The Downside for Medallion Financial Only Just Beginning

James F. Hickman – December 18, 2014 (For comments or questions, please email *info@hvmcapital.com* To download PDF version: *www.hvmcapital.com/taxi.pdf*

Abstract

Medallion Financial Corporation (Medallion Financial) is at risk of financial ruin with $689 million in managed medallion loans or 53% of its entire managed loan portfolio ($480 million of direct exposure) at risk of being written-off, compared to book value of $278 million.

In the markets where longstanding caps on taxicab supply have been eliminated (Minneapolis, Milwaukee and San Diego), the price premium of secondary market medallions/permits over issuance cost (medallion values) have immediately dropped to near zero – the end game in all medallion markets. Prices are *already* plummeting in all markets as smartphone-based ride sharing companies rapidly gobble up market share and squeeze conventional taxicab economics.

Cities and states have been sympathetic to freer taxicab markets/accepting ride sharing on the grounds of fairness to drivers, consumer preference and the rule of law. Legal arguments for compensation to medallion owners for lost value have been rejected.

Loan-to-value for medallion loans provides false downside comfort when any excess collateral value above par *currently* is meaningless if medallion values go to zero.

Near term write-down of $0.62/share expected to reflect current market Chicago medallions.

Earnings and cash flow are expected to plummet, dividend and share repurchases have exceeded operating cash flow for over three years requiring two equity offerings – expect dividend cut, elimination of share repurchase and near-term write-downs eventually accelerating into massive write-offs.

Executive Summary

Medallion markets are absorbing the sudden incursion of unconstrained vehicle-for-hire capacity that is lower-priced, higher-quality and offers better customer service. Cities and states across the US have overwhelmingly opted for acceptance and regulation rather than elimination, and courts have rejected invocation of "takings"/eminent domain arguments for medallion/license[1] owner compensation after medallion values collapsed. If a ride sharing vehicle can earn as much or more than any medallion-bearing taxi, why would any buyer pay more than the minimal startup cost of new ride sharing vehicles-for-hire? They would not, and did not in Minneapolis, Milwaukee and San Diego. Medallions became superfluous and valueless – the end game in all markets – no longer conferring exclusive access to vehicle-for-hire markets. We suspect even "hail" markets, already losing share, will eventually succumb to ride sharing intrusion in some form.

Medallion Financial Corporation has $689 million of managed loans collateralized by taxicab medallions (53% of total managed loans), and owns 150 Chicago medallions valued at $49 million but worth only $33 million at current medallion prices ($0.62/share write-down required imminently). Medallion Financial has a wholly owned, offbalance-sheet, FDIC-insured bank subsidiary, Medallion Bank, carrying $386 million of the $689 million managed loan portfolio, and the write-down exposure for the parent equals the book carrying value of the Bank, $128 million. The Bank has $147 million of equity, meaning it too is at risk of substantial bank equity deficit. In summary, $480 million

[1] "Medallion", "license" and "permit" are used interchangeably as there is no legal distinction.

of Medallion Financial assets ($303 million parent held medallion loans, $128 million investment in Medallion Bank and $49 million in owned medallions) are at risk of near-100% write-down if medallion prices go to zero, as we expect. The 40% loan-to-value for medallion loans reported in the September 2014 10Q at the parent level (Bank's LTV is not disclosed) is meaningless if medallion values go to zero.

The Company's headline dividend is not and has not been covered by earnings for almost three years, with 40% of $54 million in total dividends paid out since the end of 2011 representing asset liquidation and transfer of proceeds to shareholders. The Company has been engaged in share repurchases during the same period, including more aggressive buying in recent weeks to "support" the share price (e.g., 39% of daily volume on December 16). The headline appeal of a high dividend yield and share repurchases masks the unsustainable nature of the Company's payout and capital allocation policies. Paying out more than the cash generated by the operations of the Company is both unsustainable and starves the Company of vital growth capital, an assertion proven, in this case, by the need for two secondary equity offerings totaling $85 million and costing $5.3 million during the same three-year period, in an inexplicable and inefficient re-shuffling of shareholder capital.

Company efforts to diversify the portfolio, virtually irrelevant in the context of a medallion value collapse to zero as explained above, have increased exposure to "consumer loans" by 35% in the last twelve months to $482 million on Medallion Bank's books. This loan segment yielded 14.9% as of September 2014, suggesting the Bank is lending into the highest risk segment, hard loans, of consumer borrowing. Medallion Bank's consumer loans are secured by "recreational vehicles, boats and household improvements." Increased exposure to this segment is being undertaken while households are deleveraging and real wages are stagnant at 1996 levels. This segment is certainly more risky than medallion loans historically, and it is little comfort that the high level of credit risk taken on in hard lending is actually the relatively safer loan portfolio for Medallion Financial.

The Company has excessive concentration risk in a segment, medallion loans, undergoing secular transformation that we believe will end with medallions being worthless. The process is well underway. Over time, Medallion Financial will have to start raising its LTV ratio, writing down assets and cutting the dividend, and this process will accelerate into operating earnings declines and massive write-downs. Even if the Company does a strategic about face and tries to reduce medallion exposure – it has continued to acquire medallion loan portfolios as recently as July 2014 – we don't see how the Company escapes a traumatic financial reckoning.

Note from the Authors

Two years ago it became apparent that the disparate group of medallion owners within regional markets, never mind nationally, lacked both understanding of the existential nature of the threat posed by ride sharing and the financial commitment to collectively confront it. It became abundantly clear that Uber, Lyft and others were going to enter medallion markets largely unchecked. We believed the impact would be catastrophic to the economics of medallion ownership in terms of day-to-day operations of taxicabs and medallion values. It took until late-2013 and into 2014 for the market share gains of the smartphone-based ride sharing companies to reach critical mass and the financial devastation to begin. The free-fall has commenced.

It was one thing for recent immigrants with their life savings tied up in a single medallion and driving 12-hour daily shifts not to grasp the oncoming competitive threat. But we could not understand how a well-regarded public company with more than its entire book value directly tied to the medallion market could stridently dismiss the threat, in words and strategic actions, as little more than a trivial, over-hyped fad. Medallion Financial has left itself and its shareholders exposed to an economic reckoning rarely observed in free-market economies – the collapse of an asset class propped up by decades of government-sponsored, monopolistic entry barriers with the sudden, unconstrained introduction of new supply. This company is bearing excessive concentration risk in an asset class flashing red with 53% of its entire managed loan portfolio exposed to medallion loans, and another 36% exposed to increasingly risky consumer loans. To be sure, the market has begun to discount more risk in the Company's share

price as evidenced by a ~35%+ decline from peak (including dividends), but the magnitude of the problem is far from fairly reflected in the share price.

The Company cited ride sharing as a potential risk to medallion values for the first time in its second quarter 2014 10Q – on page 63 of the 67 page document, but later public comments by the Company President suggested he remained bewildered by declines in Medallion Financial's share price. He will have some explaining to do if, as we expect, the Company is soon forced to write down owned medallions and cut the dividend. We believe earnings and cash flow will decline and loans will be written down. Reported tangible book value was $10.85 (September 30), a $0.96/share dividend and a 20% share repurchase authorization have been cited by bullish supporters as evidence of share price cheapness and reasons to buy. In 2014, 23% of the distribution was return of capital through nine months, and 40% has been return of capital since 2012. But that's the least of the Company's problems. It is not hyperbole to suggest Medallion Financial's entire book value is at risk in the face of what is happening in the medallion market, and as the magnitude of the threat becomes clearer, investors will be reluctant to reach for the falling knife.

By way of example, imagine if city government capped building licenses issued at a level consistently below the number of building jobs out for bid at any given time – exactly analogous to the taxicab industry. All *licensed* contractors would get rich based purely on possession of a scarce building license. Possession of the license alone is the source of the wealth, as evidenced by high-and-steadily-rising prices of taxicab medallions in the secondary markets. If licenses were issued to anyone qualified to build, wealth would be disbursed across that larger population of builders and above-average wealth generation would be a function of superior overall value provided by the builder himself as determined by customers. The license would cease to have any value. The taxicab industry is undergoing this precise transition before our very eyes. What investors in companies like Medallion Financial do not yet grasp is that the intrusion of unlimited capacity and effective elimination of caps on the number of de facto taxicabs is not going to just cause a significant correction in the clearing price of medallions. It is going to eliminate the value of medallions altogether. Hence, a 40% loan-to-value reported by Medallion Financial in its Q3 2014 10Q filing, which still has not changed despite 20-30% price corrections observed already in their medallion lending markets, is not an adequate margin of safety against the risks posed. It is, in fact, an irrelevancy when the collateral is eventually going to a value near zero.

