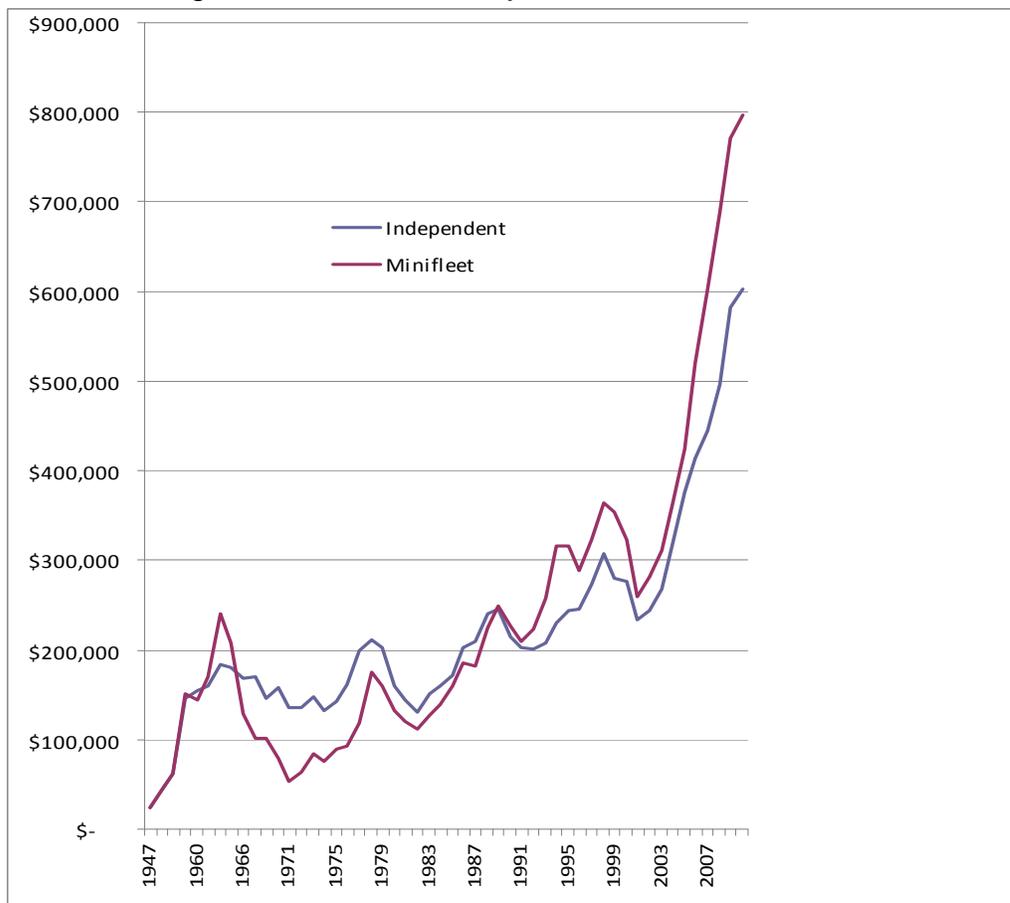


An Explanation of Medallion Prices Adjusted for Inflation

Annual Average Medallion Price, Adjusted for Inflation



What Can Explain the Increase in Medallion Prices Over the Past Ten Years?

Some factors include:

- **Access to financing** – Lenders continue to offer prospective owners access to funds to underwrite the price of medallions. Some organizations (For example: Medallion Financial Corp¹. and Melrose Credit Union) believe medallions are a riskless investment, as they believe it is easy to repossess a medallion². My investigation revealed it is common practice now for buyers to acquire their medallions with three year balloon

¹ Cabby Capitalism, Wall Street Journal, Nov 6, 2010, <http://online.wsj.com/article/SB10001424052748704353504575596400925752906.html>

²The Secret To Melrose's Great Rates: Taxis by PennySaved, November 11, 2010, www.bankaholic.com/finance/the-secret-to-melroses-great-rates-taxis/

mortgages. This seems to imply they expect the price of the underlying asset to increase.

- **Price of Medallion has Outstripped Underlying Value of Asset** – From an agent, fleet and individual owner perspective, the price of the medallion appears to have outstripped its underlying value.

