London, Hong Kong, Frankfurt). In addition, as stated by the European Commission in 2008, U.S. GAAP meets the criteria of equivalence to IFRS, effectively granting U.S. issuers the right to be listed in EU markets without costly reconciliation (reference: IP/08/619).

spectrum, smaller U.S. firms could also benefit from the adoption of IFRS. IFRS are often touted as being less complex than U.S. GAAP. Lower complexity means lower risk of errors and, on average, lower audit costs.³⁵

Compatibility of IFRS with U.S. Regulatory System, Legal Environment, and Economy

In this section, we discuss issues related to the compatibility of IFRS with the U.S. institutional environment and infrastructure. There is a growing body of evidence that a country's institutions, including its financial reporting regime, are important determinants of aggregate economic outcomes.³⁶ Furthermore, the fit among the elements of a country's institutional framework is likely important for the performance of a country's financial and economic system. As a result, a switch to IFRS by the United States could lead to unwanted consequences for the U.S. economy if there are incompatibilities with other elements of the institutional framework, even when IFRS are deemed to be high quality and perform well in other countries.

An imperfect institutional fit between IFRS and current U.S. institutions can also be a source of both transitional and future recurring costs to the economy. That is, even if IFRS and U.S. institutions are, in principle, compatible, certain U.S. institutions may need to be adjusted or adapted so as to fine-tune them to the introduction of IFRS. As there are many institutions that use or rely on firms' reported accounting numbers, including the audit profession, regulators, enforcement agencies, the legal system, tax laws, and private contracts, adjustment costs can be nontrivial. At the same time, possible adjustments to current U.S. institutions could lead to greater efficiencies and improvements of the system overall. Given the complexity of the interactions, the institutional effects and adjustments arising from IFRS adoption are difficult to ascertain and quantify.

Accounting Discretion and the U.S. Litigation System

It is often argued that the major difference between IFRS and U.S. GAAP is that the former are more principles-based compared to U.S. GAAP, which are often described as more rulesbased. The exact meaning of this distinction is not well defined and is often unclear. Moreover, in our view, it potentially distracts from more fundamental economic arguments on the impact of accounting standards. Similar to IFRS, U.S. GAAP are also based on certain principles (see, e.g., the FASB's conceptual framework). Moreover, Ball (2009) argues that, contrary to popular belief, the U.S. accounting system is arguably principles-based at the court level. He points to the 1969 criminal case of the *United States v. Simon* in which the U.S. GAAP to a more rules-based set of standards could just be a result of age, and the demand for greater specificity and guidance gradually grew, as the original standards were stress-tested and further developed.³⁸

Nonetheless, there is little disagreement that current IFRS are less specific and provide less application guidance than U.S. GAAP (e.g., SEC 2008). As result, a key difference between the two sets of standards is the amount of discretion that firms and managers have. As discussed previously, more discretion in the accounting standards is not necessarily bad. Discretion enables

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³⁵ However, as discussed below, it is not clear that IFRS would remain as simple and principles based if they were used in the U.S. environment. Moreover, it is possible that the lower complexity of IFRS is just a byproduct of their relatively young age.

³⁶ See surveys by Shleifer and Vishny (1997) and La Porta et al. (2000).

³⁷ This view has been reaffirmed in recent court cases (e.g., WorldCom as outlined in Ball 2009). This point notwithstanding firms and auditors often demand specific guidance from the SEC or the FASB in an effort to reduce (perceived) litigation risks.
³⁸ We then Starker Zeff for a printing and that the SEC?

³⁸ We thank Stephen Zeff for pointing out that the SEC's accounting staff, both in the Office of the Chief Accountant and in the Division of Corporation Finance, could be an additional source for the amount of detail in U.S. standards. Over the years, the SEC's accounting staff has continually pressed the FASB to prescribe more and more detail.

managers to convey private information to the markets in a less costly fashion. On the other hand, discretion also allows managers to pursue ulterior reporting motives. As countries' institutional frameworks play a major role in shaping managers' reporting incentives and in the use of discretion, it is important to ask whether the amount of reporting discretion in IFRS poses a problem for the U.S. litigation system, which is rather unique around the world.

As a result of less-specific standards and guidance, managers must exercise more judgment in interpreting IFRS, which could increase the incidence of legal challenges of managers' (good-faith) professional judgments.³⁹ Thus, a switch to IFRS could lead managers to make initially "less aggressive" accounting choices, given that the new parameters of U.S. litigation under IFRS have yet to be established. The uncertainty about litigation outcomes could even induce managers to make overly conservative accounting choices. Furthermore, managers may undertake conservative operating, financing, and investing decisions if they imply accounting treatments under IFRS that managers perceive as reducing litigation risk. In contrast, it is also conceivable that the transition from U.S. GAAP to IFRS leads to initially "more aggressive" accounting choices and more earnings management because IFRS give managers greater latitude in interpreting and implementing the standards. While this discussion is somewhat speculative, it highlights that the reporting consequences of more discretion in a litigious environment are not *a priori* obvious.

