MORGAN STANLEY INSURED MUNICIPAL INCOME TRUST Form N-CSRS June 29, 2007

Welcome, Shareholder:

In this report, you'll learn about how your investment in Morgan Stanley Insured Municipal Income Trust performed during the semiannual period. We will provide an overview of the market conditions, and discuss some of the factors that affected performance during the reporting period. In addition, this report includes the Trust's financial statements and a list of Trust investments.

Market forecasts provided in this report may not necessarily come to pass. There is no assurance that the Trust will achieve its investment objective. The Trust is subject to market risk, which is the possibility that market values of securities owned by the Trust will decline and, therefore, the value of the Trust's shares may be less than what you paid for them. Accordingly, you can lose money investing in this Trust.

Income earned by certain securities in the portfolio may be subject to the federal alternative minimum tax (AMT).

Fund Report For the six months ended April 30, 2007

Market Conditions

The economy continued to send mixed signals about its overall strength during the six-month reporting period. Rising energy prices and ongoing geopolitical uncertainty had a negative impact on investor sentiment, as did the contraction in the residential real estate sector. Turmoil in the sub-prime mortgage market intensified concerns about housing, and dominated investment headlines during the period. In fact, these concerns were the primary contributor to the sharp decline in the equity market in late February, which led to a "flight to quality" that forced yields on U.S. Treasury bonds lower and prices higher. The changing economic and financial picture led to changes in the Federal Open Market

Committee's (the "Fed") monetary policy bias as well. Although the Fed held the target federal funds rate steady, statements released following its March meeting signaled a more neutral bias. This apparent shift in policy led to a stronger equity market and began to move bond yields higher.

Long-term municipal bond yields (as represented by the 30-year AAA rated municipal bond), which stood at 4.06 percent at the end of October, ended the period slightly higher at 4.10 percent. The slope of the municipal yield curve remained relatively flat, with only a 50 basis point yield differential, or "pick-up," between 30-year maturities and one-year maturities. In comparison, the yield pick-up from one to 30 years in April 2006 was 95 basis points, and has averaged 165 basis points over the past three years.

Declining interest rates in the fourth quarter of 2006 spurred a rebound in municipal bond issuance that led new issue volume for the calendar year to reach \$383 billion, the second highest on record and only 6 percent below 2005's record pace. In the first four months of 2007, new issue municipal volume increased by 37 percent versus the same period one year earlier, reaching a total of \$135 billion. Insured municipal bonds continued to represent roughly half of all new issue supply. Municipalities continued to take advantage of lower interest rates to refinance their debt and refundings increased dramatically. California was the country's largest issuer of municipal bonds during the period, and new issue supply for the state rose by 84 percent.

Strong demand by institutional investors and non-traditional buyers, including hedge funds and arbitrage accounts, helped long-term municipal bonds perform relatively in line with Treasuries for the period. The 30-year municipal-to-Treasury yield ratio, which measures the relative attractiveness of these two sectors, declined slightly from 86 percent at the beginning of the period to 85 percent by period end. A declining ratio indicates that municipals outperformed Treasuries while at the same time becoming more expensive (and thus less attractive) on a relative basis.

Performance Analysis

For the six-month period ended April 30, 2007, the net asset value (NAV) of Morgan Stanley Insured Municipal Income Trust (IIM) decreased from \$15.81 to \$15.61 per share. Based on this change plus reinvestment of tax-free dividends totaling \$0.345 per share and a

2

long-term capital gain distribution of \$0.061711 per share, the Trust's total NAV return was 1.54 percent. IIM's value on the New York Stock Exchange (NYSE) moved from \$14.55 to \$14.59 per share during the same period. Based on this change plus reinvestment of dividends and distributions, the Trust's total market return was 3.12 percent. IIM's NYSE market price was at a 6.53 percent discount to its NAV. During the fiscal period, the Trust purchased and retired 275,000 shares of common stock at a weighted average market discount of 7.71 percent. *Past performance is*

no guarantee of future results.

Monthly dividends for the second quarter of 2007, declared in March, were unchanged at \$0.0575 per share. The dividend reflects the current level of the Trust's net investment income. IIM's level of undistributed net investment income of \$0.050 per share on April 30, 2007, was unchanged from six months earlier.¹

During the reporting period, the Trust's interest-rate positioning continued to reflect our anticipation of higher rates. This strategy helped the Trust's total returns at the beginning of the period when interest rates rose, but tempered returns later in the period when rates declined. At the end of April, the Trust's option-adjusted duration* including leverage was positioned at 10.5 years. To reduce the portfolio's duration, a U.S. Treasury futures hedge and Bond Market Association (BMA) interest rate swap contracts were used.

The primary detractor from performance was the Trust's overall maturity distribution, which was underweighted in longer-term issues relative to issues with shorter maturities. This stance limited the Trust's participation in the outperformance of longer-maturity bonds during the period. The Trust's performance was enhanced, however, by several holdings that appreciated when they were pre-refunded.**

Reflecting a commitment to diversification, the Trust's net assets, including preferred shares, of approximately \$485 million were invested among 11 long-term sectors and 81 credits. As of the close of the period the Trust's largest allocations were to the transportation, public power and water and sewer sectors.

