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FOREWORD

It is with much excitement that we present our latest white paper on Depositary Receipts (DRs). Oxford Metrica has been studying in some depth the international market for equities for the last two decades and our current paper focuses on the performance of DRs in the decade since the financial crisis. The results are surprisingly positive given the volatility of the crisis and post crisis study period. DRs continue to add significant value both in terms of price and trading volume.

Our last study "Depositary Receipts: Three decades of value" published nearly a decade ago reported unambiguous evidence of the benefits of establishing a DR programme over the three decades prior to the financial crisis of 2008. It is our intent here to test the hypothesis that DRs continue to add value in the dramatically different post-financial crisis decade.

The paper reports the results of a study of the universe of new DR launches between January 2008 and December 2017, which number 2,668. Sponsored DR launches exhibit an increase in value of over 16% in the year after launch whilst unsponsored DR launches deliver nearly 5% in value added. The premium for sponsored over unsponsored is explored in the paper. There is an observed increase in trading volume in the year after launch for both listed and unlisted programmes. These results are largely consistent with previous studies and thus we conclude that the DR market continues to add value. DRs continue to provide a convenient vehicle for international diversification and growth in a domestic package.

We present the core results alongside some detailed analysis by region and market. The results have a number of policy implications for corporations considering the establishment of a DR programme or indeed which have had an unsponsored DR (UADR) established without their sponsorship.

I am delighted to announce the launch of OM LAB, Oxford Metrica's in house computational finance laboratory. It is the engine of our research which has created DR Alpha $^{\text{TM}}$ an application which allows the real-time evaluation of DR performance. The new application was employed in the execution of the current study and is described in the report.

Whether you are an investor in DRs or an issuer or potential issuer, we hope you find the results here reported compelling and that they may serve to inform your decisions.

Kan This X

Dr Rory Knight Chairman

Dr Rory Knight is Chairman of Oxford Metrica and a member of the board of the John
Templeton Foundation where he chairs
the investment committee. He was formerly
Dean of Templeton College, Oxford University's
business college. Prior to that he was vizedirektor at the Schweizerische Nationalbank (SNB), the
Swiss central bank.

EXECUTIVE SUMMARY

The aim of this briefing is to provide a comprehensive and robust analysis of the value and liquidity effects of establishing a depositary receipt (DR) programme. The full universe of 2,668 sponsored (804) and unsponsored (1,864) DRs from 62 countries has been analysed for the period January 2008 through December 2017. These included 2,187 traded DRs on the OTC Markets and 481 exchange listed programmes.

- 1. The creation of a sponsored (level 1) DR programme added on average 16% of value in the first year of trading; figure 5.
- 2. The creation of an unsponsored DR (UADR) programme added on average 5% of value in the first year of trading; figure 6.
- 3. The establishment of a sponsored DR programme by companies in the BRIC countries added on average 18% of value in the first year of trading; figure 7.
- 4. The establishment of a sponsored DR programme by companies in Latin America (LATAM) added on average 16% of value in the first year of trading; figure 8.
- 5. The conversion of an unsponsored programme to a sponsored programme added on average approximately 8% of value in the 100 trading days after the conversion; figure 15.
- 6. The termination of a listed programme reduces value by approximately 22% in the year after the termination; figure 18.
- 7. The establishment of an unlisted DR programme increases liquidity in the home market on average by approximately 40% in the first year of trading; figure 19.
- 8. The establishment of a listed DR programme increases liquidity in the home market on average by approximately 38% in the first year of trading; figure 20.
- 9. Trading in the DR increases continuously on average by 35% and cumulatively by over 57% in the first year of trading; figure 21.

The decade starting in January 2008 has seen the introduction of a new form of DR, the unsponsored DR (UADR). The UADRs are created by depositary banks without the sponsorship of the underlying corporations. These have proven to be very popular and now number 1,621 representing 49% of all programmes.

The results reported have significant policy implications, particularly for the management of corporations with unsponsored programmes. Unsponsored programmes do not allow for an effective investor relations strategy and appear to be discounted relative to sponsored programmes.

INTRODUCTION

The post-crisis decade has been very active for the depositary receipt (DR) markets. In fact as many new programmes were established in this interval as had been established in the thirty years prior to the crisis. Clearly demand for the instrument remains strong. The question we seek to answer in this paper is whether the establishment of a DR programme continues to deliver the benefits of share price appreciation and increased liquidity that were evident before the financial crisis. The short and resounding answer is "yes". The main source of the growth in the number of DR programmes is a new version of DR established late in 2008 known as the unsponsored depositary receipt (UADR). These are uniquely US based and exclusively traded in the OTC Markets. UADRs may be issued by multiple depositary banks and are not sponsored by the underlying corporation. A depositary receipt (DR) is a negotiable financial instrument issued by a bank to represent a corporation's securities traded publicly in its home market. The depositary receipt trades on a market local to the investor, the instruments may be listed or traded over the counter. Thus, from the point of view of a US investor an American Depositary Receipt (ADR) is a local version of an international security. Sponsored DRs are sponsored by the underlying corporation whereas unsponsored DRs (UADR) are not sponsored and may be issued by multiple depositary banks.

