Depositary Receipts: Creating Value Across Emerging Markets

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Depositary Receipts:

Creating Value across Emerging Markets

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The aim of this briefing is to provide an independent, robust analysis of the value and liquidity effects of depositary receipts (DRs) established by companies from emerging markets. The DR programmes of 628 firms were analysed, covering the period 1980-2007[1]. The key conclusions from the research are outlined below:

- Stock exchange-listed DRs (both ADRs and GDRs) add (on average) over 20% of shareholder value in their first year of trading as the international markets welcome the greater financial disclosure, transparency and signal of superior governance;
- OTC-traded DRs (both ADRs and GDRs) add over 30% of value on average;
- An upgrade from an OTC-traded DR to a stock exchange-listed DR programme adds on average a further 60% of value as investors respond to the higher reporting standards;
- Delisting a listed DR programme to the over-the-counter trading market destroys 20% of value on average as it becomes clear that the additional financial reporting will be withdrawn;
- Listed DRs improve home-market liquidity by 40% on average, as access to, and visibility in, the issuer's stock rises and is accompanied by greater and wider coverage by equity analysts;
- OTC-traded DRs improve home-market liquidity by 48% on average;

Empirical evidence is presented that DR programmes established by firms in emerging markets add significant value and improve home-market liquidity to the benefit of both issuers and investors. DRs additionally provide a strong signal of willing disclosure, greater transparency and superior governance, particularly important from emerging, less-regulated markets.

THE BANK OF NEW YORK MELLON

[1] to 30 June 2007

The Bank of New York Mellon
1 Wall Street
New York, NY 10286

THE BANK OF NEW YORK MELLON

As the world's leading depositary bank, we strongly believe in the benefits of issuing and investing in depositary receipts (DRs). Although we have a vested interest in DRs, time and again the facts support the benefits. Over the years we have seen DRs bring positive, measurable change to the non-U.S. companies that issue them – from double-digit growth in shareholder value to elevated liquidity to dramatic increases in international name and brand recognition. In today's increasingly global marketplace, DRs allow companies to effectively expand their presence beyond their own borders. And nowhere have these results proven stronger than in the emerging markets.

We are extremely pleased that Oxford Metrica, a respected strategic adviser specializing in research-based intelligence, has drawn these conclusions independently as they relate to the emerging markets. As you review the data within, you will see that no matter a corporation's country, DRs add tangible value with remarkable consistency. DR issuers can attest to the fact that once they establish a DR program, it just keeps on working for them.

We are pleased to have contributed to Oxford Metrica's study and welcome your questions or comments on DRs.

Christopher Sturdy
Head, Depositary Receipt Division
The Bank of New York Mellon

October 2007

Foreword

Chief executives of corporations and their board of directors need to consider the costs and benefits of internationalising their shareholder base. There are several routes open to achieving this objective, from attracting foreign investors to the local market to selling shares in an international public offering. If choosing to go abroad, the choice between a stock exchange listing and an over-the-counter (OTC) quotation platform is necessary. Finally, a choice on jurisdiction is required. Each one of these choices entails careful consideration. This has become ever more relevant as the perceived cost in international regulatory compliance has increased, particularly in the United States.

The most popular route to access the international equity capital markets in the last quarter century has been the depositary receipt. This instrument enables corporations from around the world to offer international investors access to foreign shares in the form of a security local to the investor. Generally, when the depositary receipt is primarily traded in the U.S., the securities are called American depositary receipts (ADRs). When the securities are primarily traded outside the U.S. they are called global depositary receipts (GDRs). Both ADRs and GDRs may be listed on a stock exchange or traded over-the-counter. For simplification, we refer to ADRs and GDRs collectively as “DRs.”

All data underlying this study are publicly available and were obtained from a variety of online sources including, but not limited to, the websites of the U.S. Securities and Exchange Commission (SEC); international stock exchanges including the American Stock Exchange (AMEX), the Dubai International Financial Exchange (DIFX), the London Stock Exchange (LSE), the Luxembourg Stock Exchange (LuxSE), NASDAQ and the New York Stock Exchange (NYSE); and the leading depositary banks. The raw data on local and U.S. share prices, market indices, trading volumes, market values and exchange rates were obtained from Bloomberg's financial database.

The ultimate criterion by which these alternatives should be evaluated is the value created by the programme. Any sensible board of directors would expect to take an evidence–based decision in order to ensure that a programme of internationalisation added value net of costs for the shareholders. Measurement issues aside, such decisions are difficult as they are often one-off and therefore the company has no specific experience to draw on. This problem is particularly felt in the so-called emerging markets. The best proxy for your own experience is to understand what has happened to others. In the case of the emerging markets, no comprehensive source of information on the impact of depositary receipts on share price has been available to assist boards in this crucial area.

At Oxford Metrica, we have been researching and analysing international equity markets for nearly a decade. With data and input from The Bank of New York Mellon, we are delighted to make available this report on the impact of establishing a DR programme on stock price and liquidity for emerging markets. The report is a rigorous analysis of all emerging-market DR programmes established from January 1980 to the present. The study is based on our comprehensive database of all the companies that have created such instruments.

The results are striking. DR programmes demonstrably add considerable value across markets, regions and types of instrument (listed or OTC). In addition, the results clearly show that there continues to be a lively demand for the DR with a strong showing of new programmes every year.

Obviously the impact on a particular company's share price will be unique. However, we aim to provide this report to support the decision to establish a DR programme. The specific circumstances of each corporation need to be considered when placing a company in the context of these results.

We gratefully acknowledge the assistance of The Bank of New York Mellon, a leading player in the Depositary Receipt industry, for agreeing to underwrite this project.

Dr Rory Knight

Chairman, Oxford Metricia

Oxford Metrica

Executive Summary

The aim of this briefing is to provide an independent, robust analysis of the value and liquidity effects of depositary receipts (DRs) established by companies from emerging markets. The DR programmes of 628 firms were analysed, covering the period 1980-2007[1]. The key conclusions from the research are outlined below.

Key Conclusions

1 Stock exchange-listed DRs (both ADRs and GDRs) add (on average) over 20% of shareholder value in their first year of trading as the international markets welcome the greater financial disclosure, transparency and signal of superior governance; Figure 3. Subregional results include:

- 15% value added in Asia; Figure 4
- 8% value added in EEMEA; Figure 6
- 35% value added in Latin America; Figure 7
- 35% value added in BRIC countries; Figure 9

2 OTC-traded DRs (both ADRs and GDRs) add over 30% of value on average; Figure 11. Subregional results include:

- 25% value added in Asia; Figure 12
- 30% value added in EEMEA; Figure 14
- 40% value added in Latin America; Figure 17
- 50% value added in BRIC countries; Figure 19

3 An upgrade from an OTC-traded DR to a stock exchange-listed DR programme adds on average a further 60% of value as investors respond to the higher reporting standards; Figure 21.

4 Delisting a listed DR programme to the over-the-counter trading market destroys 20% of value on average as it becomes clear that the additional financial reporting will be withdrawn; Figure 22.

5 Listed DRs improve home-market liquidity by 40% on average, as access to, and visibility in, the issuer's stock rises and is accompanied by greater and wider coverage by equity analysts; Figure 23. OTC-traded DRs improve home-market liquidity by 48% on average; Figure 24.

Empirical evidence is presented that DR programmes established by firms in emerging markets add significant value and improve home-market liquidity to the benefit of both issuers and investors. DRs additionally provide a strong signal of willing disclosure, greater transparency and superior governance, particularly important from emerging, less-regulated markets.

