EXECUTIVE SUMMARY

On February 10th 2017 the New York State Department of Financial Services took possession of Melrose Credit Union, located in Briarwood, New York, and appointed the National Credit Union Administration as conservator. Melrose Credit Union is a federally insured, state-chartered credit union with 23,462 members and assets of $1.78 billion, according to the credit union’s most recent Call Report.

These developments raise concerns for other credit unions with taxi medallion loans or participation interests in such loans. The business model of traditional taxis is being severely disrupted by network transportation companies such as Uber and Lyft. It also raises questions concerning potential system-wide losses and the health of the share insurance fund.

Direct lending for taxicab medallions by U.S. credit unions is exceptionally rare. Among the nation’s nearly 6,000 credit unions we are aware of only three mono-line taxicab medallion lenders. In addition, based on conversations with credit union league presidents we are aware of only four other credit unions with more diversified portfolios but that have either a significant portion of their loans dedicated to medallion lending and/or have generated a significant number of medallion loans that have been sold/participated out to other credit unions.

Therefore, any impact on the credit union system arising from losses at medallion loan credit unions will be contained. CUNA’s recently updated analysis of taxi medallion lending concludes that although taxi medallion lending could result in future insurance fund losses, the magnitude of those losses – even in an extreme stress scenario – would have a negligible effect on the health of the NCUSIF.

Specifically, in a base case scenario reflecting an immediate, 33% write-down in all taxi medallion portfolios the NCUSIF equity ratio would most likely decline only modestly, remaining near the middle of its normal operating range. Any losses – even in a worst-case scenario - are extremely unlikely to approach anything near the levels that would require anything more than a moderate share insurance premium.

Although our analysis suggests a worst-case scenario would reduce the NCUSIF equity ratio to the lower end of the NCUSIF’s normal operating level, it is important to note that in the absence of any stress from taxi medallion lending CUNA believes that the Insurance Fund will likely be paying a six- to nine-basis-point dividend early in 2018 due to the merger of the Share Insurance and Corporate Stabilization Funds. Insurance fund costs due to medallion lending would therefore most likely reduce the size of a future dividend rather than causing a premium, even in the worst-case scenario.

BACKGROUND/DISCUSSION

We examine three distinct groups of credit unions with exposure to taxicab medallion loans: mono-line medallion lenders (with loan portfolios consisting almost entirely of medallion loans); medallion lenders with more diversified loan portfolios; and credit unions that may have bought participations in medallion loans from credit unions in the first two groups.

Throughout the discussion below we refer to the first two groups (mono-line lenders and those with more diversified portfolios) as “Primary/Direct TM lenders.” Each of these Primary/Direct TM lenders reports having sold medallion participations to other credit unions and we refer to the credit unions in this third group of likely purchasers as “Secondary/Indirect TM lenders.”
Taxi medallion (TM) loan holdings are not specifically identified on the call report. They are included in the Commercial and Industrial (C&I) loan subcategory under business lending. Therefore, our analysis supplements a list of self-reported medallion lenders with those from press reports and from an informal survey of state leagues, and credit unions with purchased participations in Commercial and Industrial loans. We identify seven Primary/Direct TM lenders – three mono-line lenders (including recently-conserved Melrose) and four with more diverse loan portfolios.

We assume that 100% of each of these institution’s Commercial and Industrial (C&I) loans are medallion loans, i.e., we assume the maximum possible exposure to TM loans. The three mono-line taxi medallion lenders we evaluated have $2.6 billion in assets and an estimated total $1.9 billion in taxi medallion loans.

The four other credit unions with a strong focus on medallion lending, but more diversified portfolios, report a total of $7.6 billion in assets and an assumed total of $281 million in taxi medallion loans. The aggregate level of capitalization at these Primary/Direct TM credit unions as of September 2016 was well above the regulatory minimum – reflected in a group average capital ratio of 9.8%.

Potential Secondary/Indirect TM lenders are those that report purchases of C&I business loans or C&I participation interests to nonmembers. Overall, we identify 256 such credit unions. These credit unions report $145 billion in assets and a maximum of $1.1 billion in what might be taxi medallion loans or participation interests to nonmembers.

