CHOOSING THE RIGHT PATH: HOW TO MAXIMISE YOUR MARKET STRATEGY

OTC Markets | OXFORD METRICA

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CONTENTS

FOREWORD

Companies that trade on OTC Markets often face the decision of whether to move to an exchange listing. The crucial question that should be asked before choosing to pursue an exchange listing, however, is whether the move will result in increased shareholder value.

To better assist corporate executives and investor relations teams in deciding whether to move to a listing on a national exchange, OTC Markets Group has commissioned an independent study to examine the impact of graduating on the value of the issuer. Presented by Oxford Metrica, this new paper reports hard, empirical evidence on whether value is created by moving to a national exchange versus remaining on OTC Markets.

The study analyses all US companies that graduated in the interval 2014 to 2016; more than 180 companies. In most cases, companies that made the move prematurely demonstrated little value creation, while very often the move resulted in value reduction. The results challenge the assumption that listing on a major US exchange will lead to a positive revaluation of the company.

We hope this paper will provide issuers with additional data, context and analysis to make an informed decision when choosing a public market that best serves their shareholders.

Jason Paltrowitz
Executive Vice President – Corporate Services
OTC Markets Group Inc. (OTCQX: OTCM)

EXECUTIVE SUMMARY

The goal of this briefing is to provide an independent, evidence-based view of the economic impact on issuers that have graduated from OTC Markets to a listing on the national US exchanges, NYSE and NASDAQ.

The primary focus is to evaluate the impact on the value of these companies after graduating, controlling for market effects and risk. In addition to the overall analysis, issuers are segmented into groups based on whether the companies had progressed successively through the OTC Markets tiers, and whether a new capital raise was the primary reason for moving. Furthermore, the impact on volume and institutional ownership after the graduation is evaluated.

The study includes all US issuers that switched from the OTC Markets to an exchange between 2014 and 2016. This yields a portfolio of 184 securities with a total market capitalisation of $117 billion.

KEY RESULTS

1. Graduates from an OTC Markets tier, lost 3% of value 180 days post graduation to an exchange.
2. Early movers, that did not successively pass through the tiers on the OTC Markets, lost 2.5% of value.
3. Companies that graduated to raise capital on average lost 4.1% of value.
4. Over 30% of graduates lost more than 20% of value one year after graduation.

> "We believe conservatively that we have saved $15 million in costs by trading on OTCQX as opposed to paying for compliance fees, and we have basically taken that $15 million and reinvested it into our business. Over the past 10 years, our share price has increased by more than 220% and our volumes have consistently grown year-over-year as we have executed our company's strategy."
>
> - Meritage Hospitality Group, Inc. (OTCQX: MHGU)

INTRODUCTION

The OTC Markets enables companies to trade their shares in the public markets, raise capital, increase their visibility, and diversify their shareholder base, providing companies with an efficient alternative to the national stock exchanges: NYSE and NASDAQ.

A diverse set of over 10,000 issuers, including large and mid-sized companies, small and micro-cap stocks, dividend paying companies and ADRs across a wide spectrum of industries comprise the OTC Markets. OTC Markets Group operates three market tiers: OTCQX is aimed at established companies. These companies must meet high financial standards, be compliant with US securities laws, be up-to-date in their disclosures and have a professional third-party sponsor introduction. OTCQB is designed for early-stage and developing companies. They must have a bid price per share of at least $0.01 and undergo an annual verification process. The Pink tier is comprised of those companies that either do not meet the criteria of OTCQX and OTCQB or chose to remain on this lower tier.

From the perspective of a US company that currently trades on the OTC Markets, a crucial question that can arise with management is: "Whether to move from the OTC Markets to listing on a national exchange?" Management and investor relations teams are understandably excited by the prospect of a listing on the NYSE or NASDAQ, as the potential for increasing their profile and liquidity may be perceived to result in a higher valuation. However, there are considerable costs associated with listing which may also undermine the potential benefits. To address this question, management should consider empirical evidence of the effects of a graduation on value, net of its costs.