1. Introduction

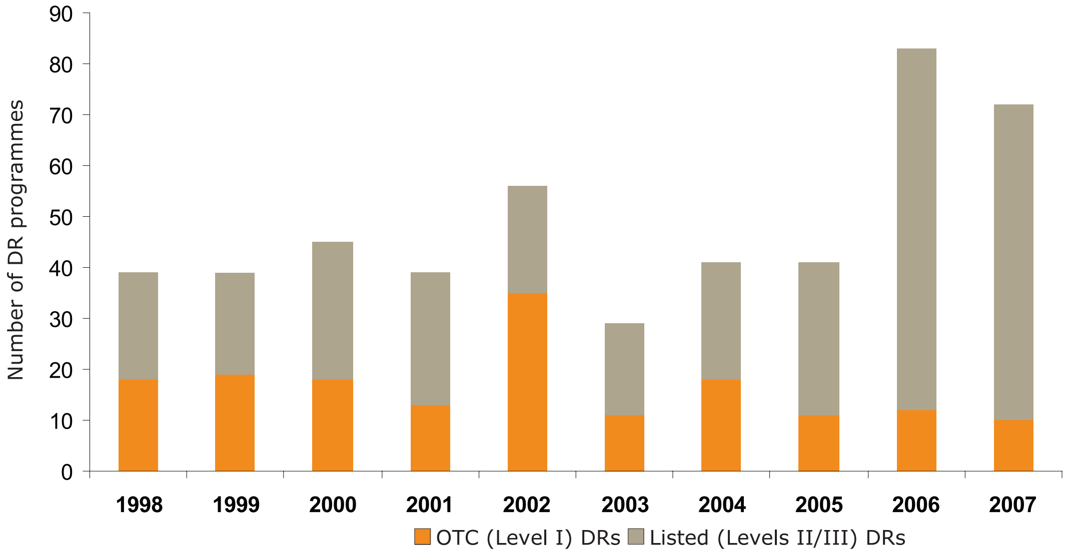
The analysis presented in this report measures the value and liquidity impact on local shares of establishing, upgrading or delisting a depositary receipt (DR) programme[2]. The full history of DRs is analysed, from 1980 to 2007. In this particular report, the focus is on emerging markets, as defined by the MSCI International Equity Indices; see Appendix for definition.

Shown in Figure 1 is the number of DR programmes by year over the last decade[3]. For the purpose of this study, Level I DR programmes are defined as DRs that trade on an over-the-counter (OTC) market and are exempt from most international reporting and accounting requirements.

[1] to 30 June 2007
[2] For definitions of industry terminology, see "A Glossary of Terms."
[3] Where the year runs from 1 July to 30 June, thus the graph shows DRs from 1 July 1997 to 30 June 2007.

In contrast, stock exchange-listed DRs (Levels II/III) require international registration, reconciliation with U.S. generally accepted accounting principles (GAAP) or international financial reporting standards (IFRS) and annual reporting according to the particular stock exchange requirements.

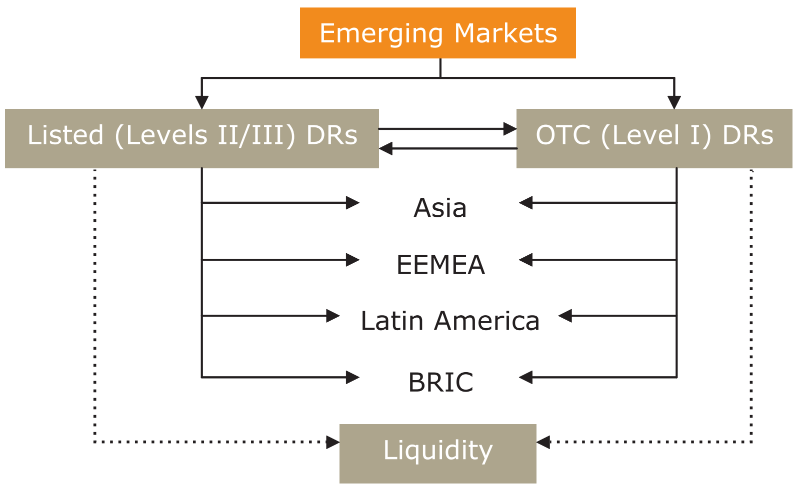
Figure 1: A decade of success in DRs



Despite recent doubts expressed over the benefits of cross-listing, the dramatic increase in listings from emerging markets is clear from this graph. Subsequent sections of this report will quantify the shareholder value and liquidity benefits for these firms.

Figure 2 provides an illustrative overview of the empirical research presented herein.

Figure 2: Analytical framework



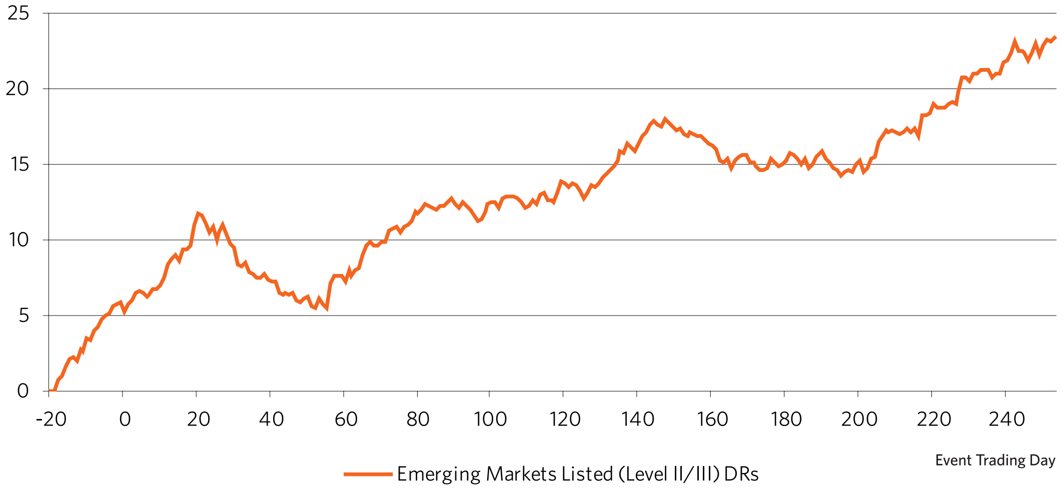
In sections 2 and 3 of this report, the research focuses on the value impact of establishing a new listed (Levels II/III) or new OTC (Level I) DR programme, respectively. Following these aggregate analyses, four regions from within emerging markets are evaluated separately: Asia, EEMEA (Eastern Europe, the Middle East and Africa), Latin America and the BRIC countries of Brazil, Russia, India and China.

Section 4 focuses on the interaction between the listed and OTC DRs. Both the value impact of upgrading one's programme (moving from Level I to Level II/III) and delisting one's programme (moving from Level II/III to Level I) are analysed. Finally, in section 5, the effect on home-market liquidity of establishing DRs is evaluated.

2. Performance of Listed DRs

This section focuses on the value impact on an emerging-market company of establishing a listed (Levels II/III) DR programme. Using the methodology described in the previous section, Figure 3 shows the average value impact on share prices in the issuers' local markets across 380 new listed programmes.

Figure 3: Over 20% added from Listed (Levels II/III) DRs



The graph shows a modelled share price reaction (using local share prices), where market-wide influences have been stripped out and the returns are risk-adjusted[4]. The dates on which the new programmes started trading have been aligned to Event Day Zero; the graph reflects one calendar year. A degree of information leakage to the markets is evident as the additional value becomes apparent over the twenty trading days prior to Day 0[5].

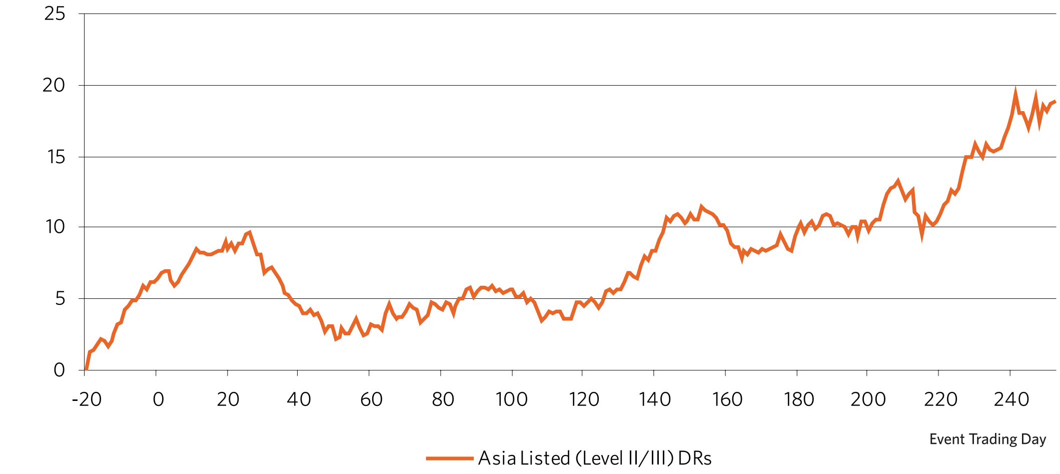
Investors anticipate the programmes and the positive market reaction is sustained through the year. By the end of the first year's trading, in an equally-weighted investment strategy, investors have added over 20% (equivalent to over US$100 billion) to their portfolios.

