

The rise of capital markets in emerging and frontier economies



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Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability. We believe that accountants bring value to economies at all stages of their development. We seek to develop capacity in the profession and encourage the adoption of global standards. Our values are aligned to the needs of employers in all sectors and we ensure that, through our qualifications, we prepare accountants for business. We seek to open up the profession to people of all backgrounds and remove artificial barriers, innovating our qualifications and their delivery to meet the diverse needs of trainee professionals and their employers.

We support our 140,000 members and 404,000 students in 170 countries, helping them to develop successful careers in accounting and business, based on the skills required by employers. We work through a network of 83 offices and centres and more than 8,000 Approved Employers worldwide, who provide high standards of employee learning and development. Through our public interest remit, we promote appropriate regulation of accounting and conduct relevant research to ensure accountancy continues to grow in reputation and influence.

**CONTACT** 

**Emmanouil Schizas** 

senior policy adviser emmanouil.schizas@accaglobal.com tel: +44 (0)20 7059 5619 Capital markets promote economic development and growth by facilitating and diversifying firms' access to finance. In order to do this they rely on institutions, including sound financial reporting and assurance, and these in turn depend on the accounting profession. This discussion paper considers how these relationships work and how policymakers can build on them.

## **Executive summary**

Capital markets play an important role in promoting economic activity worldwide by facilitating and diversifying firms' access to finance. At the macro level, deepening capital markets, which have ample liquidity and developed secondary markets, are also reshaping the developing world, driving wealth creation and the emergence of powerful regional trading blocs. The fortunes of ACCA's global membership are strongly tied to these developments.

In emerging and frontier economies, the benefits that accrue to national economies as capital markets growth and deepen are potentially greater, but they are also particularly sensitive to a host of institutional variables, including competition, protection of minority investors and overall business productivity. Because of this, supporting the development of capital markets usually involves a broad and ambitious programme of reform. Even then, successful market-builders need to be alert to signs that markets might be outgrowing the social and regulatory capital on which they rely. The need for vigilance is especially great because, as the crisis of 2008–9 demonstrated, markets can continue to grow and attract liquidity even as institutions are being eroded away from underneath them.

The system of financial disclosures is one such institution, and there is evidence to suggest it might be one of the most important ones. The perceived strength of accounting and auditing standards is a leading indicator of the health of capital markets and a strong predictor of the growth effect of market liberalisation. While the crisis of 2008–9 dented confidence in disclosures within developed countries, emerging markets have seen perceptions slowly recover and, perhaps as importantly, converge. Frontier markets, on the other hand, are not keeping up, meaning that some of the most promising economies in the world may soon not have the capital markets to match their dynamism.

As things stand, the momentum in favour of larger and deeper capital markets in the developing world is substantial but not irreversible. While market capitalisation has grown impressively and kept pace with levels of growth seen in the developed world, market liquidity has not. Although emerging economies are better off without the excess liquidity that the most developed capital markets saw leading up to 2007, it remains the case that markets need to deepen further if they are to help finance the rapid growth expected in these economies.

As a rule, the distinction between 'frontier' and 'emerging' market status (see Appendix for a classification) is sharper than that between 'emerging' and 'developed' markets. If the intention of policymakers in frontier markets is to benchmark against emerging ones, then policy will tend to focus on ensuring financial stability and improving the supply of financial services other than banking, while also developing the banking sector and improving the wider business environment. In emerging markets, on the other hand, the need to replicate the institutions of developed ones is not self-evident. If there are shortcomings in comparison, they will tend to have more to do with the use of professional management, the protection of minority shareholders and access to financial services among the wider population.

That said, the development of domestic capital markets is not linear and policymakers should not obsess about metrics such as liquidity. The needs of liquidity providers are not necessarily the same as those of investors and it is possible for markets to provide a better environment for the former rather than the latter, to the eventual detriment of all. Moreover, headline levels of liquidity can mask substantial misallocations (for instance at the expense of smaller businesses) that direct capital to less than optimal uses.

This paper argues, on the basis of sound evidence, that improved disclosure, both mandatory and voluntary, is one of the few sustainable means of attracting liquidity. The experience of markets around the world shows that the timely and credible disclosure of company information tends to promote investor confidence and attract additional listings, thus broadening the benefits to the domestic economy. In principle, disclosure also serves to reduce the cost of capital by reducing information asymmetries, especially in developing countries with high standards of market conduct. That said, the mechanism through which this is achieved is complex and sometimes appears to produce contradictory results.

Disclosure and compliance, however valuable, both come at a cost and thus policymakers are faced with a difficult trade-off. On one side are those, mostly in emerging and frontier markets, who believe that only strong and consistent regulation can build enough confidence to make a market viable. On the other side are those, mostly in developed markets, who argue that disclosure and other regulatory requirements can easily become disproportionate, making markets inaccessible to all but

the largest or most determined issuers. The evidence examined in this discussion paper suggests that policymakers can, through consistent and strict enforcement of proportionate rules, build a strong regulatory 'brand' for their markets that will attract domestic and even foreign firms.

This research additionally examined a number of challenges peculiar to emerging and frontier economies, which arguably merit further discussion. First, the paper considers the role of foreign investment, asking how emerging economies can manage 'hot money' and whether attracting foreign investment is a self-evident goal. Second, it discusses the often-overlooked contribution of privatisations to the development of capital markets and questions whether discussions of good practice are consistent with environments in which former state-owned enterprises (SOEs) are the mainstream rather than exceptions to the profile of the typical listed firm. Similarly, it examines the contribution of pension funds and pension reform to the growth of capital markets, stressing matters of quality rather than quantity and the need for careful, gradual reform. Finally, it looks at the important complications introduced by the prevalence of large family firms in emerging markets – substantial principal-principal conflicts that can undermine confidence and necessitate enhanced corporate governance arrangements, often directly involving the accounting profession.

Overall, this review makes a strong case for comparing and learning from the performance of capital markets with their institutional context in mind. It also uncovers consistent themes around the value of governance and disclosure that can guide policymakers around the world. This will provide a solid foundation for ACCA's work, engaging experts in emerging and frontier markets in a debate about the future of business finance.

### 1. Introduction

Even before the financial crisis of 2008-9 and the economic downturn that followed it, the developing world was growing much faster than developed economies. Since the third guarter of 2009, more than half of the world's economic growth has come from transitional and emerging economies (UN 2011). This trend is epitomised by the rise of the BRIC countries (Brazil, Russia, India, and China), all of which are currently ranked among the top ten economies in the world, and forecast to rank among the top six by 2020 (CEBR 2011). Since the financial crisis, this substantial imbalance in future growth prospects has fuelled a swift recovery of both direct and portfolio investment, often to above pre-crisis levels (see Table 1), as more foreign investors have sought to profit from growth in these markets or simply to diversify their portfolios away from advanced economies.

While firms in emerging markets can and do raise capital abroad, there are strong information advantages (both legitimate and otherwise) and often significant savings involved in listing domestically or at least in a regional financial hub (Sarkissian and Schill 2009). The result is that foreign investors can rarely tap into the potential of firms in emerging or frontier markets without some understanding of, or even presence in, their home countries or regions. Moreover, many internationally active firms often find it difficult to enter fast-growing markets without a regional presence, and thus have an interest in the development of regional capital markets.

Policymakers have their own reasons for encouraging the growth of domestic capital markets. Most important, of course, are the benefits to economic growth from a more efficient matching of savings with productive investment. Nonetheless, improved governance and accountability, especially among dominant private firms, are also part of their motivation. Economic planning, the reasoning goes, is much easier if a great deal of a country's output, employment and tax revenues are linked to firms that are transparent and/or accountable to the public. In fact, it is arguable (though this view has been sorely tested over the last few years) that markets can scrutinise the conduct of listed firms more rigorously, and penalise misconduct more effectively, than governments can afford to do.

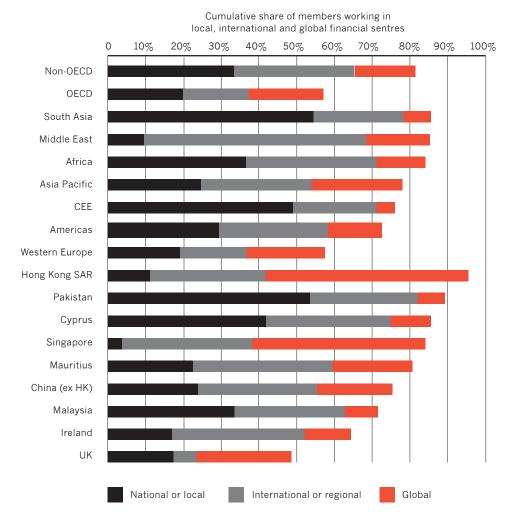
From ACCA's perspective, the fortunes of ACCA's membership in developing countries are more intimately tied to the fortunes of major financial centres and, by extension, to those of capital markets, than those of members in developed nations (see Figure 1). Nearly half (48%) of ACCA's members in the developing world claim to work in financial centres of international significance, against 37.5% in the OECD countries. This figure rises to over 80% in locations such as Singapore or Hong Kong SAR, which are home to some of the world's deepest and most developed capital markets (ACCA 2011).

Table 1: Investment in developing and transition countries

	Average annual flows		Annual flows (2010 part-estimated, 2011 forecast)					
	1997–2000	2001–6	2007	2008	2009	2010	2011	
Developing countries	,							
Net direct investment	146.4	161.9	311.8	341.6	193.3	247.5	270.9	
Net portfolio investment	31.1	-59.4	7.7	-135.5	77.7	93.4	79.9	
Net investment	177.5	102.5	319.5	206.1	271	340.9	350.8	
Transition countries	,							
Net direct investment	5.8	14.3	39.3	62	21.6	25.6	36.2	
Net portfolio investment	-12.7	2.9	20.9	-32.3	-10.4	-0.5	0.5	
Net investment	-6.9	17.2	60.2	29.7	11.2	25.1	36.7	

Source: UN (2011)

Figure 1: ACCA regions and selected markets by share of members working in financial centres, by level of (self-assessed) international importance



# 2. Understanding market development

#### WHY DO CAPITAL MARKETS MATTER?

Capital markets, including markets in equity, debt, and derivative products on these underlying assets, play an important role in promoting economic activity. In primary markets, businesses and sovereigns issue financial instruments representing claims against their future cash flows and use these to tap large regional and global pools of savings in order to finance themselves. Secondary markets, on the other hand, provide an exit for investors and facilitate price discovery – the accurate valuation of instruments that ensures issuers are paying an appropriate price for their access to finance and investors are adequately compensated for the risk they take in providing it. Liquidity providers are crucial to this latter function, as they take advantage of their superior expertise and information in order to arbitrage away inconsistencies in valuations as well as differences in risk appetites between investors.