Medallion Markets' Halcyon Days are Over – Smartphone---based Ride Sharing Shakeup

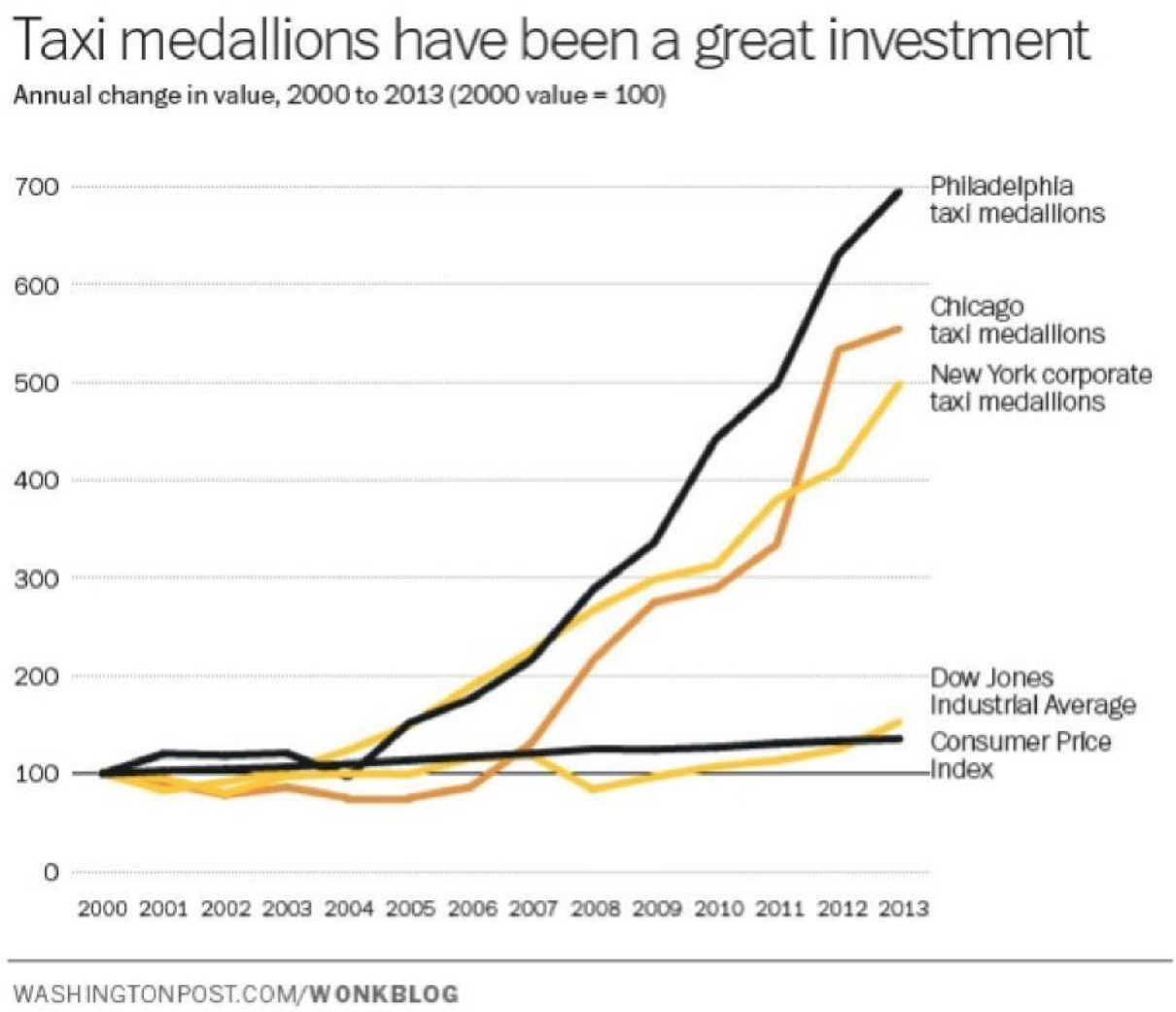
Backdrop

Medallion-like permitting systems are a relic of the Great Depression and many circumstances unique to that era. A key element to the policy mindset was to ensure demand for a ride always exceeded supply to minimize the risk of cutthroat competition for fares. For decades since, local authorities in major metropolitan areas like New York (Exhibit 2), Chicago (Exhibit 3), Boston (Exhibit 4), Cambridge (MA), Miami, Philadelphia and San Francisco have constrained taxi supply despite rising populations and evidence of significant unmet need reflected in spiking medallion prices (see Exhibit 1). The regional taxicab medallion markets have been nothing short of local-government-sponsored monopolies. New supply had long been introduced sparingly and fares maintained at profitable levels, at least from the standpoint of a medallion owner. This dynamic has propelled medallion values upward by as much as 1,000% in some markets over the last 30 years. Returns on gold (3.7X),[2] the S&P 500 (~1.5X)[3] and every other liquid asset class have paled in comparison during the same 30-year period ending in 2013. In just

[2] http://www.kitco.com/charts/historicalgold.html
[3] http://www.multpl.com/s-p-500-real-sales/table/by-year

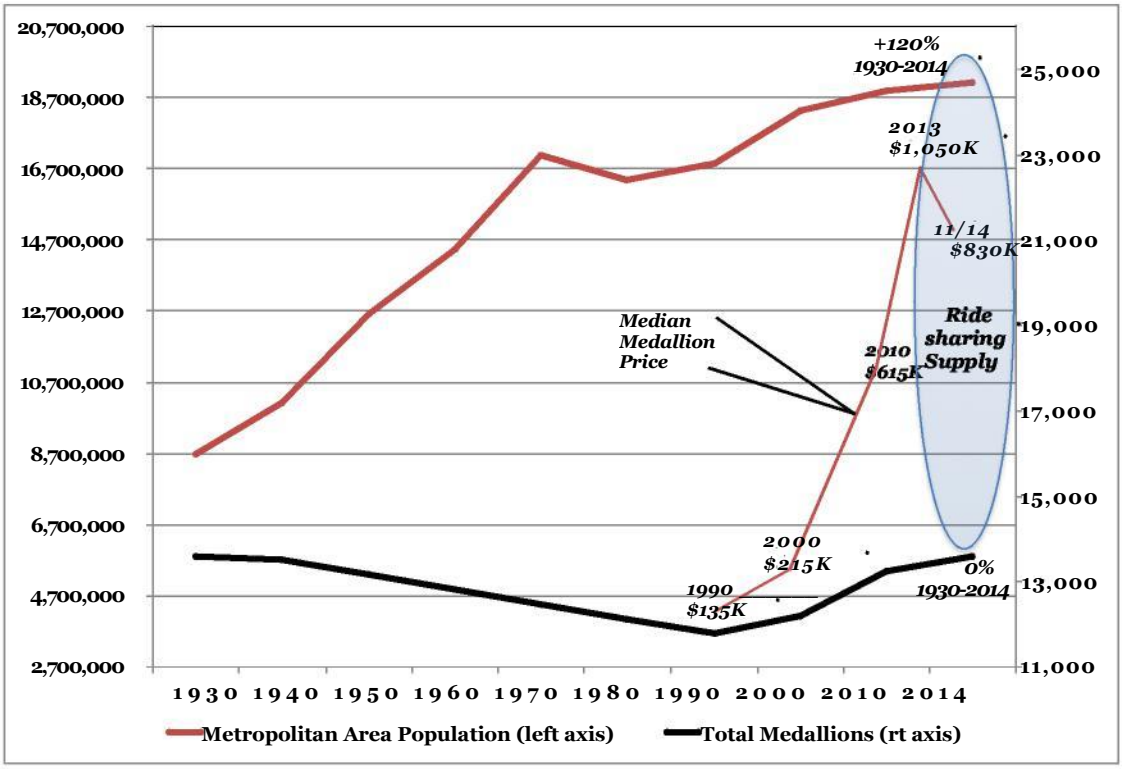
the last 10 years, prices have risen almost without interruption in most cities using the medallion model by 3.5 to 7 times (see Exhibit 1), making taxi medallions a very safe asset to own or lend against, during that time.

Exhibit 1 Taxi Medallion Pricing in Various Cities Since 2000



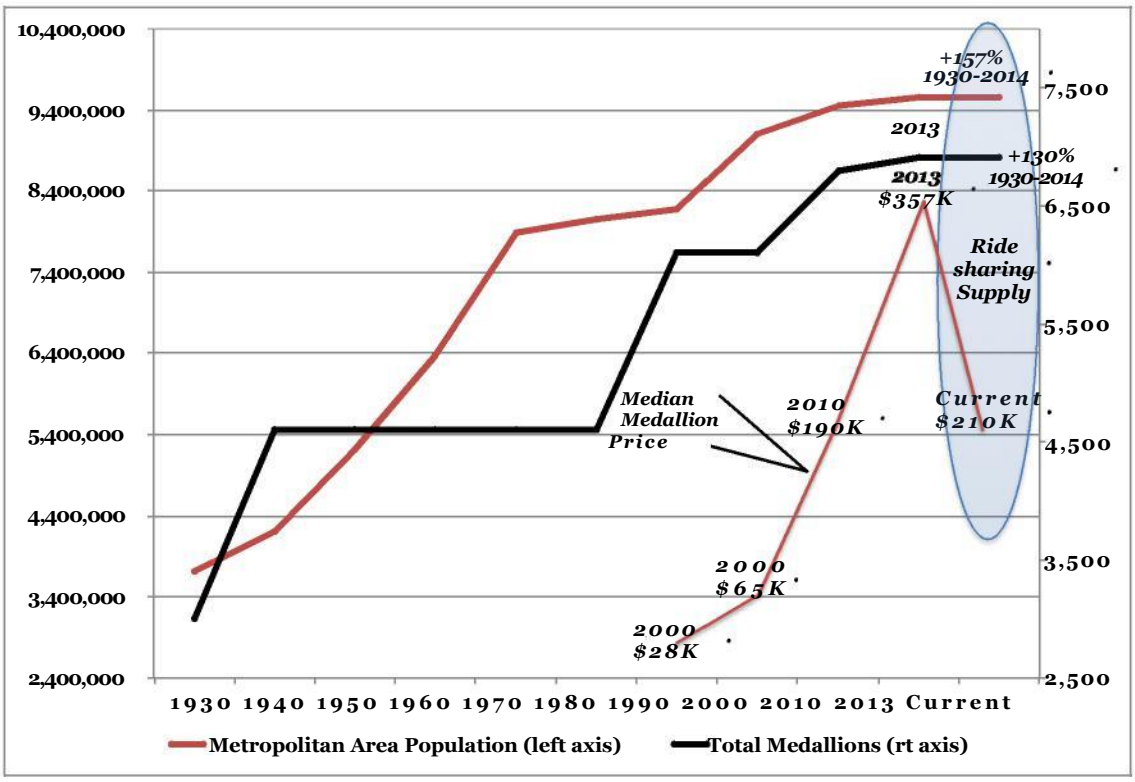
Chicago has more closely aligned medallion issuance with population growth over the decades than other major cities (130% versus 155% since 1930, respectively, in contrast with *0%* and 120% in New York City during the same period). As such, we believe Chicago is likely to see full medallion price depreciation more quickly than New York or Boston, and recent trends seem to be bearing out that hypothesis. Taxicab operating economics are at risk of declining more precipitously in Chicago given the relatively smaller excess market demand for rides – i.e., there is less market capacity to absorb new for---hire vehicle supply without major disruption.