Again, it is important to recall that firms' reporting incentives are shaped by many institutional factors and that these factors would not be expected to change around the introduction of IFRS in the United States. Therefore, it seems unlikely that greater reporting discretion under IFRS alone would lead, on average, to more earnings management across U.S. firms, but it can do so in cases where managers have poor reporting (or even hiding) incentives to begin with.⁴⁰ Thus, SEC enforcement and firms' internal controls could become more important for reporting quality as a result of IFRS adoption.

If there is a switch to IFRS, we expect the U.S. litigation system and accounting practices to transition to a new equilibrium. Consistent with this expectation, current accounting practices and GAAP generally reflect the present features of the U.S. litigation system (e.g., Basu 1997; Ball et al. 2000). Similarly, the amount of guidance in U.S. GAAP is often viewed as a response to the litigation system. Thus, for a transition period, IFRS adoption is likely to impose some costs on the parties involved. For example, audit firms, the FASB and the SEC may need some time to handle the ambiguities of IFRS and to develop new expertise. Moreover, the pressures from the U.S. litigation system will shape the application and enforcement of IFRS in the United States, and likely create demands for additional implementation guidance. One such example is the "forward-looking" risk estimates that firms are required to provide under IFRS. Since U.S. GAAP do not require these estimates, their disclosure under IFRS could increase the exposure to private litigation by investors. In sum, our prediction is that, if IFRS are exposed to the U.S. institutional environment, there will be substantial pressures on the standard setters and U.S. regulators to provide more guidance, details, and rules.

Accounting Differences between U.S. GAAP and IFRS

Before discussing the effects and particular areas of differences between IFRS and U.S. GAAP, it must be stressed that the two sets of standards have many things in common and that they are considerably more similar due to the (formal and informal) convergence efforts of both standard setters over the years. But in spite of the commonalities, several major differences

³⁹ Similar to the litigation risk argument, managers' professional judgments are also more likely to be challenged by regulators, in particular, the SEC (e.g., KPMG 2008).

⁴⁰ Even if earnings management were to increase as a result of more discretion under IFRS, a potentially countervailing effect is the occurrence of less transaction structuring and less real earnings management (Ewert and Wagenhofer 2005).

between the two sets of standards (and the respective sets of guidance) remain when it comes to particular transactions. Differences arise in how specific items are recognized, measured, and presented on the financial statements—and what disclosures are needed. The Big 4 audit firms provide updated lists of the differences between the two standards, listing many differences.⁴¹ For example, according to PwC (2009), FIN 48 (*Income Taxes*) and FAS No. 123R (*Share-Based Payment*) alone account for many of the key differences between U.S. GAAP and IFRS.

In an attempt to quantify the magnitude and direction of the accounting differences between the two sets of standards, Plumlee and Plumlee (2008) analyze a sample of 100 firms randomly selected from foreign private issuers that filed a 20-F with the SEC during 2006 and employed IFRS. Their analysis indicates only a few categories of large reconciling items. Those areas are pensions and post-retirement benefits, share-based compensation, revaluations of property, plant, and equipment, impairment losses on goodwill and intangibles, and deferred taxes. While the net income differences between IFRS and U.S. GAAP (netting across all the reconciling items for a firm) are on average small and relatively concentrated (for more than half of the firms the differences fall within +/- 15 percent of IFRS net income), there exist extreme cases with major differences ranging from -206 to +253 percent of IFRS net income. For stockholders' equity, the net difference is on average 10 percent (median = 2.7 percent) with a similar distribution as the net income difference. Similarly, Gordon et al. (2009) examine 20-F reconciliation amounts for cross-listed firms in the United States that use IFRS as their home-country GAAP, and find that the five categories with the biggest differences are business combinations, compensation, taxes, intangibles, and the classification of debt.

In terms of direction, Plumlee and Plumlee (2008) find that 75 percent of the foreign private issuers report IFRS net income in excess of U.S. GAAP net income.⁴² For stockholders' equity, the directional effect is less clear-cut: only 43 percent of the firms report IFRS values exceeding stockholders' equity under U.S. GAAP. Conditional on being positive or negative, the average difference in stockholders' equity is substantial (i.e., +35.1 and -23.7 percent, respectively), and differs by firm size and industry.

Thus, the effects of a switch from U.S. GAAP to IFRS on key metrics, such as net income, EPS or stockholders' equity, are difficult to predict in general. Moreover, while 20-F reconciliations provide useful descriptive evidence on the magnitude and direction of the differences between IFRS and U.S. GAAP, the findings are unlikely to generalize to the population of U.S. firms and, hence, should be interpreted cautiously. Foreign firms with cross-listings in the United States are not representative for the average U.S. firm. Cross-listed firms are typically large multinationals (e.g., Lang et al. 2003). Moreover, cross-listed firms may have incentives to reduce or even minimize reconciliations (e.g., Leuz 2006).

However, the importance of accounting standards for the reported amounts (and their quality) is often overestimated and the debate on IFRS adoption in the United States often incorrectly focuses on narrow issues about differences in the standards. Instead, it is important to recall the reporting incentives argument. For example, if a firm is forced to switch from U.S. GAAP to IFRS but does not want to change the valuation of a particular asset, managers may use their reporting discretion to achieve the same valuation under IFRS. If this is not possible (e.g., because the asset cannot be recognized under IFRS), managers can attempt to compensate for the recognition or valuation difference in this particular asset by using reporting discretion in other assets. Finally,

⁴¹ See the summary of accounting differences between IFRS and U.S. GAAP by Deloitte (2008), Ernst & Young (2009), KPMG (2009), and PwC (2009). We have already discussed one major difference, i.e., the amount of discretion that the two sets of standards offer in the text.