In performing these functions, the growth and deepening of capital markets can have a significant positive effect on national growth and development. Market depth is not the same as growth: deep markets benefit not only from increased liquidity but also from the presence of developed secondary markets in which securities can be traded, providing an exit for investors and an opportunity for price discovery.

At the global level, Bekaert et al. (2005) find that equity market liberalisations led to over one percentage point of additional economic growth in those countries that implemented them in the late 20<sup>th</sup> century. As long as domestic government debt remains at moderate levels (less than 35% of bank deposits), the growth of bond markets contributes positively to economic growth (Ali Abbas and Christensen 2007) and provides a basis for the development of other capital markets (Chami et al. 2009).

While the assumption is often made that developing countries have the most to gain from such reforms, their effect depends on how much additional investment markets can unlock and how productive this investment can be. Therefore, in practice, it is those countries with the highest-quality institutions that benefit the most in terms of growth. In emerging markets, this means that the benefits accruing to national economies as capital markets grow depend on a host of other institutional reforms in order to deliver benefits.

For instance, Bekaert et al. (2005) note that countries with high-quality institutions reap three times the benefit from liberalisation than those with low-quality institutions, while those benefiting from a regulatory and policy environment that encourages investment tend to see more than four times the benefit that others do. Moreover, Gupta and Yuan (2009) note that capital market liberalisation yields higher benefits for incumbent firms in sectors and markets in which competition is low; new entrants generally benefit only if liberalisation is accompanied by pro-competition reforms.

One final benefit from the development of capital markets in developing countries is their ability to diversify firms' sources of finance. Such diversification can help create not only faster but also more stable economic growth by ensuring that shocks to the supply of bank credit do not have disproportionate effects on that growth (Hawkings 2002).

In light of these findings, as well as the established fact that affluent countries have more developed capital markets (Beck and Demirguc-Kunt 2009), the development of such markets has long been considered a prerequisite for economic growth. Accordingly, both externally introduced and home-grown development strategies all over the developing world emphasise the development of capital markets (Stiglitz 2004).

While the link between financial development and economic growth is generally taken for granted, it is important to remember that much of the relevant international evidence is severely dated. Rousseau and Wachtel (2011) find that this relationship weakened significantly in the first decade of the 21st century, even before the financial crisis of 2008–09, as rapid financial development without corresponding strengthening of institutions caused markets in many parts of the world to become increasingly fragile. The need to ensure that capital markets do not outgrow the institutions on which they rely had in fact been stressed well before 2007, for instance by Stiglitz (2000). Increasing market liquidity, as important as it is, must not be seen as an end in itself.

Regardless of their actual link to economic growth, strong capital markets have been shown to drive trade and economic ties between emerging economies. Increasing financial development has not only served to increase trade by and with emerging markets, but has also contributed more to growth in trade and economic

interdependence *between* these than between emerging and developed markets. This is documented by Demir and Dahi (2011) for the banking sector but also by Beine and Candelon (2011) for stock markets. In one sense, deepening capital markets are contributing significantly to the emergence of influential regional economic blocs in the developing world.

#### THE STATE OF PLAY

In their definitive review of the evidence from 1960 to 2007, Beck and Demirguc-Kunt (2009) document a strong trend for deepening capital markets around the world, but note that this has been more evident in developed than in developing countries.

In the latter, market capitalisation has largely grown as fast as in the developed world, but trading volumes and liquidity have not. Moreover, in the period leading up to the financial crisis of 2008–9, the general trend was for stock markets to grow faster in terms of capitalisation than the banking sector, especially in Eastern Europe, Central Asia, the Middle East and Africa. This trend has, however, been absent in South Asia and has even been reversed in Latin America.

While public bond markets are more or less as large, in terms of the ratio of market capitalisation to GDP, in both developed and developing markets, stock market capitalisation is much lower in less developed countries and so is capitalisation of private (corporate) bond markets. In fact, the latter are so sensitive to economic development that data are scarcely available for the least developed markets – many of which have only very limited institutions in place for the trading of corporate debt.

What is very striking, however, is the substantial difference in market liquidity that distinguishes developed markets from emerging as well as frontier capital markets. As Table 2 shows, trading volumes in developed markets in which ACCA has a particular interest (see Appendix) are typically ten times larger than those in emerging markets. And while excess liquidity has potentially negative side effects, liquidity in general is also instrumental in explaining the superior ability of developed capital markets to allocate capital efficiently to productive business activity.

Table 2: Median financial indicators for selected groups and outlier countries among major ACCA markets

Groupings (see Appendix)	SME loans as % of GDP	Stock market cap to GDP	Informal equity to GDP	Private bond market cap to GDP	Public bond market Cap to GDP	Stock market value traded to GDP
Main Groups						
Developed	13%	152%	0.9%	26%	34%	304%
Emerging	28%	44%	2.8%	18%	36%	31%
Frontier	10%	24%	1.4%	N/A	27%	17%
Outliers						
Ireland	N/A	17%	1.0%	28%	17%	129%
Russia and the Ukraine	5%	48%	0.2%	N/A	3%	39%
Total sample	11%	48%	1.0%	20%	34%	75%

Sources: See Appendix

Derivative markets are still relatively small in emerging markets (Mihaljek and Packer 2010). At a turnover of around 6% of GDP, they are about a sixth of the size of their equivalents in developed markets, and instruments are mostly traded over-the-counter (OTC) as opposed to through exchanges. Emerging derivatives markets are, however, growing faster than their equivalents in developed markets. Driven by increasing finance openness, the rise in international trade and rising per capita incomes, they have grown four-fold in the last decade (2000-10) alone. As a consequence, export-driven economies have seen their domestic markets grow the most: Korea, Brazil, Singapore and Hong Kong SAR have experienced the most significant growth. In keeping with the significant foreign exchange (FX) risks to which these economies are exposed, the fastest-growing markets are in FX derivatives, with markets in interest-rate derivatives lagging behind.

#### BENCHMARKING CAPITAL MARKETS

Using data from the World Economic Forum (WEF) World Competitiveness and Financial Development Reports (Bilodeau 2010; Sala-i-Martin et al. 2011) and the classification of ACCA's major markets shown in the Appendix), it is possible to illustrate how markets classified as 'frontier', 'emerging' or 'developed' differ in general terms. It is important to remember that there is no simple linear progression from less to more developed markets; some types of market infrastructure and institutions represent necessary conditions for development while others are simply 'nice-to-have'. In addition, what may appear as evidence of development could simply turn out to be fleeting exuberance.

Figure 2: Market characteristics and performance at different stages of development (1)

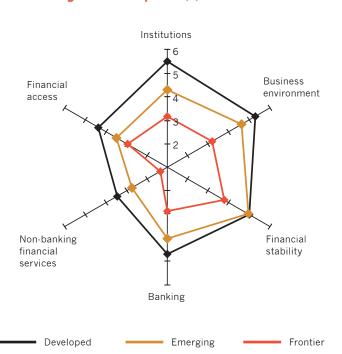
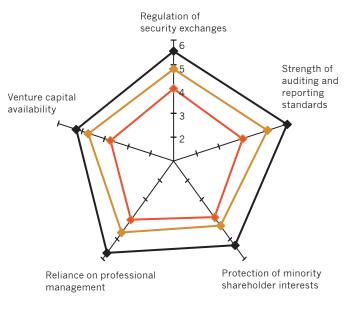


Figure 3: Market characteristics and performance at different stages of development (2)

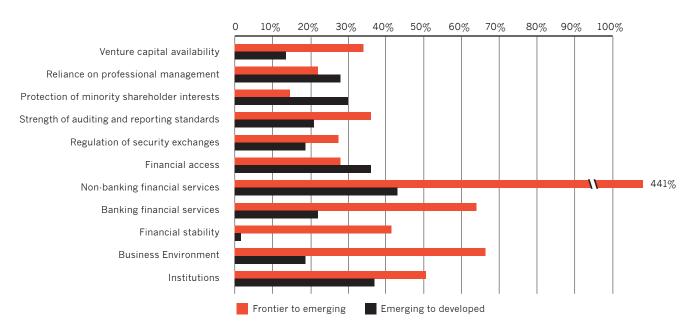


Note: Survey-derived scores are on a scale of 1 (lowest possible strength of development) to 7 (highest possible strength of development). Sources: Sala-i-Martin et al. (2011) and Bilodeau (2010).

As a rule, frontier markets lag behind emerging markets on many dimensions much more than the latter lag behind developed markets. Compared with frontier capital markets, emerging ones perform substantially better in almost all respects. The biggest difference by far appears to be in the development of non-banking financial services, followed at a distance by improvements in the overall business environment and the development of the banking sector. Financial stability is also a big difference between frontier and developing markets – a hygiene factor in the development of fledgling capital markets, but one that in turn depends on a complex set of macroeconomic conditions.

Compared with countries that host emerging capital markets, countries with developed markets still perform better on almost all measures. Particularly notable are the increased use of professional management and protection of minority shareholders as large family-owned firms adjust to public ownership and scrutiny. Additionally, extending financial access to a wider segment of the population allows large amounts of retail savings to be invested in the capital markets, adding to their depth and liquidity. The exception to the general outperformance of developed markets is financial stability: in the aftermath of the crisis in 2008–9, developed capital markets are no longer seen as any more stable than emerging ones.

Figure 4: Relative difference in WEF competitiveness and financial development scores between frontier, emerging and developed markets



Sources: Sala-i-Martin et al. (2011) and Bilodeau (2010).

# 3. Accounting as a catalyst of financial development

While Bekaert et al. (2005) document a number of interesting relationships between market institutions and the effect of capital market development on growth, they single one out for its magnitude and relevance. This is the link between the strength and quality of accounting standards and the incremental growth brought about by capital market liberalisation. Countries with below average quality of disclosures saw almost no gains in economic growth at all in the late 20th century (0.04%) compared to those with above average standards (1.1%).

This finding is not altogether surprising. As Figures 5 and 6 show, in ACCA's major markets the perceived quality of accounting standards is positively related to equity market capitalisation and ease of access to the domestic equity market. In the case of access to equity markets, the perceived strength of accounting standards functions

as a 'hygiene' factor, in that it appears to dictate minimum, as opposed to actual, levels of access. Yet despite its importance, as Figure 6 shows, gains in the quality of disclosures are only moderate as markets mature. In some cases this can set the stage for reduced stability in the future.