This paper reports such evidence and studies the impact on companies that have graduated from the OTC Markets to seek a listing on a US exchange. The study analyses all issuers which made the move between 2014 and 2016, providing a significant set of pre-graduation and post-graduation factors and data. In total, 184 companies were analysed with a total market capitalisation of over $117 billion.

The paper investigates whether value is created for the issuers that have graduated. The analysis controls for market effects on price performance and aligns the companies to control for idiosyncratic risks thus allowing an accurate analysis of the common event of the graduation. This study also evaluates some of the potential cost considerations that a company might face when switching to a national exchange. Finally, the paper provides an analysis of the benefits issuers may experience if they upgrade to OTCQX from a lower tier rather than pursuing an exchange listing.

THE VALUE IMPACT OF LISTING

THE MAJORITY OF GRADUATES LOST 300 BPS IN VALUE AFTER LISTING

This section focuses on the value reaction to the common event of moving to an exchange from OTC Markets. 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 issuers are listed on the exchange have been aligned so that day 0 in the figures is the common graduation event for all graduates. The graphs presented below reveal the average value created or lost over the first 180 trading days post listing. The large sample sizes and diverse firms over multiple observation windows have endowed the results with increased statistical significance.

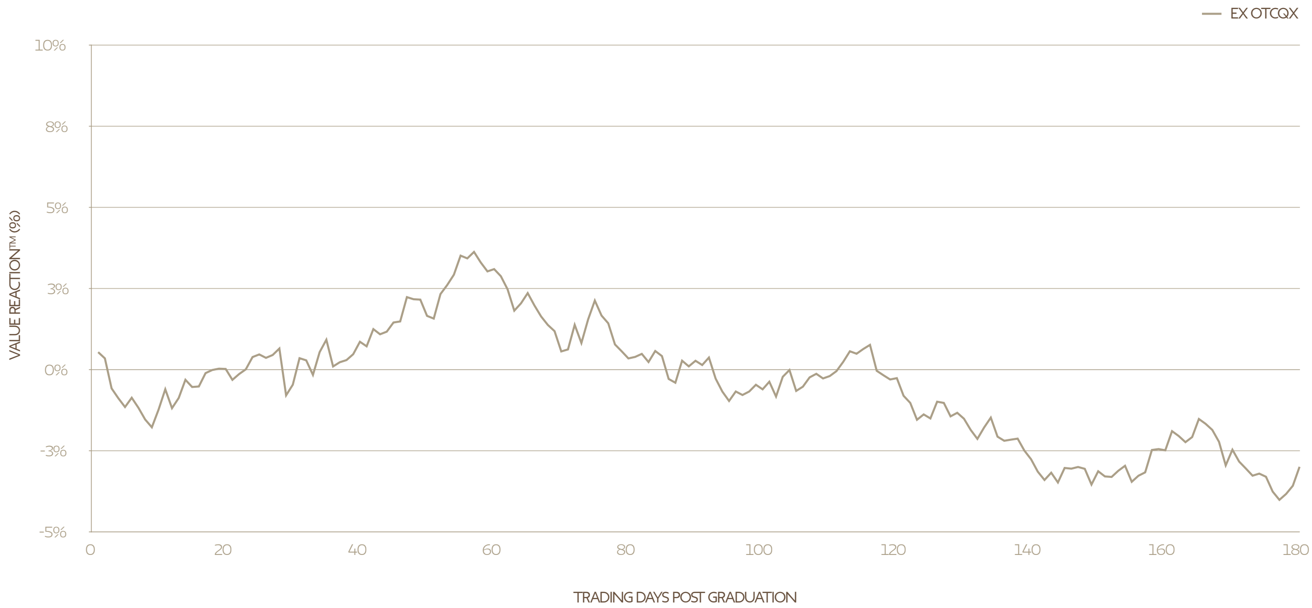

FIGURE 1: The value impact of graduation for issuers not on OTCQX (EX OTCQX)

As only just over 10% of the sample were companies traded on the OTCQX Market, the sample was evaluated excluding such issuers, in order to control for any anomalies in the distribution. The analysis indicates that graduation was value destructive, accumulating a loss of 3% in the 180 days post transfer, as shown in Figure 1. Therefore, Figure 1 provides an overall indication that issuers cannot assume that moving to the NYSE or NASDAQ will be positive for shareholder value, and in fact, it often reduces value.