Depositary Receipts (DRs) remove the friction of international equity investment and offer significant benefits for market participants comprising issuers, investors and traders.

- For issuers, DRs offer access to new sources of equity capital and allows a diversification of the shareholder base.
- For investors, DRs offer portfolio diversification and access to a broader range of international markets.
- For traders, DRs offer reduced transaction costs and the elimination of custodian charges, currency fluctuations and language barriers.

As well as these market benefits our research provides strong evidence that there are significant value creation and liquidity benefits generated through the establishment of a DR programme. A DR programme provides greater transparency and reduces the asymmetry of information between managers of the issuing firm and their shareholders. Consequently investors are able to have greater certainty of future cash flows and as a result the firm's cost of capital is reduced and value created. In the case of sponsored programmes, the voluntary willingness of managers to adhere to greater regulatory standards, specifically with a US or European listed DR programme, generates a powerful signalling effect to the market as to the issuers' corporate governance capabilities. Overall, reputation is enhanced and there is a positive correlation between reputation and value creation. This paper provides the research results from the study analysing 2,959 DR programmes, across 62 countries, during the post crisis decade from 2008 until 2017. During this interval 3,687 events were analysed including; (1) launches of DR programmes, (2) programme terminations and (3) conversions from unsponsored to sponsored programmes. The paper is organised as follows. Firstly, a brief description is provided of the key financial market developments in the study period to place the results in the relevant context. Secondly, the global evidence is provided on the extent to which the establishment of a DR programme creates additional value, after controlling for risk and market wide effects. The results for both sponsored and unsponsored DRs are reported. This is followed by a regional analysis of the results. Next, the value impact of converting from an unsponsored to a sponsored programme is identified followed by an analysis of the impact of terminating sponsored DR programmes both listed and unlisted. Finally, the impact on liquidity of the establishment of various types of DRs is reported. The paper concludes with a brief summary and conclusions section. Various appendices describe the methods used and provide additional data.

THE CONTEXT 10 YEARS POST-CRISIS

The last decade has been characterised by much uncertainty in financial markets. The key milestone events leading up to the crisis are now discernible with the benefit of hindsight. In early 2007, after a number of years of expansion the US housing market began to experience an increase in loan defaults, particularly in the sub-prime sector. However, few market participants would have been able to predict the events that would unfold through the later stages of 2007 and early 2008. Trouble was brewing for financial markets on both sides of the Atlantic which had implications as significant as the Great Depression. In Europe in 2007 BNP Paribas closed a fund with exposure to the faltering housing market. Soon after, depositors lined the streets in the UK as Northern Rock faced a bank run. In 2008 the US bank Bear Stearns, in distress, was acquired by JP Morgan; Lehman Brothers was declared bankrupt and the US government bailed out AIG. These events sent global equity markets into turmoil with the MSCI All World Index falling just under 50%, the Dow Jones declining 42% and the MSCI BRIC composite selling off over 63%. Figure 1 illustrates starkly how the MSCI ACWI EX USA and the MSCI BRIC indices at 31 December 2017 had not recovered the levels of 1 January 2008 despite there being continually increasing markets since early 2009. Many of the corporations included in this study are represented in these indices.



FIGURE 1. Stock market performance 2008 to 2017 (Source MSCI)

ACWI EX USA STANDARD (LARGE+MID CAP)
 ACWI STANDARD (LARGE+MID CAP)
 BRIC STANDARD (LARGE+MID CAP)

During this period the real economy suffered with output contracting in all major economies. The US, UK, Eurozone and Japan all exhibited falling and then negative gross domestic product (GDP) growth rates from 2008-2009 as illustrated in Figure 2. Fortunately, growth returned, if at a slow rate.