⁴² Gordon et al. (2009) also find that, on average, net income under IFRS exceeds net income under U.S. GAAP.

managers always have the option to provide additional information, e.g., in the form of a reconciliation schedule in the footnotes. Thus, it is not obvious that a forced switch to IFRS has a major impact on the reported numbers or the overall information provided.

It is important to recognize, however, that even if the remaining accounting differences between IFRS and U.S. GAAP do not affect reporting quality, they can still impede comparability and impose costs on financial statement users that want to make comparisons across firms. They can also have mechanical effects on contractual provisions and, hence, require contractual adjustments. Finally, accounting differences could influence real operating, investing, and financing activities. For instance, firms may structure transactions differently once they no longer obtain the preferred accounting treatment.

For these reasons, we provide several examples of key accounting differences between U.S. GAAP and IFRS below and discuss their potential impact on managers' real decisions. It should be noted that these differences will likely decline as the IASB-FASB convergence project continues. Thus, the *relevant* differences between the two standards are not the current ones, but the ones that exist at the proposed transition date.

First, a heavily debated issue is the use of fair values in IFRS and U.S. GAAP (e.g., Watts 2003a, 2003b, 2006; Benston et al. 2006; Barth 2008). One question in this regard is whether IFRS would accelerate the trend toward fair value accounting given that IFRS make heavy use of mark-to-market approaches and contain many standards in which the use of fair values is optional (e.g., IAS 16 and IAS 40). While fair value accounting is in many ways conceptually appealing, it is often difficult to implement (e.g., Ball 2006), and could be incompatible with the current legal, institutional, and political environment in the United States. As the use of fair value estimates is often viewed as increasing the amount of discretion given to managers (e.g., Watts 2003a, 2003b), the fair value debate is closely related to the issue of reporting discretion. Moreover, it is not obvious that a switch to IFRS indeed leads to more fair value use. Consistent with this argument, Christensen and Nikolaev (2009) show that around the mandatory adoption of IFRS many U.K. firms abandoned fair values in favor of historical costs, while only a few German firms used the newly granted discretion and switched from historical costs to fair values as a basis for their valuation.

Second, in the area of revenue recognition, U.S. GAAP comprise very specific guidance provided by the FASB and the SEC. These detailed standards include industry-specific provisions. In contrast, IFRS only have two primary revenue standards plus a few interpretations on revenue recognition that are intended to capture all revenue transactions. These principles apply without additional details or specific provisions for particular industries. For example, in the software industry, U.S. GAAP set out very specific rules and higher thresholds for recognizing revenue than IFRS. These rules have affected the business and selling strategies of U.S. software companies, which in turn implies that the adoption of IFRS could bring strategy adjustments for these firms (e.g., PwC 2009).

Third, share-based payments are another area of significant differences. IFRS allow firms to accelerate the expense recognition of certain stock options with "graded vesting" (e.g., Ernst & Young 2009). McAnally et al. (2010) compare differences in accounting for shared-based compensation for pro forma U.S. GAAP and IFRS financial statements for a sample of U.S. firms.⁴³ They find that IFRS conversion significantly increases deferred tax assets and recognized tax benefits for about one-third of their U.S. sample. They also find that IFRS tax items are better able to predict future cash flows.

⁴³ A key difference between U.S. GAAP and IFRS is that the latter reports tax benefits from equity-based compensation at the imputed intrinsic value each period. This leads to more "fair value accounting" for equity-based compensation compared to the historical cost approach for allocating future expenses under U.S. GAAP.

Fourth, the area of financial liabilities and equity gives rise to differences that could affect how a firm chooses to raise capital. Certain financial instruments that are classified as equity under U.S. GAAP have to be reclassified as debt under IFRS. The reclassification of these instruments will affect reported net assets as well as debt to equity ratios (De Jong et al. 2006). Furthermore, calculated interest expenses will sometimes increase under IFRS (and, in turn, decrease reported net income) because the distributions no longer qualify as payouts to equity holders. These changes have the potential to affect firms' borrowing activities, debt covenants, ratings, and other contracts.

Finally, consolidations are another area of differences between U.S. GAAP and IFRS. Under IFRS, the decision to consolidate is based on the principle of whether the company effectively has control, i.e., the power and ability to dictate operating and financial policies of another entity. On the other hand, U.S. GAAP provide many rules and exceptions that allow firms to avoid consolidation and to place items "off balance sheet." Therefore, IFRS adoption likely increases the number of entities that have to be consolidated (e.g., Deloitte 2008), potentially affecting firms' acquisition and investment strategies. Furthermore, the change in consolidation treatment can alter financial ratios, which could necessitate mechanical adjustments to accounting-based contracts.

IFRS Reporting and U.S. Disclosure Requirements

Current FASB standards and additional SEC filing rules require far more disclosure than is observed in many countries. To the extent that these disclosures exceed what is required under IFRS, they do not create an incompatibility. That is, IFRS do not preclude additional disclosures. To the contrary, the underlying principles of IFRS encourage disclosures that help paint a "true and fair" picture of firms' transactions, their performance, and financial health. However, a switch to IFRS poses the question of whether to maintain explicit SEC disclosure requirements that are outside or go beyond those in IFRS.

