

**STRATEGIC REPORT FOR  
XM SATELLITE RADIO HOLDINGS INC.**

**G**OTHAM  
GLOBAL.

**JORDAN KUNZ  
KAITLYN CAUGHLIN  
BENJAMIN KRAUS**

**April 18, 2007**

## TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	3
COMPANY BACKGROUND.....	4
COMPETITIVE ANALYSIS.....	6
INTERNAL RIVALRY.....	6
ENTRY.....	7
SUBSTITUTES AND COMPLEMENTS.....	8
SUPPLIER POWER.....	11
BUYER POWER.....	12
SWOT ANALYSIS.....	13
FINANCIAL ISSUES.....	14
STRATEGIC ISSUES AND RECOMMENDATIONS.....	18
OEM YIELD.....	18
MARKETING.....	20
PORTABLE HYBRID MEDIA PLAYERS.....	21
XM-SIRIUS MERGER.....	23

## EXECUTIVE SUMMARY

After decades of technological stagnation in the radio broadcasting market, XM Satellite Radio ushered in an exciting new option for consumers with its launch in late 2001. In the years since, XM has developed into the leading satellite radio provider in the United States with over 7.6 million subscribers and approximately 170 digital channels spanning music, sports, news/talk/comedy, traffic and weather.<sup>1</sup> Primary revenue comes from the \$12.95 a month user fee for receiving the broadcasts and a smaller portion comes from advertisers. XM competes directly in the satellite radio market against Sirius Satellite Radio, with the added competition of the well-established FM and AM radio broadcasters. Further complicating matters are the increasing prevalence of HD radio, MP3 players and other portable media devices including cell phones, and streaming Internet media. The once clearly-defined market segments of the past have become muddled and this has major ramifications for Gotham Global's strategy recommendations and the future success of XM.

On February 19, 2007, XM and Sirius announced an all-stock merger of equals to be completed by the end of the year, ending months of industry speculation. Whether this merger passes regulatory and antitrust approval is still to be seen, but it is Gotham Global's belief that the proposed merger is the best solution for the majority of the issues depressing XM's stock price. Not only will consumers have access to the combined content of XM and Sirius at the same individual service price, but there will be significant revenue boosts and cost savings as well. A larger firm will be more stable and end the bitter battle for subscribers between XM and Sirius. Programming, marketing, and re-negotiated partnership deals are some of the target areas leading to estimated total merger synergy savings in the realm of \$5 billion.

Due to the regulatory uncertainty surrounding the merger, XM must continue to plan as though the merger will fail in order to ensure long-term stability and viability. XM continues to have strong OEM relationships with the automotive

industry and Gotham Global recommends that this must remain the prime focus for the future in the face of declining retail subscriptions. We expect that this back-end growth will payoff in the coming years with the increased market penetration leading to new subscribers beyond the new car market. Building on this, XM should also offer monthly cash drawings to increase the yield of subscribers resulting from OEM installations. In addition, XM should aggressively expand its marketing campaign to address the low consumer awareness of what satellite radio offers. This has the added externality of increasing positive public exposure of XM prior to the merger rulings. Finally, consumer interest has been high for several recent hybrid portable media devices that allow users to tune into XM's channels and play MP3 files from their personal collections. Gotham Global recommends redoubled efforts towards lengthening the battery life of the players, providing substantially more storage space than the current 1GB, and adding support for more codecs (including video). This should reinvigorate weakening retail subscriptions and work as a natural extension for the recommended advertising campaign, while reaching out to the younger demographics that are driving consumer media sales. The outcome of the 2007 holiday season will be a crucial litmus test for the long-term viability of XM as a mainstream broadcaster rather than a company with limited niche appeal.

## Company Background

XM Satellite Radio was incorporated in 1992 and is a wholly owned subsidiary of XM Satellite Radio Holdings Inc. XM's founding was prompted by the radio industry's first major technological change since the popularization of FM radio in the 1970s: the establishment of a third broadcast medium, transmitted by satellite, now taking up residence alongside AM and FM on the airwaves.<sup>2</sup> A spin-off of the American Mobile Satellite Corp., XM was titled American Mobile Radio Corp. in 1997 when it received one of two licenses for satellite radio broadcast rights from the Federal Communications Commission. The other license went to rival Sirius Satellite Radio. Shortly after, in 1998, AMRC changed

its name to XM Satellite Radio. Full satellite service began on November 12, 2001 and extends over the entire continental United States. Canadian Satellite Radio functions with a license under the name XM Canada and began broadcasting in November 2005. XM Canada carries exclusive Canadian content and National Hockey League play-by-play coverage besides the standard XM music channels.

Coverage comes from two satellites in geostationary orbit nicknamed “Rhythm” and “Blues”, with “Rock” and “Roll” serving as backups in case of technical failure. In addition, a network of approximately 800 terrestrial repeaters provides coverage in 60 urban markets to ensure reception in the so-called “urban canyons” created by skyscrapers. Subscribers also have the option of tuning in to a more limited set of streaming media channels from any online location. DirecTV’s approximately 15 million subscribers have been able to access 72 of XM’s music, children’s and talk channels since November 2005. XM’s 2007 lineup includes more than 170 digital channels of choice from coast to coast: including 68 commercial-free music channels and exclusive live concerts and original programming, plus premier sports, talk, comedy, children’s and entertainment programming; and 21 channels of advanced traffic and weather information. XM has exclusive contracts as the official satellite radio provider for Major League Baseball, plus the NHL, college football and basketball for the Atlantic Coast, Pac-10, Big-10 and Big East Conferences, and a variety of other sporting events. Famous celebrities with popular shows on XM include Oprah Winfrey, Ellen DeGeneres, Bob Dylan, and Snoop Dogg.