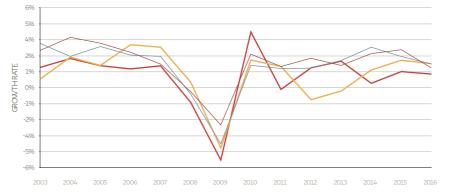


FIGURE 2. GDP growth rates 2008 to 2016 (Source OECD)

- USA - UK - EUROZONE - JAPAN

The collapse in output could have been far worse and the intervention of central banks around the world averted a major depression. The central bank interventions were two pronged: a rapid reduction in interest rates to zero or negative, to stimulate the world economy; and so-called quantitative easing (QE) to provide liquidity to support financial markets. The combined effect of these interventions certainly avoided another Great Depression. However, the interest rate policy did not stimulate as much as was expected and QE, which is a euphemism for pouring money into financial markets, came at a price. Figure 3 illustrates the consequences of OE over the decade. Central bank balance sheets have ballooned in excess of \$20 trillion which is larger than the total value of the NYSE. These balances hang over the world economy like a sword of Damocles as central banks will inevitably have to unwind these positions.

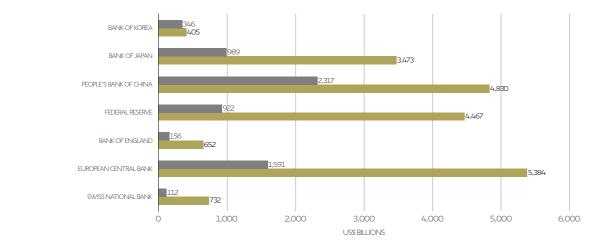


FIGURE 3. Assets held by central banks (Source Central Banks' Annual Reports)

2007

2016

This loose monetary policy has continued though the majority of the last decade and only recently has the US Federal Reserve started to raise rates and pare back the expansion of the balance sheet. The Bank of England also raised rates in 2017. The European Central Bank will follow in 2018. Figure 4 illustrates that despite recent increases base rates are extremely low.

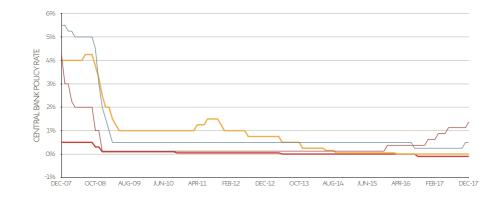
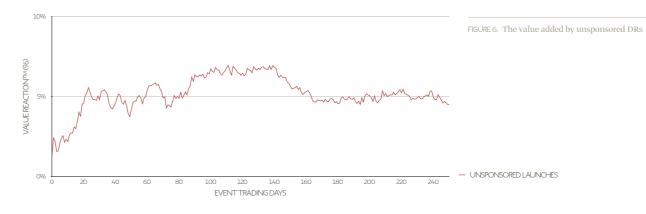


FIGURE 4. Central bank base rates (Source BIS)

The decade on which this study is focused is unusual and characterised as having volatile equity markets, slow real growth and very low interest rates. In this context it will be seen that DRs have fared extremely well.

This section provides evidence on the incremental value added to shareholders by the establishment of a depositary receipt programme. The full universe of DR launches is analysed from the beginning of 2008 until 2017, providing 10 years of post-crisis events, across both exchange-listed and over-the-counter programmes. The universe was made up of 2,668 launches established during the period of which 1,864 were unsponsored and 804 were sponsored. 2,187 of these were traded in the OTC Markets and 481 were exchange-listed. Figures 5 and 6 indicate the average value created in the first year of trading for sponsored and unsponsored programmes respectively. The Value Reaction™ metric captures the firm specific impact on shareholder value while controlling for market wide effects and risk. The dates at which the individual DR programmes started trading have been aligned so that day 0 in the figures is the common launch event for all programmes. The graphs reveal the value created over the first 250 trading days post launch. The large sample sizes and diverse programmes over multiple observation windows have endowed the results with increased statistical significance.





It is evident that the establishment of DR programmes since the 2007 crisis has provided value for shareholders, whether sponsored or unsponsored. Globally, the launching of an unsponsored programmes on average created 5% of positive abnormal return within 250 trading days. However, sponsored (level I) programmes were found to be the real stars, creating over 12% of value within 100 trading days of launch and going on to create 16% in the first year of trading. The reputation signal that is generated by the voluntary establishment of a sponsored programme as a result of meeting the standards of governance of the US or European markets, explains the value differential. Furthermore, listed sponsored programmes have an enhanced regulatory burden, further strengthening the firm's willingness to provide increased transparency and strong corporate governance. Unsponsored programmes do not enjoy the same level of investor

SPONSORED LEVEL I LAUNCHES

relations support which partially explains the apparent discount. DRs from emerging less transparent markets exhibit larger than average benefits as the reputational signal generated by establishing a sponsored programme is stronger. Figures 7 and 8 present the value created from the BRIC and LATAM nations by establishing a level I sponsored programme which illustrates this point. On average in the first year of trading 18.4% of value is created from level 1 sponsored programs within the BRIC nations and 16.6% within LATAM.