Agents - Medallions face a lease cap of \$800 per week or \$41,600 per year. Corporate medallions now sell for \$850,000. A 15 year loan with a 4.5% interest rate³ on \$765,000 (90% of the price of the medallion) costs \$70,226 per year to service⁴. The cost of financing is nearly 70% greater than the weekly lease cap. Using a 3 year balloon mortgage with a 4.5% interest rate costs \$46,514⁵ per year, which is still more than the revenue from lease caps.

Fleets - A medallion can bring in \$84,680⁶ by double shifting, which only leaves about \$15,000 for running the taxicab over the year. TLC's analysis indicates it costs in the range of \$50,000⁷ per year to service a taxi per year by a fleet.

Individual Owner Operators - A driver can generate \$100,000 in fares and tips per year. Independent medallions now sell for \$624,000 and a \$561,600 mortgage (90% of the price of the medallion) with a 4.5% interest rate over 15 years costs \$51,554⁸ annually. It is estimated to cost about \$40,000⁹ annually to operate a taxi by an owner-operator. Even with \$100,000 in fares, this barely pays for the medallion mortgage and operating costs. It is estimated that leasing out the taxi to a 2nd driver would generate about \$24,000/year¹⁰. With the extra income, the owner operator would produce \$33,000/year before taxes.

Alternatively, a three year balloon mortgage of \$561,600 at 4.5% would cost \$34,146 /year. This reduction in mortgage costs would increase income, but would require a balloon payment of \$561,600 after three years.

³ Lowest Rate on Bankrate (www.bankrate.com) mortgage rate search

⁴ Based on a 4.5% interest rate fixed over 15 years from the LOMTO Mortgage Calculator http://lomto.org/index.php?option=com_calc_mortgage&Itemid=93

⁵ www.money-zine.com/Calculators/Mortgage-Calculators/Balloon-Mortgage-Calculator

⁶ Hybrid lease cap (\$116) x days per year (365) x shifts per day (2) = \$84,680

⁷ Income Statement: Fleet - IncomeStmts v10.xls prepared by the TLC

⁸ Based on 4.5% interest rate fixed over 15 years from the LOMTO Mortgage Calculator http://lomto.org/index.php?option=com_calc_mortgage&Itemid=93

⁹ Income Statement: Individual Owner/Operator - IncomeStmts v10.xls prepared by the TLC

¹⁰ Income Statement: Individual Owner/Operator - IncomeStmts v10.xls prepared by the TLC

- **Low Volume of Transactions** – The value of medallions is recognized as the value of the last market based transaction. Based on 2010 values, the total market value of medallions is about \$9.5 billion¹¹. The number of transactions annually has averaged 362 over the past twelve years (1999 – 2010) or about 1.4 transactions per day¹². For comparison, Southwest Airlines has a market capitalization of \$9.5 billion, but their trading volume is 4.98 million per day¹³. As their stock price is \$12.75¹⁴ this means that around \$60 million worth of Southwest Airlines is traded per day, compared with about \$1.2 million worth of medallions. Southwest Airlines shares are traded at a 5000% higher volume than TLC taxi medallions. The illiquid nature of the medallions makes them susceptible to price manipulation. When the volume of trades is high, no single entity can easily manipulate the price.
- **The Friedman Factor** – The fact that Gene Friedman entered the marketplace and acquired many medallions may have an affect on the asset price. In 2006 Gene Friedman's bid won all 54 of the City's wheelchair-accessible medallions up for auction for a price of \$25.8 million or \$477,666.50 each¹⁵. The full extent of his medallion holdings is not easily looked up at the TLC. To my understanding, the medallions are listed under different spellings of his name, and with multiple principals. According to the newspapers, he controls about 700 medallions¹⁶ or over 5% of the medallion fleet. The TLC does not seem to keep good records of how many medallions are controlled by individuals or groups. Records contain multiple spellings of owner's names and Social Security Numbers are occasionally entered incorrectly.
- **Government Support** – New York City government plays a factor in keeping the price high as a 5% transfer fee is retained by the City on every transfer. For this reason, if a seller wants to sell a medallion at below the average of the last month's price, permission first needs to be requested by the Department of Finance. This gives the impression that medallion prices only go in one direction, up. Last months average price becomes the floor price the following month.
- **Implied Scarcity** – One of the often stated factors for medallions' price is their scarcity. It is true that the number of medallions on the road has been basically constant, but this is not true for taxis when including FHV's &