As Hail and Leuz (2006) demonstrate, strict disclosure requirements that are well-enforced are associated with a lower cost of capital for firms that operate within these requirements. However, they also show that the cost of capital reduction is larger in countries with less integrated capital markets. As the U.S. market is one of the best-integrated capital markets in the world and as U.S. GAAP and IFRS already have demanding disclosure requirements, the cost of capital benefits from any *additional* disclosure requirements in the United States are likely to be muted. Moreover, disclosure requirements are costly to firms and, hence, the usual cost-benefit trade-off applies. In this sense, the switch to IFRS provides an opportunity to review whether current U.S. disclosure requirements provide net benefits to U.S. firms and investors.

A more subtle issue is that disclosure requirements affect managers' reporting incentives and, thereby, indirectly influence the recognition and valuation of transactions in firms' financial statements.⁴⁴ As such, additional disclosure requirements could be counterproductive with respect to the goal of comparability. A counterargument is that additional disclosure requirements could be used to bolster the quality of IFRS reporting in the United States, if they are expanded in those areas in which particular IFRS are a concern or viewed as insufficient. Furthermore, more stringent and specific disclosure requirements could provide a way for the United States to distinguish its reporting environment from other countries and allow the kind of leadership it had in developing accounting standards in the past. The strictness of U.S. reporting requirements and enforcement has attracted many foreign firms to the U.S. capital markets (e.g., Doidge et al. 2004; Karolyi

⁴⁴ For example, there is growing evidence that earnings management and good disclosure are negatively related (e.g., Leuz et al. 2003; Burgstahler et al. 2006).

2006; Hail and Leuz 2009). Thus, the SEC disclosure overlay provides benefits and opportunities for the United States, but it also has costs with respect to comparability, which need to be traded off against each other.

IFRS Reporting and the Link to Taxation

The effect of IFRS on U.S. firms' corporate taxes and on U.S. tax policy is an important area of debate. Academic research has highlighted the potential interactions between a country's tax reporting system and its financial reporting system. Guenther and Young (2000) and Haw et al. (2004) suggest that a strong tax enforcement system within a country is associated with higher-quality reported accounting numbers. But it is unclear whether tax enforcement leads to better financial reporting outcomes, or whether other (correlated) institutional factors provide incentives to increase reporting quality that also lead to greater observed tax compliance (Wysocki 2004). Clearly, there are a number of strong institutions in the United States outside the tax system, such as the well-functioning legal system, the auditing infrastructure, or the audit firm oversight by the PCAOB, that likely foster tax compliance.

Even though we view high-quality financial reporting and tax compliance as correlated outcomes, it is conceivable that the relatively strict tax enforcement system in the United States provides incentives toward a higher-quality implementation of IFRS.

Aside from incentive effects, a change to IFRS can also affect certain tax calculations related to financial statement numbers. As discussed above, income under IFRS differs from U.S. GAAP income in the areas of revenue recognition, leases, asset impairments, classification and measurement of financial instruments, hedging activities, and stock-based compensation. Many of these items give rise to timing differences with regard to their treatment under the Tax Code and, hence, will have an impact on the magnitude and time-series pattern of deferred taxes reported in the IFRS financial statements.

Another difference arises in the area of uncertain tax positions. The IASB has explicitly stated that it will not use the FASB's requirements on uncertain tax positions in FIN 48 (e.g., PwC 2009). This raises the question of whether the United States is willing to give up its position and adopt current IFRS provisions (i.e., IAS 12, *Income Taxes*), whether the United States uses its weight to change IFRS to include elements of current FIN 48, or whether it chooses a carve out for IAS 12 and supplants it with FIN 48. At the very least, the case of FIN 48 provides an interesting example of impediments to the ongoing convergence between IFRS and U.S. GAAP.

Finally, there are IFRS-U.S. GAAP differences that affect the amount of taxes that firms pay and, hence, have cash flow consequences. One potentially important issue arises from the fact that IFRS do not allow LIFO accounting. In contrast, U.S. tax law allows LIFO valuation, but only if it is also used for financial reporting. Presumably, a switch to IFRS would lead to a higher tax burden for firms that previously used LIFO valuation, unless the tax system is adjusted. There are also international tax impacts including, but not limited to, fair value measurement, cash repatriations, and cash distributions through affiliates (e.g., PwC 2009). In addition, there could be differences in state and local tax positions (e.g., PwC 2009).

The Internal Revenue Service (IRS) is likely aware of the tax-revenue implications of a possible switch to IFRS, and, hence, could adjust the tax rules if there were any potential revenue losses. The reverse is less clear, especially in times when overall revenues are declining. However, for the LIFO issue, there are several relatively simple solutions. First, the IRS or, more precisely, U.S. Congress could drop the requirement that LIFO is also used for financial reporting purposes (Pincus 1989). As such financial reporting prerequisites are rare in the U.S. tax system, it is unlikely that dropping the LIFO conformity rule imposes major costs on other elements of the tax

system.⁴⁵ Second, the IRS could provide tax credits or tax breaks to firms that currently benefit from LIFO accounting but would incur higher taxes after being forced to use IFRS. Thus, there are some transition costs for both the IRS and firms, as they must adjust their tax-planning strategies and tax reporting systems to the new rules. Moreover, if there are real tax implications from IFRS adoption, they likely affect firms in an uneven manner as their present tax burden not only reflects a firm's financial and operating structure, but also managers' incentives to minimize tax payments under the current Tax Code. Therefore, a shift in the incentives structure is likely to affect taxplanning strategies.