FIGURE 7. Value creation from BRIC sponsored level I programmes

- BRIC LEVEL I SPONSORED LAUNCHES



FIGURE 8. Value creation from LATAM sponsored level I programmes

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VALUE CREATION BY REGION

Figures 9 to 14 present the value creation from six regions: Africa, Australia and New Zealand, Eastern Europe, Western Europe, Middle East and the United Kingdom & Ireland.



FIGURE 9. Value created by African unsponsored OTC launches

- AFRICA UNSPONSORED LAUNCHES

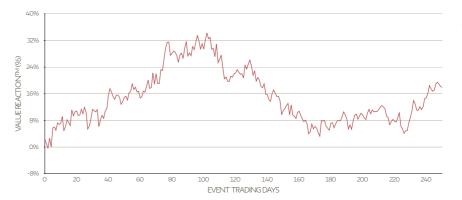


FIGURE 10. Value created by Australian & New Zealand sponsored level I launches

- AUSTRALIA & NEW ZEALAND SPONSORED LAUNCHES

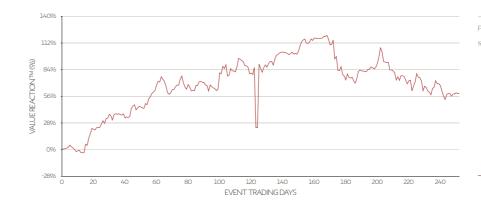
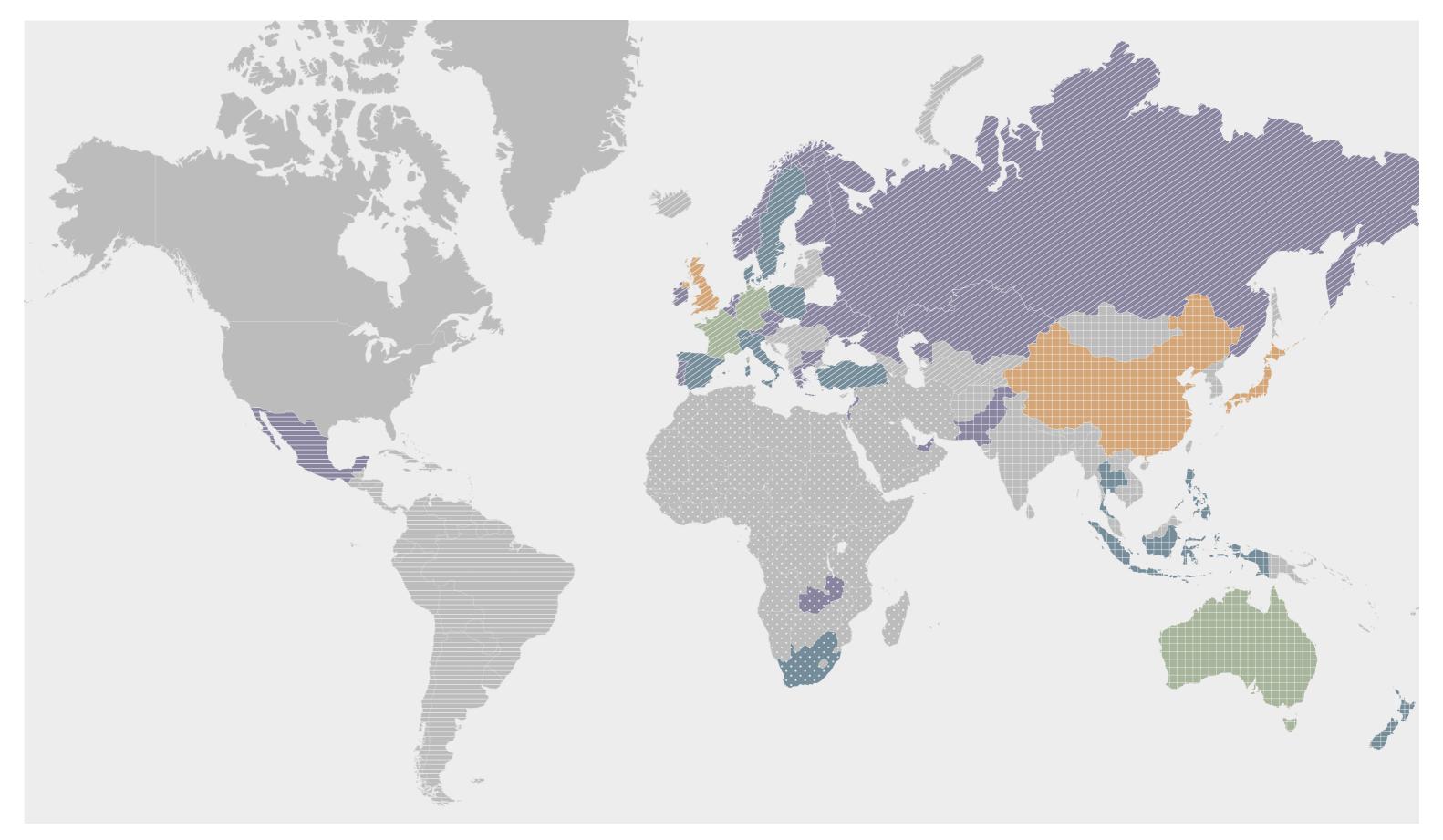