In order to understand the catalytic role played by the quality of accounting and auditing standards in the growth of capital markets, it is important to understand the effect of disclosures on two key aspects of market function: market liquidity and the cost of capital.

Figure 5: Assessed strength of accounting and auditing standards and market capitalisation in major ACCA markets

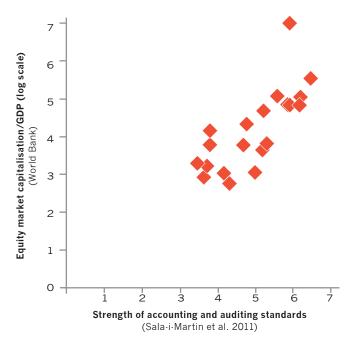
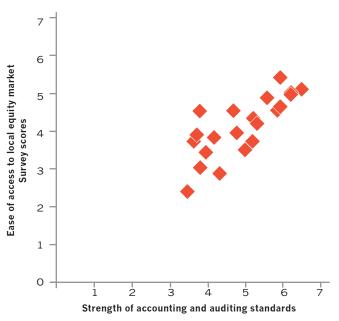


Figure 6: Assessed strength of accounting and auditing standards and ease of access to domestic equity markets in major ACCA markets



Source: Sala-i-Martin et al. (2011)

#### MARKET LIQUIDITY

Investors in capital markets need exit opportunities, usually through secondary markets, in order to match the maturity of available securities to their own preferred portolios. This requires the function of brokers and dealers willing to build inventories of financial instruments and, while these are frequently denounced as mere speculators, their function is essential (Chami et al. 2009). In fact, insufficient liquidity is very often cited as the primary barrier to capital market development (eg Hearn and Piesse 2009).

Chami et al. (2009) demonstrate that liquidity providers are generally attracted to a critical mass of borrowers and lenders but equally they need a set of rules governing trading that are not unduly restrictive. They also benefit from trading mechanisms, including supporting clearing and settlement systems, which do not impose prohibitive transaction costs. To minimise learning costs, liquidity providers tend to require relatively large issue sizes and frequent and/or regular issuance or, alternatively, long maturities. Finally, liquidity providers rely on the existence of financial instruments whose risk profiles incorporate mostly or exclusively market risk as opposed to a plethora of different risks; alternatively, other instruments through which market risk can, at least in theory, be isolated (eg by hedging all other sources of risk).

When market rules and trading conditions are much more benign for liquidity providers than for other investors, a market can accumulate liquidity in good times, often from overseas, whose presence in the market is extremely volatile. Such excess liquidity during booms may be associated with the rapid loss of market liquidity that several developed markets saw during the financial crisis of 2008–9 and the sovereign debt crisis of 2010–11. In fact, such phenomena could prove to be self-reinforcing as fear that liquidity may drain from the market at short notice is likely to drive investors away.

In their review of 50 stock markets around the world, Frost et al. (2006) find that the strength of the disclosure system (disclosure rules, monitoring and enforcement, and information dissemination) is positively correlated with stock market liquidity. The timely and credible disclosure of company information tends not only to promote investor confidence and encourage more active participation in the market, but also to attract additional listings, thus broadening the benefits to the domestic economy. On top of mandatory disclosures, voluntary disclosures have also been shown to increase stock market liquidity by reducing bid-ask spreads (Haddad et al. 2009). Disclosures also have an indirect effect on emerging bond market liquidity. In their study of the development of Malaysia's substantial bond market. Chan et al. (2007) find that strong credit ratings have a significantly positive effect on liquidity.

It is, however, important to note that overall market liquidity is not an end in itself. Hearn et al. (2007) find, for instance, that investors demand a premium from smaller firms listed in key emerging markets above and beyond what would be justified by market liquidity. This finding echoes the findings of Demarigny (2010) in Europe, where a small number of firms with the largest capitalisation were shown to benefit from almost all equity market liquidity. Thus there is a case for policies that ensure that capital markets not only attract liquidity, but also direct it towards the most productive firms, regardless of size.

#### **COST OF CAPITAL**

The accounting profession would like nothing more than to argue that enhanced disclosure *always* reduces the cost of capital for businesses. In fact, the actual effect of disclosure on individual firms is very complex and empirical findings tend to reflect this. As Lambert et al. (2007) and Gao (2010) demonstrate, disclosures may reduce the information asymmetries involved in investing in businesses, thus lowering the cost of capital. Yet disclosures also indirectly affect a firm's investment decisions by allowing the market to provide feedback on the announced investment plans, and this complicates the matter of precisely *who* wins and who loses from added disclosure. In emerging and frontier markets hoping to attract new investors to capital markets, the welfare of these new investors is likely to be a priority.

In particular, Gao (2010) deduces that a firm's cost of capital is only reduced by superior disclosures if the adjustment cost of new investment is relatively high, or if a firm's current investments are expected to be relatively unprofitable compared with new prospects. Current investors are only better off with superior disclosure if they are not much more risk-averse than new investors or if the adjustment cost of new investment is relatively low. On the other hand, new investors are only better off with superior disclosure if one of the following two conditions is met:

- assuming initial disclosure quality is low, if the adjustment cost of new investment is relatively low or the level of existing investment is relatively low
- assuming initial disclosure quality is high, if the adjustment cost of new investment is relatively low, or if it is modest but existing investment is relatively low.

In emerging and especially in frontier markets, disclosure quality is usually seen as average to low; existing investors are likely to be more comfortable with risk than new ones; existing levels of investment for the typical firm will be low; and the cost of adjusting to new investments will be high, meaning that businesses are path-dependent and cannot quickly rearrange their business models or their resources in order to make the most of new capital. This should mean that, generally speaking, superior disclosures in emerging markets will generally tend to reduce the cost of capital and increase the welfare of both existing and new investors. It is also worth noting, however, that Gao's analysis (2010) suggests that as accounting disclosures become better, a wider range of firms should benefit from the effect of disclosures on the cost of capital – meaning that as market institutions improve the beneficial effects of disclosure should increase.

Nonetheless, a further complication arises from the fact that disclosure related to earnings is a complement to, not a substitute for, privately held information. Gow et al. (unpublished) argue on this basis that in highly imperfect and less competitive markets (which are by no means confined to the emerging or frontier markets) increased disclosure can *increase* the cost of capital. Overall, the evidence leads to the conclusion that countries that maintain a high standard of market conduct are more likely to reap the full benefits of enhanced financial disclosure. Because of this, even within the emerging and frontier market, the cost of raising capital can vary dramatically (Hearn et al. 2007).

## 4. Two traditions in market-building

The previous section discussed the significant benefits from enhanced disclosure. Policymakers need, however, to balance these against the costs that disclosure imposes on issuers. This trade-off has given rise to two different schools of thought and practice.

#### 'IF YOU BUILD IT, THEY WILL COME'

The first tradition holds that, because of the information asymmetries involved in most financial transactions, and the learning costs borne by liquidity providers, only significant disclosure and strong trading rules are likely to create sufficient levels of confidence to attract enough investors and liquidity providers.

In a study of 42 stock exchanges around the world, Cumming et al. (2011) demonstrate that some types of exchange rules do indeed enhance liquidity. This is particularly the case with rules defining and discouraging insider trading and market manipulation, or enhancing transparency. Moreover, stricter enforcement of such rules also serves to enhance liquidity (Christensen et al. 2011). Others, such as broker-agency conflict rules, have no discernible effect.

Some proponents of this view argue that firms actively seek out better disclosure and trading regimes in order to signal the quality of their earnings (Stulz 2009); thus the measure of success for a regulatory regime would be the willingness of companies to choose it over others. Frost et al. (2010) find that businesses from emerging markets benefit from a reduction in their cost of capital when listing abroad in markets with a reputation for sound regulation, above and beyond that gained from the quality of their individual disclosures. Perhaps most tellingly, Christensen et al. (2011) find that market abuse and transparency regulations help enhance liquidity the most in countries with a previous track record of stricter regulations and enforcement – meaning that different domestic capital markets essentially brand themselves through their choices on regulation and enforcement.

#### 'SUFFER THE CHILDREN'

The second tradition suggests that, while disclosure is important for the functioning of markets, excessive requirements can impose costs that are prohibitive for businesses seeking finance and thus keep markets from achieving critical mass and becoming self-sustaining. Regulatory reform can thus strengthen capital markets by making sure disclosures are as efficient as possible. Dermarigny (2010) demonstrates this in the case of European equity markets, but as these are already fairly developed it is unclear whether the principle applies equally well in emerging markets.

This view, however, is reinforced by several facts. First, a certain amount of the cost involved in listing and maintaining a listing are fixed regardless of the issue size. This means that smaller businesses face prohibitive costs of capital regardless of the actual economic value of their securities. Moreover, because smaller issue sizes tend to make securities less liquid, investors will tend to demand a premium for taking this additional liquidity risk and entrepreneurs (or management) will be sceptical of the market's ability to provide a fair valuation. For instance, Hearn et al. (2007) find that the cost of capital in Kenya's relatively illiquid Alternative Investment Market, targeted at smaller issuers, is three times as high as that for its more liquid main market. Goswani and Sharma (2011) offer more direct evidence in favour of this narrative in Asian bond markets, with several companies preferring private offerings to public listings in order to avoid incurring the associated compliance and disclosure costs.

## 5. A crisis of confidence

The Credit Crunch and the financial crisis of 2008-9 severely dented confidence in accounting disclosures in developed capital markets. Of the group of developed markets considered in this exercise (see Appendix), only Canada, Singapore and South Africa enjoyed more confidence in 2011 than they had in 2005 (Figure 7); on the other hand, all the 'emerging' markets identified in this paper (China, Poland, the UAE and the Czech Republic) saw a significant improvement in perceptions over this period; moreover, their scores appear to have converged during this time (Figure 8).

It is worth noting that the Western developed markets in the sample, namely the US, UK, Ireland and Canada, were already registering losses in 2006, when the extent of the coming global financial crisis was still inconceivable. While this is hard to prove conclusively, it appears that the loss of confidence in accounting disclosures has been a leading indicator of falling liquidity and consequently of weakening markets.