The next few graphs show the value reaction across selected regions in the emerging markets portfolio: Asia, EEMEA (Eastern Europe, the Middle East and Africa), Latin America and the BRIC countries (Brazil, Russia, India and China).

[4] Market-wide factors removed include all those which are found, statistically, to be influencing all stocks in that market or sector. They include, for example, macroeconomic changes such as interest-rate movements and core economic trends, and key industry-wide events. All returns are presented on a risk-adjusted basis. That is, the returns are adjusted to take account of the stock's price sensitivity to the market as a whole – the firm's beta. The result of these modelling procedures is a daily impact of the establishment of the DR programme on a firm's local share price; Value Reaction™. The metric captures a firm's shareholder value performance, relative to investors' expectations, in the domestic stock market. By making the necessary adjustments, ValueReaction™ captures a very clean measurement of impact, which is the firm-specific value response to establishment of the DR programme.

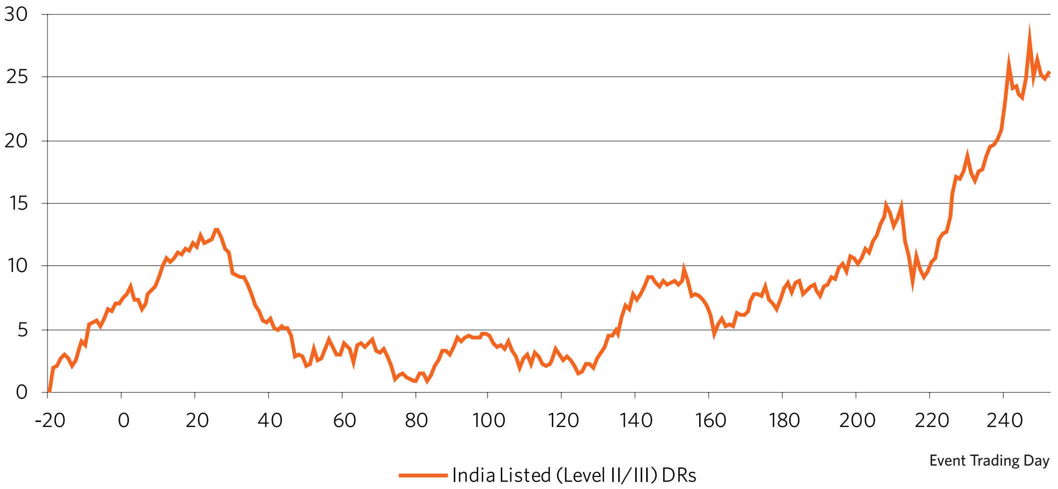
[5] For DR programmes involving Initial Public Offerings (IPOs) where data is not available before the date of DR establishment, the average figures in the graph have been adjusted accordingly.

Figure 4: Over 15% added across Asia



It can be seen that 15% of value is added to the Asian portfolio of new DR programmes, equivalent to over US$40 billion in an equally-weighted investment portfolio. Particularly strong value was realised in India; Figure 5.

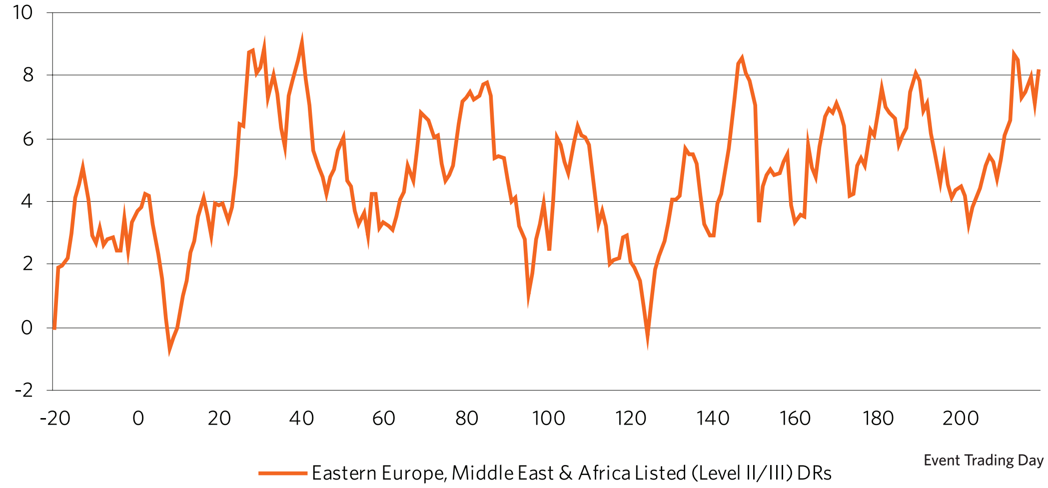
Figure 5: Strong value added in India



Of the 84 new DR listings by Indian companies, 51 have been on the Luxembourg Stock Exchange.

Across the EEMEA region also, the positive value effects are demonstrable in Figure 6 with a significant 8% of value being added to portfolios, equivalent to US$1.4 billion.

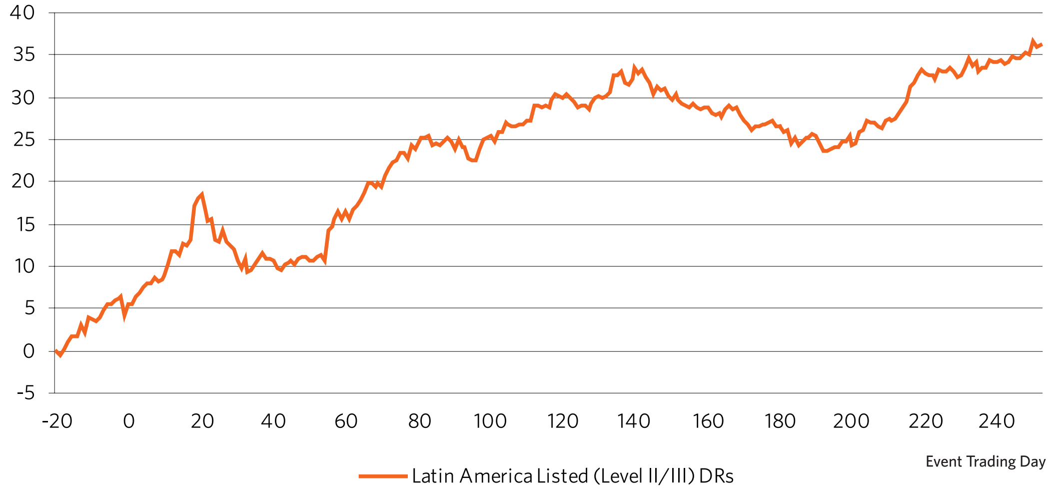
Figure 6: Significant value impact across EEMEA



The picture here is positive but more volatile, the volatility being due, in part, to the smaller portfolio size under analysis.

The results from Latin America are stellar with companies, on average, increasing their value by over one-third. This is equivalent to US$72 billion in an equally-weighted investment portfolio.

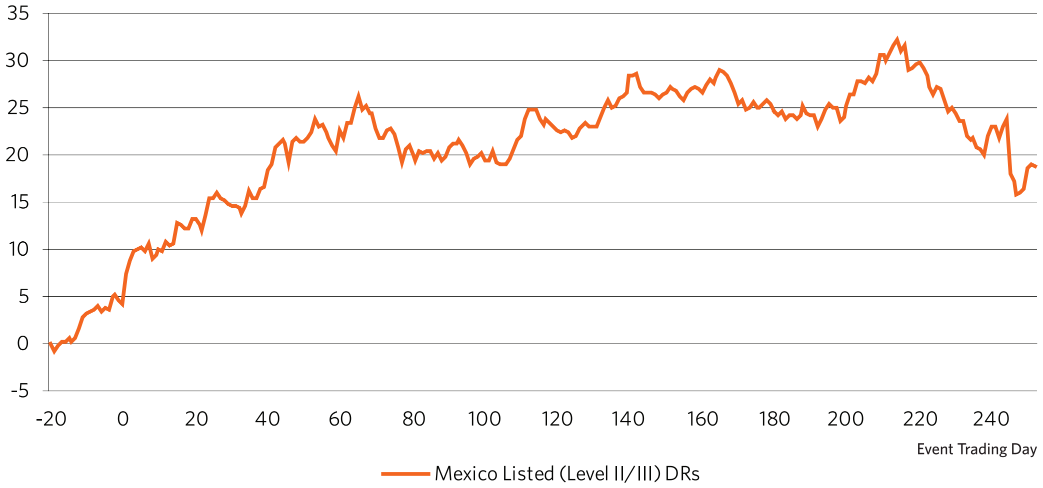
Figure 7: 35% value added across Latin America



The New York Stock Exchange appears as the exchange of choice for Latin American companies, dominating the listings with 87 of a total 98 new programmes from the region.