The primary driver of subscriptions comes from OEM installations in select vehicle models by participating manufacturers. XM has exclusive contracts with General Motors, Honda/Acura, Hyundai, Isuzu, Nissan/Infiniti, Porsche, and Suzuki. Other producers include Saab, Subaru, and Toyota/Lexus/Scion. Over 140 different new vehicle models will have XM Radio available for factory or dealer installation in 2007. Retail sales also play a role: aftermarket radios from

a variety of manufacturers are available at national and regional consumer electronics retailers in car stereo, home stereo, and portable media products.

XM has traded publicly on the NASDAQ exchange since October 5, 1999 under the symbol XMSR. Its IPO was for 10 million shares at an initial price of \$12. Since then, the stock has been quite volatile. The highest traded price was \$50 on March 9, 2000 and the lowest price was \$1.66 on November 21, 2002. The stock price rebounded strongly after that absolute minimum and broke the \$40 threshold again in December 2004 before gradually declining to the present trading level of ~\$11-12. Based on closing prices on April 17, 2007, XM has a market cap of \$3.63 billion.

## COMPETITIVE ANALYSIS

### INTERNAL RIVALRY

XM Satellite Radio is classified as a radio broadcaster, which puts it in competition with a number of other companies. First and foremost is Sirius Satellite Radio, the other FCC licensee for providing satellite radio in America with over 6 million subscribers as of December 31, 2006. Although XM has more total subscribers, Sirius has a slightly larger retail share of ~55%<sup>3</sup>, as well as a larger market cap of \$4.44 billion.

We also include the established FM and AM radio broadcasters, including the massive Clear Channel Communications Inc. (market cap of \$18.04 billion), CBS Radio, Cumulus Media, Cox Radio, Entercom, Radio One, Citadel Broadcasting, Westwood One, and so on. Previously, XM's digital signal has served as a way to differentiate from the analog offerings of standard radio, but the growth of high-definition (HD) radio has effectively rendered this competitive advantage moot. Over 1,000 stations are currently broadcasting their primary signal via digital transmission and subsequently reaching 80% of the US population with a free high-quality broadcast.

Beyond this obvious competition, there are a number of newer options that allow consumers to receive similar experiences to radio broadcasts. It suffices to briefly mention portable digital media players such as the Apple iPod as well as the growing popularity of Internet radio. These will be discussed in more detail in the following sections.

## ENTRY

Due to FCC regulations as part of establishing the satellite radio market, there were only two licenses available for purchase, with one going to XM and the other to Sirius. As such, it is currently impossible for further entry into satellite radio. This somewhat protected market is misleading if viewed in a narrow scope due to the wider competition that satellite radio faces. It is doubtful any companies would have been successful if a large number of licenses had been made available to start based on the extremely high technological and physical costs required to create a satellite network. The artificial market was thus designed to protect both consumers and the firms entering the market.

The nationwide reach of XM ensures that entry by AM and FM competitors is limited due to the large fixed costs in what is essentially an oligopoly of existing large station owners. A substantial number of smaller stations exist to serve local markets, but XM is not designed to compete with them. It is important to note that HD radio is easier for the major terrestrial radio competitors of XM to successfully roll out due to economies of scale and their existing infrastructure. This is allowing for the rapid spread of this new technology, with over 3,000 stations preparing to transmit in HD.

Entry into the Internet radio sector has proven to be far easier, with a vast variety of extremely low-cost operations springing up lately, but this will be changing for US-based stations because of a new increased royalty fee system that is threatening to all but wipeout the bulk of these small startups.<sup>4</sup> It remains to be seen if XM Online will be impacted by the new royalty system. We believe that a

reduction in Internet radio stations, even with an increased cost for providing XM's online channels, will bring in enough former Internet radio listeners as subscribers to cancel out any new costs. However, any reduction is bound to be temporary because of the global nature of the Internet and the ease of receiving media from almost any corner of the globe, including countries that don't have the same royalty systems as the US. This is an area that certainly requires XM to stay abreast of new technological advances and trends.

Within the portable media player market, barriers to entry are modest based on technological and physical capital requirements. The most popular player is clearly the Apple iPod, but the widespread availability of the MP3 audio format has allowed a wide range of products to emerge and competition is fierce among the major consumer electronics manufacturers.

#### SUBSTITUTES AND COMPLEMENTS

As a subscription service, XM is always under threat by substitutes appealing to consumers looking for the best pricing and utility. Starting with the obvious substitute, Sirius Satellite Radio offers over 130 channels of programming with the same sound quality and \$12.95 per month pricing of XM. Standard music content is similar, but Sirius has several big names attached that XM does not. Popular shock jock Howard Stern was signed for a record \$500 million and has served as a focal point for Sirius since moving to pay radio in 2006. Martha Stewart has her own show as well, and Sirius is also the satellite home of the NFL. XM lost NASCAR to Sirius in January of 2007 and this is expected to lead to slightly higher churn than usual for 1Q07. Sirius has its own OEM agreements as well, including exclusive contracts with Ford, DaimlerChrysler, and Volkswagen. The 10 million subscribers of the DISH network also receive Sirius broadcasts at home. XM and Sirius are fairly evenly matched, but both are still losing money. The proposed merger will have a profound impact on their future success regardless of regulatory approval as a failure might cripple short-term growth before the companies can reach long-term profitability.