An analysis of the above result indicates that there is greater value lost if a company leaves directly from the Pink tier, with an accumulated value loss of 9.8% over the 180 days after graduation, compared to the graduations from the OTCQB tier with an average 0.8% value reduction over a similar period. It appears that transfering from the lower tiers does not add value for shareholders.

A further investigation analysed whether issuers that were classified as “early movers” destroyed value after graduating. Early movers were characterised as issuers that had not progressed through the three OTC Market tiers successively prior to seeking a listing on a major exchange.

It is evident from Figure 2 that firms which did not undertake a step by step progression through the OTC Market tiers, characterised as early movers, experience a negative value reaction. Overall, the cohort of early movers lose an average of 2.5% of value over the first 180 trading days once listed on an exchange.

FIGURE 2: Early movers lose value

The Value Reaction™ metric captures the firm specific impact on shareholder value while controlling for market wide effects and risk.

Finally, the study analysed the performance of companies that employed the move to an exchange exclusively to raise capital. It is hypothesised that companies moving purely to raise capital are likely to be doing so prematurely. Consequently, the market would be sceptical and an adverse effect on value would be expected to accompany the graduation.

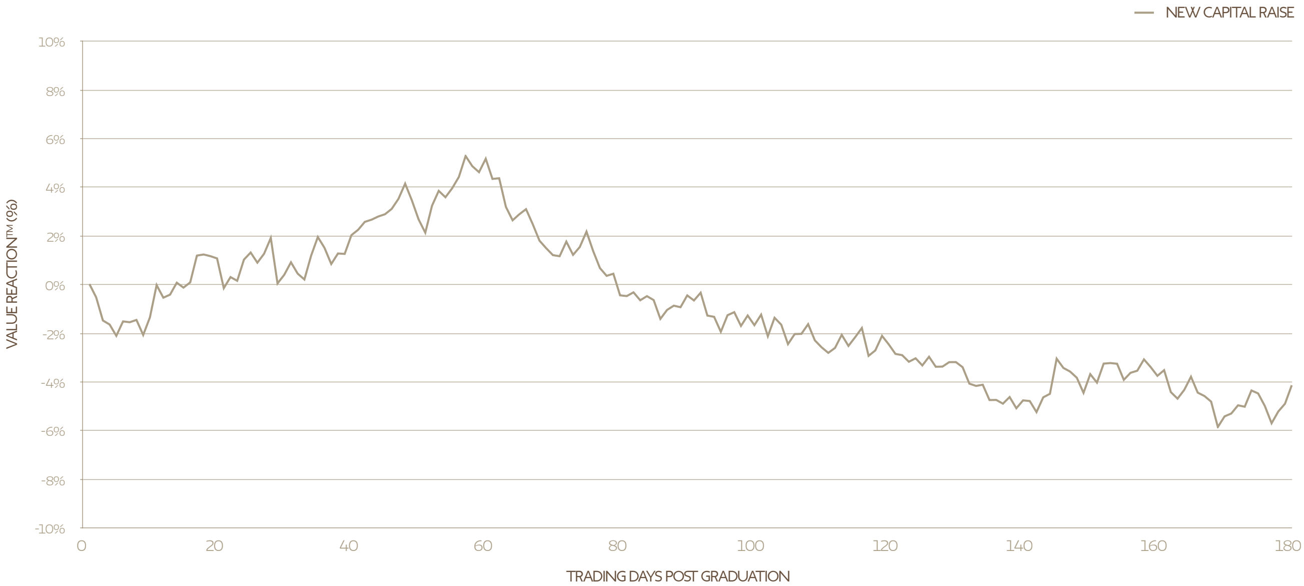

FIGURE 3: Issuers graduating for new capital tend to experience an adverse value reaction

Figure 3 indicates that over the first 180 days after graduation over 4.1% of value is lost if the primary reason for a company's departure is to raise new capital.