ESTIMATING POTENTIAL MEDALLION LOAN LOSSES

Before the advent of network transportation companies, on-demand taxi service in New York City, especially in central Manhattan, was essentially only available from cabs holding a medallion, and the supply of medallions was strictly limited. The influx of services such as Uber and Lyft has dramatically increased the supply of transportation services, substantially disrupting the taxi market. There are currently about 13,600 medallions outstanding, up by only 2,000 from the number that prevailed for most of the second half of the last century. Because of this limited supply, the price of a medallion soared from less than $200,000 in 1996 to a reported range in 2013 of $1 million for medallions owned by individual operators to $1.3 million for those owned by corporations that lease medallions to others. Since then, with the advent of the network transportation companies, the value of a medallion has fallen by 54% to 60%, to a range of $400,000 to $600,000. A few other cities operate with taxi medallion systems, and although their medallion prices never rose to the levels seen in New York, they have also declined substantially in the past few years.

If losses on TM loans were driven solely by the plunging value of the collateral (medallions), we might expect very high loss rates, especially on those loans originated near the peak of prices. Fortunately, many of the loans were likely granted when medallion values were well below the peak, which followed a sharp run up in values in the few years before 2013. Just three years before the 2013 peak, New York medallion prices ranged from $600,00 to $800,000, and five years before that (in 2005) values were around $300,000. Evidence that most of the loans were not issued at peak prices is revealed by the less than $400,000 average remaining balance on TM loans at the New York TM lending credit unions.

Further complicating the picture is that the decline in medallion taxi revenue in the past few years, although significant, has been much less severe than the decline in medallion values. Average daily revenue of $5.2 million for all medallion taxis in 2016 was down by 17.9% from its peak of $6.4 million in 2013 compared to declines in medallion
values of over 50%\(^1\). There are likely a few reasons behind this discrepancy. Medallion prices had reached speculative bubble levels in 2013 based on the strict limit on their supply. The arrival of the network transportation companies pierced that bubble. However, an app hailed ride is not a perfect substitute for a traditionally hailed taxi. For short rides in congested Manhattan, hailing a yellow cab can be more convenient than picking out which of a number of black cars is responding to your app. Also, the previous supply of taxis was so artificially limited by the medallion system, that even with the substantial influx of new alternatives there is still a viable amount of business for traditional yellow cabs.

This is not to say that the outlook for TM loans is not dramatically worse now than it was in 2010. But so long as a medallion owner is making sufficient revenue on his or her cab(s) to cover all expenses—including the loan payment—and make a living, there is an incentive to keep current on the loan to maintain the source of income. Of course, the greater the size of the loan, the weaker this incentive. And should medallion values and taxi revenues continue to decline unabated, the TM loan performance will weaken further.

Last year, Morgan Stanley estimated cumulative taxi medallion loan loss rates. The firm’s “base case” scenario assumed loss rate was 25% with a “mid-range” estimate of 38% and a “worst-case” estimate of 50%. Based on our analysis, we err on the conservative side and evaluate three somewhat more severe cases: a 33% loss “base case” scenario; a 50% “pessimistic” scenario; and a 66% “worst case” scenario. We believe the 33% loss scenario is the most likely of the three but note it is entirely possible that even this loss scenario overstates the extent of any eventual disruption.

There are a few reasons 33% losses might overstate the extent of eventual actual losses.

First, most of these credit unions already have suffered significant losses and reflect substantial charge-offs on these loans. Melrose, for example, charged off 10\% of its loans in the year ending December 2016. These charge-offs are likely to have occurred on higher balance, more recently originated loans.

Second, our analysis makes no attempt to incorporate loss mitigation strategies/activities that NCUA typically employs in similar situations when the insurance fund might be exposed to stress. The Agency rarely liquidates troubled institutions, but rather seeks to maximize value via whole/partial sales to financially strong credit unions. For example, unique fields of membership that give acquiring credit unions broader potential membership can carry significant market value even when acquisition requires loss sharing arrangements.

**ESTIMATING NCUSIF EXPOSURE TO TM LOAN LOSSES**

We analyzed potential losses to the share insurance fund arising both from Primary/Direct TM lending credit unions and Secondary/Indirect TM credit unions. For each credit union, we applied the assumed loss rates from our three scenarios to that credit union’s known or assumed maximum amount of TM loans and compared the result to the credit union’s total capital and allowance for loan and lease losses (ALLL). For those cases where the estimated loss exceeded the credit union’s capital, we count the deficit as a loss to NCUSIF. This assumes that in those cases, the credit union would be acquired by another credit union at, on average, neither a premium nor a discount.