Exhibit 2 History of New York City Medallions versus Metropolitan Population



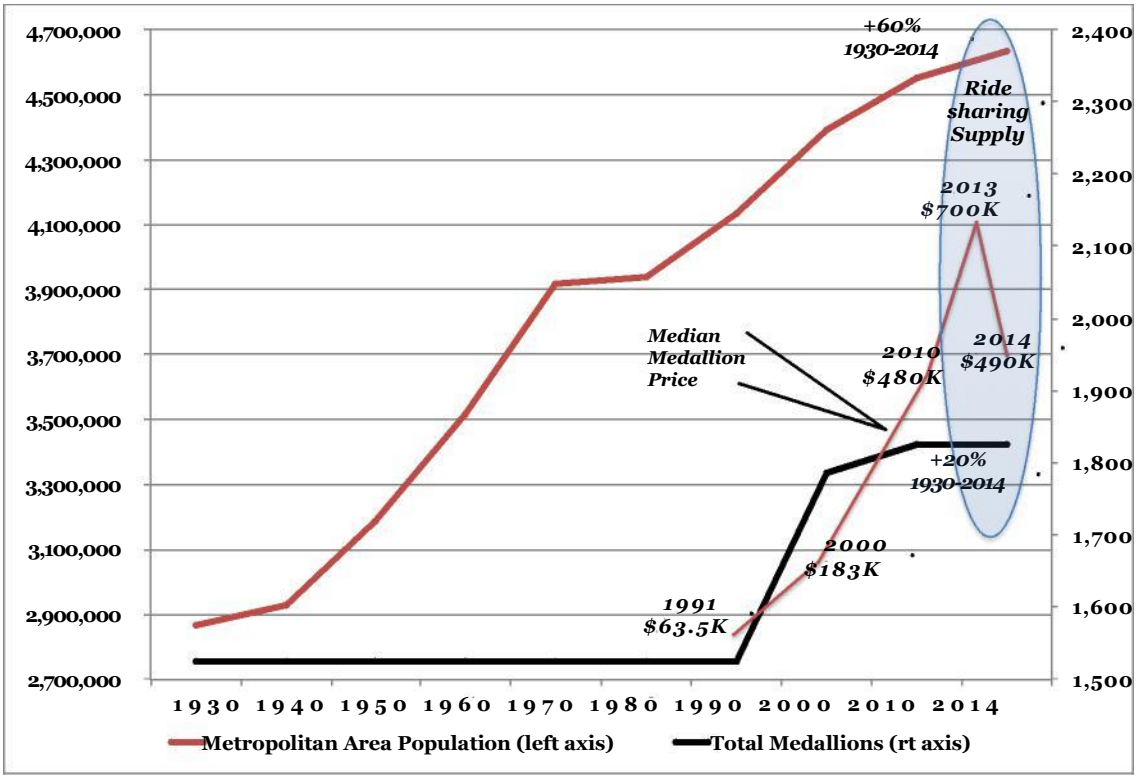
Source: Taxi and Limousine Commission, http://www.city---data.com/forum/city---vs---city/1786915---historical---population---metropolitan---areas---decade.html and industry sources.

Exhibit 3 History of Chicago Medallions versus Metropolitan Population



Source: Chicago Dispatcher, City of Chicago Business Affairs & Consumer Protection, index from http://venturebeat.files.wordpress.com/2014/06/washington---post---medallions---graphic.jpg and industry sources.

Exhibit 4 History of Boston Medallions versus Metropolitan Population



Source: Hackney Carriage Unit, Chris Berdick, Boston Magazine, 2004, http://www.city-data.com/forum/city-vs-city/1786915-historical-population-metropolitan-areas-decade.html and industry sources.

Three years ago Uber, Lyft , Sidecar and other so-called smartphone-based ride sharing, transportation network companies turned these government-sponsored monopolistic/oligopolistic markets upside down. For an industry with ironclad, government-backed entry barriers in place for decades, the introduction of unconstrained new supply has proven more than a little disruptive, and the ultimate effects are yet to be fully realized. By mid-2014, values of taxi medallions in all markets, including NY, Chicago, Boston, Newark, Philadelphia and Cambridge started declining at a pace and magnitude rarely seen historically. Price trends have been steadily upward since the collapse of the technology bubble in 2001, including during and after the financial crisis. As market participants grapple with the full implications, the facts on the streets are pointing to the collapse of a historically high-entry-barrier market and the attendant supply scarcity.

In New York City, a medallion investor historically has been able to lease out medallions nearly 24/365 as 50,000 drivers competed for 13,437 total medallions in the city (up only 14% from 11,787 medallions in NY in 1996, and that level was actually *lower* than 1937 owing to natural attrition). As a result, percentage utilization in the mid-to-high-90s has been the historical norm, yielding an estimated average 3% - 7% pre-tax cash-on-market-value return per year on a $1 million medallion, while the underlying value of the medallions, as noted, has risen in double digits without downside volatility for over a decade. Similar economics, albeit on lower medallion prices, have been evident in other medallion-based cities.

Those quaint times are likely gone forever. Uber/uberX, Lyft, Sidecar and others have flooded markets with readily available rides that are not only cheaper than incumbent taxis – sometimes by 20% to 40% – but offer superior customer service, ride-hiring and payment convenience, quality and reliability of vehicles. Taxi drivers are losing riders to the new entrants. A “leaked” Uber investment presentation indicated the company grossed $26 million in

NYC during December 2013,[4] and by mid-2014, Uber had intimated publicly that the company's overall annualized growth rate was almost double what it had been at the end of 2013, suggesting Uber probably approaches or exceeds 20% market share in mighty New York, the most protected medallion market in the country. Revenue growth per taxicab in Boston has been +10.5%, +5.1% and -15% in 2012, 2013 and 2014 (through September), respectively. In both Boston and NY, meter revenue was down by an estimated 13-15% by mid-2014 because of fewer trips per shift.[5] Excess taxi driver supply (e.g., 3-4 drivers per medallion in New York and Boston), long supporting 24/365 utilization of leased medallions, is rapidly being absorbed by the new competitors. In fact, even regularly-working drivers have abandoned medallion leasing in large numbers to join Uber and Lyft networks, resulting in a 50%+ increase in idle shifts for medallion leasers in some markets, according to local sources. Drivers have begun paying medallion lease fees late and evidence has just recently emerged of drivers pushing to renegotiate lease payment terms (usually drivers pay certain daily or weekly sums to medallion owners). Actual declines in medallion leasing fees have been reported in Chicago, Boston and San Francisco.[6]

Uber's Rapid Traction

Uber completed a private round of investment valuing the company in excess of $40 billion. Whether that price tag is in irrational exuberance territory or not is not our concern, but suffice it to say, Silicon Valley and the highly discerning venture capital world is asserting Uber is a major player for the long haul. A "leaked" investor presentation deck on Uber published by Business Insider is a far cry from a tax filing or audited financials, but it seems to offer a credible proxy on the traction of the startup. By the end of 2013, Uber was on pace to generate over $300 million in gross sales in the metropolitan NY market, generating over $26 million in December 2013. We estimate the total NYC market to be roughly $2.3 billion annually, based on total trips and average fares. Uber will reach some equilibrium-level of market share, but we believe it likely exceeds the approximate 13.5% observed in December given the month-over-month growth rate trajectory of 19% observed in metro-NY at that time. Indeed, public comments by Uber in the summer of 2014 suggested the entire company was tracking at $2 billion annual gross sales at that time. That figure compares to an annualized level of gross revenue for all of Uber, per the leak, in December 2013 of $900 million. A full year later during which Uber's brand recognition and market penetration has accelerated, market share is likely now above 20% in New York City. It is notable that Uber NYC was only launched in May 2011!

It is also instructive to note that uberX has become the dominant service in the Uber service-offerings universe. The uberX share of total Uber gross sales in metro NY went from 10% in January to 43% by the end of the year, largely at the expense of the higher priced UberBlack. The latter went from 80% to 30% over the period. This high sensitivity of demand to price could bode well for Sidecar's innovative, lower cost Shared Rides service, matching vehicles already heading in the direction of a customer's specified destination. Sidecar suggests this service is priced at 33% - 50% below its own base rideshare livery service, 60% below Lyft's "1.5X Prime Time" pricing, and 70% below Uber's "2X Surge" pricing, for comparable trips. Uber has a similar service, UberPool in San Francisco and Paris, also launched in NYC on December 4, 2014. Lyft is also a player in NY, while Sidecar is in ten major metropolitan markets, but not yet NY. Lyft claimed to TechCrunch in December 2013 to be experiencing gross sales growth of 6% per week.

In San Francisco, where Uber was born, taxi ridership dropped by 65% according to local authorities.[7]

In May 2014, a spokesman for the Boston Taxi Drivers Association union claimed ride sharing, led by Uber, had taken 35% to 45% market share.[8]

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[4] *LEAKED: Internal Uber Deck Reveals Staggering Revenue And Growth Metrics*, Alyson Shontell, Business Insider, November 20, 2014.

[5] Local taxicab operating sources.

[6] Ibid.

[7] http://time.com/money/3397919/uber-taxis-san-francisco/

These seismic shifts in the cash---generating capability of medallions have slowed medallion sales to a trickle in the historically liquid secondary markets and financing for the few purchases taking place has ground to a virtual halt. Dry primary and secondary medallion auctions have recently occurred in Philadelphia and Chicago. New York City was forced to scale back primary auction plans for 2015 from 550 medallion sales to 200.[9] It was reported that 58 prospective buyers withdrew bids citing various reasons, including wariness of new competition from ride sharing.[10]

The result? Medallion prices are plunging. From peak to current prices, as measured by "over---night" published, signed P&S, auction "ask" or local broker quotes, the trends are as follows:

> NY values (74% or $510 million of Medallion Financial's medallion loan portfolio) are down by 21% from $1,050,000 to $830,000 based on TLC published November numbers, and by 24% based on street asking price ($800 thousand) for "individual" medallions.[11]
> Chicago values are down by 21.8% from $375,000 to $293,000 of the official published November sales and by 44% to $210,000 asking street price.[12]
> Boston values are down by 32% from $700,000 to $475,000 street asking price.[13]
> Cambridge values are down 26% from $540,000 to $400,000 (street asking price).[14]
> Philadelphia values are down 21% from $495,000 to $390,000.[15]

Why and How Medallion Values Fall to Zero

Medallion owners are coping with precipitous declines in medallion values accompanied by reduced access to original financing and refinancing, and deteriorating cash flow from operating taxicabs. Medallions, like all asset classes, are priced on the basis of market perception of future free cash flows generated. Scarcity and desirability can combine to push values up despite the absence of any ongoing cash flows – think of fine art. Medallion values have been pushed higher owing to both factors. Bubble formation often involves extrapolation of rising price trends that cease to be supported by any realistic forecast of cash flows. Saying medallions are in bubble territory gives bubbles a bad name. All bubbles burst, but most leave some residual, intrinsic value – medallions are likely to leave no residual value.