Figure 7: Strength of accounting and auditing standards over time (developed markets plus Ireland)

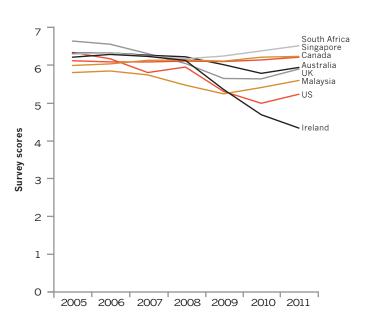
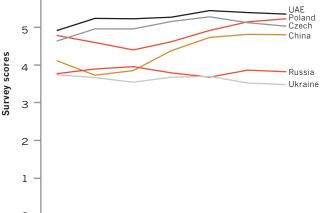


Figure 8: Strength of accounting and auditing standards over time (emerging markets plus Russia and the Ukraine)



Source: Sala-i-Martin et al. 2011

2005

2006

2007

2008

2009

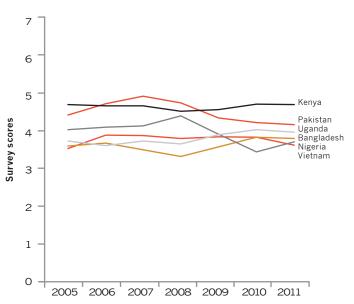
2010

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Source: Sala-i-Martin et al. 2011

Figure 9: Strength of accounting and auditing standards over time (frontier markets)

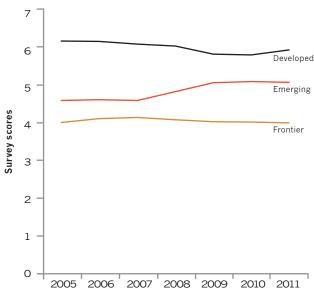


Source: Sala-i-Martin et al. 2011

Frontier markets are a more fragmented group (Figure 9). The East African nations in the sample, Kenya and Uganda, were relative winners in the sense that in both countries faith in financial disclosures was higher in 2011 than in 2005, although it took a hit in 2008. Bangladesh followed a similar trajectory. In other frontier markets such as Pakistan and Nigeria, the damage done by the financial crisis as well as by adverse developments at the domestic level has yet to be repaired.

On the whole, the emerging markets in the sample have been catching up with developed ones since 2007, while frontier markets have not. While this shift in perceptions may well reflect outcomes in the function of capital markets more than it does the actual quality of disclosures, it remains the case that such perceptions

Figure 10: Strength of accounting and auditing standards (average WEF scores over time)

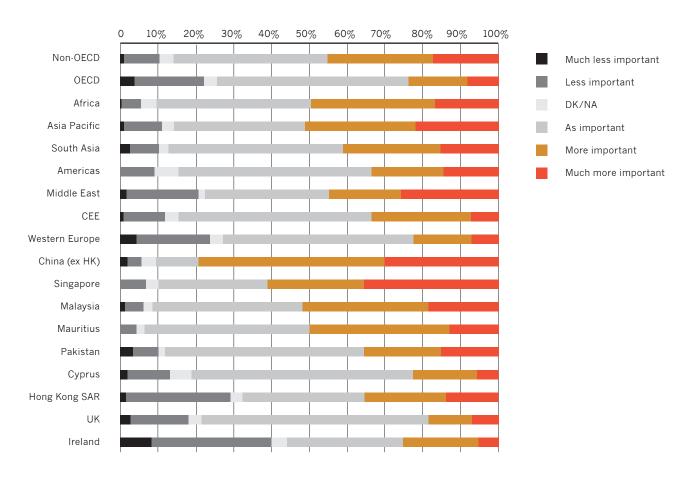


Source: Sala-i-Martin et al. 2011

have real-world effects in the allocation of investors' money. That said, as the group of 'developed' markets includes many of the financial centres perceived as relative 'winners' of the financial crisis (see also Figure 11), the present findings cannot be dismissed as simply a reaction to failures in Western markets.

ACCA's members' views on the changing fortunes of financial centres confirm these findings. Overall, the financial centres in which ACCA members work gained in importance between 2008 and 2011, but not all have benefited equally. Africa and the Asia-Pacific region saw the greatest rise in importance (Figure 11) but after accounting for geography and the state of their domestic economies the most important, most global centres still benefited from an advantage, in the view of respondents.

Figure 11: ACCA regions and selected markets by % of members reporting corresponding levels of change in importance as a financial centre between 2008 and 2011



# 6. Special issues in the development of capital markets

In many ways, the issues discussed so far are not unique to emerging or frontier capital markets, but are, rather, general 'rules of the game' interpreted from the point of view of such markets. Nonetheless, there are also specific issues that are much more significant in emerging markets and merit some discussion in brief – all of them related to how policymakers can jump-start a virtuous cycle of market liquidity, confidence and contribution to economic growth. This discussion paper focuses on three of these: the role of foreign investment, privatisation of state enterprises as a tool for market growth, and the potential for tapping into the growing pool of pension fund assets in emerging economies.

#### HANDLING HOT MONEY WITHOUT GETTING BURNED

Owing to the crucial role of liquidity in the development of fledgling capital markets, foreign investment into domestic markets seems at first to be a development to be welcomed. Encouraged by the strong growth prospects of emerging economies, foreign investors tend to seek out both short- and long-term opportunities in their capital markets, often making investments that are very substantial compared with the market capitalisation of individual firms and indeed the market as a whole. For instance, Rhee and Wang (2009) show that between 2002 and 2007 foreign institutional investors held almost 70% of the total free flotation value of Indonesia's equity market.

In practice, the effects of such investment are not always benign. Sarno and Taylor (1999) demonstrate that a great deal of the flows into developing countries' equity and bond markets contain very substantial temporary elements – what is commonly known as 'hot money'. And although the beneficiaries of such boom-time flows tend to be the larger and most liquid listings (Ferreira and Matos 2008), the fallout when funds are subsequently withdrawn tends to be felt across the board, with detrimental effects not only on individual firms but also on the wider economy (McCauley 2008).

Moreover, not all foreign investment is the same. In a study of 39 countries worldwide, Ng et al. (2011) find that foreign **direct** ownership tends to decrease stock liquidity while foreign **portfolio** ownership (where foreign owners do not exercise any control on the target firms) tends to increase it, and that in both cases asymmetries of information have a role in explaining the effect on liquidity.

All this evidence begs the question of whether and how emerging capital markets can attract much-needed liquidity from abroad without jeopardising long-term market health and economic growth. Indeed it is not clear that attracting foreign investors should be a policy goal at all.

#### FROM PUBLIC OWNERSHIP TO PUBLIC LISTINGS

In many emerging economies, the creation or deregulation of emerging capital markets, especially stock exchanges, has gone hand-in-hand with programmes for the privatisation of state-owned enterprises (SOEs) (Hearne and Piesse 2010). Historically, the development of capital markets in developing countries has been driven to a great extent by such offerings, with large-scale privatisation programmes typically being followed by substantial increases in market capitalisation and trading volumes as well as the strengthening of regulatory and corporate governance frameworks. At the end of the 20th century, 30 of the 35 largest share offerings in history had been privatisations (Megginson and Netter 2001).

Between 2000 and 2008, developing countries used equity markets to raise about \$193 billion by selling stakes in state-owned corporations (World Bank 2009). The largest such deals were China's sale of shares in the Industrial and Commercial Bank of China (ICBC) and the Bank of China, as well as the floating of Russia's Rosneft, all carried out at the height of the equity market boom in 2006. In fact, between them China and Russia accounted for 82.5% of the total value of equity-market-led privatisations over the 2000–8 period.

Not all privatisation, however, is a boon to the capital markets. Voucher or mass privatisation has generally hindered the development of secondary markets that are crucial to financial sector deepening and has led to increased ownership by insiders (Estrin et al. 2009). Moreover, the patterns of wide share ownership created by such schemes have been shown to be unstable (Megginson and Netter 2001). This legacy partly explains why some countries in which the practice was adopted, including Russia and the Ukraine, emerge even today as outliers to the classification of capital markets shown in the Appendix. As Kogut and Spicer (2002) put it, 'in the absence of institutional mechanisms of state regulation and trust, markets become arenas for political contests and economic manipulation'.

From an accounting perspective, privatisation of SOEs entails some unique challenges as investors are concerned about the prospects for companies' survival as going concerns in private-sector terms. To reassure them, companies need to reconcile the reporting and control conventions of the state with international good practice in the private sector. Accountants, in particular, need to be able to analyse organisational structures, the flow of information through the various organisational units, and the implications for internal control (Selvi and Yilmaz 2010). In fact, the benefits of privatisation for capital markets have often been contingent on accounting regulation reforms (Al-Akra et al. 2010).

While it is very easy to treat privatised SOEs as a special case, the evidence shows that they are at the core of the development of capital markets and even more so during times of excess liquidity. This means that work on improving financial disclosure needs to consider the implications of SOE privatisation and that reporting and management practices in parts of the public sectors of emerging economies need to be gradually aligned with the needs of potential investors.

#### PENSION FUNDS AS INVESTORS

One final means of injecting liquidity into capital markets, which avoids the 'hot money' problem and is consistent with other policy objectives in developing countries, is to encourage or at least allow retail investors to invest in securities through pension funds. Roldos (2004) finds that pension reform, in particular, has been positively associated with the development of capital markets in emerging economies, although regulatory restrictions have meant that bond, as opposed to equity, markets have benefited the most. These findings are reinforced by Niggerman and Rocholl (2010) who, in reviewing the evidence from 57 countries over 30 years to 2007, find that pension reforms have contributed to the building of larger, though not necessarily deeper, capital markets (since benefits were largely confined to the primary markets). Still the effect is significant and incremental to the benefits from other pro-market reforms. Markets in less financially developed countries have benefited the most, as have less developed markets at the country level: for instance, in OECD countries, corporate bond markets have benefited more than stock markets.

It is important to stress that it is the quality, not the relative size, of pension funds' activities that is associated with capital market growth. Meng and Pfau (2010) find that the growth of pension funds' assets tends to promote capital market development only in countries with an otherwise high level of financial development. Elsewhere, restrictions on the types of assets fund are allowed to invest in, small pension fund sizes, political interference and efforts to enlist funds in financing government deficits make it very difficult for markets to build on pension fund activity. Other studies, such as Raddatz and Schmukler (2008), find that even in developing countries such as Chile, which boasts a pension-fund-assets-to-GDP ratio rivalling those of developed countries, there has been little benefit to capital markets from pension fund activity, with the exception of some primary markets. In fact, the two authors point to a substantial literature that essentially sees pension funds as 'dumb money' whose largely sub-optimal investments are prone to herd behaviour. Reform can help address some of the shortcomings identified by Raddatz and Schmuckler (2008), although Roldos (2004) suggests that a gradual approach to pension reform might yield better outcomes than wholesale reforms, owing to the advantage of learning periods.