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Our analysis suggests that Primary/Direct TM lenders might expose the insurance fund to losses ranging from $207 million in the base-case scenario to $729 million in losses in a catastrophic, worst-case scenario. In each of the three scenarios we examined for this group, NCUSIF losses appear to be confined to mono-line TM lenders. Among the four TM lending credit unions with more diversified portfolios, each appears to have sufficient capital and ALLL to remain solvent in the face of the large assumed losses in all scenarios. Even in the worst-case scenario, with 66% losses, none of the diversified lenders approaches insolvency.

We also considered Secondary/Indirect TM credit unions, i.e., those that appear to have holdings of medallion loans through loan purchases or purchased participation. As mentioned earlier, all the Primary/Direct TM lenders we analyzed appear to have sold medallion loans or medallion participations. Primary/Direct TM lenders report having sold participations totaling $1.27 billion to other entities. It appears that most of these loans and participation interests were sold to other credit unions as opposed to banks or other lenders. Indeed, we identify 256 credit union holders of purchased C&I business loans or participations to nonmembers. These Secondary/Indirect TM lenders report having sold $145 billion in total assets and a total of $1.05 billion in purchased C&I business loans or participations to nonmembers. This represents roughly 83% of the total loans and participations sold by Primary/Direct TM lenders.

We have taken an exceedingly conservative approach to evaluating these credit unions: For each of the 256 credit unions with purchased participations and/or nonmember C&I business loans we assume that 100% of the loans and participations purchased are TM participations. This is likely an overestimate of overall exposure since not all C&I loans are apt to be taxi medallion loans. Nevertheless, we use the same 33% “base case,” 50% “pessimistic case” and 66% “worst-case” loss scenarios described above to 100% of the reported purchased C&I loan participations throughout the system.

Doing so reveals that, in a base-case scenario, none of the potential 256 Secondary/Indirect TM lenders would have insufficient capital and ALLL to remain solvent in the face of the large assumed losses. Only one credit union would be rendered

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2 Only one of the seven Primary/Direct lenders reports any non-mortgage whole loan sales at any point over the past three years. This credit union’s sales over the past three years total $36 million with an average loan size of approximately $49,000. Therefore, virtually all of the transactions involved participations.
insolvent in both the pessimistic and worst-case scenarios. This single institution appears to expose the fund to $749,000 in losses in the pessimistic scenario and to $1.88 million in losses in the worst-case scenario. No other Secondary/Indirect TM lender suffers losses that would overwhelm capital and ALLL in any of the scenarios we examined.

These results are summarized in Figure II, which combines the results for the Primary/Direct and the Secondary/Indirect TM lenders in each of the three scenarios we examined.

As shown in the table we estimate that the NCUSIF would likely suffer losses of $207 million in the base case, $456 million in the pessimistic scenario and $731 million in the worst-case scenario reflecting a 66% decline in portfolio values.

The NCUSIF equity ratio ended 2016 at 1.27% of insured shares. That ratio would decline by an estimated two basis points but remain in the middle of its normal operating range under the 33% loss rate assumed in the base case. In the pessimistic scenario, the equity ratio would decline by four basis points (finishing at 1.22%) after a 50% decline in portfolio values. And even in the worst-case scenario, reflecting portfolio declines of 66%, the NCUSIF would remain in its normal operating range – though it would likely decline seven basis points which would put it at 1.20% - the bottom of the range.

Of course, several of other credit unions – not included in the totals above, would likely experience significant declines in capital buffers and some could become undercapitalized. For a few the consequences could be serious. However, since these would still have positive net capital, we assume they could be resolved without cost to the Share Insurance Fund.

It is interesting to note that this analysis suggests a base-case stress scenario would produce a two-basis point decline in the NCUSIF equity ratio. Again, CUNA has pointed out in several recently-published white papers that the fund is likely to be paying a six- to nine-basis-point dividend in the near future.

CONCLUSION

The disruptive effect that network transportation companies such as Uber and Lyft have had and will have on the medallion taxi business model, and therefore on lenders to that industry, is difficult to overestimate. The impact on credit unions with large or near total exposure to taxi medallion loans will be severe. Other credit unions that have purchased taxi medallion loan participations will suffer losses. However, the impact on the National Credit Union Share Insurance Fund will be modest in the most likely case, and manageable in even the most severe case.

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Last update as of March 29, 2017