Medallion markets are experiencing the relatively recent introduction of unconstrained, lower cost, and higher---quality supply after decades of ironclad supply constraints enforced by regulation. Market participants, by definition, are slow to come to terms with the existence of a bubble. Medallion owners and, to a lesser degree, buyers – the latter are far fewer in number but have not yet completely disappeared – are proving no exception. Scarcity has been completely eliminated with the introduction of unconstrained new supply at virtually *zero* marginal cost. Falling meter revenues, fewer fares per trip/declining taxicab ridership, and increasing idle shifts as drivers migrate to the ride sharing companies are putting pressure on medallion leasing fees, and that trend shows no signs of abating. Adaptation to radical change is very difficult for market incumbents, especially those in a market with decades of stable, predictable behavior. Drivers committed to taxis, even if there is greater earnings potential in a ride sharing network, are going to continue to lose fares and cash flow to ride sharing companies. As cash flow continues to

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8 *Taxi drivers say Uber threatens their livelihoods*, Martine Powers, Boston Globe, May 22, 2014. http://www.bostonglobe.com/metro/2014/05/22/taxi---drivers---protest---uber---boston---offices/0YlRN0hHAHVhcxFIQ2X5aI/story.html

9 http://www.gothamgazette.com/index.php/government/5449---hailing---higher---tax---revenue---city---lowers---expected---taxi---haul

10 *Yellow taxi industry loses 58 prospective buyers in auction for medallions*, Daily News, Jennifer Fermino, December 10, 2014. http://www.nydailynews.com/new---york/yellow---taxi---industry---loses---58---bidders---medallions---article---1.2039989

11 Local NYC medallion brokers and medallion owners.

12 Multiple Chicago taxicab medallion brokers.

13 Local Boston medallion brokers and owners.

14 Local Cambridge medallion owners.

15 Local Philadelphia medallion brokers.

decline, drivers will be forced to adapt by either negotiating lower fees paid to medallion owners or joining more lucrative ride sharing networks. This process continues until there is no margin to support medallion---leasing fees at all. The last gasp for medallions occurs when protected sanctuaries like airports and street hails finally yield to ride sharing in some form. In short, the free cash flow associated with medallion ownership is steadily being eroded, with an attendant decrease in the net present value of medallion ownership, accompanied by gradual recognition that scarcity is no longer an attribute of the asset class. The ultimate bottom is a secondary market premium over minimal costs to operate vehicles---for---hire of zero on the day that medallions offer no cash---generating exclusivity – no value – at all.

As these trends persist, medallion owners will become increasingly tardy on loan payments. At some point, likely sooner rather than later, more debtors will be compelled to walk away from medallions and default on loans (five defaults in NYC in last three months is historically unusual).

Relief Unlikely from Regulators, Legislatures or Courts

Almost every city told the ride sharing companies they must wait until the impact of their designs is studied and evaluated, but they boldly and brazenly entered markets anyway. In recent weeks, Uber has gone from media darling to villain, with every misstep – and there have been a few – receiving broad media attention, including bans in multiple countries for failure to comply with regulations including India, France, Thailand, Spain, Netherlands and Belgium. Uber and other ride sharing companies are involved in various legal actions with multiple taxi medallion ownership groups, as well as several regulatory groups including California, Oregon, Nevada and Florida – along with the aforementioned sovereigns. In some US markets, citations have been issued to drivers and vehicles impounded. But the bottom line is ride sharing is advancing at stunning speed and taking market share in every major US metropolitan market, including NYC, Chicago, Dallas, Los Angeles, DC, San Francisco, Philadelphia, and Boston, and showing every sign of permanence. Uber is purportedly launching in at least one new city somewhere in the world every day, and now reaches 64% of all Americans.[16] The ultimate regulatory response remains to be seen, but it will be very difficult to put this genie back in the bottle. We expect when the dust settles, cities, some combination of states and courts will compel ride sharing companies to more fully submit to regulations essentially requiring them to do things they claim to be already doing (e.g., background checks, vehicle inspections and insurance provision). Forcing ride share companies to comply with basic safety regulations is no victory at all for medallion owners and taxicab operators as it officially confers legitimacy and acceptance of ride sharing in the eyes of courts and regulators, without any substantive relief on the cost/fare advantage or the unconstrained supply. Between now and that seemingly inevitable outcome, medallion price and taxicab operating profit pain will get *far* worse. We do not see any realistic scenario in which outright supply quotas return:

> Medallion auctions have produced meaningful windfalls for cities in the past (NYC raised over $200 million by auctioning off over 200 medallions in early 2014), but the auction spigot has dried up with the emergence of ride sharing (56 bidders recently withdrew from a NYC auction and auctions failed or delayed in multiple cities), and ongoing revenue at risk for local governments has not been adequate to compel legislators to push out the well---received new ride options (we estimate that less than 50 one thousandths of one percent of the NYC annual budget is funded by annual medallion fees).[17]
>
> Ride sharing has become extremely popular with consumers making it politically problematic to turn back now in defense of an outdated monopoly.
>
> The arguments prompting the creation of medallion systems, primarily those related to safety, are harder to make years into the presence of ride sharing in multiple markets.

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[16] *Uber's Global Expansion in Five Seconds*, Ellen Huet, Forbes, December 11, 2014. http://www.forbes.com/sites/ellenhuet/2014/12/11/ubers---global---expansion/

[17] Based on published NYC Taxi and Limousine Commission fee schedules and a $70 billion NYC budget.

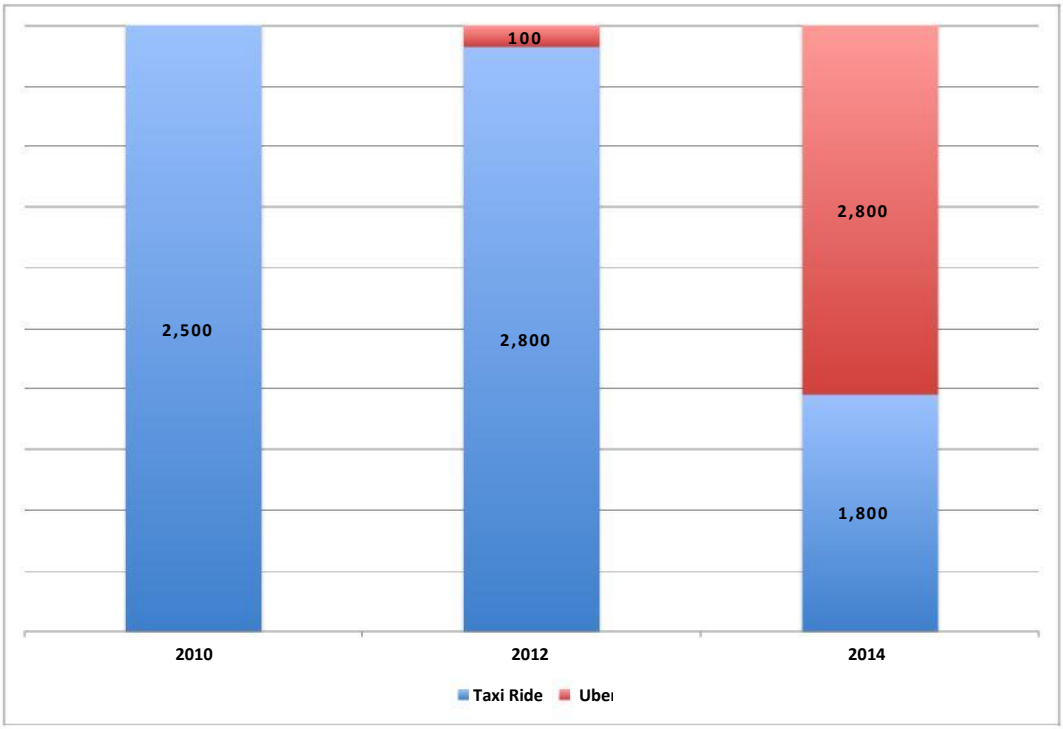
Other trends suggesting acceptance and regulation are the more likely outcome than elimination and protection of caps include:

Illinois governor Pat Quinn vetoed a state law seeking to place greater restrictions on smartphone---based ridesharing companies (override considerations were abandoned in late November), and the city of Chicago issued "transportation network provider" licenses to Lyft and Sidecar, conferring total compliance legitimacy, an action advocated by Chicago mayor Rahm Emanuel.[18]

Outgoing Massachusetts governor Deval Patrick proposed in December 2014 to regulate ride sharing companies, with a spokesperson saying, "The Patrick administration is committed to ensuring the public safety and at the same time supporting innovation in transportation."[19] The Boston City Council has expressed initial inclination to better regulate ride sharing, with no talk of banning. Councilor Sal LaMattina captured the general tone when he said he uses Uber and likes being able to track his daughter's progress on his smartphone when she uses it.[20] Boston Mayor Marty Walsh formed a Taxi Advisory Committee, including representatives from the ride sharing companies, and has emphasized input from the public. He has generally been in favor of proper regulation to ensure safety – again, acceptance under regulatory requirements already being observed by the ride sharing companies, not enforcement of caps.

Federal Election Commission filings indicate Uber usage by Congress and their staffers for fares below $100 increased from 100 during the 2012 election cycle to 2,800 during the 2014 cycle, while taxi rides dropped from 2,800 to 1,800 in the same periods (see Exhibit 5).[21] It appears the government sponsors/regulators historically protecting the taxicab industry are not only reluctant to interfere with an innovation enthusiastically embraced by voting constituents, they are adopting it themselves!