Terrestrial radio offers a broad spectrum for radio stations to transmit over and has been an established technology for decades. Although it does not dominate the media industry the way it had prior to the television, terrestrial radio still has a massive reach with over 230 million weekly listeners in the US alone. Due to physical restraints on broadcasting distances due to transmitter power, there are thousands of stations across the country and these reach almost all of the local markets. Broadcasts are free and paid for by on-air advertisements and feature local programming and information that XM cannot compete with. The low-cost hardware cost to receive terrestrial radio and the free broadcasts appeal to consumers unwilling to pay for satellite radio, even with all its benefits. HD radio is making strides as the next development in the terrestrial industry. It offers similar-quality digital signals to satellite at the same free price point. Hardware to receive the signal is still somewhat expensive, but prices are expected to drop as more stations make the switch. There are also plans to offer limited subscription service via HD radio for live concerts and other events, which further blurs the product differentiation between satellite radio and future terrestrial radio.

Another broadcast medium that works as a substitute to XM Radio is the Internet. As mentioned before, these generally free and near-CD quality Internet radio channels are available worldwide with an endless supply of content, but are under grave threat in the US from a new and far costlier royalty system. Major players such as Last.fm and Pandora will likely continue to thrive as specialists based on their ability to customize a unique listening experience that caters to the user's personal musical tastes. Faster connection speeds, better bandwidth and greater music selection will allow for increasing Internet radio user metrics and we expect to see further expansion into the home stereo market through adapters and media-center PCs. This competes directly with XM's home stereo products and subscriptions. Many of the wireless phone providers are preparing to allow for streaming Internet media via their increasingly advanced cell phones and this represents another challenge for XM on both the broadcast and retail fronts.

Portable digital media players such as the iPod are also competing substitutes. Apple sold over 39 million iPods in 2006 and the storage capacity on these devices is enough to store entire radio station catalogs. It's very clear that these devices present a compelling alternative to the usual XM service. Current hardware limitations, legal downloading fees, and the bandwidth needed to load these players to capacity with media can make XM's services appear inviting, but the overwhelming cultural phenomenon spawned by iPod has led to overnight cottage industries adapting digital media players for use in the home and car beyond the standard portable usage. We believe XM took a bold step with the hybrid Pioneer Inno XM2go and Samsung Helix devices, which feature MP3 playback and satellite radio capabilities, as well a way to bookmark and store a limited amount of broadcasted songs. *Popular Science* gave the Inno its "Best of What's New 2006" award and consumers voted the Inno the "Best of CES 2006" through CNET. Unfortunately, this critical acclaim has been dampened recently. The Recording Industry Association of America has brought a copyright lawsuit against XM for the recording feature, claiming XM functions as a distributor in the sense that it sends the signal and provides a way to store it. An appeal on the basis of the Audio Home Recording Act of 1992 was rejected in January and continued high legal fees or a settlement appear likely. Future models may or may not have this unique feature.

There are few complements to satellite radio at the moment beyond products for enhancing the listening experience. Headphones, home-stereo equipment, and car speakers are the standard fare. XM can use its superior digital signal to help advertise high-end audio products that benefit from this and vice-versa, but otherwise opportunity is low.

## SUPPLIER POWER

Satellite radio is dependent on a number of other firms and industries to reach consumers. The seller's market for attractive non-music providers based on the duel between XM and Sirius means that these suppliers are extremely powerful at the moment. Stern's record \$500 million, 5 year contract with Sirius is one of the many indications of this. The majority of the existing desirable providers have already been signed in a frenzy of long-term contracts, but their presence will still be felt through their annual payments.

Music content royalty agreements and license fees are maintained with BMI, ASCAP, SESAC, and the RIAA. These contracts are essential to XM's core services and a new five-year agreement was recently signed with ASCAP. The other contracts ended in 2006 and new agreements are being negotiated. The prior existence of terrestrial radio has made this process fairly streamlined, but the possibility exists for problems. In particular, the current lawsuit by many of the major record companies of the RIAA against XM for copyright infringement is hampering the royalty negotiations and the proceedings have now moved to the Copyright Royalty Board in order to set a new rate.

Third-party hardware is necessary for broadcasting and receiving the satellite signals and XM is somewhat disadvantaged by its reliance on these firms. XM owns the designs for its system, but lacks the technological and physical capital to produce the hardware itself. Even given that XM is reliant on these firms, it is still unlikely that any one firm will hold XM hostage for higher pricing due to the competitive market and their blurred buyer/supplier relationship. The best example of this is the aftermarket radio sector. XM radios are available under the Audiovox, Pioneer, Delphi, AGT, Alpine, Samsung, Sony, and etón/Grundig brands. XM supplies the designs for these radios and the service needed to use them, but the manufacturers supply the physical products. Both sides cooperate on marketing and advertising. The best way to view this is as a collaboration, and as such, both sides should continue to work together to maximize joint profits.