The problem of investment restrictions is ubiquitous because pension funds are often either state-owned or at least strongly regulated and are investing money that, as a rule, beneficiaries cannot afford to lose. Hence the funds' soundness and performance are highly political and rapid liberalisation may be undesirable.

# FAMILY FIRMS – BUILDING BLOCKS OR STUMBLING BLOCKS FOR CAPITAL MARKET GROWTH?

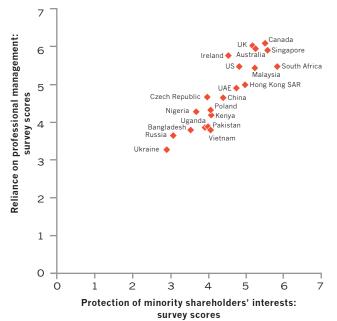
It is a established fact that family firms become less important to their domestic economies as capital markets develop (Bhattacharia and Ravikumar 2001). This also means, however, that in emerging and frontier capital markets some of the most important issuers of securities are likely to be, and to remain, family firms. As Fan et al. (2011) explain, 'the ownership of a typical emerging market firm is concentrated in a family or a government agency. The firm is affiliated with a business group, controlled by the owner through a complex web of ownership formed by stock pyramids, cross-shareholdings, and/or dual class shares. These ownership structures...enhance the owner's control of the firm and the overall business group beyond the owner's ownership

level....family ownership in emerging markets is typically highly concentrated and remains so even long after going public.'

Indeed, as the analysis of the WEF data in Chapter 5, above, suggests, reliance on professional management is only very widespread in the most developed markets, and thus the engagement of major family firms is likely to be a running theme for much of the lifecycles of markets around the world. Governments have an incentive to nudge such firms into going public, not only in the interests of transparency and accountability but also in order to provide critical mass for domestic bond and equity markets (Al Masah Capital Management 2011). As Table 6.1 shows, however, the decision on whether or not to go public is not straightforward, nor is an IPO the inevitable outcome of a family firm's growth.

The listing of family firms is not always welcome news for policymakers and regulators. Family firms are relatively prone to private information abuse (Filatotchev et al. 2010) and are often believed to be structured in ways that favour expropriation of minority shareholders (Fan et al. 2011). During the financial crisis of 2008–9, valuations of

Figure 6.1: WEF indicators of the quality of family firm engagement with capital markets



Source: Sala-i-Martin et al. 2011

family-controlled firms listed around the world fell disproportionately, reflecting the market's belief that families would prioritise the diversion of funds to themselves over the company's health (Lins et al. 2011). Overall, different markets may be better or worse equipped to deal with large listed family firms; in a large international study, Peng and Jiang (2010) demonstrate that the overall effect of family ownership depends strongly on institutional factors, especially the protection of minority shareholders' rights.

As Figure 6.1 shows, countries such as Singapore, South Africa or Malaysia are able to engage family firms in capital markets in more constructive ways, while in Russia and the Ukraine, or Bangladesh and Uganda, the implications of family ownership on governance will tend to be more problematic.

Finally, the intricacies of listed family firms also present a challenge for the accounting profession. When control of listed firms is concentrated among a few family members. their reported earnings are generally seen as less informative or credible (Fan and Wong 2001). The principal-agent conflicts generally anticipated by institutions in developed markets are secondary in emerging economies, while principal-principal conflicts are much more common, necessitating a different set of safeguards (Young et al. 2008). Fan and Wong (2005), for instance, demonstrate that, in east Asia's capital markets, auditors with the major audit firms play something akin to a governance role in response to the dominant ownership structure. More specifically, firms in which a few shareholders exercise actual control that is disproportionate to their share ownership are more likely to engage Big Five auditors in order to reassure investors.

Table 6.1: Taking a family business public: Advantages and disadvantages for shareholders

Advantages	Disadvantages
Marketability of shares and exit opportunities for family members	Loss of privacy (for both the firm and individual family members)
Improvement of the firm's financial position and increased ability to borrow	Loss of autonomy as the firm is now also accountable to the new shareholders
Potential increase in share value	Increased liability
Increased visibility	Possibility of takeovers
	Costs associated with listing and disclosure

Source: Abouzaid 2008

## 7. Conclusions and themes for discussion

This discussion paper offers a substantial review of the evidence regarding the development and prospects of emerging and frontier capital markets. Nonetheless, the diverse experiences of investors, business leaders and regulators in these markets are impossible to capture here, and in any case there are limits to what desk research can reveal. Instead, the paper has identified a small number of key themes to be explored by other means and in greater detail. ACCA's current research into the rise of capital markets in emerging and frontier markets will use these insights to engage policymakers, regulators and market participants in a global dialogue on the future of capital markets. The most important of these themes are as follows.

#### **BUCKING THE TREND**

The analysis here confirms that many of the emerging markets have resisted the loss of confidence in financial disclosures that was evident in many of the developed markets around the world. It is now clear that confidence dwindled well before the magnitude of the coming crisis was understood, and arguably this had much to do with the resulting loss of liquidity and falling valuations. Clearly, financial disclosures are valuable, although this is not to say that all information creates value proportionate to the costs imposed on business. What is not clear is why, at that early stage, some emerging and frontier markets were immune to this loss of confidence, or indeed why some markets (namely South Africa, Poland, China, Kenya and Uganda) retained much more confidence than others and even made significant gains.

Questions: What, if any, new institutions, reforms or newly introduced practices helped bolster confidence in the quality of disclosures in South Africa, Poland, China, Kenya and Uganda between 2007 and 2011? Is this new-found confidence likely to be sustained in the recovery? Which types of financial disclosure are seen as adding the most value, and which are most commonly dismissed as irrelevant or overly burdensome?

#### QUALITIES OF LIQUIDITY

This review has questioned the primacy of liquidity as a measure of capital market success and suggested that the emerging markets' relative failure to keep up with rising liquidity in developed markets may not have been such a bad thing after all. While insisting that illiquid

markets are not sustainable in the long-term, it has been noted that when the rules are more accommodating to liquidity providers than to investors, the resulting volatility can threaten the stability of markets and drive away both businesses and investors. It is not just the headline figures on liquidity that should be targeted; efficient markets should ideally be able to allocate liquidity to all traded securities with minimal biases based on, for instance, business size. Bringing in liquidity by introducing big players such as foreign investors or pension funds can be challenging as the quality of their participation may vary. As a rule, markets benefit little from 'dumb money' and not at all from excessively smart money exploiting inside information.

Questions: Do regulators in emerging and frontier markets have a working definition of 'excess liquidity', and what early warning systems are or could be put in place? What kind of information would help them assess such risks and who has it? Are authorities in emerging and frontier markets actively trying to attract foreign institutional investors? If so, how do they deal with 'hot money'? What would be the best examples of good practice in relatively small markets?

# REGULATORY CAPITAL AND THE BRANDING OF CAPITAL MARKETS

This review has discussed at some length the branding of domestic capital markets: the ways in which business, government and the accounting profession can work together to establish a reputation that attracts more participants and liquidity to the market. One of the most intriguing findings emerging from this review is that confidence in accounting and auditing standards is a leading indicator of market liquidity. As is shown, businesses in emerging economies actively seek out the kudos from listing in better-branded markets, and a reputation for strict and consistent enforcement of the rules is embedded into the regulatory capital of domestic capital markets.

Questions: How strong are the brands of key emerging markets and how do they measure up against each other? Who do regulators look to for good practice in branding markets and what are the rules, institutions, behaviours and cultures that contribute to this? Who are the key audiences and what is the best way to communicate with them?

#### **GOVERNANCE AND MARKET CONDUCT**

This review has considered the unique challenges arising from the systems of control and governance as well as the competitive conditions common to many emerging markets. It shows that, while widening the use of professional managers and the protection of minority shareholders are crucial steps towards developed market status, the principal-principal conflicts common to emerging markets are unlikely to be addressed fully by importing best practice from systems designed to deal primarily with principal-agent problems. Instead, in many cases the market has evolved parallel systems of controls or even informal markets for governance services, involving such agents as controlling blockholders, auditors, and possibly other service providers. It is crucial to explore further the options available to policymakers and indeed shareholders in emerging markets, as the presence of large family firms and other companies with similar patterns of control and ownership is unlikely to diminish in the near future.

Questions: What is the state of the art on emerging markets' efforts to protect minority shareholders while encouraging dominant business groups and family firms to go public? Is this a priority in policy and if so, what are the authorities' primary incentives? Is it really the role of auditors and other third parties to provide governance services, even indirectly? Are they doing so consciously and how well do they match the required skill set?

#### SOES: INTO THE MAINSTREAM

The analysis shown in this paper reveals that, far from being outliers or exceptions to the normal function of capital markets, privatisations pursued through public offerings account for a great deal of the activity observed in emerging and frontier markets. It is important, in fact, to treat them as the norm as long as their respective governments continue to pursue their agendas of privatisation. This investigation has revealed that SOEs face unique challenges in conforming to the expectations of investors and need to converge with international best practice in order to convince investors of their viability as going concerns in the private sector.

Questions: How, if at all, have public offerings contributed to the intended reforms of public sector entities? What particular instances of privatisations do regulators and governments regard as noteworthy success stories? Are governments in emerging and frontier markets committed to pursuing such policies in the recovery and what events or conditions might cause them to reconsider?

In which ways, if at all, do accounting and governance practices in SOEs intended for privatisation diverge from international best practice? If such cases of divergence exist, what types of divergence are most problematic from investors' point of view and what are their implications for finance professionals in SOEs? What initiatives are in place to address these challenges?

### References

Abouzaid, S. (2008), *IFC Family Business Governance Handbook*, <a href="http://www.ifc.org/ifcext/corporategovernance.nsf/AttachmentsByTitle/Family\_Business\_English\_final\_2008/\$FILE/FB\_English\_final\_2008.pdf">http://www.ifc.org/ifcext/corporategovernance.nsf/AttachmentsByTitle/Family\_Business\_English\_final\_2008/\$FILE/FB\_English\_final\_2008.pdf</a>, accessed 20 February 2012.

Ali Abbas, S.M. and Christensen, J. (2007), 'The Role of Domestic Debt Markets in Economic growth: An Empirical Investigation Low-income Countries and Emerging Markets.' IMF Working Paper 07/127, June, <a href="http://www.imf.org/external/pubs/ft/wp/2007/wp07127.pdf">http://www.imf.org/external/pubs/ft/wp/2007/wp07127.pdf</a>, accessed 20 February 2012.