Exhibit 5 Uber Taking Share from Taxicabs Among Congress and Staff During Election Cycles



[18] http://www.chicagobusiness.com/article/20140430/NEWS02/140429724/five---things---to---know---about---todays---council---vote---on--- ride sharing

[19] http://www.bostonglobe.com/metro/2014/12/09/governor---patrick---pushes---provide---oversight---ride sharing---services---lyft---and--- uber/a29fXj5gEtDkKDsZHp4HFJ/story.html?s_campaign=email_BG_TodaysHeadline

[20] http://www.wbur.org/2014/12/02/boston---uber---lyft---taxi

[21] Federal Election Commission filings, per Hamilton Place Strategies, hamiltonplacestrategies.com.

Playing Politics

Uber quickly recognized the importance of politics in overcoming decades of bureaucracy, inertia and entrenched, moneyed interests at the local level in places like New York, Boston and Chicago. The company consistently responds to unfavorable regulatory actions, wherever they arise, with robust political-lobbying and grass roots campaigns launched almost instantly through its massive user base and formidable lobbying arm. The latter includes David Plouffe, former senior political strategist-extraordinaire for President Obama and primary architect of the improbable 2008 presidential campaign, along with scores of former statehouse aides and insiders from both parties and an estimated 161 dedicated lobbyists across all 50 states, according to a recent Washington Post essay. Uber has been known to have unfavorable regulatory actions overturned within days.

When the government coalition of supporters includes Virginia Governor Terry McAuliffe (D), Kentucky Senator Rand Paul (R) and the Republican National Committee, it is fair to say the lobbying and public relations battle is going the way of ride sharing.

Elimination of Taxi Supply Constraints in Other Cities Drove Secondary Market Medallion/Permit Price Premiums to Zero – Legal Arguments Invoking "Takings Clause" and Eminent Domain Failing in Court

In 2007, the U.S Federal District Court in Minnesota held that medallion owners "do not have a property interest in the value of the taxicab vehicle license on the secondary market because the issuance of the license does not entitle them to that value, nor does it provide for its legal protection. The license allows its holders to drive a taxi in the City. It does not guarantee that the City would indefinitely limit the number of taxi licenses issued."[22] In 2009, the U.S. Court of Appeals for the Eighth Circuit unanimously upheld the 2007 ruling and declared taxi licenses do not "provide an unalterable monopoly over the Minneapolis taxi market."[23] In rejecting the coalition's "takings clause" argument, the Court further held that the "property interest that the taxicab-license holders may possess does not extend to the market value of the taxicab licenses derived through the closed nature of the City's taxicab market." The coalition then petitioned the U.S. Supreme Court, which rejected the appeal without comment in February 2010.[24] Do you know what the current secondary market value of a taxicab license in Minneapolis is today? Zero, after an estimated peak near $24,000 in the mid-2000s.[25] There is no secondary market and for less than $1,000 in fees, an individual can enter the taxicab business.

In 2013, a Milwaukee County Circuit Court declared unconstitutional the city's law imposing a cap on the number of taxicabs.[26] In July 2014, the city's Common Council voted unanimously to completely lift the cap on how many taxicabs may operate in the city, implementing the Court's ruling. Permits issued in a manner equivalent to a medallion system had been fetching $150,000. There is no longer any secondary market for taxicab permits in Milwaukee. The local permit holders are vowing to block the cap lift by suing.

On November 10, 2014 the City Council of San Diego removed the cap on taxicab medallions (993), with arguments centering on taxicab drivers beholden to medallion owners earning too little (less than minimum wage, according to often cited study).[27] Values dropped from $140,000 to the $3,000 charge for the permit.

Short of a legal decision equating local governments' "allowing" new competition to enter medallion markets with takings/declaring eminent domain (the argument made in Minneapolis appeal), an argument that has gained no traction in the courts so far, and forcing municipalities, many with already stretched financial resources to

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[22] Minneapolis Taxi Owners Coalition, Inc. v City of Minneapolis, US District Court, District of Minnesota, Civil No. 07-1789, October 29, 2007.

[23] Minneapolis Taxi Owners Coalition, Inc. v City of Minneapolis, US Court of Appeals, 8th District, No. 08-1789, July 14, 2009.

[24] http://www.ij.org/images/pdf_folder/economic_liberty/mn_taxis/minn-taxi-timeline_12-31-2013.pdf

[25] https://www.ij.org/minneapolis-taxis-background

[26] Ghaleb Ibrahim v. City Of Milwaukee, April 2013, http://www.ij.org/milwaukee-taxis

[27] *Driven to Despair: A Survey of San Diego Taxi Drivers*, San Diego State University and the Center on Policy Initiatives, May 2013.

compensate medallion owners for the attendant drop in the price of those medallions, we do not see a scenario in which medallion values hold up at even small fractions of recent prices.

The trend is clear. Local regulators have responded angrily at the brazen flouting of their authority and rules, but legislators, courts and the court of public opinion have consistently favored opening up long-closed taxicab markets. Arguments in favor of protecting regulations artificially constraining supply and public access to services strongly in demand, regardless of their merit, are struggling to gain traction. Even back in 1993, almost two decades before ride sharing technologies hit the streets, the case for eliminating supply caps demonstrated its public policy, legal, cultural and popular appeal. In August of that year, the U.S. District Court in Colorado upheld then-existing laws constraining new taxi license issuance (50 years had passed since the last license had been issued to a new cab company), ruling against the Institute for Justice and its minority entrepreneur clients seeking to operate a new taxicab company. The Colorado legislature took up the matter before the appeals process got underway, leading to the governor of Colorado signing legislation officially opening up the market in June 1994.[28] In Minneapolis, Milwaukee and San Diego, caps are gone and medallions/licenses ceased to have meaningful value, while Boston and Chicago are both signaling an inclination to accept and regulate ride sharing. In New York City, the Taxi and Limousine Commission has been relatively aggressive in efforts to protect its authority in response to ride sharing. Few politicians have spoken out publicly for or against. But the ride sharing apps have already gained stunning market share and the practical challenges of eliminating smartphone-based ride-for-hire applications, when consumers have already adopted in large numbers and the most dire safety warnings of status quo advocates have largely been defanged by several years of ride sharing in the market, leads us to the conclusion that it too will succumb to regulation in lieu of elimination – and that ultimately means no value for medallions.

We do think invocation of the "takings" clause argument may receive more serious treatment by courts in markets where cities auctioned medallions and realized values reflected in secondary markets. It is a high bar to prevail with this argument as evidenced in at least two adjudicated cases:

> Minneapolis did not *auction* licenses at prices set in secondary markets (it remains to be seen if that distinction matters), but the US District Court of Minnesota decision made an argument and cited precedent we expect to be hard to overcome in *any* attempt to press the "takings" assertion:
>
> > "In this case, the Court finds that the license holders do not have a property interest in the value of the taxicab vehicle license on the secondary market because the issuance of the license does not entitle them to that value, nor does it provide for its legal protection. The license allows its holders to drive a taxi in the City. It does not guarantee that the City would indefinitely limit the number of taxi licenses issued. Even under the former ordinance, the City was required to conduct a hearing at least every 24 months to determine whether "public convenience and necessity" warranted additional licenses. (Compl. Ex. E at fmr. sec. 341.270(a)). Furthermore, the City, as a law-making entity, is free to amend ordinances as it sees fit.Like the trucking authority holders in the *Rogers Truck Line* case[29], the taxicab vehicle license holders do not have a constitutionally protected freedom from competition."[30]
>
> In 2012, when New York City was in the process of issuing 2,000 additional medallions and 18,000 HAIL licenses, medallion owners filed a lawsuit alleging that such licenses "would so diminish the value of current medallions as to constitute a 'taking'." The Court found, "This argument is unavailing, for overlapping procedural and substantive reasons."[31]

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[28] https://www.ij.org/jones-v-temmer

[29] Rogers Truck Line, Inc. v. United States, 14 Cl. Ct. 108, 112 (1987)

[30] http://www.volokh.com/files/IJdecision.pdf

[31] Taxicab Service Association, et. al. v. Michael R. Bloomberg, as Mayor of the City of New York, et. al. (Supreme Court of the State of New York, 2012).

Street Hails in NYC as Protected Sanctuary for Taxis – Can Entry Barriers Hold Up?

We believe the New York medallion market will prove more resilient than other cities before fully succumbing to the rise of ride sharing for three primary reasons. First, no taxi medallion system is more tightly regulated than that of NYC, making the entry barriers more formidable. Second, the gap between demand for and supply of taxis is greater in NYC than any other major city, as evidenced by the disparity in growth rates of population and medallions issued over the full history of its medallion system. As a result, the market should be able to support more new supply per capita than other cities before an economic collapse in taxicab operating economics and medallion values. Third, the regulatory protection of "street hails" as the exclusive domain of medallion-bearing taxis is expected to provide some level of insulation, at least temporarily, for that particular hiring mechanism, accounting for approximately half of all fares historically (we suspect that share is lower now owing to success of ride sharing). Violations of that regulation have been common for decades, and in the end, assuming it remains a market sanctuary for medallion holders through the ride sharing market-entry onslaught, we suspect the ride sharing companies will brazenly flout that regulation too, and ultimately knock off that sacred cow as well. We continue to believe NYC will experience a slower medallion market decline, but the evidence so far suggests it is not proving as resilient as we initially expected. Uber alone has captured an estimated 20% market share, maybe more,[32] and NYC medallion values and taxicab profits have tracked the declines observed in other cities.

Implications for Medallion Financial Corporation

Medallion Financial Corporation (NASDAQ: TAXI) is a specialty finance Company with a market capitalization of $253 million and $1.3B in managed loan assets, up 13% since the end of 2013 (see Exhibit 6). The Company reported $0.27 per fully diluted share in earnings in the third quarter (on 25.118 million fully diluted shares outstanding), $0.72 through nine months, and $1.16, $1.21 and $1.09 in 2013, 2012 and 2011, respectively. As an investment company, Medallion Financial is bound to pay out 90% of its pre tax income to maintain that designation and avoid taxation at the corporate level.