## BUYER POWER

The large automotive market for satellite radio is driving the biggest portion of XM's growth and buyer power is becoming increasingly important. OEM installations of XM radios are scheduled to reach 3 million in 2007 and a large number of these will lead to new subscribers. Such a critical element of XM's business strategy does not come cheaply. In order to reach this scale of market penetration, XM has entered into partnerships with many of the manufacturers and paid them in advance for the privilege. Most notable is the exclusive distribution agreement with General Motors until 2013. More than 1.8 million GM vehicles will be pre-installed with XM Radio in 2007. In return, XM is helping to pay for installation costs and exclusivity, as well as sharing revenue from subscribers acquired from the partnership. XM paid just under \$240 million to GM in 2006 to retire fixed payments scheduled to be due in 2007-2009 from the deal.

Consumer buyer power is weak on the individual level as one user cannot negotiate pricing due to low volume, although cheaper family plans do exist for multiple household users. Counteracting this is the low switching cost inherent in the industry. The only cost to consumers switching between XM and Sirius is the one-time radio purchase cost, as the subscription prices are identical. Likewise, switching to terrestrial radio and most Internet radio is free barring the necessary hardware available in the vast majority of the market. XM has to appeal to the tastes and demands of the consumer in order to stay successful. The most common method has been to offer discounts, family plans, and free three-month trials in pre-installed vehicles to attract subscribers beyond the first-adopters.

## SWOT ANALYSIS

### **Strengths**

- Largest satellite radio provider in the US
- Vast OEM network for pre-installation in new and used vehicles
- Established satellite distribution system
- Little-to-no threat of entry by new firms
- Increasing revenue streams
- Value-added retail products and accessories

### **Weaknesses**

- Significant debt of \$1.3 billion due to high initial costs and negative cash flows
- Slumping retail subscriber growth resulting in revised growth opportunities
- Competition with Sirius over costly exclusive content
- Lag between cost-intensive OEM installations and subscriber acquisition
- Negative return on assets
- Low switching costs for consumers
- Costly legal and regulatory issues
- Low brand presence among advertiser-friendly youth demographic
- Subject to unpredictable changes in consumer preference

### **Opportunities**

- Planned merger with Sirius would lead to dramatic cost savings and synergy benefits
- Increasing penetration in automotive market
- Partnerships with major airlines to prove XM services in-flight
- Development of new technology and refinements to players, infrastructure and service

## Threats

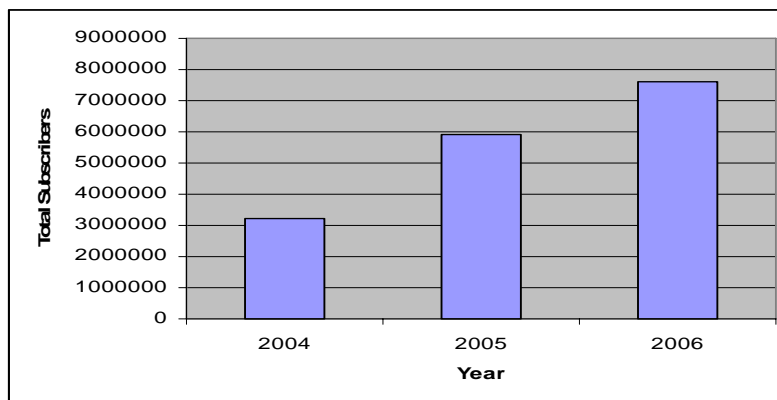
- Competition from Sirius, AM/FM broadcaster, HD radio, Internet radio, and portable media players
- Hostile lobbying from the National Association of Broadcasters (NAB)
- Uncertainty with subscribers, employees, and business partners based on the pending merger
- Possibility of signal being pirated by users
- Unfavorable litigation outcomes, high legal fees

## FINANCIAL ISSUES

The relative youth of satellite radio as an industry and XM's rapid growth within it leads to a complex financial situation. We will discuss some of the recent performance data for XM and then move on to the pressing financial issues surrounding the firm. Due to the size and special considerations of the XM-Sirius merger, we will address financial issues specific to the merger within the noted discussion in the Strategic Considerations section below.

2006 was a year of continued growth for XM. Revenue increased 67% to \$933.4 million from \$558.3 million in 2005. Total subscribers reached over 7.6 million in 2006, up 29% from 2005, and are forecasted to reach 9.1 million by the end of 2007.