FIGURE 11. Value created by Eastern European sponsored level III launches

- EASTERN EUROPE LEVEL III SPONSORED LAUNCHES





EGION AVERAGE VALUE CREATION	
LATAM	17.796
AFRICA & MIDDLE EAST	18.0%

REGION	AVERAGE VALUE CREATION
EUROPE	5.2%
APAC	3.9%

NUMBER OF UADRS		
	0 - 20	
	21 - 50	
	51 - 100	
	101+	

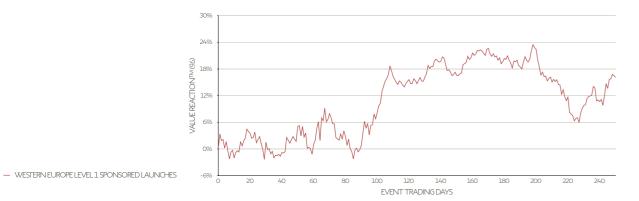


FIGURE 12. Value created by Western European sponsored level I launches

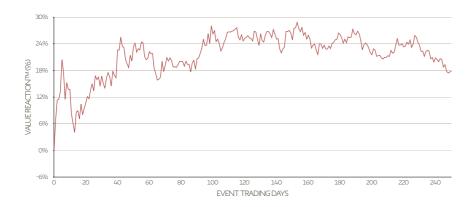


FIGURE 13. Value created by Middle Eastern unsponsored OTC launches

- MIDDLE EAST UNSPONSORED LAUNCHES

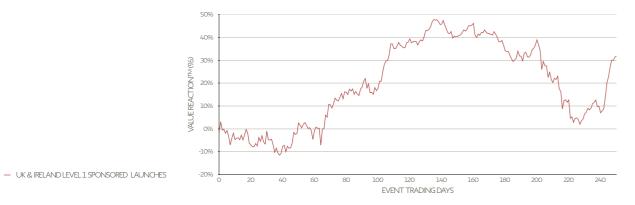


FIGURE 14. Value created by UK & Irish sponsored level I launches

CREATING VALUE BY CONVERTING FROM AN UNSPONSORED TO A SPONSORED DR

The emergence of the UADR presents a serious policy dilemma for all the corporations around the world that have unsponsored programmes created by depositary banks. Since management has no involvement with the programme it means that a significant subset of the corporation's shareholders, namely the UADR holders, receive no investor relations attention. In fact, in many cases management would not know who holds their stock through the UADR programme. The holders of UADRs receive no communications from the underlying corporations. In short, the investor relations programme of such firms is incomplete. The lack of investor relations attention probably explains why converting to a sponsored programme with a single depositary bank is associated with an increase in value. This increase, illustrated in figure 15, is on average around 8% in the first 100 days of trading under the new arrangement. This implies a discount is associated with unsponsored programmes which often gives rise to some confusion given the multiple depositaries.

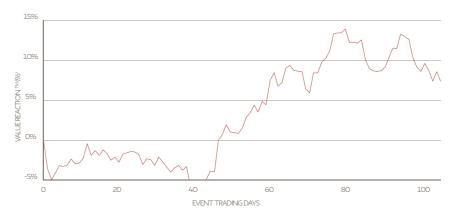


FIGURE 15. Value creation from converting to a sponsored programme

- CONVERSION TO SPONSORED

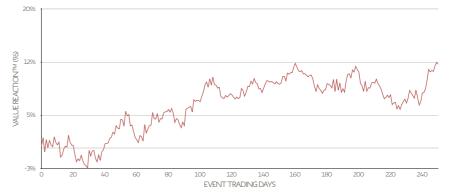


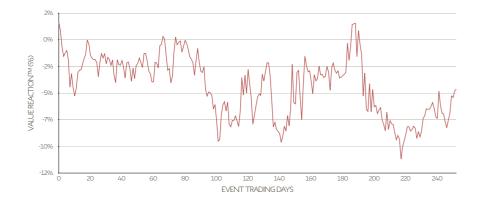
FIGURE 16. Value premium of level 1 sponsored over unsponsored launches

- CONVERSION PREMIUM

Further evidence of the premium attributed to sponsored DRs is revealed in figure 16 which shows the differential value added by the establishment of a level 1 sponsored DR relative to an unsponsored. This is on average around 12% in the first year of trading. Oxford Metrica is producing a separate paper on UADRs and the implications for corporations.