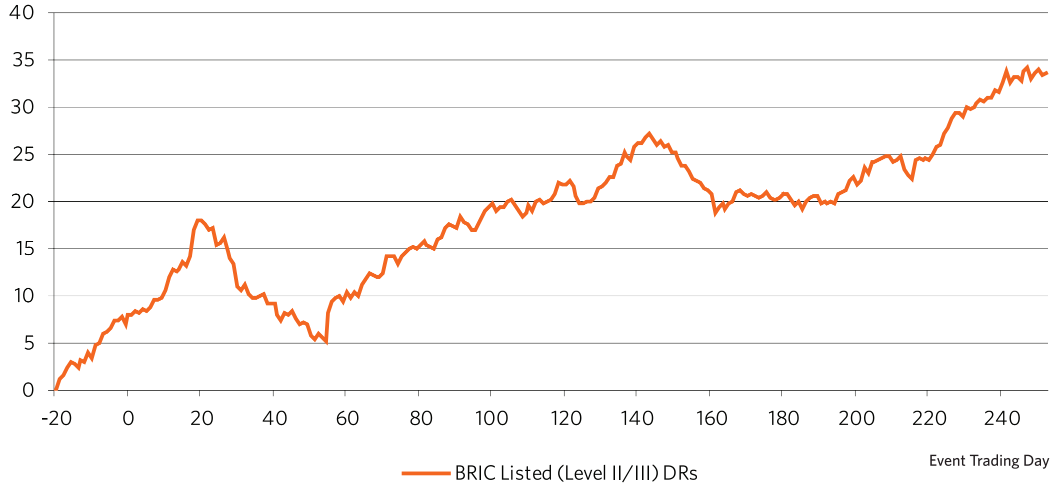
Presented in Figure 8 is the value reaction to programmes established by Mexican companies; equivalent to US$22 billion in monetary terms.

Figure 8: Strong value in Mexico



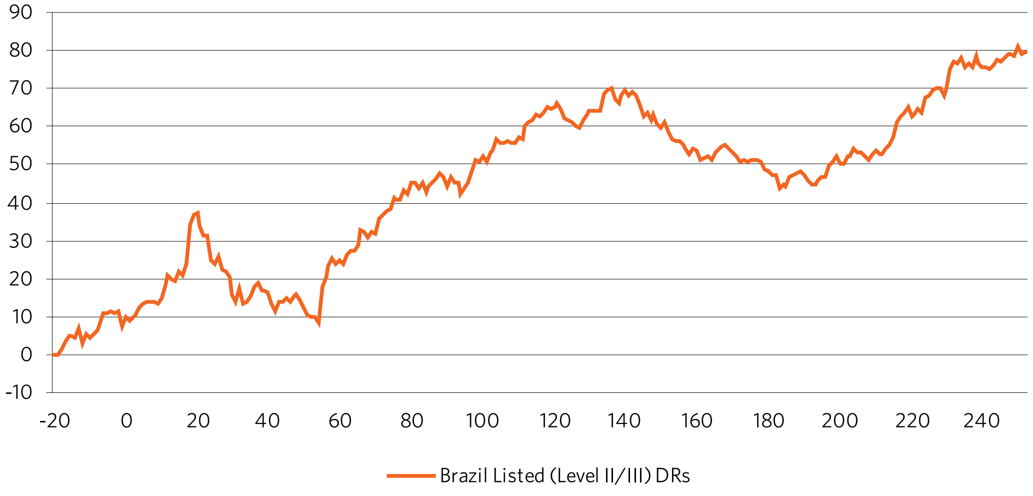
The final region selected for analysis is that of the so-called BRIC countries: Brazil, Russia, India and China. For these purposes, China is considered as mainland China and excludes Taiwan (and Hong Kong, considered a developed market). Shown in Figure 9 is the value reaction.

Figure 9: 35% value added across BRIC countries



A dramatic 35% of value is added, on average, to companies across these countries, equivalent to over US$36 billion. In Brazil specifically, 80% of value is added (US$33 billion); Figure 10.

Figure 10: Substantial value added in Brazil



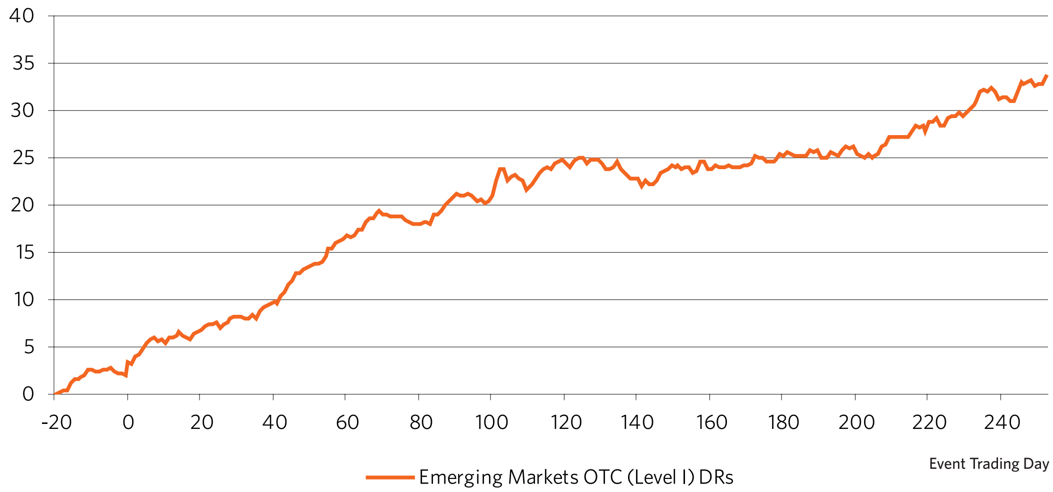
It is clear that by signing up voluntarily to more stringent standards of reporting and disclosure, companies from emerging markets can make a strong signal of their willingness to embrace superior governance. These signals are not lost on the markets, and the companies are rewarded with higher valuations.

3. Performance of OTC DRs

Presented in this section is an analysis of firms' local share-price performance following the establishment of an over-the-counter (Level I) DR programme. Unlike their U.S.-listed counterparts, OTC programmes are exempt from U.S. reporting requirements and from U.S. GAAP compliance.

Shown in Figure 11 is the value reaction to 248 firms across emerging markets as they establish an OTC (Level I) programme.

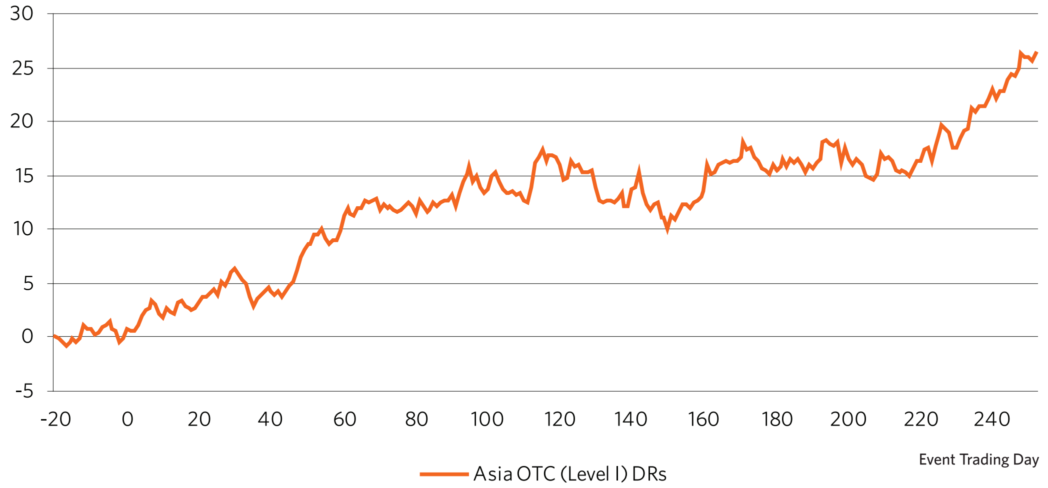
Figure 11: Over 30% added from OTC (Level I) DRs



The value impact is dramatic with approximately one-third of companies' value being added in the year following establishment. In an equally-weighted investment strategy, this is equivalent to US$136 billion.