Other Macroeconomic Effects

In this section, we consider other macroeconomic effects from IFRS adoption in the United States. While changes to a country's reporting system in conjunction with changes to other institutions could have broad effects on economic outcomes, IFRS adoption by the United States is unlikely to have a major macroeconomic impact, such as GDP growth effects, because U.S. GAAP are already high-quality reporting standards and the United States already has strong institutions. If there are any macroeconomic effects of IFRS adoption, they are likely to arise in three areas: (1) the redistribution of wealth between different types of firms (e.g., internationally oriented versus purely domestic firms); (2) the redistribution of wealth between different service providers (e.g., Big 4 versus smaller audit firms); and (3) comparability and competitive effects arising from the use of a single worldwide set of accounting standards.⁴⁶ As we have already discussed the potential wealth redistributions among firms above, we focus on the effects of IFRS adoption on the competitiveness of U.S. capital markets, trade flows and foreign direct investments, service providers, and the educational system.

International Competitiveness of U.S. Capital Markets

Based on evidence from the cross-listing literature, it is not clear that U.S. capital markets were hurt in the past by strict U.S. regulation or U.S. GAAP reporting requirements (e.g., Ammer et al. 2005; Doidge et al. 2009; Piotroski and Srinivasan 2008). To the contrary, the bonding literature suggests that firms choose to cross-list in the United States because of its strict regulations and not in spite of them (e.g., Reese and Weisbach 2002; Doidge 2004; Doidge et al. 2004; Hail and Leuz 2009). That is, the valuation and cost of capital benefits from U.S. cross-listings seem large enough to outweigh the costs of reporting under U.S. GAAP or preparing 20-F reconciliations, particularly for firms from countries with weak institutions and underdeveloped capital markets. Based on this evidence, U.S. GAAP reporting requirements do not appear to be a competitive disadvantage. If anything, strict reporting requirements appear to create benefits at least for some firms. Thus, it is not clear that moving to IFRS would make U.S. capital markets more attractive to foreign firms.⁴⁷

The SEC has recently decided to allow foreign firms cross-listing in the United States to report under IFRS without a 20-F reconciliation, essentially granting them a choice between U.S. GAAP and IFRS. This move raises the question of whether, based on fairness or competition

⁴⁵ However, dropping the conformity rule will likely lead to more firms switching to LIFO for tax purposes, resulting in revenue losses.

⁴⁶ In addition, one might contemplate redistributional effects in the labor markets. Some argue that IFRS adoption would lead to higher reported earnings, which, in turn, could boost wage demands from employees and labor unions (Wu and Zhang 2009). However, such differences could be explained in a reconciliation schedule, and hence it is uncertain, if not unlikely, that the wage demands would have much weight.

⁴⁷ It should be noted that much of the evidence on the "attractiveness" of U.S. capital markets (including U.S. GAAP reporting requirements) was gathered in the years preceding widespread adoption of IFRS in Europe and other parts of the world. Also, IFRS adoption might make U.S. markets more attractive to international investors that are not familiar with U.S. GAAP.

arguments, U.S. registrants should be given the same option. Even though giving a choice to U.S. registrants does not involve the same trade-offs for the SEC as giving it to foreign issuers, it involves similar issues. For example, if foreign countries were to require the use of IFRS reporting but not accept U.S. GAAP, U.S. companies that trade or operate in these countries (or would like to do so) would be forced to use IFRS in addition to U.S. GAAP.⁴⁸ Furthermore, international subsidiaries of U.S. firms may have to report under IFRS for statutory purposes. In this regard, it is important to recall that most countries so far require IFRS only for the consolidated financial statements of publicly traded firms but not for their parent-only accounts or for statutory purposes. Thus, at present, many international (non-publicly traded) subsidiaries of U.S. firms still have to report under local GAAP, which necessitates some form of restatement or reconciliation regardless of whether the United States moves to IFRS or not. In the long run, however, the ability to use IFRS for international subsidiaries of U.S. firms is likely to become a bigger issue as more countries require IFRS for private firms and for statutory reporting purposes. With such a trend, and if the United States maintains the current U.S. GAAP reporting requirement, more and more U.S. multinational firms will either have to reconcile IFRS reports from foreign subsidiaries to U.S. GAAP for consolidation purposes, or have to provide a reconciliation from the subsidiaries' U.S. GAAP reports to IFRS for statutory purposes.

If, on the other hand, the United States adopts IFRS, we expect that regulatory competition will shift to other elements of the reporting system, such as the enforcement of IFRS within a jurisdiction (including penalties and investor remedies for noncompliance) or additional disclosure requirements. The cross-listing literature suggests that, historically, many foreign firms have chosen to list in the United States precisely for the bonding benefits arising from the relatively strict U.S. disclosure and enforcement regime. Accordingly, these elements should be viewed as "assets" in the regulatory competition with other countries. Similarly, one possible strategy for the United States would be to become a leader for IFRS implementation and enforcement. However, this strategy likely creates a "U.S. version" of IFRS and, hence, introduces incompatibilities with the reporting practices of foreign firms (see also Part II of this study).