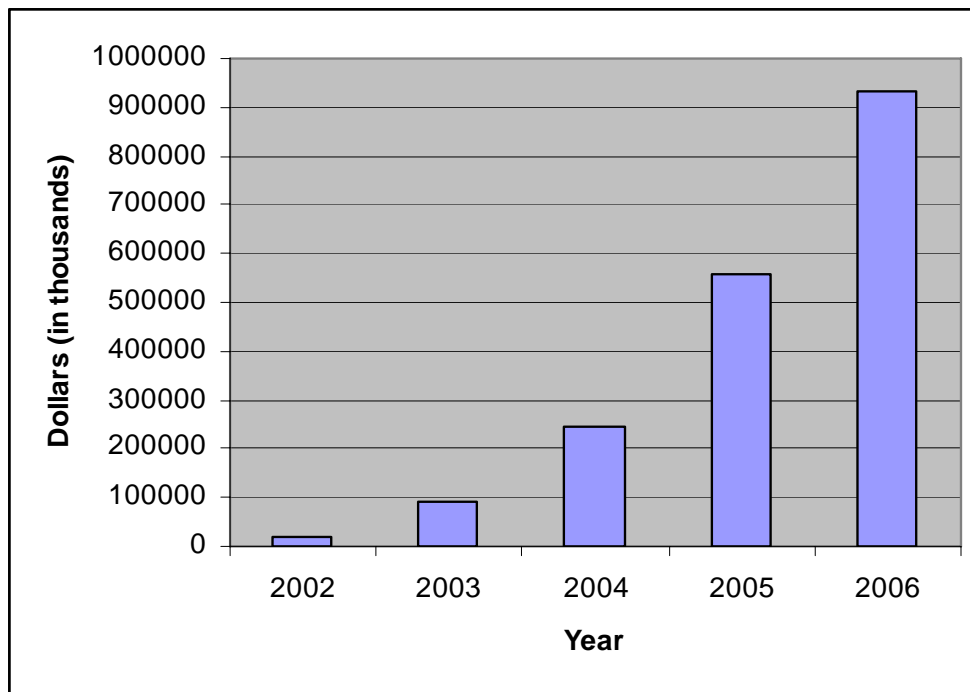
**Figure 1: End-of-Year Subscribers, 2004-2006**



Source: 2006 XM 10-K

Of particular note is the increase in monthly average subscription revenue per subscriber (ARPU) from \$9.51 in 2005 to \$10.09 in 2006, as well as the flat Subscriber Acquisition Costs (SAC) of \$64 between 2005 and 2006 and the decrease in Cost Per Gross Subscriber from \$109 to \$108 in the same time period. This increase in revenue and decrease in costs bodes well for XM's future.

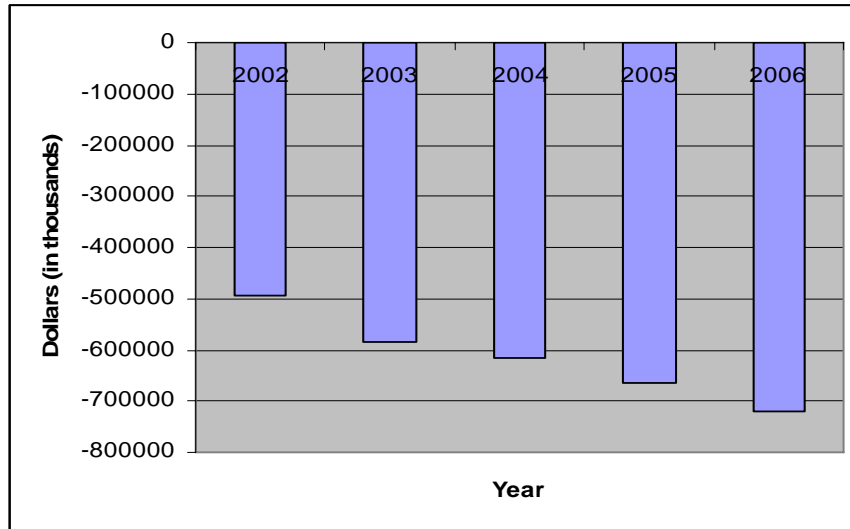
**Figure 2: Revenue Per Year, 2002-2006**



*Source: 2006 XM 10-K*

Overall, XM is still operating with a yearly net loss as it has since inception. Normally worrisome, this is to be expected with a tech-heavy startup with high amounts of capital expenditure, depreciation, and interest payments. As an example, total capital expenditures since inception have reached \$1.7 billion. The infrastructure necessary to have four orbiting satellites and a 5<sup>th</sup> for 2008 is staggeringly expensive.

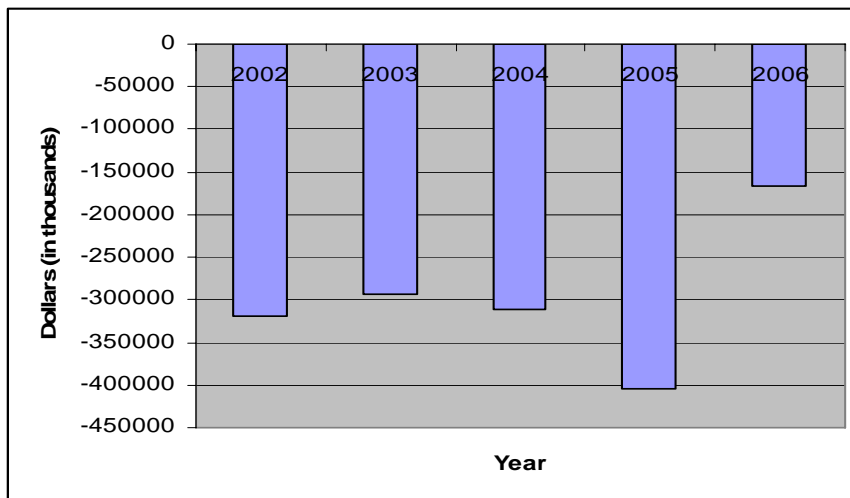
**Figure 3: Net Loss Per Year, 2002-2006**



Source: 2006 XM 10-K

The net loss before interest income, interest expense, income taxes, depreciation, and amortization is known as EBITDA. Adjusted EBITDA excludes loss from deleveraging transactions, loss from impairments of investments, equity in net loss of affiliate, other income (expense), and stock-based compensation. This as a more informative measure of the company's performance because of the previously-stated high costs associated with the launch.