This result is consistent with other research and market experience. An IPO often has attendant costs and discounts which should be anticipated when seeking a listing.

ADDITIONAL OUTCOMES

This section presents findings of some of the additional outcomes issuers experienced from switching to a listed exchange, even though overall the goal of value creation was not widely achieved.

The two metrics that showed an improvement post graduation are:
- Average trading volume
- Average institutional ownership

Overall, although it is found that issuers experience an increase in trading volume and institutional ownership from moving to a listing on a major exchange, these measures do not always translate into value for the shareholders. Quite often, the higher overall listing costs, relative to management's time and resources, additional risk management, and corporate governance related costs will dilute value for issuers.

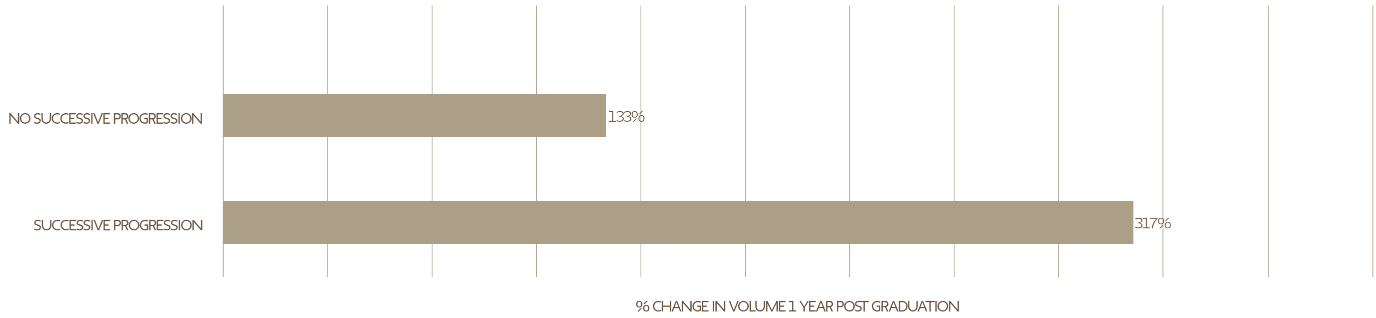

FIGURE 4: Percentage change in daily average trading volume one year post graduation *(Statistically signficant at a 90% confidence level)*

Figure 4 presents the percentage change in daily average trading volume in the year post graduation. Figure 4 indicates there was a pronounced difference in percentage increase when comparing issuers which had shown progression through all the OTC tiers (317%) against those that had not (133%). However, the size of pre-graduation average volumes should be considered. The average daily trading volume for companies that experienced progression is only approximately 27,000 shares, in contrast to the 63,000 shares for those that did not progress through the tiers before moving. Overall, these findings highlight the fact that early graduates have a lower likelihood of success. Again, progression is shown to be a strong factor in determining success by these measures.

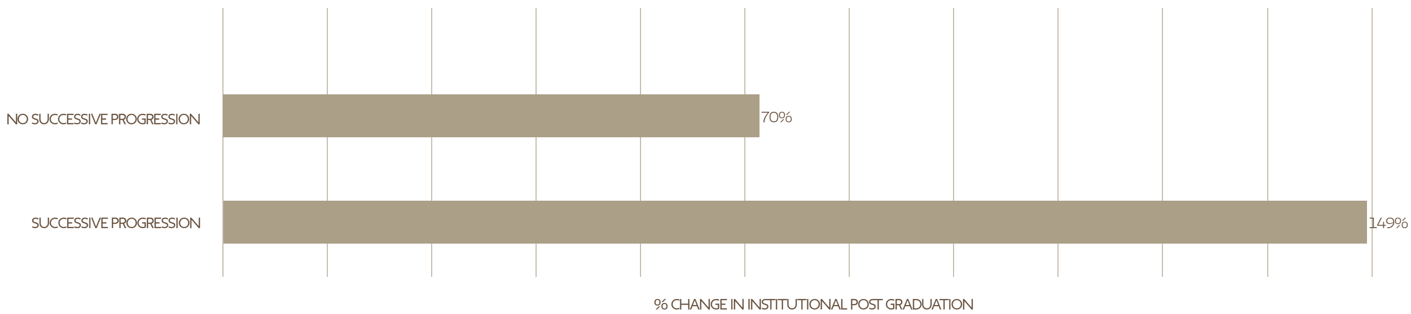

FIGURE 5: Percentage change in average institutional ownership one year post graduation *(Statistically signficant at a 95% confidence level)*