VALUE DESTRUCTION BY PROGRAMME TERMINATIONS

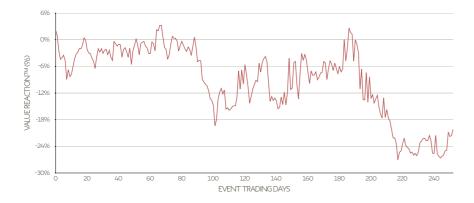
Terminating a DR programme may have a detrimental impact on value. The decision by management to terminate a sponsored programme may send a strong negative signal to the market about the firm's attitude to governance and investor relations. The termination in such cases appears to cause a reassessment of the company's prospects by the market resulting in a reduction in share price. Figure 17 provides a graphical representation of the value destroyed in the case of sponsored programmes terminating their programme. On average over 5% of value is destroyed in the first 250 days post termination.



SPONSORED TERMINATIONS

FIGURE 17. Value destruction of terminated sponsored programmes

Furthermore, the value destruction can be more acute if the programme is listed on an exchange. The decision by management to delist sends a potentially strong message that the issuer no longer may be willing to meet the strict reporting and disclosure requirements of listed securities. Again, this may lead to investors questioning the firm's governance and confidence in the issuer may diminish. Figure 18 presents the value destruction following the delisting of level II and III issuers, indicating on average 21.8% of value is destroyed over 250 days post termination.



- LEVEL II/III SPONSORED TERMINATIONS

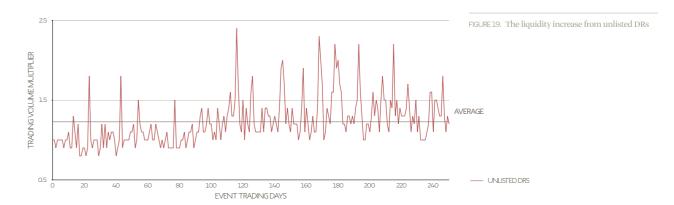
FIGURE 18. Value destruction of terminated level $_{
m II/III}$ sponsored programmes

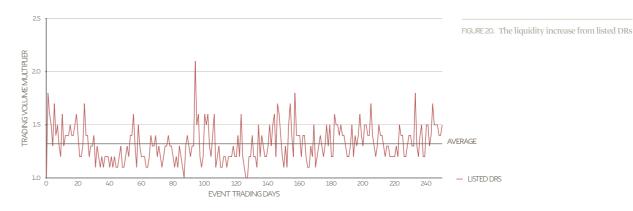
THE EVIDENCE OF LIQUIDITY IMPROVEMENT

In addition to the significant reputational advantage of establishing a DR programme, which translates directly into value for shareholders, a DR may improve trading in the issuer's ordinary shares in the home market. The establishment of a DR programme provides greater access to investors and improves visibility by generating a higher profile and wider coverage from equity analysts.

In this section, evidence is presented which demonstrates that the establishment of a DR programme does indeed improve liquidity in issuers' local shares. Once again, the full universe of DRs is analysed from 2008 to 2017. The Trading Volume Multiplier metric is the multiple of the previous year's average daily trading volume in ordinary (local) shares. A Trading Volume Multiplier of one, therefore, indicates normal trading volumes and no significant effect on liquidity. Shown in figures 19 and 20 is the impact on home market liquidity from establishing a DR programme for OTC (Level I) DRs and for stock exchange-listed (Levels II/III) DRs respectively.

The establishment of an unlisted DR appears to increase home market liquidity on average by approximately 40% over the first year of trading.





In the case of the establishment of a listed DR programme the improvement in liquidity in the home market is similar and averages 38% in the first year of trading. Another critical measure of the success of a DR programme is a sustained interest in the instrument as reflected in increasing trading volumes. Figure 21 presents the calculated average daily volume of sponsored DRs for the first year of trading. The average volumes are indexed to the first day's trading to control for any unusual spike in volumes after launch. As shown in figure 21 the average daily volume increases consistently and continuously resulting in a cumulative increase of around 57% in the first year of trading.