**Figure 4: Adjusted EBITDA, 2002-2006**



Source: 2006 XM 10-K



As of December 31, 2006, XM has \$1.3 billion in debt. The resulting interest payments cost the company \$121.3 million last year alone. That said, current business plans state there is no need for further liquidity and XM's current debt-to-cap rate is 0.358, which we view as perfectly acceptable based on the industry.

XM and Sirius are still operating with a loss, so we are slightly limited in comparison tools. Still, based on Table 1, we can see that XM tends to fall between Sirius and Clear Channel, its two most direct competitors. The enterprise multiple is negative for both XM and Sirius due to their high growth. We also find it encouraging to see that although XM has a negative ROA, it is nearly half that of Sirius. These relatively strong ratios could help explain the better market performance of XM compared to both competitors, as it offers stronger growth prospects compared to Clear Channel and better revenue and ROA than Sirius.

**Table 1: Industry Comparables**

	<b>XMSR</b>	<b>SIRI</b>	<b>CCU</b>
<b>Price/Sales</b>	<b>3.85</b>	<b>6.92</b>	<b>2.54</b>
<b>EV/Revenue</b>	<b>5.01</b>	<b>7.94</b>	<b>3.61</b>
<b>EV/EBITDA</b>	<b>(25.34)</b>	<b>(9.78)</b>	<b>11.00</b>
<b>ROA</b>	<b>(0.11)</b>	<b>(0.21)</b>	<b>0.05</b>

*Source: Yahoo Finance!*

Stock performance has varied dramatically since the IPO in 1999, with two prolonged periods of strong performance and a few smaller periods of underperformance compared to the S&P 500 as seen in Figure 5. Analysts currently regard XM as undervalued with decent fundamentals and good growth opportunities, but we believe that merger progress alone will drive stock performance for the next few quarters.

**Figure 5: XMSR Performance Relative to S&P500, 1999-2007**



Source: Yahoo! Finance

## STRATEGIC ISSUES AND RECOMMENDATIONS

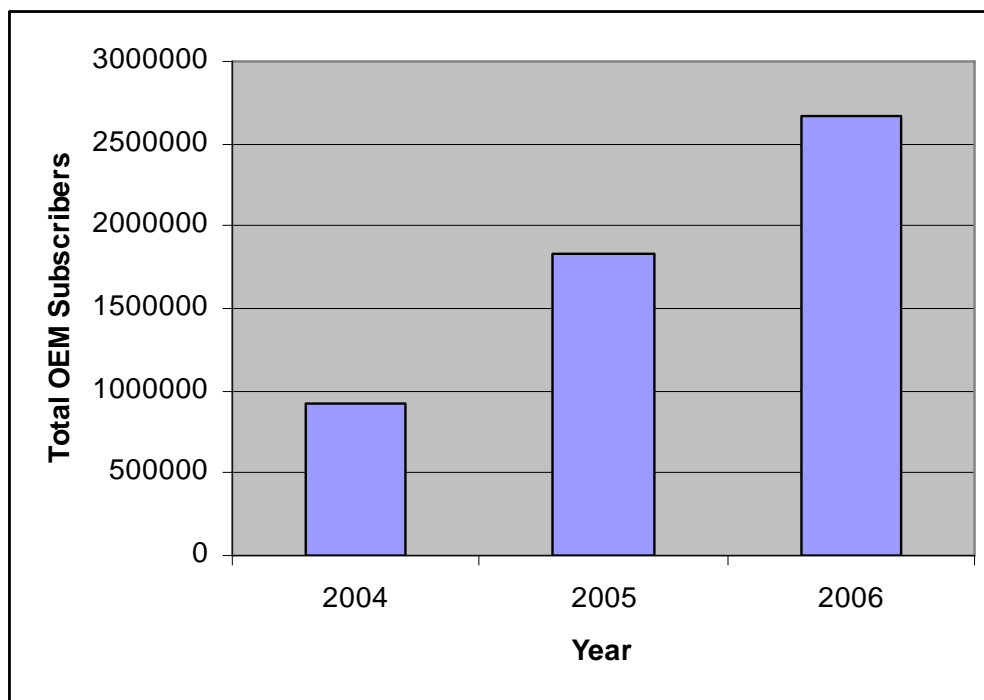
A successful XM-Sirius merger would simplify many of the issues driving the high costs of subscriber acquisition and would place the combined firm in a very favorable position. The merger itself is discussed in a separate section below. The following three strategic issues and recommendations cannot accomplish what the merger has the potential to do, but Gotham Global believes they still apply regardless of the hoped outcome.

### OEM YIELD

The strength of XM is its OEM vehicle installation program, which has seen continued growth as new manufacturers are brought on-board. Hyundai has announced it will be the first to have XM Radio installed as a factory-standard option on all models in 2007. The anticipated number of OEM installations for 2007 is just over 3 million vehicles. Honda/Acura has also begun to offer XM as

part of its certified pre-owned car program in addition to its new vehicle program. Gotham Global suggests further expansion into the new car market with an emphasis on certified pre-owned cars to increase market penetration. With more than 240 million registered cars in the US and 16.5 million new vehicles produced every year, this is still a relatively untapped market for XM. Management appears to be shifting focus towards this realization with the standardization of free three-month trials for OEM installations to bring in new subscribers.