ACCA (2011), Global Economic Conditions Survey Report, Q2 2011, <a href="http://www.accaglobal.com/pubs/general/activities/library/economy/tech-ms-gec10.pdf">http://www.accaglobal.com/pubs/general/activities/library/economy/tech-ms-gec10.pdf</a>, accessed 20 February 2012.

Al-Akra, M., Eddie, I.A. and Jahangir, M. (2010), 'The Association Between Privatisation and Voluntary Disclosure: Evidence from Jordan', *Accounting and Business Research*, 40 (1): 55–74, <a href="http://www.tandfonline.com/doi/abs/10.1080/00014788.2010.9663384">http://www.tandfonline.com/doi/abs/10.1080/00014788.2010.9663384</a>, accessed 20 February 2012.

Al Masah Capital Management (2011), *MENA Family Businesses: The Real Power Brokers?*, <a href="http://www.almasahcapital.com/uploads/media/MENA\_Family\_Businesses\_Report\_\_17-Apr-11\_.pdf">http://www.almasahcapital.com/uploads/media/MENA\_Family\_Businesses\_Report\_\_17-Apr-11\_.pdf</a>, accessed 20 February 2012.

Ardic, O.P., Mylenko, N. and Saltane, V. (2011), Small and Medium Enterprises: A Cross-country Analysis with a New Data Set, World Bank Policy Research Working Paper no. 5538, accessed 13 February 2012, <a href="http://www.cgap.org/gm/document-1.9.49438/Small\_and\_Medium\_Enterprises.pdf">http://www.cgap.org/gm/document-1.9.49438/Small\_and\_Medium\_Enterprises.pdf</a>, accessed 20 February 2012.

Beck, T. and Demirguc-Kunt (2009), 'Financial Institutions and Markets across Countries and over Time – Data and Analysis', World Bank Policy Research Working Paper No. 4943, <a href="http://siteresources.worldbank.org/INTRES/Resources/469232-1107449512766/Financial\_Institutions\_and\_Markets\_across\_Countries.pdf">http://siteresources.worldbank.org/INTRES/Resources/469232-1107449512766/Financial\_Institutions\_and\_Markets\_across\_Countries.pdf</a>, accessed 20 February 2012.

Bekaert, G., Harvey, C.R. and Lundblad, C. (2005), 'Does Financial Liberalisation Spur Growth?' *Journal of Financial Economics*, 77: 3–55, <a href="http://www.kelley.iu.edu/clundbla/growthfin\_JFE\_main\_copy.pdf">http://www.kelley.iu.edu/clundbla/growthfin\_JFE\_main\_copy.pdf</a>>, accessed 20 February 2012.

Beine, M. and Candelon, B. (2011), 'Liberalisation and Stock Market Co-movement Between Emerging Markets', *Quantitative Finance*, 11 (2): 299–312, <a href="http://www.econstor.eu/bitstream/10419/26176/1/557642256">http://www.econstor.eu/bitstream/10419/26176/1/557642256</a>. PDF>, accessed 20 February 2012.

Bhattacharia, U. and Ravikumar, B. (2001), 'Capital Markets and the Evolution of Family Business' *Journal of Business*, 74 (2): 187–219, accessed 13 February 2012, <a href="http://manitobapork.com/uploads/REF\_2-Datasetal.pdf">http://manitobapork.com/uploads/REF\_2-Datasetal.pdf</a>, accessed 20 February 2012.

Bilodeau, J. (Ed.) (2010), *The Financial Development Report 2010*, <a href="http://www3.weforum.org/docs/WEF\_FinancialDevelopmentReport\_2010.pdf">http://www3.weforum.org/docs/WEF\_FinancialDevelopmentReport\_2010.pdf</a>, accessed 20 February 2012.

Bygrave, W.D. and Hunt, S.A. (2005), Global Entrepreneurship Monitor 2004 Financing Report, <a href="http://www.fundacionxavierdesalas.com/contenido/GEM%20">http://www.fundacionxavierdesalas.com/contenido/GEM%20</a> Web%20Ultimo/Informes%20GEM/finanzas2004.pdf>, accessed 20 February 2012.

Bygrave, W.D. and Quill, M. (2007), *Global Entrepreneurship Monitor* 2006 *Financing Report*, <a href="http://www.gemconsortium.org/download/1324348772020/GEM%20Financing%20Report%20071007.pdf">http://www.gemconsortium.org/download/1324348772020/GEM%20Financing%20Report%20071007.pdf</a>, accessed 20 February 2012.

CEBR (Centre for Economic and Business Research) (2011) 'Brazil has Overtaken the UK's GDP' CEBR Press Notice, 26 December, <a href="http://www.cebr.com/wp-content/uploads/Cebr-World-Economic-League-Table-press-release-26-December-2011.pdf">http://www.cebr.com/wp-content/uploads/Cebr-World-Economic-League-Table-press-release-26-December-2011.pdf</a>, accessed 20 February 2012.

Chami, R., Fullenkamp, C. and Sharma, S. (2009), 'A Framework For Financial Market Development', IMF Working Paper WP/09/156, <a href="http://www.imf.org/external/pubs/ft/wp/2009/wp09156.pdf">http://www.imf.org/external/pubs/ft/wp/2009/wp09156.pdf</a>, accessed 20 February 2012.

Chan, E., Hj Ahmad, M.H. and Woodridge, P. (2007), 'Liquidity in an Emerging Bond Market: A Case Study of Corporate Bonds in Malaysia', BIS Working Paper, August, 2012<a href="http://www.bis.org/repofficepubl/arpresearch\_dev\_200806.05.pdf">http://www.bis.org/repofficepubl/arpresearch\_dev\_200806.05.pdf</a>, accessed 20 February 2012.

Chari, A. Ouimet, P.P. and Tesar, L.L. (2010) 'The value of control in emerging markets' *The Review of Financial Studies*, v. 23 n.4: 1741–70, <a href="http://www.unc.edu/~achari/control.pdf">http://www.unc.edu/~achari/control.pdf</a>, accessed 20 February 2012.

Chinn, M.D. and Ito, H. (2008), 'A New Measure of Financial Openness', *Journal of Comparative Policy Analysis*, 10 (3): 309–22, <a href="http://web.pdx.edu/~ito/kaopen\_Chinn-Ito\_hi0523.pdf">http://web.pdx.edu/~ito/kaopen\_Chinn-Ito\_hi0523.pdf</a>, accessed 20 February 2012.

Christensen, H.B., Hail, L. and Leuz, C. (2011), 'Capital Market Effects of Securities Regulation: The Role of Prior Regulation, Implementation and Enforcement', NBER Working Paper 16737, January, <a href="http://www.nber.org/public\_html/confer/2011/CFf11/Christensen\_Hail\_Leuz.pdf">http://www.nber.org/public\_html/confer/2011/CFf11/Christensen\_Hail\_Leuz.pdf</a>, accessed 20 February 2012.

Cumming, D., Johan, S. and Li, D. (2011), 'Exchange Trading Rules and Stock Market Liquidity' *Journal of Financial Economics*, 99 (3) March: 651–71, <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.175.6673&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.175.6673&rep=rep1&type=pdf</a>>.

Demarigny, F. (2010) An EU-Listing Small Business Act – Establishing a Proportionate Regulatory and Financial Environment for Small and Medium-sized Issuers Listed in Europe, (French Ministry of Economy, Industry and Employment), <a href="http://www.mazars.com/content/download/37683/867875/version/2/SBA-smiles-english.pdf">http://www.mazars.com/content/download/37683/867875/version/2/SBA-smiles-english.pdf</a>.

Demir, F. and Dahi, O.S. (2011), 'Asymmetric Effects of Financial Development on South-South and South-North Trade', *Journal of Development Economics*, 94 (1): 139–49, January, <a href="http://faculty-staff.ou.edu/D/Firat.Demir-1/Demir\_and\_Dahi\_JDE11\_Financial\_Development\_and\_South\_South\_Trade.pdf">http://faculty-staff.ou.edu/D/Firat.Demir-1/Demir\_and\_Dahi\_JDE11\_Financial\_Development\_and\_South\_South\_Trade.pdf</a>, accessed 20 February 2012.

Estrin, S., Hanousek, J., Kocenda, E. and Svejnar, J. (2009), 'The Effects of Privatisation and Ownership in Transition Economies', *Journal of Economic Literature*, 47 (3): 699–728, <a href="http://www.relooney.info/00\_New\_3424">http://www.relooney.info/00\_New\_3424</a>. pdf>, accessed 20 February 2012.

Fan, J.P.H., John Wei, K.C. and Xu, X. (2011), 'Corporate Finance and Governance in Emerging Markets: A Selective Review and an Agenda for Future Research', *Journal of Corporate Finance*, 17 (2): 207–14, <a href="http://ihome.cuhk.edu.hk/~b109671/doc/research\_published\_paper/17.pdf">http://ihome.cuhk.edu.hk/~b109671/doc/research\_published\_paper/17.pdf</a>>, accessed 20 February 2012.

Fan, J.P.H. and Wong, T.J. (2001), Corporate Ownership Structure and the Informativeness of Accounting Earnings in East Asia, Competitive Enterprise Institute,(CEI) Working Paper Series, no. 2001-21, September, <a href="http://hermes-ir.lib.hit-u.ac.jp/rs/bitstream/10086/13950/1/wp2001-21a.pdf">http://hermes-ir.lib.hit-u.ac.jp/rs/bitstream/10086/13950/1/wp2001-21a.pdf</a>, accessed 20 February 2012.

Fan, J.P.H. and Wong, T.J. (2005), 'Do External Auditors Perform a Corporate Governance Role in Emerging Markets? Evidence from East Asia', *Journal of Accounting Research*, 43 (1): 35–72, <a href="http://ihome.cuhk.edu.hk/~b109671/doc/research\_published\_paper/08.pdf">http://ihome.cuhk.edu.hk/~b109671/doc/research\_published\_paper/08.pdf</a>, accessed 20 February 2012.

Fan, J.P.H. and Wong, T.J. (2001) 'Corporate ownership structure and the informativeness of accounting earnings in East Asia', CEI Working Paper Series, no. 2001–21, September, <a href="http://hermes-ir.lib.hit-u.ac.jp/rs/bitstream/10086/13950/1/wp2001-21a.pdf">http://hermes-ir.lib.hit-u.ac.jp/rs/bitstream/10086/13950/1/wp2001-21a.pdf</a>, accessed 20 February 2012.