As discussed in previous reports, the total income available for distribution to holders of common shares includes incremental income provided by the Trust's outstanding Auction Rate Preferred Shares (ARPS). ARPS dividends reflect prevailing short-term interest rates on maturities ranging from one week to two years. Incremental income to holders of common shares depends on two factors: the amount of ARPS outstanding and the spread between the portfolio's cost yield and its ARPS auction rate and expenses. The greater the spread and the higher the amount of ARPS outstanding, the greater the amount of incremental income available for distribution to holders of common shares. The level of net investment income available for distribution to holders of common shares varies with the level of short-term interest rates. ARPS leverage also increases the price volatility of common shares and has the effect of extending portfolio duration.

3

During this six-month period, ARPS leverage contributed approximately \$0.02 per share to common-share earnings. The Trust has five ARPS series totaling \$155 million, representing 32 percent of net assets, including preferred shares. Weekly ARPS rates ranged from 2.84 to 4.00 percent during the fiscal period.

The Trust's procedure for reinvesting all dividends and distributions in common shares is through purchases in the

open market. This method helps support the market value of the Trust's shares. In addition, we would like to remind you that the Trustees have approved a procedure whereby the Trust may, when appropriate, purchase shares in the open market or in privately negotiated transactions at a price not above market value or net asset value, whichever is lower at the time of purchase. The Trust may also utilize procedures to reduce or eliminate the amount of ARPS outstanding, including their purchase in the open market or in privately negotiated transactions.

Performance data quoted represents past performance, which is no guarantee of future results, and current performance may be lower or higher than the figures shown. Investment return, net asset value and common share market price will fluctuate and Trust shares, when sold, may be worth more or less than their original cost.

There is no guarantee that any sectors mentioned will continue to perform as discussed herein or that securities in such sectors will be held by the Trust in the future.

- ¹ Income earned by certain securities in the portfolio may be subject to the federal alternative minimum tax (AMT).
- * A measure of the sensitivity of a bond's price to changes in interest rates, expressed in years. Each year of duration represents an expected 1 percent change in the price of a bond for every 1 percent change in interest rates. The longer a bond's duration, the greater the effect of interest-rate movements on its price. Typically, trusts with shorter durations perform better in rising-interest-rate environments, while trusts with longer durations perform better when rates decline. Duration calculations are adjusted for leverage.
- ** Prerefunding, or advance refunding, is a financing structure under which new bonds are issued to repay an outstanding bond issue on its first call date.

 4

TOP FIVE SECTORS	
Transportation	31.3%
Public Power	30.7
Water & Sewer	24.0
Refunded	21.7
Appropriation	15.4

CREDIT ENHANCEMENTS	
MBIA	33.8%
FGIC	25.3
Ambac	18.4

FSA	18.3
XLCA	3.4
AGC	0.8

Data as of April 30, 2007. Subject to change daily. All percentages for top five sectors are as a percentage of net assets applicable to common shareholders. All percentages for credit enhancements are as a percentage of total long-term investments. These data are provided for informational purposes only and should not be deemed a recommendation to buy or sell the securities mentioned. Morgan Stanley is a full-service securities firm engaged in securities trading and brokerage activities, investment banking, research and analysis, financing and financial advisory services.

For More Information About Portfolio Holdings

Each Morgan Stanley trust provides a complete schedule of portfolio holdings in its semiannual and annual reports within 60 days of the end of the trust's second and fourth fiscal quarters. The semiannual reports and the annual reports are filed electronically with the Securities and Exchange Commission (SEC) on Form N-CSRS and Form N-CSR, respectively. Morgan Stanley also delivers the semiannual and annual reports to trust shareholders and makes these reports available on its public web site, www.morganstanley.com. Each Morgan Stanley trust also files a complete schedule of portfolio holdings with the SEC for the trust's first and third fiscal quarters on Form N-Q. Morgan Stanley does not deliver the reports for the first and third fiscal quarters to shareholders, nor are the reports posted to the Morgan Stanley public web site. You may, however, obtain the Form N-Q filings (as well as the Form N-CSR and N-CSRS filings) by accessing the SEC's web site, http://www.sec.gov. You may also review and copy them at the SEC's public reference room in Washington, DC. Information on the operation of the SEC's public reference room may be obtained by calling the SEC at (800) SEC-0330. You can also request copies of these materials, upon payment of a duplicating fee, by electronic request at the SEC's e-mail address (publicinfo@sec.gov) or by writing the public reference section of the SEC, Washington, DC 20549-0102.

5

Distribution by Maturity (% of Long-Term Portfolio) As of April 30, 2007

Weighted Average Maturity: 18 Years(a)

(a) Where applicable maturities reflect mandatory tenders, puts and call dates. Portfolio structure is subject to change.