The managed loan portfolio includes **$689 million of total loans collateralized by taxicab medallions** (74%/$510 million in New York City) – $303 million of which is carried on Medallion Financial's books. The footnoted loan-to-value (LTV) was 40% for these loans, as of the September 2014 10Q. Not knowing the precise methodology used for calculating "fair value," we cannot question the accuracy of the LTV reported at that time. We do find it curious that the LTV has barely changed since the end of 2013 (38%) despite medallion prices down over 20% - 30% in every market. We believe the downside risk in medallion prices greatly exceeds the implied margin of protection (see discussion below). The Company's exposure to the remaining $386 million carried on the books of Medallion Bank (LTV not reported) is $128 million, the value at which the bank is carried on the balance sheet, equal to 20% of tangible assets and 47% of tangible book value. The Company also carries 159 owned medallions in Chicago on its balance sheet at $49 million, for a total direct exposure to medallions of $480 million. Medallion Financial also holds $72 million in commercial loans earning a weighted average interest rate of 11.5%.

Reported book value is $278 million. If the medallion market entry barriers are effectively eliminated, the marginal cost of supply equals the cost of a vehicle, driver's license, smartphone and a clean background check and drug test, medallions will cease to have *any* meaningful value, in our opinion. In such a scenario, Medallion Financial's and Medallion Bank's entire medallion loan portfolios would fall to fair value of zero, a $480 million write-down for the parent, and a $386 million write-down for the bank, less fair value of any additional collateral or personal guarantees attached to individual loans, significantly in excess of book value for the respective entities. This is the scenario currently playing out across medallion markets.

[32] Estimated based on leaked Uber presentation published by Business Insider, later comments by Uber sources on revenue run rates (http://blogs.wsj.com/digits/2014/11/20/ubers-massive-fundraising-campaign-forges-ahead-amid-controversy/), divided by NYC taxicab market revenues calculated from TLC 2014 Annual Report.

The Company uses Medallion Bank, a FDIC-insured bank, as an off-balance-sheet financing vehicle to underwrite medallion-based and other loans. Medallion Bank is significantly more leveraged (debt to equity ratio of 5.5:1) than Medallion Financial (1.2:1). The pro forma combined debt to equity ratio is 3.9:1. As indicated, Medallion Bank has $386 million or 43% of its assets in medallion loans. The balance of its loan portfolio includes $462 million, or 52%, in "consumer loans" secured by boats, RVs and small home-improvements, earning a weighted average interest rate of almost 15% (see discussion of consumer loans below), and $43 million in "commercial loans" yielding 4.6%.

Recent Share Price Performance and Future Prospects

Annualized total returns for Medallion Financial shares exceeded 29% during the three years ending 2013, but the shares are down over 35% from the peak close in December 2013 and 20% year-to-date, adjusted for dividends. In addition to arguing the ride sharing implications for Medallion Financial are overblown, stock bulls cite the dividend yield, share repurchases and tangible book value as reasons to own the shares (see respective discussions below).

The balance sheet is not healthy enough nor the diversification of the loan portfolio and earnings stream sufficient to absorb a decline in medallion values to near zero. The process is expected to begin with a rising loan-to-value ratio, decelerating earnings growth, rising nonaccrual bookings for late and non-payment and loan write-downs in the coming quarters, accelerating into a downward spiral of declining earnings, dividend elimination and write-offs threatening the entire book value of the Company and its unconsolidated bank subsidiary, Medallion Bank. The share price is not discounting the possibility of such a scenario.

Chicago Medallion Write---downs Imminent?

As noted, Chicago is a market with less excess ride demand, at least relative to New York City and Boston, and therefore greater near-term vulnerability to a more precipitous collapse in taxicab operating cash flow and medallion values. The Chicago medallions owned and booked at $49 million (17.5% of total book value plus associated leasing income of $1.7 million in 2013), will decline dollar-for-dollar with further declines in medallion values in Chicago. As stated, our sources are reporting street asking prices in Chicago of $210,000, and those levels are not getting any bids! At $210,000, Medallion Financial's Chicago medallion holdings would have a fair value of less than $34 million that would require a $0.62/share write-down. In a city that has already issued Class A licenses to Lyft and Sidecar (for drivers averaging less than 20 hours per week),[33] and where the policy response is clearly pointing to acceptance and regulation rather than elimination, how much longer will medallion buyers see *any* value in a medallion conferring for-hire rights available to ride sharing drivers at a total cost of $10,000 per *company*? Again, there is no credible argument we have heard for medallions holding *any* value once unlimited new supply bearing a marginal cost per vehicle of near zero is officially allowed.

Have Decades of Stability Created Blinders to Impact of Secular Changes in Medallion Market Supply Dynamics?

Protracted periods of stability in financial markets lead to riskier behavior and rising underlying instability, an insidious dynamic known as Hyman Minsky's Financial Instability Hypothesis. Sometimes the inevitable correction comes suddenly and precipitously. Medallion Financial appears to have grown complacent from decades – almost twenty years as a public entity – lending against a singularly attractive asset class, taxicab medallions. In June 2014, announcing the acquisition of a medallion loan portfolio from a specialty finance company in Chicago, Medallion Financial President Andrew Murstein stated in a press release "In the history of the company there have been virtually no losses on the medallion loans that management has originated." The Company made a similar acquisition of Newark Funding Corp., a Newark, New Jersey taxi medallion loan brokerage company in July. The result is substantial-and-increasing exposure to, and failure to recognize any significant threat from ride sharing, never mind the magnitude of that threat created by the first major *supply* shock in the *history* of medallion markets.

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33 *Chicago issues ride---sharing licenses to Lyft, Sidecar*, Chicago Tribune, John Byrne, November 18, 2014. http://www.chicagotribune.com/news/local/breaking/ct-emanuel-rideshare-licenses-met-1119-20141118-story.html

The Company's current gross revenues break down as follows:

Medallion loans and leases	48%
Commercial loans	23%
Consumer loans	29%

Source: September 30, 2014 Medallion Financial Corp. 10Q.

The stability of medallion markets remains critical to Medallion Financial's financial health. We believe its entire tangible book value is at risk of being wiped out by write-offs of potentially 100% of its managed medallion loan portfolio. In addition, with borrowing costs on acquired deposits averaging less than 2.5%, calculated from Medallion Bank FDIC Call Report filing (overall borrowing costs for Medallion Financial reported as 2.68% in Q3), interest rate risk and compression of interest rate spreads is also a meaningful risk to Medallion Financial's earnings and cash flows.

Capital Allocation Policy Difficult to Comprehend

Capital allocation has been inexplicable in recent years for Medallion Financial. In the last three years, the Company's cash operating earnings have not been sufficient to cover the dividends paid. Of the $54 million of dividends paid since the end of 2011, 40% represented return ***of*** capital (see discussion below) or payout in excess of earnings in that time. During this same period the Company was also buying back shares *and* issued $85 million in two secondary offerings, an entirely inefficient, circular shuffling of investor capital. The aggregate cost of the two secondary offerings was $5.3 million. The dividend should be reduced to a sustainable level based on cash earnings, in our opinion, and raised in line with earnings growth going forward. We do not believe the headline 8.5%-9% dividend yield or the share repurchases are understood by many investors, in this sense, and with fundamentals breaking down in its core business, we do not see how the Company can possibly grow its cash earnings to levels actually covering these distributions. In short, the current dividend and share repurchases are not sustainable, in our opinion. Issuing more equity to cover cash shortfalls will be a lot harder as the deterioration of medallion markets continues to play out.

Consumer Loan Market – Chasing Yield with Credit Risk Mounting

If medallions become worthless in NYC, Chicago and Boston with unlimited supply of for-hire vehicles becoming the new normal, we believe what happens in the rest of Medallion Financial's portfolio will not alter the inevitable outcome – the Company will suffer massive write-offs that will wipe out shareholders' equity. But an examination of the diversification strategy suggests rising risk as well. Medallion Financial has set a strategic course to diversify its loan portfolio by allocating more capital to consumer loans (consumer loan balance is up 35% in twelve months compared to a 6.5% increase in medallion loans) and commercial loans.

Interest rates earned in consumer lending at Medallion Bank average near 3X and 4X those of medallion financing for Medallion Financial and Medallion Bank, respectively. Medallion Bank averaged 14.9% interest on its $462 million "Consumer loans" portfolio in Q3 2014, and has increased the size of that portfolio from $341 million a year ago, in contrast to larger banks reporting flat to lower consumer loan balances in that period. Clearly, Medallion Bank is finding high-margin opportunities to lend money to consumers, and the question is at what risk? Medallion Bank's consumer loan portfolio (and smaller commercial loan portfolio) is far riskier than medallion financing has been *historically*. The growth of the consumer loan portfolio has brought greater credit risk to the enterprise, and the benefit of reduced *concentration* risk is small in comparison.

Exhibit 6 Medallion Financial Corporation Loan Portfolio at September 30, 2014

(Dollars in thousands)	September 30, 2014 Interest Rate (1)	Investment Balances	Percentage of Portfolio	September 30, 2013 Interest Rate (1)	Investment Balances	Percentage of Portfolio
Medallion loans						
New York	3.61 %	$ 204,662	16%	3.54 %	$ 198,739	18%
Chicago	4.97	39,538	3%	4.95	41,244	4 %
Boston	4.69	27,435	2%	5.12	22,532	2%
Newark	5.36	24,727	2%	5.83	20,211	2 %
Cambridge	4.83	5,981	0%	5.28	5,355	0%
Other	6.58	837	0%	6.35	3,291	0%
Total medallion loans	4.06	303,180	24%	4.08	291,372	26%
Commercial loans						
Secured mezzanine	12.25 %	$ 54,265	4%	12.48 %	$ 51,572	5%
Asset based	5.66	3,071	0%	5.39	7,073	1%
Other secured commercial	9.92	15,041	1%	9.29	11,923	1%
Net commercial loans		$ 64,256			$ 63,061	
Investment in Medallion Bank and other controlled subsidiaries, net	10.57 %	$ 127,708		12.21 %	$ 102,377	
Equity investments	0.61 %	$ 5,836		0.89 %	$ 5,653	
Net equity investments		$ 7,828			$ 6,386	
Net investments		$ 503,294			$ 463,369	
Medallion Bank investments (unconsolidated)						
Consumer loans	14.94 %	$ 462,005	36%	15.92 %	$ 341,273	31%
Medallion loans	3.82	385,617	30%	3.81	346,639	31%
Commercial loans	4.63	43,312	3%	4.94	66,242	6%
Total Loans	8.40	$ 1,266,491	100%	8.12	$ 1,116,094	100%

1 Represents the weighted average interest or dividend rate of the respective portfolio as of the date indicated.

Source: September 2014 Medallion Financial Corp. 10Q.