Ferreira, M.A. and Matos, P.P. (2008), 'The Colors of Investors' Money: The Role of Institutional Investors Around the World', *Journal of Financial Economics*, 88 (3): 499–533 <a href="http://docentes.fe.unl.pt/~mferreira/index\_files/colors.pdf">http://docentes.fe.unl.pt/~mferreira/index\_files/colors.pdf</a>, accessed 20 February 2012.

Filatotchev, I. Zhang, X. and Piesse, J. (2010), 'Multiple Agency Perspective, Family Control, and Private Information Abuse in an Emerging Economy', *Asia Pacific Journal of Management*, 28 (1): 69–93 <a href="http://dx.doi.org/10.1007/s10490-010-9220-x">http://dx.doi.org/10.1007/s10490-010-9220-x</a>, accessed 20 February 2012.

Frost, C.A., Gordon, and Hayed, A.F. (2006), 'Stock Exchange Disclosure and Market Liquidity: An Analysis of 50 International Exchanges', *Journal of Accounting Research*, 44 (3) June: 437–83, <a href="http://www.ksri.org/bbs/files/research02/SSRN\_ID355361\_code021218500.pdf">http://www.ksri.org/bbs/files/research02/SSRN\_ID355361\_code021218500.pdf</a>, accessed 20 February 2012.

Frost, C.A., Gordon, E.A. and Pownall, G. (2010), 'Financial Reporting and Disclosure Quality, and Emerging Market Companies' Access to Capital in Global Markets', *Asia Pacific Journal of Accounting & Economics*, <a href="http://ssrn.com/abstract=802824">http://ssrn.com/abstract=802824</a>, accessed 20 February 2012.

Gao, P. (2010), 'Disclosure Quality, Cost of Capital and Investors' Welfare', *Accounting Review*, 85 (1): 1–29, <a href="http://faculty.fuqua.duke.edu/~qc2/BA532/2008%20">http://faculty.fuqua.duke.edu/~qc2/BA532/2008%20</a> WP%20Gao.pdf>, accessed 20 February 2012.

Goswami, N. and Sharma, S. (2011), *The Development of Local Debt Markets in Asia*, IMF Working Paper 11/132, June, <a href="http://asianbondsonline.adb.org/publications/external/2011/The\_Development\_of\_Local\_Debt\_Markets\_in\_Asia\_IMF\_Jun\_2011.pdf">http://asianbondsonline.adb.org/publications/external/2011/The\_Development\_of\_Local\_Debt\_Markets\_in\_Asia\_IMF\_Jun\_2011.pdf</a>, accessed 20 February 2012.

Gow, I.D., Taylor, D.J. and Verrecchia, R.E. (unpublished), 'Disclosure and the Cost of Capital: Evidence of Information Complementarities', <a href="http://server1.tepper.cmu.edu/Seminars/docs/GTVGow.pdf">http://server1.tepper.cmu.edu/Seminars/docs/GTVGow.pdf</a>, accessed 20 February 2012.

Gupta, N. and Yuan, K. (2009), 'On the Growth Effect of Stock Market Liberalisations', *Review of Financial Studies*, 22 (11): 4715–52, <a href="https://kelley.iu.edu/Faculty/Finance/nagupta/publications/guptayuan\_rfs.pdf">https://kelley.iu.edu/Faculty/Finance/nagupta/publications/guptayuan\_rfs.pdf</a>, accessed 20 February 2012.

Haddad, A.E., Al Shattarat W.K. and Nobanee, H. (2009), 'Voluntary Disclosure and Stock Market Liquidity: Evidence from Jordanian Capital Market', *International Journal of Accounting, Auditing and Performance Evaluation,* 5 (3): 285–309, <a href="http://www.eis.hu.edu.jo/deanshipfiles/pub10487232.pdf">http://www.eis.hu.edu.jo/deanshipfiles/pub10487232.pdf</a>, accessed 20 February 2012.

Hawkings, J. (2002), 'Bond Markets and Banks in Emerging Economies' in Bank for International Settlements [BIS] (ed.), *The Development of Bond Markets in Emerging Economies* (London: Department for Business, Innovation and Skills), 11: 42–8, <a href="http://www.bis.org/publ/bppdf/bispap11d.pdf">http://www.bis.org/publ/bppdf/bispap11d.pdf</a>, accessed 20 February 2012.

Hawkings, J. (2002) 'Bond markets and banks in emerging economies', 11 (October): 48, <a href="http://www.bis.org/publ/bppdf/bispap11d.pdf">http://www.bis.org/publ/bppdf/bispap11d.pdf</a>, accessed 20 February 2012.

Hearn, B. and Piesse, J. (2010), 'Barriers to the Development of Small Stock Markets: A Case Study of Swaziland and Mozambique', *Journal of International Development*, 22 (7): 1018–37, <a href="http://www.csae.ox.ac.uk/conferences/2009-EDiA/papers/071-Hearn.pdf">http://www.csae.ox.ac.uk/conferences/2009-EDiA/papers/071-Hearn.pdf</a>, accessed 20 February 2012...

Hearn, B., Piesse, J. and Strange, R. (2010), 'Market Liquidity and Stock Price Premia in Emerging Markets: The Implications for Foreign Investment', *International Business* Review, 19 (5): 489–501, <a href="http://www.kcl.ac.uk/content/1/c6/04/06/30/MarketLiquidityand StockSize">http://www.kcl.ac.uk/content/1/c6/04/06/30/MarketLiquidityand StockSize</a> PremiainEmergingFinancialMarketsTheImplicationsfor ForeignInvestment.pdf>, accessed 20 February 2012.

Kogut, B. and Spicer, A. (2002), Capital Market Development and Mass Privatization are Logical Contradictions: Lessons from Russia and the Czech Republic, *Industrial and Corporate Change*, 11 (1): 1–37, <a href="http://www0.gsb.columbia.edu/faculty/bkogut/files/2002\_ICC\_Kogut\_Spicer.pdf">http://www0.gsb.columbia.edu/faculty/bkogut/files/2002\_ICC\_Kogut\_Spicer.pdf</a>, accessed 20 February 2012.

Lambert, R., Leuz, C. and Verrechia, R.E. (2007), 'Accounting Information, Disclosure, and the Cost of Capital', *Journal of Accounting Research*, 45 (2): 385–420, <a href="http://fic.wharton.upenn.edu/fic/papers/06/0620.pdf">http://fic.wharton.upenn.edu/fic/papers/06/0620.pdf</a>, accessed 20 February 2012.

Lins, K.V., Volpin, P.F. and Wagner, H. F. (2011), 'The Value of Controlling Blockholders During the Global Financial Crisis', Working Paper, <a href="http://194.90.30.6/">http://194.90.30.6/</a> CaesareaAdmin/Uploads/ES/Events/Files/432.pdf>, accessed 20 February 2012.

McCauley (2008), 'Managing Recent Hot Money inflows in Asia' in M. Kawai and M. B. Lamberte (eds.) *Managing Capital Flows: The Search for a Framework*, <a href="http://www.environmentportal.in/files/managing%20capital.pdf">http://www.environmentportal.in/files/managing%20capital.pdf</a>, accessed 20 February 2012.

Megginson, W.L. and Netter, J. M. (2001), 'From State to Market: A Survey of Empirical Studies on Privatisation', *Journal of Economic Literature*, 39: 321–89, <a href="http://faculty-staff.ou.edu/M/William.L.Megginson-1/prvsvpapJLE.pdf">http://faculty-staff.ou.edu/M/William.L.Megginson-1/prvsvpapJLE.pdf</a>, accessed 20 February 2012.

Meng, C. and Pfau W.D. (2010), *The Role of Pension Funds in Capital Market Development*, National Graduate Institute for Policy Studies (GRIPS) Discussion Paper, 10-17, <a href="http://r-center.grips.ac.jp/gallery/docs/10-17.pdf">http://r-center.grips.ac.jp/gallery/docs/10-17.pdf</a>, accessed 20 February 2012.

Mihaljek, D. and Packer, F. (2010), 'Derivatives in Emerging Markets', *BIS Quarterly Review*, December, <a href="https://www.bis.org/publ/qtrpdf/r\_qt1012f.pdf">https://www.bis.org/publ/qtrpdf/r\_qt1012f.pdf</a>, accessed 20 February 2012.

Ng, L., Wu, F., Yu, J. and Zhang, B. (2011), 'Foreign Investor Heterogeneity and Stock Liquidity Around the World', China Financial Research Network (CFRN) Working Paper Series, <a href="http://ssrn.com/abstract=1965021">http://ssrn.com/abstract=1965021</a>, accessed 20 February 2012.

Niggerman, T. and Rocholl, J. (2010), *Pension Funding and Capital Market Development* Working Paper Series, <a href="http://www.fma.org/Hamburg/Papers/PensionFundingandCapitalMarket">http://www.fma.org/Hamburg/Papers/PensionFundingandCapitalMarket</a> Development.pdf>, accessed 20 February 2012.

Peng, M.W. and Jiang, Y. (2010), 'Institutions Behind Family Ownership and Control in Large Firms', *Journal of Management Studies*, 47 (2): 253–73, <a href="http://www.utdallas.edu/~mxp059000/documents/Peng10JMSJiang472253-273\_000.pdf">http://www.utdallas.edu/~mxp059000/documents/Peng10JMSJiang472253-273\_000.pdf</a>, accessed 20 February 2012.

Raddatz, C. and Schmuckler, S.L. (2008), 'Pension Funds and Capital Market Development: How Much Bank for the Buck?', World Bank Policy Research Working Paper 4787, December, <a href="http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/12/01/000158349\_20081201093039/Rendered/PDF/WPS4787.pdf">http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/12/01/000158349\_20081201093039/Rendered/PDF/WPS4787.pdf</a>, accessed 20 February 2012.

Rhee, S.G. and Wang, J. (2009), 'Foreign Institutional Ownership and Stock Market Liquidity: Evidence from Indonesia', *Journal of Banking and Finance*, 33 (7): 1312–24, <a href="http://cgfs.hu.edu.jo/confernce%20papers/Jian-Xin%20Wang%20(Foreign%20Ownership%20and%20Liquidity">http://cgfs.hu.edu.jo/confernce%20papers/Jian-Xin%20Wang%20(Foreign%20Ownership%20and%20Liquidity).pdf</a>, accessed 20 February 2012.