¹¹ Assuming 42% of medallions are selling as individual and 58% are selling as corporate
 $(13,237 \times 0.42 \times \$602,145) + (13,237 \times 0.58 \times \$797,495) = \$9,470,388,040$

¹² http://nyc.gov/html/tlc/html/misc/avg_med_price.shtml

¹³ www.google.com/finance?&gl=us&hl=en&q=NYSE%3ALUV&client=fss

¹⁴ www.nyse.com/about/listed/lcddata.html?ticker=LUV

¹⁵ King of the road, January 24, 2010, New York Post, www.nypost.com/p/news/business/king_of_the_road_6IFc74ViNtiEY7OZABB99L#ixzz180wFviJQ

¹⁶ King of the road, January 24, 2010, New York Post, www.nypost.com/p/news/business/king_of_the_road_6IFc74ViNtiEY7OZABB99L#ixzz180wFviJQ

Black Cars. The FHV / Black Car market adds an additional 35,000 taxi like vehicles into the marketplace. While these are not permitted to perform street hails, they perform an analogous service. In addition, the TLC has created and sold additional medallions on occasion.

- **Agent Price Inflation** – It is possible that Agents themselves are pushing up the price through two factors. The first is the illiquid nature of the medallion allows the agents to talk the price up to prospective buyers. The second is that by offering an ever greater lease fee for the medallions, the agents themselves are increasing the underlying price of the asset. Ironically, the agents are now requesting the TLC to increase the lease caps, as the monthly fee they need to pay medallion holders is too high.
- **Amortization Under the Tax Code** – The IRS tax code states:

A taxpayer shall be entitled to an amortization deduction with respect to any amortizable section 197 intangible. The amount of such deduction shall be determined by amortizing the adjusted basis (for purposes of determining gain) of such intangible ratably over the 15-year period beginning with the month in which such intangible was acquired.¹⁷

This seems to have been in the tax code since 1993 and allows purchasers of medallions to write off the value of their medallion purchase over 15 years.¹⁸ The presence of this section of the tax code encourages people to purchase medallions for the ability to deduct other business profits.

Why Does This Matter to the TLC?

If the price of medallions dropped significantly, it could force recent medallion buyers “underwater”, meaning the value of their outstanding loan is greater than the current selling price for a medallion. In this case, owners may default on their loan, and have the medallion repossessed by the bank. If there were large number of repossessions, it could cause the major financiers to go into default, and put a damper on sales. We do not know the capacity of the mortgage financiers to absorb losses and we do not track financiers’ exposure to medallions. The main impact on the TLC would be a potential reduction in service, as medallions going through repossession may not be driven on the road. Additionally, TLC does not currently have rules for the repossession of medallions.

¹⁷ Sec. 197. Amortization of goodwill and certain other intangibles
www.taxalmanac.org/index.php/Internal_Revenue_Code:Sec._197._Amortization_of_goodwill_and_certain_other_intangibles

¹⁸ IRS Publications, Section 8
www.irs.gov/publications/p535/ch08.html#en_US_publink1000208962

A secondary factor may be calls from the industry to “prop up the price of the medallion” through an increase in the lease caps and fares. While increased lease caps may be needed to bail out agents who signed pricy contracts or medallion owners who bought at the peak of the market, it would come at the expense of passengers and drivers who would be asked to pay for the bail out. In addition, it would simply increase the profit margin of medallion owners who do not hold a mortgage.

Moving forward I foresee three scenarios:

- **Price of Medallions Continues to Increase** – In this scenario the price would become so high, that it may prevent new participants from entering the marketplace. At the current pricing, it is very difficult for drivers to acquire a medallion. Medallions will be owned by the very wealthy and leased to the less wealthy.
- **Price of Medallions Levels Off** – In this scenario the price would reach equilibrium near the current prices. All participants will continue to state their displeasure about the high or low values, but things would remain status quo.
- **Price of Medallions Reduces Significantly** – In this scenario many recent entrants into the marketplace would be forced to default on their loans when the three year balloon mortgages are due. It is possible that if the price drops significantly, deep pocketed medallion holders will buy up all of the medallions sold at the new lower pricing. There is the possibility that the prices would fall considerably if a significant number of medallion holders were forced to divest. This could result in service disruptions as medallions are repossessed by banks or entangled in foreclosure lawsuits.