Household and Corporate Deleveraging has been Shrinking Demand for Credit

The private sector and consumers are deleveraging and real household income is in a third year of near-zero growth. Consumer loans are also far more correlated with broader capital market trends than medallion loans. Not only is median household income not growing in real terms (notwithstanding the effect of plunging gasoline prices on CPI in the last several months), it hovers near 1996 levels. US household debt has declined without interruption since the financial crisis from 98% of GDP in the first quarter of 2009 to 81% at the end of April 2014. Non-financial corporate business debt has also been declining from a cycle-high of 45% of market value in 2009 to below 38% at the end of April. A smaller consumer-borrowing universe is producing greater competition among banks seeking to grow earnings. As a result, according to the Office of the Comptroller of the Currency in its 2014 spring report, "underwriting standards appear to be easing, volume of new-issue covenant-lite leveraged loans are surging."[34] Remembering Minsky, market stability begets riskier market behavior and the attendant rise in instability is often ignored or not perceived until the instability reaches a critical state and markets are disrupted.

34 *Semiannual Risk Perspective,* Spring 2014, Office of the Comptroller of the Currency.

How Risky are Consumer Loans Yielding 15%?

Consumer loans generally have lower and less volatile default rates historically when compared to credit cards, mortgages and commercial loans,[35] but Medallion Bank is earning interest typical of hard loans, a segment to which borrowers resort when conventional lending channels are not available – by definition, a riskier lending universe. Moreover, just as reduced lending standards and artificial inflation of housing values ended the multi-decade streak of rising property values with a crash, the unprecedented monetary policy of the Federal Reserve is having a perverse effect on risk assets, including consumer loans. Hence, historical consumer delinquency rates may not hold up in the uncharted territory created by unprecedented easy money. The FICO score breakdown of the Medallion Bank lending universe is not published, but we believe multiple factors point to the likelihood that Medallion Bank's rapidly-expanding consumer loan portfolio bears significant credit risk (and rising at least over the last twelve months). These factors include:

Average aggregate interest rates near 15% in Q3 when the US 10-year bond is yielding 2.5% (less than half its historical average), suggests a lower credit-score borrowing universe.

The 35% increase in consumer loans may be fueled by declining lending standards at Medallion Bank:

- Bank of America, Wells Fargo and Citi Group (industry proxies) all have greater loan portfolio diversification (average roughly 15% exposure to comparable consumer loans), earn significantly lower interest rates on those loans (even credit card interest is nearer 9-10%) and reported lower consumer loan balances in the last twelve months.
- A year-over-year decline in average rates in the consumer loan portfolio of 1% when the US 10-year is off only 0.25%, a potential indication of aggressive lending – offering lower rates without a commensurately lower borrower risk profile.
- US households continue to *deleverage*, as evidenced by declining debt as a percentage of GDP, suggesting the overall consumer lending opportunity set has been steadily declining.

The OCC warnings suggest many banks have resumed riskier lending practices in order to grow profits in the short term, and we believe Medallion Financial, through Medallion Bank, is participating in this trend. The downside catalyst is not as readily evident as that in the medallion loan space, but consumer loans are another area increasing Medallion Financial's risk profile and yet the Company continues to pursue it aggressively.

Two Secondary Offerings Since 2012

Medallion Financial executed a 2.9 million shares secondary offering in the fourth quarter of 2013 priced at $16.40/share (peak daily close was $17.74/share, at the end of November 2013) as well as a 3.5 million shares secondary in May 2012 at $10.72. The Company's press releases for the respective closings suggest the cost to execute these offerings, commissions, underwriting discounts and offering expenses, was $2.9 million and $2.4 million, respectively.

Dividend is not Being Covered by Cash Earnings – 40% of Payout Since 2012 a Return of Capital

As mentioned, Medallion Financial is bound to pay out 90% of its pretax income as a regulated investment company and remain exempt from US federal income tax on any gains, investment company taxable income or net operating income. The Company is paying a "dividend" of $0.96/share, yielding between 8.5% and 9% on the recent share price trading range ($10 - $10.75/share) that warrants greater scrutiny by investors. We do not believe the difference between return *of* capital and return *on* capital is well understood based on market commentary on Medallion Financial's dividend yield. The latter is sustainable and part of ones total return on investment, the former is not, making the headline "dividend yield" of Medallion Financial misleading in this sense. Moreover, the Company has

[35] Federal Reserve Bank, http://www.federalreserve.gov/releases/chargeoff/delallsa.htm

doubled down on this financially unsustainable trend through its share repurchase program. High dividends and share repurchases are justifiably welcome by investors generally as bullish signs of Board and management confidence in their business and share price. But when this spending has to be financed through secondary offerings, $50 million only twelve months ago and another $35 million in May 2012, borrowing and asset sales, they amount to slow liquidation of the Company's assets, and the signal raises serious questions about prudent allocation of scarce capital by the Board of Directors and senior management.

In 2014 (through September), 2013 and 2012, respectively, 23%, 46% and 53% of the dividend was actually a return of capital – liquidating or borrowing against assets, some of which were recently gathered through the second secondary offering since 2012, and distributing the proceeds to shareholders, thereby reducing each investor's cost basis in the stock. A cumulative 40% of the $54 million in total dividends paid out since and including 2012 was return of capital. These amounts are clearly labeled "Return of Capital" on the "Consolidated Statements of Changes in Net Assets." That means of the dividends paid out since 2012, $22 million has been nothing more than drawing down assets and sending the proceeds to investors, from whom $85 million was sought and received during the same period.

The Company's cash earnings have not covered the dividend in any of the last four years. A glance at the book value of Medallion Financial since 2011, up over 60%, gives a pretty favorable first impression of value creation, but when one understands that almost 120% of that increase was directly attributable to secondary offerings ($85 million) and unrealized, non---cash appreciation in passive investments ($37 million), the unsustainable nature of payout policy becomes obvious (see Exhibit 7). Medallion Financial's core operation is earning a spread between the money it borrows and the money it lends. Passive, non---cash, unrealized gains are not core, operating gains even though they may one day be realized. A prudent payout policy would be to undertake special dividends if and when such gains are realized, rather than paying out cash not generated by operations for four straight years. But for selling more shares to the public, borrowing or asset sales, Medallion Financial would not have been able to pay this dividend or repurchase shares dating back at least to 2011.

Exhibit 7 Medallion Financial Distributing Cash from Borrowings, Asset Sales and Secondary Offerings 2011---2014

Shareholders' Equity - December 31, 2011	**$171,504**	
Attribution of Change in Equity:		
Investment Income from Operations 2012-2014	$33,434	
Cash Distributions:		
Distribution of Investment Income from Operations	-$32,060	*Sustainable.*
Additional Distribution (Return of Capital)	-$21,715	***Reduced book value - unsustainable.***
Investment Income from Ops less Cash Distributions	-$20,341	***Net reduction of book value - unsustainable.***
Non-operating, unrealized, non-cash increases/(decreases) in investments:		
Medallion Bank	$22,071	*Non-cash.*
Other	$15,352	*Non-cash.*
Equity issued on secondary market	$85,080	*Sustainable???*
Other (net)	$4,365	
Net Change 2011 to September 30, 2014	**$106,527**	
% from equity issuance + Non-operating, unrealized, non-cash investment increases	***119%***	
Shareholders' Equity - September 30, 2014	**$278,031**	

Source: SEC filings (September 2014 10Q and annual 10Ks).

Companies that pay out more than their cash earnings starve the business of growth capital, requiring the periodic issuance of shares on the secondary market to pay the dividend shortfall, share repurchases and, with what is left, fund growth. That has been the Medallion Financial pattern.

Weaker operating results, obviously, will create incrementally greater pressure to cut the dividend. A high dividend yield, especially in a yield starved capital markets environment, creates support for share prices, particularly among retail investors, who may not realize a high yield is the market's signal that the dividend is not sustainable.

Share Repurchases

Share repurchase, and retirement, is another mechanism for returning cash to shareholders. Medallion Financial has had an active share repurchase program in place since 2003, and in July 2014, the Board of Directors increased the authorization to $20 million shares ($16.8 million remaining as of December 8, 2014). Share repurchases are commonly used to ensure stock is available for employee stock option plans, as well as a tool to support the stock price and signal the market that management is bullish on a company's operating and share price prospects. Medallion Financial management has been publicly vocal about its share repurchase activity in recent weeks, issuing 8Ks with regularity, presumably to alert investors of its attempts to "support" the share price. It is hard to argue with the optics of a company treating its own stock as the best investment opportunity for scarce capital. But a company into a fourth year of having to finance a dividend exceeding its cash earnings, and less than twelve months removed from issuing $50 million worth of new shares, a share repurchase, like the dividend itself, is not sustainable and definitely not the most prudent allocation of scarce capital, especially when shareholders' equity is threatened by competitive changes in the core business – the latter conclusion management obviously disputes.

Tangible Book Value as Source of Share Price Support

Medallion Financial shares are trading near tangible book value of $10.85, including $1.94/share in the book value of 159 Chicago medallions purchased and held on the balance sheet that are particularly vulnerable to near-term impairment. Share price will draw support from this basic valuation parameter until investors start to worry about write-downs or earnings vulnerability. Our analysis of the medallion market suggests, barring a reversal of the status quo trends – continued presence of unconstrained new taxicab-equivalent supply in formerly supply-constrained medallion markets and effectively no state, local or legal action to push the existing new supply back out of markets or, eventually, keep it out of markets still protected (e.g., "street hails") – demand for medallions will disappear and prices will go to approximately zero. Medallion Financial's total tangible shareholder's equity is $273 million, and it has $480 million of direct medallion price exposure. Medallion Bank (carried at $127 million) has $147 million of bank equity and medallion loans of $386 million. What happens to loans made by Medallion Financial and Medallion Bank at 75% LTV for new loans (and some at 90%), or even "40% LTV" on a weighted average basis for just the former (Medallion Bank LTV is not published, and we suspect higher than 40%) when the "V" drops to something between a small fraction of values observed in recent years and zero? They get written down (less fair value of any additional collateral or personal guarantees attached to individual loans) and Medallion Financial does not have the capital to withstand such an outcome.