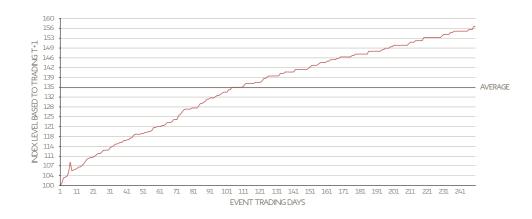


FIGURE 21. DR trading volumes for sponsored programmes

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It is clear that the establishment of a listed (Levels II/III), or an OTC (Level I) DR programme improves trading volumes in the home market for the issuers. The greater visibility and access to new markets of investors increases liquidity and generates additional demand for the shares. This may help to reduce the issuer's cost of capital, providing further benefits. In addition, average trading volumes in the DR itself typically exhibit strong and sustained growth in the first trading year.

SUMMARY AND CONCLUSIONS

The research results presented in this briefing provide substantial evidence for the value and liquidity advantages of establishing a depositary receipt programme. Approximately 16% of value is added to companies which choose to establish a sponsored depositary receipt programme. In the case of unsponsored DRs approximately 5% value is created. The difference between the two is likely to be an investor relations premium. Considering the low interest rate and high volatility that characterised the study period this is an excellent showing for the instrument. An additional 8% of value is added on average to firms which convert their unsponsored programmes to a sponsored arrangement, as investors welcome the greater attention and clarity a sponsored programme delivers. Investor relations professionals in corporations with UADRs may well consider the possible benefits of evaluating seriously the option of converting to a sponsored programme. It may not, of course, suit all companies, but the evidence suggests the idea is worthy of consideration. Boards of issuers with listed programmes considering a delisting, however, beware; on average 22% of value is destroyed by the decision to delist, as investors are wary of why the additional disclosure to which they have become accustomed is withdrawn. Beyond the positive impact of a DR programme on shareholder value, there are shown to be considerable liquidity advantages. Trading volumes in the issuer's ordinary shares in the home market increase respectively by 38% and 40% with the establishment of a listed (Levels II/III), or an OTC (Level I) DR programme. The increase in home market liquidity is driven by the greater visibility of the firm, wider coverage by analysts of its shares and simply increased access to its shares by new markets of investors. The evidence presented in this briefing points clearly to the net positive impact of establishing a DR programme. Although by no means costless, compliance with higher standards of governance is rewarded in the markets to the benefit of issuers and investors. With effective investor relations, a virtuous cycle can be generated between reputation equity and shareholder value. It is readily apparent why the growth in DR programmes continues apace around the world: the DRs have continued to create value in the post-crisis decade.

OM LAB DR ALPHATM

OM LAB is Oxford Metrica's in house computational finance laboratory. It is the engine of our research. We have a computing platform using OM LAB proprietary applications supported by the leading commercial applications. Our network of computational experts allows us to bring clients the latest techniques in investment performance and risk analysis. Other applications include index construction, big data analysis and AI applications in finance. In executing the research for this white paper, OM LAB has developed an application DR Alpha™ which is specifically designed to analyse the performance of DR programmes in real time. It is an econometric model designed to interrogate the data of all DRs to measure the performance of any combination of DRs based on a multi-factor identification scheme. Thus a particular DR programme may be compared to a peer group custom defined for a particular purpose based on attributes such as size, domicile, industry etc.. In addition, the application is able to assemble portfolios of DRs based on common events such as launches, earnings announcements, conversions and terminations. The econometric model allows the estimation of the Value Reaction™ metric using a variety of different research designs, using single and multiple variable regressions, a selection of different indices for market adjustments and a choice of local and DR prices in local currency or the US dollar. DR Alpha™ is available to our clients to generate custom reports as required.

GLOSSARY OF TERMS

CONVERSION

The change of a DR programme from an unsponsored (UADR) to a sponsored programme.

DELISTING/DEREGISTRATION

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

DEPOSITARY RECEIPTS

Depositary Receipts (DRs) are negotiable US securities, denominated in US dollars, that represent shares of companies listed outside the United States. DRs are issued by a depositary bank to evidence that the underlying shares have been deposited with a custodian in the local market. American Depositary Receipts (ADRs) that are listed on a US exchange (NYSE and NASDAQ) require, therefore, full SEC registration, reconciliation with US GAAP and annual reporting with a Form 20F filing. Level III DRs additionally raise capital. Global Depositary Receipts (GDRs) are the same as ADRs, but typically are not registered with the SEC on Form F-6.

OTC (LEVEL I)

DRs Depositary receipts that trade in the "over-the-counter" OTC market and are exempt from US reporting requirements and from complying with US GAAP.