Effects on Service Providers

The infrastructure supporting U.S. corporate financial reporting is significant. It includes financial and information intermediaries such as accountants, auditors, consultants, financial analysts, investment bankers, and transaction-advisory service providers. For example, in 2006 there were almost 300,000 accountants and auditors employed directly by U.S. accounting firms, tax preparation firms, bookkeeping and payroll services firms, law firms, and consulting firms.⁴⁹ Direct and indirect employment by other financial and information intermediaries is also significant with a large concentration in the New York City area.

Much of this support infrastructure has developed around the current U.S. GAAP reporting paradigm. Drawing upon homegrown U.S. GAAP expertise, the United States has become an exporter of high-end services. This expertise has been in demand by foreign cross-listed firms and foreign firms engaged in cross-border transactions. Moreover, U.S. accounting, auditing, consulting, banking, and transaction-advisory firms have been highly successful in exporting their services around the world. Arguably, IFRS adoption makes the United States less unique and the resulting financial reporting system will have many features in common with other countries

⁴⁸ At present, we are not aware of a country that requires IFRS but does not accept U.S. GAAP for financial reporting purposes, but it is possible that countries could introduce such rules in the future (e.g., for political reasons).

⁴⁹ See the Bureau of Labor Statistics' "Occupational Outlook Handbook" for the professions of Accountants and Auditors (http://www.bls.gov/oco/ocos001.htm).

including those in the EU. The adoption of IFRS could, therefore, have negative competitive and employment implications for U.S. service providers. However, there are also countervailing effects that need to be considered.

First, even without IFRS adoption by the United States, foreign firms are unlikely to demand as much U.S. GAAP expertise in the future. IFRS are now widely accepted around the world and demand, therefore, has shifted to IFRS-related services. Thus, if the U.S. service providers are perceived as lacking IFRS-specific capabilities, they will lose business to foreign competitors. Conversely, if the United States maintains a version of U.S. GAAP that is substantially different from IFRS, then domestic service providers would continue to have a "home-field" advantage relating to U.S. GAAP services. In addition, U.S. GAAP capabilities are likely to remain in close proximity to their U.S. client base, reducing the risk of extensive offshoring of services. Foreign financial intermediaries would also be at a competitive disadvantage in a U.S. GAAP regime. Thus, in this scenario, we expect U.S. service providers to essentially hold on to their domestic market share at the expense of building capabilities to capture worldwide growth in IFRS-related services.

Second, the accounting and auditing industry is likely to generate additional business from a transition to IFRS, and could be seen as primary beneficiary of such a decision. In particular, large multinational auditors appear better positioned than small domestic auditors, which lack the IFRS expertise and the international network to capitalize on IFRS services. That said, smaller auditors could specialize in U.S. GAAP services to firms that are not subject to IFRS reporting requirements (e.g., private firms) or firms that stick to U.S. GAAP in the event the SEC makes IFRS adoption optional.

In sum, while we recognize that the aforementioned effects are somewhat speculative in nature, the discussion highlights that IFRS adoption in the United States could have significant redistributional effects on various service providers.

Effects on Trade Flows and Foreign Direct Investment

International trade and capital flows are affected by firms and investors weighing the portfolio of institutional costs and benefits offered by various jurisdictions when planning where to operate, invest, or raise capital. The costs and benefits of a country's accounting system are among the factors likely to be considered by firms and investors. Thus, we discuss whether the adoption of IFRS in the United States has predictable effects on trade flows, portfolio investment, or foreign direct investments (FDI).

In terms of international trade flows, using the same accounting language might facilitate trade of real goods between suppliers and customers. Márquez-Ramos (2008) provides evidence consistent with the notion that the accounting harmonization process in Europe has reduced information costs and unfamiliarity between countries and, therefore, is one way of encouraging international trade and FDI. However, these effects primarily apply to transitional economies that are moving away from lower-quality domestic GAAP to IFRS. In the case of the United States, these "language" effects on trade are likely to be small because both IFRS and U.S. GAAP are of high quality and already widely used and understood around the world.

In the area of cross-border capital flows, the home-bias literature suggests that familiarity with the accounting standards matters for portfolio holdings. Specifically, the adoption of high-quality standards (including IFRS) is associated with higher foreign mutual fund and institutional investor holdings, consistent with less home bias and a more efficient cross-border capital allocation (Bradshaw et al. 2004; Aggarwal et al. 2005; Covrig et al. 2007). In addition, Cumming and Johan (2007) provide weak evidence that the adoption of IFRS in Europe have facilitated cross-border private equity investments. However, as Beneish and Yohn (2008) point out, it is difficult to sort out whether these findings are mainly due to familiarity with a particular accounting system or due

to better information being produced by the new accounting system. Again, given the high quality of U.S. reports, the effects on cross-border capital flows from IFRS adoption are likely to be small.