**Figure 6: OEM subscribers, 2004-2006**



*Source: 2006 XM 10-K*

The next step is to reach higher conversion rates and reduce the large physical cost of OEM installation for owners who never use XM Radio. The market principal behind both XM and Sirius is that listeners trying satellite radio for the first time will not be able to switch back to terrestrial radio or other options. Therefore, a major problem arises when OEM installations are never activated and used. Some of the car manufacturers are pre-activating systems out of the factory, which we feel is a step in the right direction, but something more drastic

should be done to try to reach 100% activation across all OEM installations. Based on this goal, Gotham Global recommends a free contest open to all OEM users that finish their 3-month trial subscription. This contest should offer reasonable odds for free annual subscriptions and discounts on XM product, but the big draw should be a monthly \$100,000 cash prize pool distributed to 100 users who finish their trial during the month. It is our belief that the chance to win significant free prize money from using a free trial of XM will entice consumers who normally would not have activated their system. The relatively minimal yearly cost of this promotion should in turn lead to higher yield percentages and increased revenue while lowering the significant waste of unused OEM installations. There is an element of risk to be sure, but it is necessary to reach out to marginal consumers.

## MARKETING

Even though XM has the larger total subscriber share, Sirius actually holds the upper-hand in retail subscribers. One reason for this is the greater consumer recognition of Sirius. The signing of Howard Stern was a major media event and with the most listeners of any FM broadcast, he brought his devoted fans over to Sirius in droves. Gotham Global feels a strong marketing push in 2007 will have a number of positive impacts for XM.

As laid out in the following section, XM has a presence in the portable media player market. However, this presence means nothing if consumers are not aware of current offerings, no matter how attractive. A new line of products could be ready by the 2007 holiday season and a well-designed marketing campaign would have consumers anxiously awaiting their arrival. Gotham Global suggests a high-visibility series of nationwide billboards and print ads emphasizing XM's complete nationwide coverage: from remote rural areas to the middle of the largest cities. This could be supplemented by a small series of commercials. A possibility would be to parody the style of Apple's successful "Mac and PC" commercials. "XM and FM" commercials could tout the benefits of

XM Radio through by subtly emphasizing the shortcomings of FM broadcasts. A more ambitious and aggressive pitch would pit XM's hybrid devices against those of the competition.

Advertising results in increased public exposure and the small subscriber base of XM has not reached enough critical mass to become a true household name. This recommended campaign would signal the public that XM is here to stay and increase the confidence of marginal subscribers. Positive exposure for XM during merger proceedings would be an added externality from this campaign and should not be underestimated.

#### PORTABLE HYBRID MEDIA PLAYERS

XM has stayed a few steps ahead of Sirius with retail devices and portable media players in particular. The current Inno and Helix devices have proven popular among critics and consumers alike with the ability to receive XM channels and play MP3 and protected WMA files in a pocket-sized design. These players are attached to the company brand through hardware partners and improving the design requirements is an area in which XM can easily excel. By incorporating a longer battery, increased storage space, and adding more supported codecs, XM has the opportunity to redefine the portable digital media market and send slowing retail subscriptions skyrocketing.

Portable digital media players such as the Apple iPod have battery playback lasting approximately 20 hours for stored audio playback and over 6 hours for video.<sup>5</sup> In comparison, battery life in the Inno lasts approximately 10 hours for stored audio and 5 hours for satellite broadcasts. To compete adequately, Gotham Global recommends incorporating increased battery capacity for future hardware devices and also recommends that said battery capacity at least double over current levels.

Current XM media players are constrained by a 1GB storage capacity. While this may work for a cell phone or PDA, consumers have player options ranging up to 80GB. Toshiba recently announced an advance in flash memory design that yields a 16GB chip suitable for use in small consumer electronics.<sup>6</sup> The remarkably small size (14.0 x 18.0 x 1.5 mm) of this chip will allow it to be used to keep player size down; including two chips would bring total storage capacity to 32GB and into the range of other media players of comparable size. Mass-production is scheduled to begin in December 2007. With the constant increases in storage capacities and decreases in price, Gotham Global recommends that XM modify hybrid storage designs to catch up with the competition by including at least 30GB of storage in one of its new models. Hardware partner Samsung is one of the leaders in memory manufacturing, so this should not be a difficult modification to make.

The Apple iPod, Microsoft Zune and Creative Zen all have something the XM hybrid players do not: video codec support. This is a vital selling point for marketing and will create a player that is not only attractive to those interested in XM Radio, but also to marginal subscribers who value video playback higher than satellite radio. The larger file sizes of video make the storage recommendation above even more critical. We strongly recommend that the next-generation of XM hybrid players include support for MP4, XviD, DivX, and MPEG playback, as well as expanded audio codecs and image-viewing capabilities. With the popularity of YouTube and other online video sites growing rapidly in the youth demographic, we feel XM must make this improvement now or risk being shutout of the market. Additionally, XM demonstrated that it has the capability to stream both audio and video over its existing satellite network at the 2007 Consumer Electronics Show.<sup>7</sup> A move towards video playback of stored media opens the door for video streaming to devices and vehicles in the future. Sirius has recently announced plans to do so in select 2008 model year vehicles with children's video content, but we feel it wise for XM to build up the framework first and wait for a more affordable price point for in-car entertainment systems. An option for future consideration would be to provide this service via aftermarket devices for

vehicles with installed entertainment systems and gradually move into OEM installation.