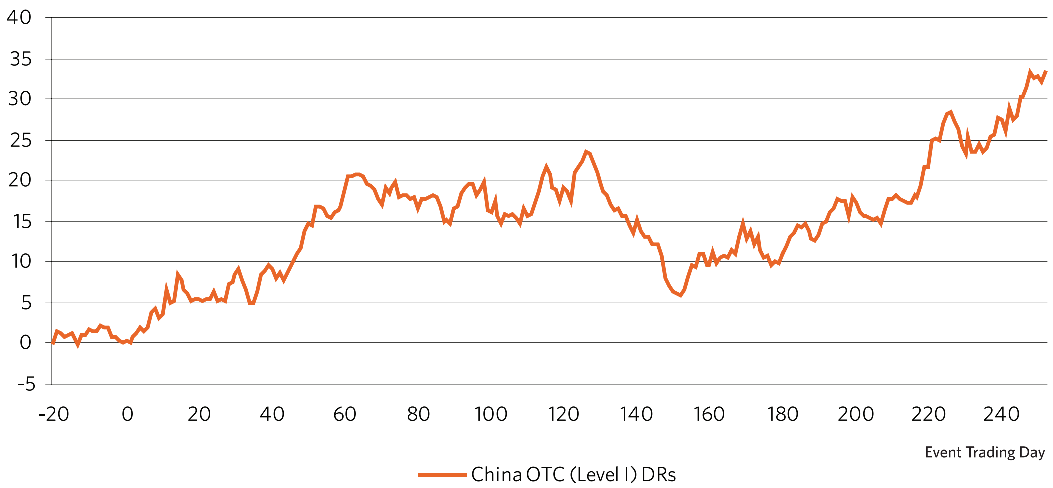
The following graphs show the value reaction in different subregions of emerging markets. Presented in Figure 12 is the value impact across Asia.

Figure 12: 25% value added across Asia



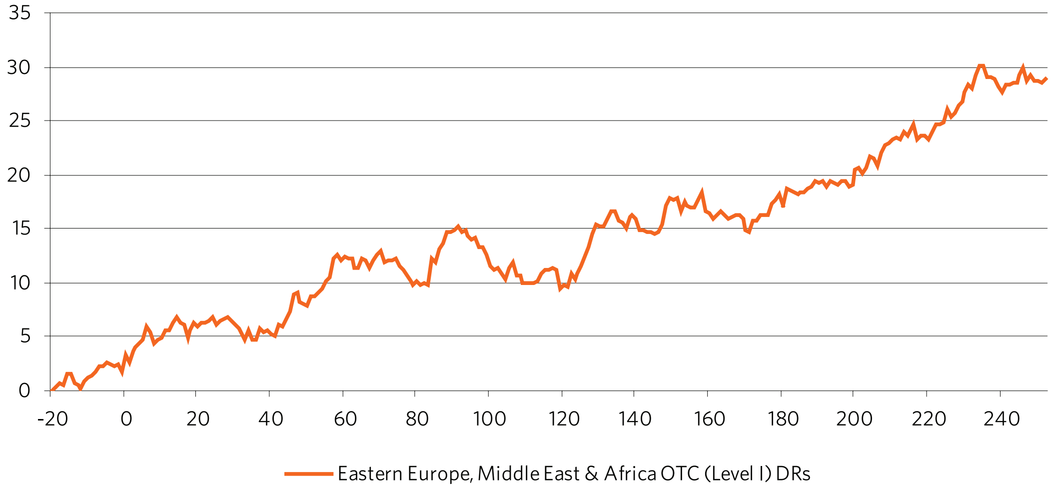
A steady and sustained 25% of value is added to firms, equivalent to US$9 billion. Figure 13 shows the powerful value effects in mainland China due to establishing an OTC DR programme.

Figure 13: Strong performance in mainland China



Over 30% (US$3 billion) is added to an investment portfolio of such firms. Similarly strong results are found in the region of Eastern Europe, the Middle East and Africa (EEMEA); Figure 14.

Figure 14: Higher valuations across EEMEA



Approximately 30% of value is added across this region by the establishment of a Level I programme, equivalent to US$84 billion. Two countries notable in driving the value growth in this region are Russia and South Africa; Figures 15 and 16.

Figure 15: Dramatic value growth in Russia

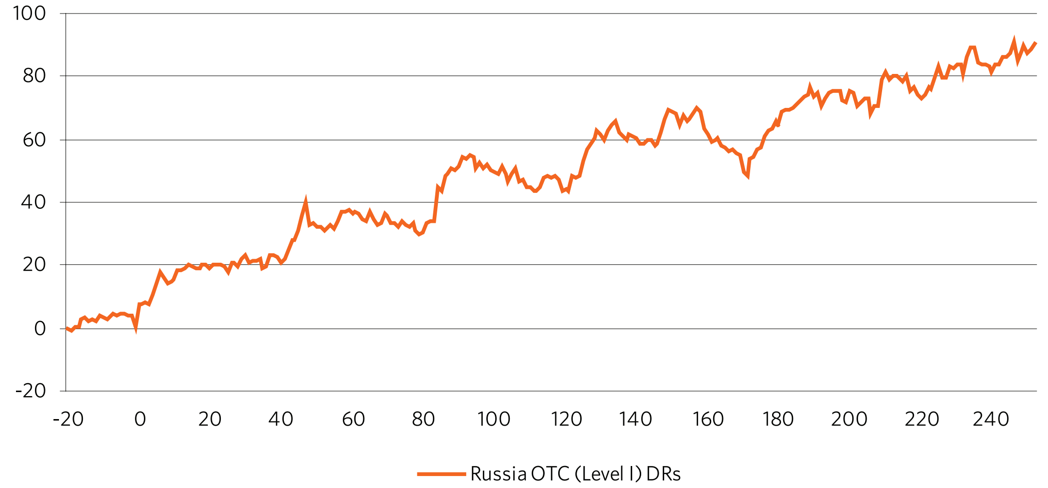
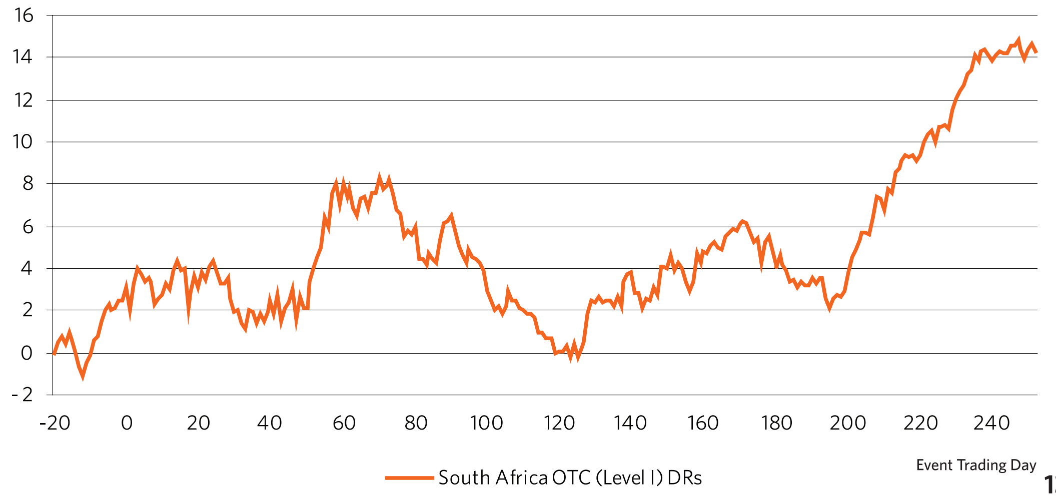