In the area of FDI (including multinational mergers and acquisitions), there are issues related to both direct reporting costs and information processing costs arising from different financial reporting systems across jurisdictions. For example, it is possible that U.S. firms are more apt to set up foreign operations (rather than investing in the United States) or to acquire foreign firms if they are no longer required to reconcile from IFRS for statutory reporting to U.S. GAAP for consolidation purposes. In other words, the direct reporting costs of foreign operations are likely to be lower if the United States switches to IFRS *and* foreign jurisdictions increasingly move to IFRS for statutory reporting purposes.

The converse question is whether foreign firms are more likely to set up U.S. operations (or acquire U.S. firms) if there exists an IFRS infrastructure in the United States. The answer to this question depends on whether U.S. subsidiaries of foreign firms have (statutory) reporting requirements tied to U.S. GAAP. Contrary to many countries around the world, the United States does not have general statutory reporting requirements. However, presently, there exist many federal and state regulatory rules for private companies referencing U.S. GAAP or "generally accepted accounting principles." At this point, it is unclear if U.S. GAAP would continue as a distinct set of standards even after the adoption of IFRS (e.g., for private firms) or whether IFRS would simply turn into "generally accepted accounting principles" in the United States. Regardless of this issue, foreign acquirers currently have to operate two sets of accounts when purchasing a *publicly traded* U.S. company. In these cases, it is conceivable that U.S. adoption of IFRS would promote FDI in the United States.

Education System

A major issue surrounding the adoption of IFRS is whether it is possible to bring the accounting profession, analysts, educators, and other parties up to speed in a sufficiently timely manner so as to have a smooth transition to IFRS (e.g., Barth 2008; SEC 2008).⁵⁰ To the extent that there are "educational" gaps, they would speak in favor of delaying IFRS adoption in the United States. However, as many other countries have experienced a relatively smooth transition of the education system to IFRS, the same should be possible in the United States, although the relatively large size of the U.S economy and the diversity of its markets present particular challenges.

Furthermore, the major accounting firms have already started an IFRS awareness campaign among major constituencies and education providers.⁵¹ This campaign suggests that many auditing and consulting firms are being proactive in their preparation for a potential IFRS adoption by the United States, irrespective of the view that these activities could also be self-serving.

Finally, the IFRS educational and training concerns apply mainly to preparers and the accounting profession and less to capital market participants. The latter group is already exposed to IFRS through foreign companies and will become increasingly familiar with IFRS financial statements as time passes. For example, academic studies on 20-F reconciliations and studies of mandatory IFRS adoption (e.g., Daske et al. 2008) suggest that investors can and already do cope with differences in the accounting standards.

⁵⁰ As argued by Sunder (2010), such a harmonization of accounting standards could also have adverse effects on the education system by discouraging scholarly debate and learning through experimentation, while at the same time promoting the distribution of increasingly detailed knowledge on individual rules and standards.

promoting the distribution of increasingly detailed knowledge on individual rules and standards.
 ⁵¹ The Big 4 accounting firms have released a number of reports indicating that IFRS education is lagging behind (e.g., Ernst & Young 2007b; KPMG 2008; KPMG/AAA 2008). They warn that U.S. investors and issuers are not yet sufficiently knowledgeable with IFRS, and that, at present, college curriculums, textbooks, and other instructional materials do not adequately train students and other interested parties in IFRS capabilities.

CONCLUSION OF PART I

This article is Part I of a two-part series analyzing the economic and policy factors related to the potential adoption of IFRS by the United States. In this first part, we draw on the academic literature in accounting, finance, and economics to analyze potential economic consequences of IFRS adoption for U.S. firms, investors, other stakeholders, and the U.S. economy as a whole. In Part II (see Hail et al. 2010), we extend our analysis to related policy and political issues, present several scenarios for the future evolution of U.S. accounting standards, and outline opportunities for future research on U.S. and global accounting standards and regulation. Given the close links between the economic, policy, and political issues, we stress that both parts of this series should be evaluated together. We also acknowledge and highlight that the motivating question for this twopart series is *normative* in nature. Therefore, our analysis should be viewed as laying out the economic and policy issues related to the SEC's decision about IFRS adoption, rather than advocating a particular decision. At the same time, we see our analysis as an example for how academic research can inform policymakers with respect to important policy questions.

We begin our economic analysis by delineating the conceptual underpinnings. We discuss the costs and benefits of improving the quality and comparability of firms' financial reporting and disclosure practices. We then discuss the role of accounting standards for achieving high-quality and comparable reporting. Thereafter, we apply our economic framework to the question of IFRS adoption in the United States. We recognize unique institutional features of the U.S. setting and discuss potential costs and benefits of IFRS adoption to U.S. firms and investors, including macroeconomic consequences of such a move. Our economic analysis yields the following key insights.

What are the Potential Costs and Benefits of High-Quality and Comparable Reporting?

- 1. Important potential benefits of high-quality and more comparable corporate reporting practices are greater market liquidity, a lower cost of capital, and a better allocation of capital.
- 2. The *net* benefits of high-quality and more comparable reporting vary significantly across firms, industries, markets, and countries-and they can be negative.

What Role do Accounting Standards Play in Achieving High-Quality and Comparable Reporting?