Figure 5 reports the percentage change in institutional ownership pre and post transfer. Similar to the change in volume, those companies that were early movers exhibited limited increase in institutional ownership against those companies that progressed through successive OTC Markets tiers.

COST CONSIDERATIONS

A key consideration that should be evaluated by a company's management, who may be considering a move from the OTC Markets to an established US exchange, should be the incremental cost of the switch.

A recent PWC publication, *"Considering an IPO to fuel you company's future? – Insight into the costs of going public and being public"*, highlights the incremental costs that an issuer faces when seeking a public listing on a US exchange. Using this study, it is possible to highlight the key costs that a company already trading on the OTC Market may face if a graduation to NYSE or NASDAQ occurred.

Initial costs:

- *Market listing fees* – Once registration fees are accounted for, the initial cost to list on NYSE of NASDAQ could total over $300,000.
- *Underwriting fees* - If the listing is for capital raise purposes, underwriting fees on average can range from $4 to over $61m, depending on the size of the offering.
- *Legal and accounting costs* – There are incremental legal and accounting costs if the company undertakes an offering when joining a US exchange.
- *Blue sky fees* - Fees related to each state law.
- *Transfer agent fees.*

Ongoing costs:

- *Annual listing fees* can range from $42,000 to $155,000.
- *Incremental auditing fees* accounted for over 30% of the ongoing costs. In 2016 the average audit fees ranged from over $300,000 to $14m.
- Two thirds of the CFO's surveyed in the PWC study stated that spending to maintain a US exchange listing fell between $1m to $1.9m annually.

All cost data reported in this section are from PWC study referred to above.

"We've seen almost triple the amount of trading volume on a daily basis that we saw prior to upgrading to OTCQX. We've seen probably a hundred percent appreciation in our stock price over that time. Upgrading has given us access to potentially more investors than we may have otherwise had."

- Singing Machine Company, Inc. (OTCQX: SMDM)

OTCQX: AN ALTERNATIVE TO A NATIONAL EXCHANGE

For issuers seeking to reduce the costs and time requirements associated with listing on an exchange, what are the market options? OTC Markets' premier tier, OTCQX can provide an efficient and cost-effective alternative.

Oxford Metrica's previous study "OTCQX: The Clear Advantage" evaluated the impact on liquidity of companies that trade on OTCQX. Findings indicated that after firms joined the OTCQX Market, there were significant increases in liquidity: trading volume by number of shares and dollar volumes increased; bid-ask spreads fell; and there was an increase in the number of broker dealers per security.

Key Findings:

1. Trading volume by number of shares increases by 53% on average, following a move to the OTCQX mark; see Figure 6.
2. Dollar volumes increase similarly by 57% on average.
3. Bid-ask spreads narrow by 4% on average.
4. The number of broker-dealers per security rises on average by 16%.

For each security in the portfolio, trading volumes are analysed for the six months prior to joining OTCQX and for the six months subsequent to joining. The dates on which companies join OTCQX are aligned such that Event Trading Day 0 is the date of joining for all companies.

The Trading Volume Multiplier™ is the daily trading volume after joining OTCQX expressed as a multiple of the one year average daily trading volume prior to joining.