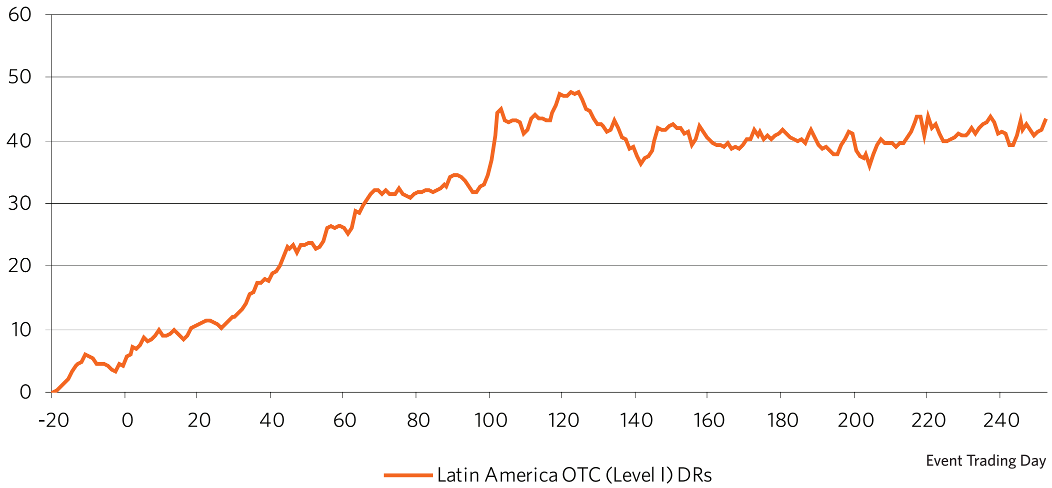
Figure 16: More volatile but still impressive in South Africa



In Russia and South Africa, respectively, the value added to investors has been 90% (US$221 billion) and 14% (US$5 billion).

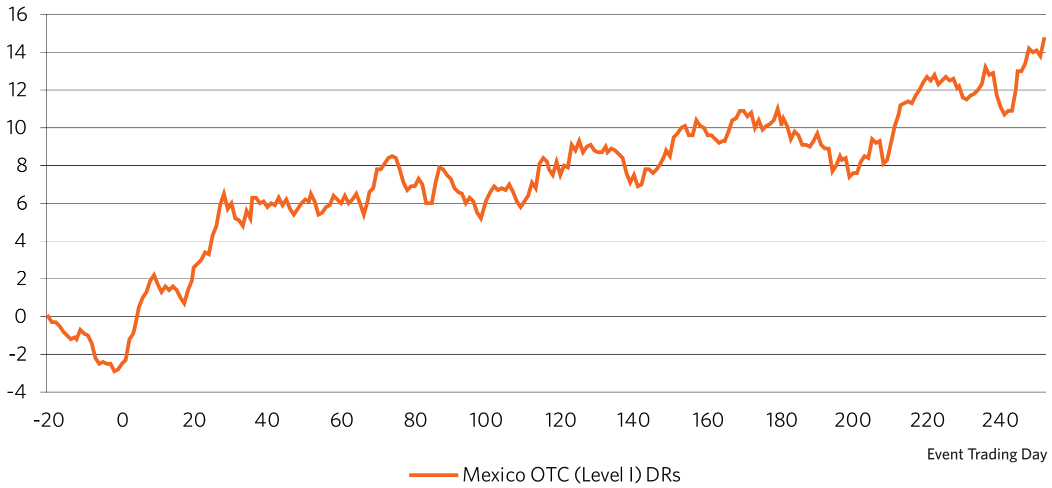
Latin American firms demonstrate strong value growth in the year following establishment of an OTC programme; Figure 17. Over 40% is added on average to such an investment portfolio, equivalent to US$34 billion.

Figure 17: 40% value added in Latin America



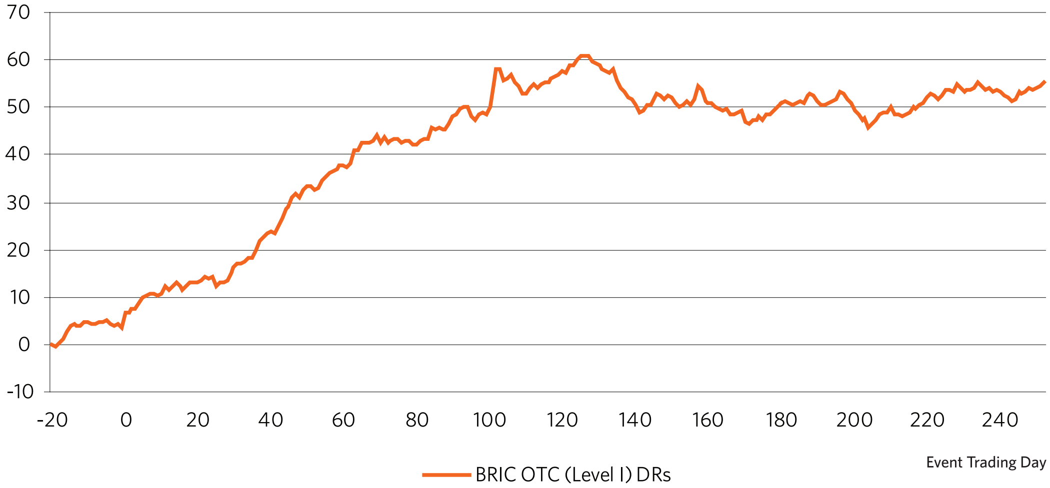
Both listed and OTC DR programmes prove popular and successful amongst Mexican companies, with OTC programmes adding 14% in value over the first trading year, equivalent to almost US$9 billion.

Figure 18: Further success in Mexico



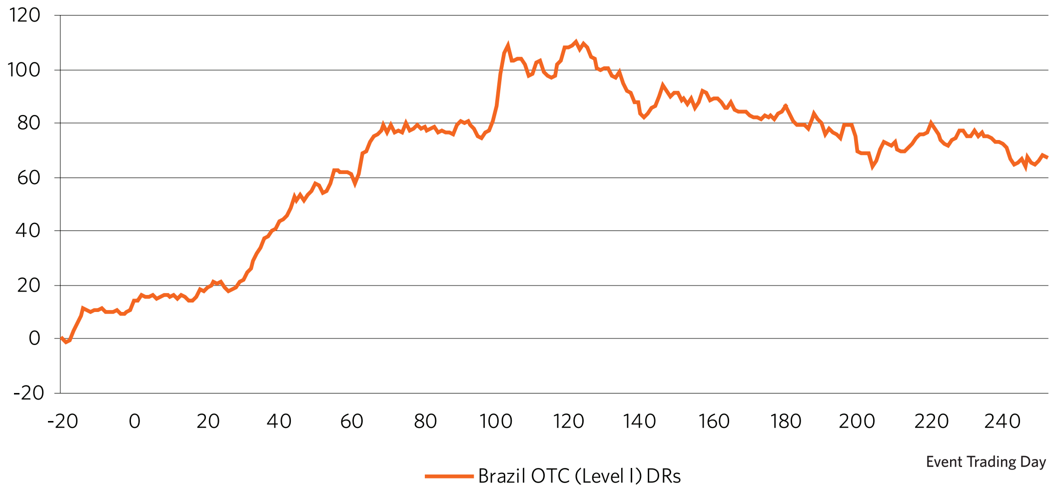
The final region under consideration within the emerging markets is the BRIC region, which includes Brazil, Russia, India and China. Shown in Figure 19 is the value performance across these countries following the establishment of an OTC DR programme.

Figure 19: 50% value added across BRIC



Firms from these countries add on average 50% of shareholder value in the first trading year, equivalent to an impressive US$150 billion.

Figure 20: Impressive performance from Brazil



Similar in percentage terms is the value reaction to Brazilian companies establishing an OTC DR programme, equivalent to US$11 billion in monetary terms.

4. Impact of Upgrading and Delisting

This section focuses on the interaction between OTC (Level I) DR programmes and U.S.-listed (Levels II/III) programmes. Specifically, the value effects of upgrading from a Level I to a Level II/III, and delisting from a Level II/III to a Level I programme, are measured.

Figure 21 illustrates clearly the value enhancement possibilities of upgrading one's programme to meet more rigorous reporting and disclosure requirements, whereas Figure 22 is a stark warning to issuers considering delisting.