- 3. The importance of accounting standards for the quality of corporate reporting is more limited than often thought. Other supporting institutions play an important role in determining reporting outcomes. Academic studies suggest that firms' underlying economics and managerial reporting incentives as well as the enforcement of standards are at least as important as accounting standards in influencing reporting practices.
- 4. A single set of accounting standards by itself does not guarantee the comparability of firms' reporting practices, neither within a country nor across countries. This applies to any set of standards (not just IFRS) and it is true even when the enforcement of standards is very high, indicating that reporting comparability is not only a matter of enforcement. Comparability in reporting practices is unlikely to occur as long as firms' reporting incentives differ.
- The effects of accounting standards cannot be viewed in isolation from other elements of 5. a country's institutional infrastructure. In well-functioning economies, the key elements of the institutional infrastructure fit and reinforce each other. Thus, changing one element

of the institutional infrastructure (e.g., the accounting standards) has the potential to lead to undesirable outcomes for the economy as a whole, even if the change unambiguously improves the element itself.

6. There is mixed evidence on the capital market and other effects around IFRS adoption by firms around the globe. Not all countries and firms see benefits and, more importantly, it is not clear that the documented effects can be attributed solely or even primarily to the adoption of new accounting standards *per se*.

How Will Switching to IFRS Affect U.S. Investors and Firms Individually and in the Aggregate?

- 7. The direct effects of IFRS adoption on the *quality* of U.S. reporting are likely to be small. U.S. GAAP constitute a set of high-quality standards, and it is difficult to argue that a move to IFRS would bring a significant improvement of the standards within the U.S. context. Given many other elements of the U.S. institutional environment and firms' reporting incentives, a significant decline in reporting quality as a result of IFRS adoption is also unlikely.
- 8. IFRS adoption likely generates comparability benefits for U.S. firms and investors. These effects arise from the widespread adoption of a single set of accounting standards around the world, and not because IFRS is *per se* better or worse than U.S. GAAP. However, the comparability benefits to U.S. firms and investors will be limited for at least three reasons. First, the United States is a large economy with many firms. Comparability effects are likely to be larger for smaller economies with fewer firms. Second, firms *and* countries have incentives to implement IFRS in ways that fit their particular institutional infrastructure and meet the specific needs of their stakeholders. Third, U.S. GAAP and IFRS are already fairly close and are expected to be even closer by the time the United States might adopt IFRS.
- 9. Thus, the capital market benefits of IFRS adoption are likely to be limited. We expect the main impact of IFRS adoption to be on firms' reporting costs (including potential cost savings), on the U.S. reporting system, and on the supporting infrastructure. In this regard, our study identifies both transitional as well as recurring costs from a move to IFRS. There may also be benefits from evaluating current processes and using the regulatory change to upgrade previous practices. Moreover, certain U.S. firms, such as U.S. multinationals, likely have (recurring) cost savings from IFRS adoption because they can use a single reporting system for their operations around the world. However, despite the widespread acceptance of IFRS for financial reporting purposes, it is generally not used for statutory reporting and tax purposes. Therefore, the magnitude of the cost savings to U.S. multinationals depends on the (future) use of IFRS for statutory reporting around the world and the acceptance of U.S. GAAP in foreign jurisdictions.
- 10. Based on our analysis, IFRS adoption in the United States primarily involves a trade-off between (1) the short-term costs of transitioning to a new system; (2) the comparability benefits, which are relatively modest but accrue over a much longer horizon; and (3) the recurring cost savings of reporting, which accrues primarily to U.S. multinational companies. The net effect for a given company or the U.S. economy as a whole is not obvious, and crucially depends on the time horizon and the discount factor used in the analysis.
- 11. As the outside world is changing, simply maintaining the regulatory status quo in the United States will not guarantee economic status quo. Put differently, delayed or non-adoption of IFRS can have (recurring) costs for firms and investors as well.

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Are IFRS Compatible with the Current Reporting and Institutional Infrastructure in the United States?

- 12. One of the major perceived differences between IFRS and U.S. GAAP is that the former allegedly provides more discretion (i.e., less specific standards and less implementation guidance). We highlight that more reporting discretion is not necessarily a problem and that reporting incentives, which are shaped by the U.S. institutional framework, play a major role in how firms would apply the discretion under IFRS.
- 13. U.S. GAAP started out as "principles based" and evolved into a more detailed set of standards in response to changes in the U.S. institutional environment (e.g., litigation). IFRS will be subject to the same forces once adopted in the United States. These forces will likely influence IFRS reporting in the United States over time and can hinder the international comparability of U.S. reporting (even after switching to IFRS).
- 14. There do not appear to be major incompatibilities between IFRS and other elements of the U.S. reporting environment and institutional framework. However, various U.S. institutions will have to be adapted to better match with IFRS. This takes time and introduces transition costs.

Are There Any Other Macro Effects From Switching to IFRS Reporting in the United States?

15. Given the already strong institutions in the United States, IFRS adoption is unlikely to have major direct macroeconomic effects (e.g., on economic growth). However, certain redistributional effects across firms and service providers are to be expected. In addition, there could be smaller effects from comparability on trade flows, portfolio flows, and foreign direct investments, including international mergers and acquisitions. However, these effects hinge critically on the magnitude of the comparability effects and the future role of IFRS for statutory reporting around the world.

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