Loan to Value (LTV) in Taxicab Medallions

As indicated, Medallion Financial is exposed to $689 million in medallion-secured loans, $303 million of which are included on the balance sheet, and the balance are held by Medallion Bank, off-balance-sheet. Medallion Financial disclosed the LTV on its medallion loan portfolio to be 40% at the end of September in a range from 0 – 96%. LTV for Medallion Bank is not disclosed. Our spot check of 2014 medallion loans made by Medallion Financial identified two Boston medallion loans originated in 2014 at ~90% LTV, and three other Boston medallion loans near 75% (the industry convention). That is 5 out of the 14 loans made in Boston during the first nine months of 2014 now below or nearly-below par based on street asking prices on medallions. One of three medallion loans in Cambridge,

Massachusetts was made for $431,000 or 80% loan to purchase price of $540,000.[36] Street asking price in Cambridge is as low as $400,000 currently[37]. If spot checks indicate one third of original loans made in Boston and Cambridge occurred at 75% to 90% LTV, it stands to reason that Medallion Financial offered those terms more broadly across the original loan portfolio in 2013 and 2014. It is critical to understand that a portfolio LTV of 40% is a weighted average. It certainly suggests that medallion values have to drop a lot further from current levels before *most* of Medallion Financial's medallion loan par values are at risk of write-downs, but significant collateral value cushion for one loan does not protect another loan from being written down. Each loan stands alone and those below par have to be written down. We expect to see a rise in LTV, rising nonaccruals (for underperforming loans) and write-downs beginning within the next two quarters.

In an interview published in February 2014, Medallion CEO Andrew Murstein stated, "The taxi business is as strong as it's ever been, despite Uber, because people in major cities will still go and stick their hands in the air. Uber is nothing more than a terrific black car company."[38] By June, the Company added ride sharing to its 10Q risk disclosures. But then in December, Murstein was at a loss to explain the market's concern over ride sharing relative to his Company, "We can't understand why the stock is trading down."[39] This is a striking example of hubris, and helps explain why the company recently made medallion loans at 90% LTV and is buying medallion loan portfolios from other lenders, despite three years of market intelligence demonstrating historically-impregnable entry barriers in the ridesharing market have been materially breached by the smartphone-based companies. Uber has claimed double-digit market share, likely in excess of 20%, in only three years since being launched in Medallion Financial's biggest medallion-lending market (NYC). The CEO dismissing Uber as competitively irrelevant is quite remarkable when, in fact, ride sharing represents an existential threat to an asset class representing collateral on 53% of Medallion Financial's loan portfolio.

Medallion Financial turned over 70% of its publically disclosed loan portfolio since the beginning of 2013. Certainly much of that activity was in refinancing, but total medallion loans increased modestly in 2013 and are up 6.5% through September (up 9% through June before pulling back modestly). As indicated, the Company does not disclose the LTV for Medallion Bank. As medallion values consistently rose 12% - 15% per year in NYC between 2007 and 2013, for instance, the overall portfolio LTV declined significantly. But loans originated in 2012 and 2013, near peak values, are far more vulnerable to the declines now being observed.

Medallion Financial will soon have to incorporate lower medallion values into its LTV calculation, perhaps as soon as its Q4 2014 filings. As that ratio rises, the perception of risk associated with the stock will rise with it. It's a long way from 40% LTV to 100%, but remember these are weighted averages. Every individual loan value below par will have to be written down. As indicated, Medallion Bank may have even less cushion, which means the write-downs there could be larger sooner. But the end game is the biggest concern – a potential 100% value surrender for medallions in Chicago, New York and Boston, even accounting for fair value of any additional collateral or personal guarantees attached to individual loans, means Medallion Financial's book value turns negative. The comfort provided by a headline LTV of "40%" in this loan category does is false. The risk here is existential.

Borrowing Costs and Margin Compression when Rates Rise

According to Medallion Financial's 10Q Notes, "Medallion Bank began raising brokered bank certificates of deposit during 2004, which were at our lowest borrowing costs." Low costs indeed. Medallion Bank's average interest expense over the last six quarters has been 2.4%, including the amortized portion of capitalized brokers' fees. Brokers

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[36] Baton Moise Cab Inc., OKE Auguste Cab, Inc., God-Will, Inc., Johnson Holding, Inc., Loren Cab, Inc. and Eureka Cab, Inc., respectively, source Carriage News, UCC website and Medallion Financial SEC filings.

[37] Industry sources.

[38] *If Uber Is Killing Taxis, What Explains the Million-Dollar Medallions?,* Bloomberg Businessweek, Technology, Joshua Brustein and Caroline Winter, February 28, 2014.

[39] *As Uber rises, yellow-taxi-medallion stock plunges*, Crain's New York Business, Andrew J. Hawkins, December 1, 2014.

fees average 0.2% on deposits raised and are amortized over the life of the respective pools of deposits raised. Another risk cited in the OCC spring 2014 report is that of extrapolating historically low borrowing costs during a bank's strategic planning and portfolio construction process. As noted by the OCC, some banks have reached for yield to boost interest income with decreasing regard for interest rate or credit risk. Banks that extend asset maturities to pick up yield, especially if relying on the stability of non-maturity deposit funding in a rising rate environment, could face significant earnings pressure and potential capital erosion depending on the severity and timing of interest rate moves.

The average maturity of Medallion Bank's loan portfolios in medallion and consumer loans is unknown, but Medallion Financial has reduced the average length to maturity in its medallion loan portfolio. If the Bank has done the same, the interest rate risk cited by the OCC would be less of a concern. That is a significant "if" however, given the dramatic rise in consumer loans over the last twelve months despite the challenging supply demand trends in that category. We would not be surprised to see longer average maturities for both medallion and consumer loans at Medallion Bank versus Medallion Financial as part of the cost of winning business in a shrinking credit environment. In any event, the spread Medallion Bank and Medallion Financial have enjoyed in recent years across the respective loan portfolios is vulnerable to significant decline as interest rates rise, even if maturities have been shortened.

Conclusion

We do not whimsically suggest public companies with long histories of financial stability and outstanding shareholder returns are at risk of financial collapse. Nor do we entirely fault Medallion Financial management for failing to appreciate the seriousness of the threat to their business after decades of "muscle memory" lending against an asset class without rival. But the medallion market is undergoing legitimately catastrophic change with the introduction of unconstrained supply brought by ride sharing. It has become clear that the one factor that might have at least mitigated the impact, legislative or legal action blocking the upstarts from flooding markets with new supply, has, and in our estimation, will continue to opt for acceptance and regulation rather than *attempt* to eliminate. Putting the proverbial genie back in the bottle is unlikely. One does not have to speculate as to the impact of eliminating enforced caps on taxicab supply, the precedents exist in Minneapolis, Milwaukee and San Diego. Values of medallions or license/permit equivalents did not drop 10%, 30% or even 70% ... they went to zero (in the case of San Diego, to the $3,000 cost of the permit). Public comments already presented by Medallion Financial President Andrew Murstein bookending calendar 2014, sandwiched around a perfunctory risk citation buried in SEC filings beginning in Q2 2014, suggest Medallion Financial remains in denial about the seriousness of the threat to earnings, dividends and shareholders' equity:

> *"Uber is nothing more than a terrific black---car company." February 28, 2014*

> *"In the event Street Hail Livery licenses and increased competition from ridesharing and car service apps materially reduce the market for taxicab services, income from operating medallions and the value of medallions serving as collateral for our loans could decrease by a material amount." 10Q beginning June 30, 2014*

> *"We can't understand why the stock is trading down." December 1, 2014*

The market dynamics for medallions, and less importantly, consumer loans, represent a multi-front problem for Medallion Financial:

> Little to no growth for medallion loan origination in the near-term, representing 53% of the total loan portfolio, soon followed by initial write downs of medallions and medallion loans and a dividend cut. Rising risk for a consumer loan portfolio representing 36% of the total managed loan portfolio and up 35% in last twelve months.
> Covenant and capital requirement violation risk at the parent and bank subsidiary levels, respectively.

Acceleration in number of underperforming loans followed by defaults and full write-offs as asset class is wiped out altogether (unless cities and states reverse policy course).

Potential for entire Medallion Financial book value to decline into significant deficit.

We believe senior management will continue to artificially "support" the stock through its authorized share repurchase program (the Company represented 39% and 25% of the share volume on December 16 and December 8, respectively)[40]. Seeking to reassure investors and project confidence is understandable, but Medallion Financial needs to reassure investors by way of prudent strategic action. To the contrary, management has and continues to misallocate scarce capital in the face of market-based existential threats, evidenced by:

The inexplicable re-shuffling of shareholders' capital:

- *40% of dividend payouts* were not covered by earnings and constituted return ***of*** capital since the end of 2011;
- Share repurchases transferred even more assets to shareholders during same period yet
- Two secondary offerings totaling $85 million and costing $5.3 million were required in same period to absorb the cash shortfalls and gather growth capital from capital remaining.

The acquisition of medallion loan portfolios rather than disposition of them and general ambivalence as the core loan asset class is falling apart.

Chasing hard-loan-equivalent consumer loan business when warning signals are flashing about risk therein.

There is little the Company can do to stave off the inevitable, at this point, other than a strategic about face and sell-off of medallion loans – if it can find buyers. The only question remaining is how long will it take for the full reckoning to run its course. In the end, we expect acceptance and regulation, including whatever ends up left of the hail segment, rather than a practically unenforceable attempt to eradicate smartphone-based ride sharing commerce from the streets, against the will of the population and long-suffering drivers. Allowing markets to determine when new supply is necessary in lieu of hard caps will render medallions superfluous and valueless.

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