Figure 21: 60% value added by upgrading...

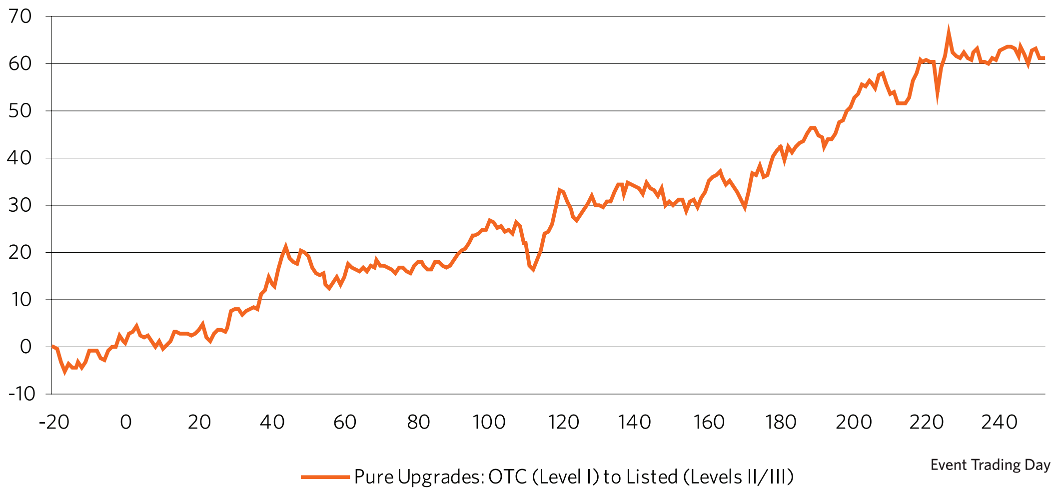
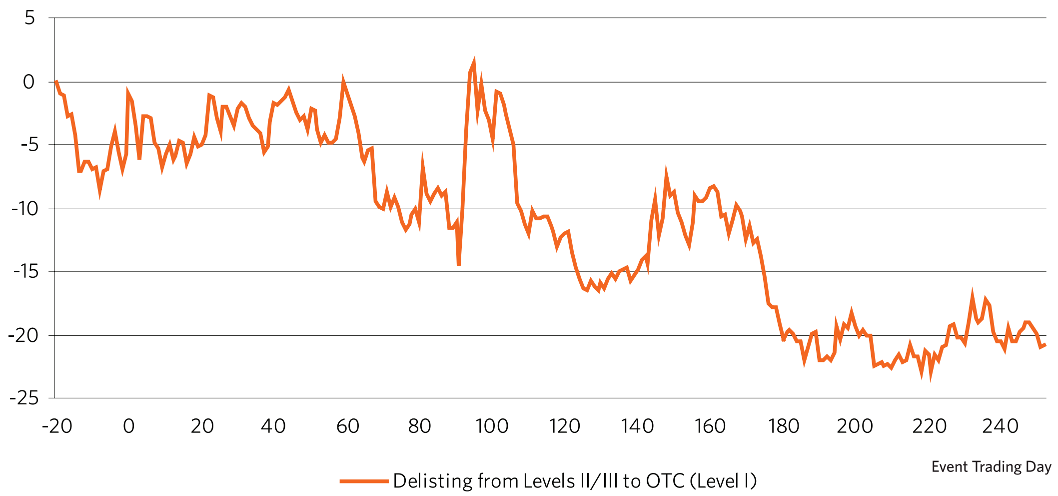


Figure 22: ...and 20% value destroyed by delisting



For U.S.-listed issuers wishing to delist but not incur such extensive value losses, there is now a premier level of OTC programme, the International OTCQX^{SM} programme launched by Pink Sheets LLC. This tier of programme enables issuers to retain the advantages of an OTC DR programme (rather than terminate it completely) but distinguish themselves through specified disclosures.

5. Evidence on Liquidity Improvement

In this section, the impact on home-market liquidity of establishing a DR programme is evaluated. Trading volume activity reflects the speed and intensity with which information about a firm is disseminated, digested and acted upon by investors. In the context of DRs, an increase of liquidity in ordinary share trading would indicate that the firm is now more visible, with greater access to (and from) investors, and receiving more profile and wider coverage from equity analysts.

The Trading Volume Multiplier is defined as the multiple of the previous year's average daily trading volume in ordinary (local) shares. Thus a Trading Volume Multiplier of one indicates normal trading volumes and no significant impact on liquidity. Figures 23 and 24 illustrate the positive (above one) impact on home-market liquidity from establishing a DR programme, for listed (Levels II/III) and OTC (Level I) DRs, respectively.

Figure 23: Listed DRs improve home-market liquidity by 40%

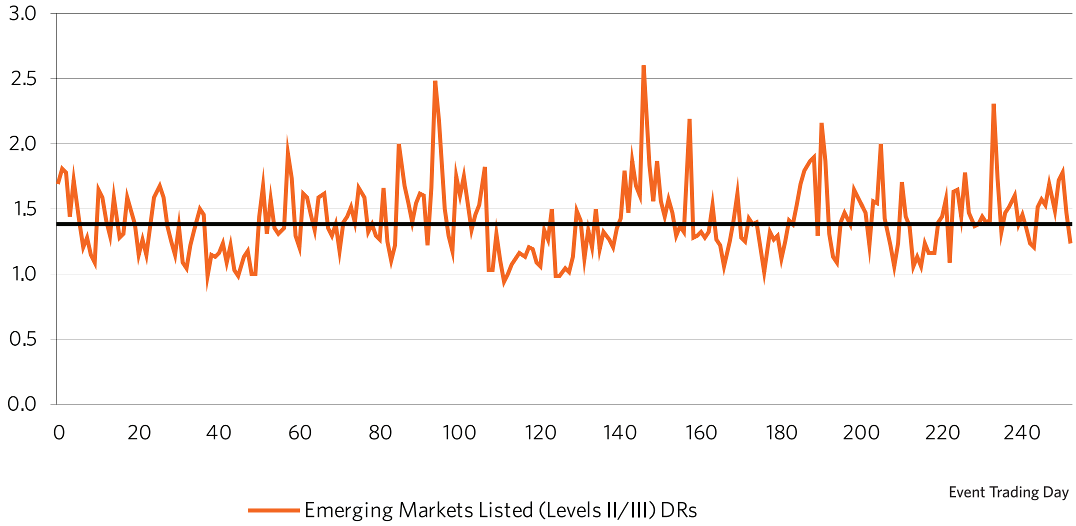
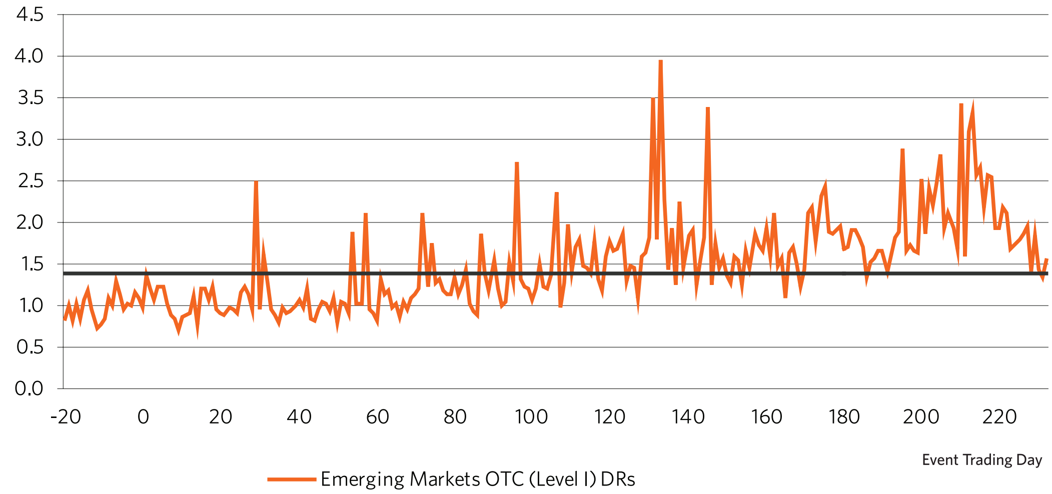


Figure 24: OTC DRs improve home-market liquidity by 48%



One reason cited for actual or potential delisting of a DR programme is the widely perceived reduction in home-market liquidity when a DR exists. A common expectation is that, by concentrating all trading activity in the local market, liquidity in the security would increase.