OTCOX

The top section offered by OTC Markets for OTC traded securities, including Level 1 programmes, designed to enhance visibility for qualified foreign issuers.

SPONSORED DR

DR programmes where the issuer sponsors the programme with a single depositary bank.

SECURITIES AND EXCHANGE COMMISSION (SEC)

The US Securities and Exchange Commission (SEC) is an independent regulatory agency in the United States created to regulate the securities industry in the United States and enforce federal securities laws.

UNSPONSORED DR (UADR)

Depositary banks issue a DR programme without the sponsorship of the underlying corporation. These are uniquely a US instrument traded on the OTC Markets.

TERMINATION

The cessation of a DR programme such that only the local shares in the issuer's home market are traded.

JPGRADE

22

The development of a DR programme from OTC (Level I) status to listed (Levels II/III) status - for which additional requirements must be met.



UADRs outstanding by country

COUNTRY	NUMBER OF OUTSTANDING UNSPONSORED PROGRAMMES
AUSTRALIA	85
AUSTRIA	10
BELGIUM	19
BULGARIA	4
CHINA	157
CZECH REPUBLIC	4
DENMARK	20
FINLAND	19
FRANCE	71
GERMANY	81
GREECE	16
HONG KONG	108
INDONESIA	48
IRELAND	12
ISRAEL	9
ITALY	47
JAPAN	261
JERSEY	3
KAZAKHSTAN	2
LEBANON	1
LUXEMBOURG	7
MACAU	2
MÉXICO	5
NETHERLANDS	19
NEW ZEALAND	29
NORWAY	18
PAKISTAN	1
PHILIPPINES	42
POLAND	28
PORTUGAL	13
RUSSIA	9
SINGAPORE	52
SOUTH AFRICA	34
SPAIN	34
SWEDEN	47
SWITZERLAND	46
THAILAND	43
TURKEY	26
UKRAINE	9
UNITED ARAB EMIRATES	2
UNITED KINGDOM	173
UNITED STATES	1
ZAMBIA	4

APPENDIX 2

Summary data table

EVENTS	LAUNCHES	SWITCHES	CONVERSIONS	TERMINATIONS	TOTAL EVENTS	PROGRAMMES
TOTAL	2668	182	109	728	3687	2959
SPONSORED	804	182	109	381	1476	1095
UNSPONSORED	1864	0	0	347	2211	1864
EFFECTIVE	2003	140	88	0	2231	2231
TERMINATED	665	42	21	728	728	
TOTAL	2668	182	109	728	3687	2959
TOTAL						
LEVELI	2184	67	109	497	2857	2360
LEVEL II	38	45	0	28	111	83
LEVEL III	145	36	0	57	238	181
REG. S	150	9	0	90	249	159
144A	151	25	0	56	232	176
TOTAL	2668	182	109	728	3687	2959
SPONSORED	804	182	109	381	1476	1095
LEVEL I	323	67	109	150	649	499
LEVEL II	38	45	0	28	111	83
LEVEL III	145	36	0	57	238	181
REG. S	148	9	0	90	247	157
144A	150	25	0	56	231	175
UNSPONSORED	1864	0	0	347	2211	1864
LEVEL I	1861	0	0	347	2208	1861
LEVEL II	0	0	0	0	0	0
LEVEL III	0	0	0	0	0	0
REG. S	2	0	0	0	2	2
144A	1	0	0	0	1	1

OXFORD METRICA

BANKING

BNY Mellon Credit Suisse Deutsche Bank Invesco Schroders

Templeton & Phillips

UBS

UniCredit

ENERGY & MINING BP De Beers Exxon Mobil Gazprom Gold Fields

Royal Dutch Shell

FOOD DongA One General Mills Nestlé

FOUNDATIONS

John Templeton Foundation

TWCF

HEALTH CARE

Bristol-Myers Squibb Johnson & Johnson Merck Serono Novartis Novo Nordisk

INDUSTRIAL

Solvay

ABB Aker Solutions BAA BAE Systems General Electric

Jardine Matheson

INSURANCE

FM Global ING Group Munich Re Swiss Life Swiss Re

Zurich Insurance Group

PROFESSIONAL SERVICES

Accenture Ashurst Blue Rubicon Deloitte Edelman Freehills Hill & Knowlton Ince & Co KBC Peel Hunt Kenyon International Marsh Ogilvy PR

OTC Markets Group

PriceWaterhouse Coopers

PUBLISHING Reed Elsevier

Porter Novelli

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TECHNOLOGY Cisco Systems

Green ICN Hitachi IBM ICN Telecom Infosys Intel KNTV Naspers Oracle Tencent Xilinx

TRANSPORT **P&O Ferries**

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