A complaint from consumers about the current portable hybrid models addresses the required purchase of additional accessories to provide XM Radio playback through via their car and home audio systems. Advertising promised FM modulation to provide this capability, but it was not delivered. Including this in future models will allow a cable-free experience for consumers wishing to use their hybrid XM player on the go and at home. This is not as vital as the above recommendations, but it would be a further boost to the quality experience that XM is known to provide.

Finally, we see an opportunity to bundle a free trial of XM Radio with new hybrid purchases. To reach the goal of redefining the portable media marketplace, XM should offer incentives to marginal subscribers attracted initially to the non-satellite capabilities of the suggested future hybrid player. This could be accomplished by taking a loss on hardware sales with the intent to recoup them via the resulting new subscriptions: quite similar to the strategy of Microsoft and Sony with their next-generation consoles.

### XM-SIRIUS MERGER

Whispered rumors of a proposed merger between XM and Sirius have swirled across the broadcasting industry for months, increasing in volume in December 2006, and confirmed on February 19<sup>th</sup>, 2007. It will be an uphill battle with Congress, the Justice Department and the FCC weighing in. Language in the original satellite radio licenses granted to XM and Sirius explicitly states that one company can “not be permitted to acquire control” of the other. Fortunately, this statement can be modified if the FCC sees compelling reasons to change it. A change in the market composition would certainly qualify and this is the tack XM and Sirius are taking in their arguments. There was no competition from HD radio, Internet radio, and portable digital media players at the time of the license

purchase and consumers now have a much wider array of choices to choose from for their listening habits. Gotham Global agrees that this strategy is the correct one for the companies to follow and will follow the on-going merger developments with great interest.

The proposed merger is an all-stock merger of equals with XM shareholders receiving 4.6 shares of Sirius share for every XM share. As of April 17, 2007, that values XM at \$13.94, a 17% premium over its current value. Each set of stockholders will hold roughly 50% of the combined company. Sirius' CEO Mel Karmazin will transition to the CEO of the combined company, while XM Chairman Gary Parsons will remain chairman of the combined company. XM chief executive Hugh Panero will remain as CEO until the merger is complete.

The NAB is lobbying heavily against the merger, claiming this will create a monopoly in satellite radio, leading to higher prices and hurting consumers.<sup>8</sup> This is a rather obvious ploy to raise the ire of policy-makers, who tend to be pro-competition for fear of public outrage. The irony is that a combined XM-Sirius entity will cause more competition across the audio listening landscape than the two companies can apart. The NAB is certainly right to be worried, but not for the consumers. Instead of forcing consumers to choose between MLB and the NFL, Howard or Oprah, a combined stable of XM-Sirius content would offer consumers the option to listen to what they really want without going to the extreme of subscribing to both services. Marginal consumers waiting for one company to become dominant before committing to a subscription would be captured by the clearly consumer-friendly merged firm. Advertising revenue, already growing for both companies, would dramatically increase with one combined nationwide market for advertisers. Additionally, programming costs would drop, as would the high costs resulting from advertising and marketing against each other. The new firm would also be able to re-negotiate revenue shares and distribution costs with its retail and OEM partnerships. All told, James Dix of Deutsche Bank believes that a merger “could generate \$5 billion in total cost synergies” and potentially \$7 billion.<sup>9</sup>



Based on the level of scrutiny this merger will see, especially given the failed merger of satellite television companies DirecTV and DISH Network in 2002, we feel it is wise to discount any synergies and benefits the combined company will receive from the merger by 50%. This accounts for possible failure as well as possible restrictions from the regulatory bodies such as price caps and mandatory public channels. Even with this in mind, such a savings is substantially larger than the debt of both XM and Sirius combined and would create a massive windfall for the new company to use judiciously to entrench itself as a major broadcasting power.

Both XM and Sirius have stated that pricing after the merger will remain the same and we believe this is important to stress to the public and regulators. The reduced costs and increased subscribers of a merged company will make it substantially more profitable, while allowing consumers to benefit by staying at current price levels and receiving a better product.

For every action, there is a reaction, and a rush of new subscribers from the merger would force other competitors to innovate in order to try and maintain market share. Terrestrial stations have already begun to offer fewer commercials and more diverse selections because of the competition from satellite radio. It would be interesting to see what other changes and benefits might happen for consumers if the merger goes through.

- 
- <sup>1</sup> 2006 XM 10-K, all further statistics are from this source unless otherwise noted
- <sup>2</sup> <http://xmradio.com/about/corporate-information.xmc>
- <sup>3</sup> Deutsche Bank Company Bulletin, February 27, 2007
- <sup>4</sup> <http://www.forbes.com/feeds/ap/2007/03/19/ap3531170.html>
- <sup>5</sup> <http://www.apple.com/ipod/ipod.html>
- <sup>6</sup> [http://www.toshiba.co.jp/about/press/2007\\_04/pr1702.htm](http://www.toshiba.co.jp/about/press/2007_04/pr1702.htm)
- <sup>7</sup> RBC Industry Comment, March 30, 2007
- <sup>8</sup> [http://money.cnn.com/2007/02/19/news/companies/xm\\_sirius/index.htm](http://money.cnn.com/2007/02/19/news/companies/xm_sirius/index.htm)
- <sup>9</sup> Deutsche Bank Industry Bulletin, February 20, 2007