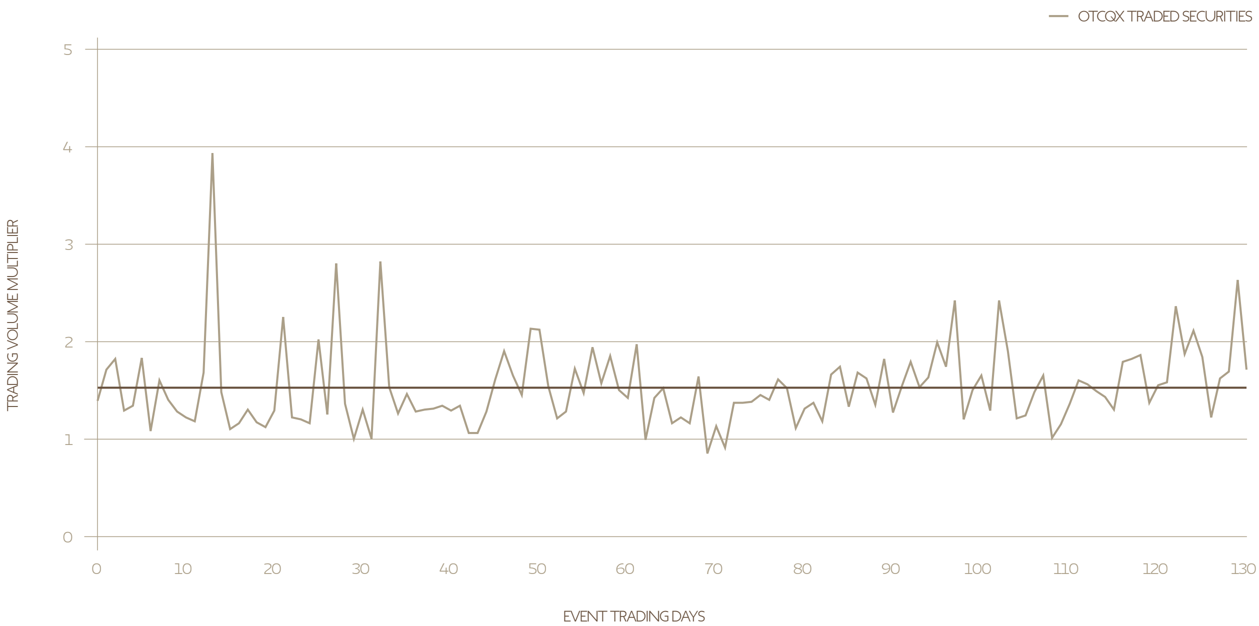

FIGURE 6. Trading volume multiplier

Figure 6 highlights the positive impact that issuers see when joining OTCQX.

Figure 6 introduces the Trading Volume Multiplier, defined as the multiple of the previous six months trading volume. A Trading Volume Multiplier of 1 indicates normal trading volumes and no impact on liquidity; any result greater than 1 is evidence of higher liquidity. Through the first six months of joining OTCQX, companies experience, on average, a Trading Volume Multiplier of 1.53. This means that companies are enjoying 53% greater liquidity on average since becoming OTCQX members.

CONCLUSION

This study demonstrates that there isn't always a clear benefit for US companies and their shareholders in transfering from the OTC Markets to a listing on an exchange. Although there may be a marginal increase in trading volume and institutional ownership, these factors are not sufficient enough to compensate for the additional burdensome cost of a listing. For the majority of issuers there is a net loss of value.

It is also evident that a prospective issuer looking toward possible graduation should undertake an evaluation of their position within the OTC Markets and its underlying characteristics before the decision to move. Companies that choose to migrate and those which haven't successively progressed through the OTC Markets hierarchy shouldn't expect the migration to be value accretive. In addition, listing for new capital raising purposes is detrimental to value. Overall, the OTC Markets offers a platform that shareholders value. For many companies the move to OTCQX obviates the need for the additional costs associated with a listed exchange.

This paper provides an independent assessment of the evidence of the impact on value, volume and ownership coverage for issuers that have graduated to an exchange. The research results may be helpful to companies in the process of evaluating whether to graduate from OTC Markets to the NYSE or NASDAQ. Moving to OTCQX is a viable alternative.

> "When we made the switch from Nasdaq, we were worried about liquidity on OTCQX. Since we made the move to OTCQX, liquidity has actually improved."
>
> - Harleysville Financial Corp. (OTCQX: HARL)

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