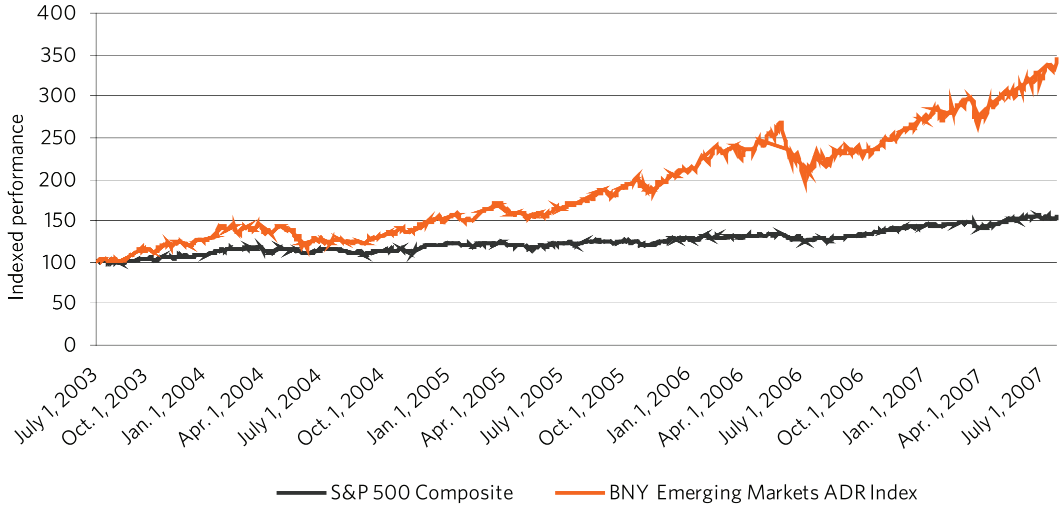
However, the research results suggest that such expectations usually are ill-founded and that liquidity in the local shares is enhanced significantly by a DR programme (listed or OTC) as the profile of the firm's stock rises.

6. Summary and Conclusions

The research conducted demonstrates that, on average, there are significant value and liquidity advantages to be gained by emerging-market companies which pursue a cross-listing. Furthermore, with the help of effective investor relations, it appears that these advantages are sustainable over the long-term.

Figure 25 shows the DR performance for emerging-market companies over the last four years against the S&P 500 Composite Index. An investment of US$100 million in the S&P 500 Composite Index over the last four years would be worth US$155 million at the end of the period. A similar investment in The Bank of New York Emerging Markets ADR Index would be worth US$341 million.

Figure 25: Sustained performance over time



DR programmes have much to offer firms in emerging markets seeking to demonstrate their growing willingness to embrace robust standards of financial disclosure and reporting, heighten their visibility and expand their investor bases.

A Glossary of Terms

Delisting
The downgrading of a DR programme from listed (Levels II/III) status to OTC (Level I) status.

Depositary Receipt (DR)
A negotiable receipt, denominated in U.S. dollars and issued as a certificate, that represents a set number of a non-U.S. firm's publicly-traded shares in its home market. It is sponsored by a U.S. depositary bank.

Listed (Levels II/III) DRs
DRs that are listed on a U.S. exchange (NYSE, NASDAQ or AMEX) or an international exchange (including London and Luxembourg) and require, therefore, a higher degree of registration, accounting (US GAAP or IFRS) and annual reporting. Level II DRs are defined as a listing without a capital raising in DR form. Level III DRs additionally raise capital.

OTC (Level I) DRs
DRs that trade in the "over-the-counter" market and are exempt from U.S. reporting requirements and from complying with U.S. GAAP.

Upgrade
The development of a DR programme from one status to another for which additional requirements must be met. 'Pure' upgrades represent those DR programmes that are upgraded from OTC (Level I) status to listed (Levels II/III) status.

Appendix

For the purposes of the research presented herein, emerging markets are defined as the 25 countries included in the MSCI Emerging Markets Index plus the 8 MSCI Stand-alone countries; Gulf Cooperation Council (GCC) plus Sri Lanka and Venezuela. These 33 countries – presented in Figure 26 – capture 95% of the listed and OTC DRs established by firms in all markets which could be considered "emerging".

Figure 26: Emerging Markets defined[6]

MSCI International Equity Indices — Country and Market Coverage

MSCI World Index			MSCI Emerging Markets Index			
North America	Europe	Pacific	Latin America	Europe Middle East Africa	Emerging Asia	Stand-alone Countries
Canada United States	Austria Belgium Denmark Finland France Germany Greece Ireland Italy Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom	Australia Hong Kong Japan New Zealand Singapore	Argentina Brazil Chile Colombia Mexico Peru	Czech Republic Egypt Hungry Israel Jordan Morocco Poland Russia South Africa Turkey	China India Indonesia Korea Malaysia Pakistan Philippines Taiwan Thailand	GCC Countries Bahrain Kuwait Oman Qatar Saudi Arabia United Arab Emirates Sri Lanka Venezuela

Presented in Figures 27 and 28, respectively, are the distributions by country of listed (Levels II/III) and OTC (Level I) DRs[7].

Figure 27: Listed (Levels II/III) DRs by country

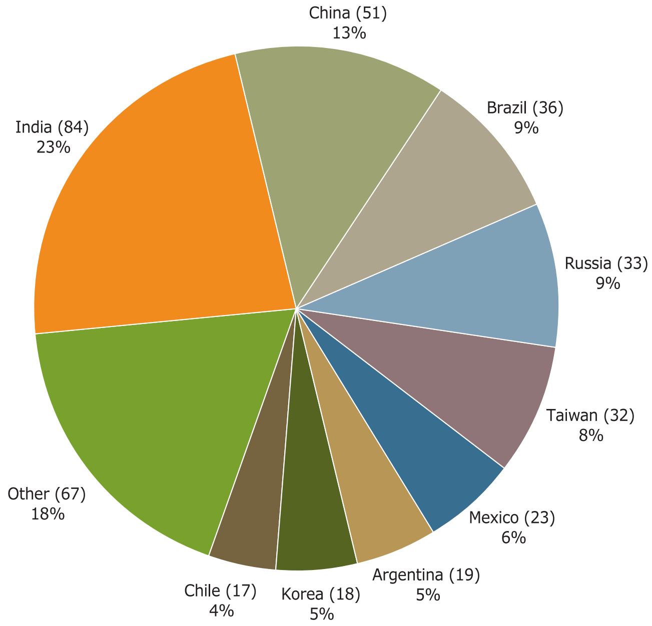
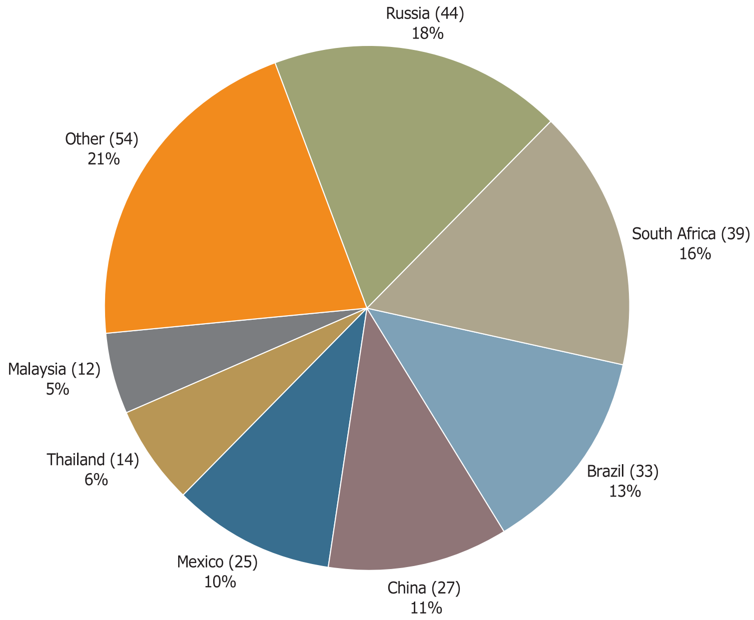


Figure 28: OTC (Level I) DRs by country



[6]*Source: MSCI Barra*
[7]*at 30 June 2007*

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