Roldos, J.E. (2004), 'Pension Reform, Investment Restrictions and Capital Markets', IMF Policy Discussion Paper PDP/04/4, <a href="http://www.imf.org/external/pubs/ft/pdp/2004/pdp04.pdf">http://www.imf.org/external/pubs/ft/pdp/2004/pdp04.pdf</a>, accessed 20 February 2012.

Rousseau, P.L. and Wachtel P. (2011), 'What is Happening to the Impact of Financial Deepening on Economic Growth?', *Economic Inquiry*, 49 (1): 276–88, <a href="http://law.vanderbilt.edu/academics/scholarly-events/symposia-conferences/theory-sloan/papers/download.aspx?id=7202">http://law.vanderbilt.edu/academics/scholarly-events/symposia-conferences/theory-sloan/papers/download.aspx?id=7202</a>, accessed 20 February 2012.

Sala·i·Martin, X., Bilbao·Osorio, B., Blanke, J., Browne, C., Crotti, R., Drzeniek Hanouz, M., Fidanza, B. and Geiger, T. (2011), *The Global Competitiveness Report 2011–12*, <a href="http://www3.weforum.org/docs/WEF\_GCR\_Report\_2011-12.pdf">http://www3.weforum.org/docs/WEF\_GCR\_Report\_2011-12.pdf</a>, accessed 20 February 2012.

Sarkissian, S. and Schill, M.J. (2009) 'Are There Permanent Valuation Gains to Listing Abroad?' *The Review of Financial Studies*, 22 (1): 371–412, <a href="http://sergei-sarkissian.com/papers/valuation.pdf">http://sergei-sarkissian.com/papers/valuation.pdf</a>, accessed 20 February 2012.

Sarno, L. and Taylor, M.P. (1999), 'Hot Money, Accounting Labels and the Permanence of Capital Flows to Developing Countries: An Empirical Investigation', *Journal of Development Economics*, (59): 337–64, <a href="http://www.cass.city.ac.uk/\_data/assets/pdf\_file/0004/40684/JDE.pdf">http://www.cass.city.ac.uk/\_data/assets/pdf\_file/0004/40684/JDE.pdf</a>, accessed 20 February 2012.

Schneider, F. Buehn, A. and Montenegro, C.E. (2010), 'Shadow Economies All Over the World: New Estimates for 162 Countries from 1999 to 2007', World Bank Policy Research Working Paper 5356, <a href="http://www.econ.jku.at/members/Schneider/files/publications/">http://www.econ.jku.at/members/Schneider/files/publications/</a> LatestResearch2010/SHADOWECONOMIES\_June8\_2010\_ FinalVersion.pdf>, accessed 20 February 2012.

Selvi, Y. and Yilmaz, F. (2010), 'The Importance of Financial Reporting During Privatization: Turkish Case', *Annales Universitatis Apulensis Seriers Oeconomica*, 12 (2): 672–91, <a href="http://oeconomica.uab.ro/upload/lucrari/1220102/20.pdf">http://oeconomica.uab.ro/upload/lucrari/1220102/20.pdf</a>, accessed 20 February 2012.

Stiglitz, J.E. (2000), 'Capital Market Liberalisation, Economic Growth, and Instability', *World Development*, 28 (6): 1075–86, <a href="http://fac.comtech.depaul.edu/topiela/content/798-102\_Stiglitz\_Fin%20Makt%20Lib%20">http://fac.comtech.depaul.edu/topiela/content/798-102\_Stiglitz\_Fin%20Makt%20Lib%20</a> and%20Instability%202000.pdf>, accessed 20 February 2012.

Stiglitz, J.E. (2004), 'Capital Market Liberalisation, Globalisation and IMF', *Oxford Review of Economic Policy*, 20 (1): 57–71, <a href="http://www.relooney.info/00\_New\_951">http://www.relooney.info/00\_New\_951</a>. pdf>, accessed 20 February 2012.

Stulz (2009), 'Securities Laws, Disclosure and Capital Markets in the Age of Financial Globalisation' *Journal of Accounting Research*, 47 (2): 349–90, <a href="http://ideas.repec.org/p/nbr/nberwo/14218.html">http://ideas.repec.org/p/nbr/nberwo/14218.html</a>, accessed 20 February 2012.

UN (United Nations) (2011), *World Economic Situation and Prospects 2011*, <a href="http://www.un.org/en/development/desa/policy/wesp/wesp\_current/2011wesp.pdf">http://www.un.org/en/development/desa/policy/wesp/wesp\_current/2011wesp.pdf</a>, accessed 20 February 2012.

World Bank (2009), *World Bank / IFC Privatisation Database*, 2000–08 dataset, <a href="http://rru.worldbank.org/documents/Privatization/PrivatizationData00\_08.xls">http://rru.worldbank.org/documents/Privatization/PrivatizationData00\_08.xls</a>, accessed 20 February 2012.

World Bank (2011), 'Market Capitalisation of Listed Companies (% of GDP) World Development Indicators, <a href="http://data.worldbank.org/indicator/CM.MKT.LCAP">http://data.worldbank.org/indicator/CM.MKT.LCAP</a>. GD.ZS>, accessed 20 February 2012.

World Bank and International Finance Corporation (IFC) (2011), *Doing Business 2012: Doing Business in a More Transparent World*, <a href="http://www.doingbusiness.org/~/">http://www.doingbusiness.org/~/</a> media/FPDKM/Doing%20Business/Documents/Annual-Reports/English/DB12-FullReport.pdf>, accessed 20 February 2012.

Young, M.N., Peng, M.W., Ahlstrom, D., Bruton, G.D. and Jiang, Y. (2008), 'Corporate Governance in Emerging Economies: A Review of the Principal–Principal Perspective', *Journal of Management Studies* 45 (1): 196–219, <a href="http://web.cenet.org.cn/upfile/115714.pdf">http://web.cenet.org.cn/upfile/115714.pdf</a>, accessed 20 February 2012.

## **Appendix: Classifying markets**

To give a better understanding of the similarities and differences between different countries, 21 key ACCA markets are classified below according to various indicators of financial development and depth. The major groupings correspond roughly to the three-tier classification employed by Standard & Poors. The following variables were considered in grouping different economies.

- Availability of venture capital rankings and scores (Sala-i-Martin et al. 2011)
- Regulation of securities exchanges rankings and scores (Sala-i-Martin et al. 2011)
- Ease of access to local equity markets rankings and scores (Sala-i-Martin et al. 2011)
- Protection of minority shareholder rights rankings and scores (Sala-i-Martin et al. 2011)
- Strength of accounting and auditing standards rankings and scores (Sala-i-Martin et al. 2011)
- Reliance on professional management 2011–12 rankings and scores (Sala-i-Martin et al. 2011)
- Getting Credit 2012 rankings (World Bank and IFC 2011)
- Log [(Market Capitalisation) / GDP] in 2010 or latest (World Bank 2011)
- Informal economy as % of GDP in 2007 or latest (Schneider et al. 2010).

Moreover, the following variables were considered as key context variables.

- Loans to SMEs as % of GDP (Ardic et al. 2011)
- Informal equity investment as % of GDP in 2006 or latest (Bygrave and Hunt 2005; Bygrave and Quill 2007)
- Overall financial development scores and rankings for 2011 (Bilodeau 2010)
- Financial institutions scores and rankings for 2011 (Bilodeau 2010)
- Financial business environment scores and rankings for 2011 (Bilodeau 2010)
- Financial stability scores and rankings for 2011 (Bilodeau 2010)
- Banking financial services scores and rankings for 2011 (Bilodeau 2010)
- Non-banking financial services scores and rankings for 2011 (Bilodeau 2010)
- Financial markets scores and rankings for 2011 (Bilodeau 2010)
- Financial access scores and rankings for 2011 (Bilodeau 2010)
- Financial openness scores for 2008 (Chinn and Ito 2008).

The resulting classification is as follows.

#### **Developed markets**

In the sample, these include Australia, Canada, Hong Kong, Malaysia, Singapore, the UK, South Africa, and the US. One obvious common characteristic of these markets is the English common law tradition, which is known to be associated with highly liquid markets and stronger benefits from equity market liberalisation (Bekaert et al. 2005; Cumming et al. 2011). The median country in this group has an equity market capitalisation of about 150% of GDP,1 and corporate bond market capitalisation of 26% as well as an informal equity market roughly equal to 0.9% of GDP per annum. Although the analysis in this paper uses these as the reference point in most cases, this is not to suggest that they are adopting best practices in all ways.

#### **Emerging markets**

These include, in this sample, Poland and the Czech Republic but also China and the UAE, all countries with a legacy of central planning. In these countries, informal investors and the banking system manage to pick up some of the slack from under-developed capital markets: the median ratios of SME loans and informal equity investment to GDP are 28% and 2.8% respectively, more than twice those of developed markets. The median country in this group has an equity market capitalisation of about 44% of GDP, and corporate bond market capitalisation of 18% of GDP.

#### Frontier markets

In the sample, these included Kenya, Uganda, Nigeria, Pakistan, Bangladesh and Vietnam. These are developing countries with young and relatively undeveloped financial markets, although they are too diverse a group to allow significant generalisations. Equity market capitalisation is low, with the median around 24% of GDP, and corporate bond markets are underdeveloped. Informal equity flows tend to be larger relative to GDP (1.2%) than in developed but not emerging markets. Finally, the banking system does not compensate for the relative lack of investment, with loans to SMEs typically reaching just 10% of GDP.

#### **Outliers**

Russia and the Ukraine are two particularly interesting cases and are best grouped together. Stock market capitalisation is higher, at a median of 48% of GDP, than financial development alone would suggest, partly owing to the legacy of mass privatisation of formerly public industries. Lending to SMEs, however, is low and informal equity markets are quite small: in Russia informal investment is equal to only 0.2% of GDP, one-fifth of the ratio for the median developed economy.

Ireland is another important outlier. In past years, Ireland would have easily fitted into the developed capital markets category and in many ways it still does. Nonetheless, faith in the regulatory system and the quality of disclosure was shaken in the aftermath of the financial crisis, leading to a further loss of faith in the country's financial markets; moreover, Ireland's financial stability has come into question. Overall, indicators derived from the World Economic Forum (WEF) tend to reflect these realities, which leads us to classify Ireland in a group of its own – nominally sharing many of the institutional strengths of the more mature economies but also suffering from a fundamental lack of faith in the system.

<sup>1.</sup> It is important to use a median in this case as Hong Kong is an extreme outlier: market capitalisation is over 1,200% of GDP.

Figure A1: Classification of capital markets – dendrogram using average linkage between groups