Geographic Summary of Investments Based on Market Value as a Percent of Total Net Investments

Arizona	0.8%
California	16.6
Colorado	1.5
District of Columbia	3.5
Florida	5.0
Georgia	2.7
Hawaii	1.1
Illinois	7.5
Indiana	0.9%
Louisiana	0.9
Maryland	0.3
Massachusetts	1.1
Michigan	1.4
Minnesota	1.1
Missouri	1.2
Montana	0.4
Nebraska	1.3%
Nevada	2.7
New Hampshire	0.3
New Jersey	1.6
New York	10.4
North Carolina	2.0
Ohio	0.2
Oregon	0.7
Pennsylvania	3.6%
Rhode Island	2.3
South Carolina	3.4
Texas	15.9
Utah	1.1
Virginia	1.4

Washington	6.8
West Virginia	0.7
Joint exemptions*	(0.4)
Total†	100.0%

^{*} Joint exemptions have been included in each geographic location. Does not include open futures contracts with an underlying face amount of \$27,082,033 with unrealized depreciation of \$15,767, and open swap contracts with net unrealized appreciation of \$13,953.

6

Call and Cost (Book) Yield Structure (Based on Long-Term Portfolio) As of April 30, 2007

Years Bonds Callable—Weighted Average Call Protection: 7 Years

Cost (Book) Yield(b)—Weighted Average Book Yield: 5.0%

(a) May include issues initially callable in previous years.

Portfolio structure is subject to change.

⁽b) Cost or "book" yield is the annual income earned on a portfolio investment based on its original purchase price before the Trust's operating expenses. For example, the Trust is earning a book yield of 5.9% on 4% of the long-term portfolio that is callable in 2007.

Investment Advisory Agreement Approval Nature, Extent and Quality of Services

The Board reviewed and considered the nature and extent of the investment advisory services provided by the Investment Adviser under the Advisory Agreement, including portfolio management, investment research and fixed income securities trading. The Board also reviewed and considered the nature and extent of the non-advisory, administrative services provided by the Trust's Administrator under the Administration Agreement, including accounting, clerical, bookkeeping, compliance, business management and planning, and the provision of supplies, office space and utilities at the Investment Adviser's expense. (The Investment Adviser and the Administrator together are referred to as the "Adviser" and the Advisory and Administration Agreements together are referred to as the "Management Agreement.") The Board also compared the nature of the services provided by the Adviser with similar services provided by non-affiliated advisers as reported to the Board by Lipper Inc. ("Lipper").

The Board reviewed and considered the qualifications of the portfolio managers, the senior administrative managers and other key personnel of the Adviser who provide the administrative and advisory services to the Trust. The Board determined that the Adviser's portfolio managers and key personnel are well qualified by education and/or training and experience to perform the services in an efficient and professional manner. The Board concluded that the nature and extent of the advisory and administrative services provided were necessary and appropriate for the conduct of the business and investment activities of the Trust. The Board also concluded that the overall quality of the advisory and administrative services was satisfactory.

Performance Relative to Comparable Funds Managed by Other Advisers

On a regular basis, the Board reviews the performance of all funds in the Morgan Stanley Fund Complex, including the Trust, compared to their peers, paying specific attention to the underperforming funds. In addition, the Board specifically reviewed the Trust's performance for the one-, three- and five-year periods ended November 30, 2006, as shown in a report provided by Lipper (the "Lipper Report"), compared to the performance of comparable funds selected by Lipper (the "performance peer group"). The Board also discussed with the Adviser the performance goals and the actual results achieved in managing the Trust. The Board concluded that the Trust's performance was competitive with that of its performance peer group.

Fees Relative to Other Proprietary Funds Managed by the Adviser with Comparable Investment Strategies

The Board reviewed the advisory and administrative fee (together, the "management fee") rate paid by the Trust under the Management Agreement. The Board noted that the management fee rate was comparable to the management fee rates charged by the Adviser to other proprietary funds it manages with investment strategies comparable to those of the Trust.

8

Fees and Expenses Relative to Comparable Funds Managed by Other Advisers

The Board reviewed the management fee rate and total expense ratio of the Trust as compared to the average

management fee rate and average total expense ratio for funds, selected by Lipper (the "expense peer group"), managed by other advisers with investment strategies comparable to those of the Trust, as shown in the Lipper Report. The Board concluded that the Trust's management fee rate and total expense ratio were competitive with those of its expense peer group.

Breakpoints and Economies of Scale

The Board reviewed the structure of the Trust's management fee schedule under the Management Agreement and noted that it does not include any breakpoints. The Board considered that the Trust is a closed-end fund and, therefore, that the Trust's assets are not likely to grow with new sales or grow significantly as a result of capital appreciation. The Board concluded that economies of scale for the Trust were not a factor that needed to be considered at the present time.

Profitability of the Adviser and Affiliates

The Board considered information concerning the costs incurred and profits realized by the Adviser and affiliates during the last year from their relationship with the Trust and during the last two years from their relationship with the Morgan Stanley Fund Complex and reviewed with the Adviser the cost allocation methodology used to determine the profitability of the Adviser and affiliates. Based on its review of the information it received, the Board concluded that the profits earned by the Adviser and affiliates were not excessive in light of the advisory, administrative and other services provided to the Trust.

Fall-Out Benefits

The Board considered so-called "fall-out benefits" derived by the Adviser and affiliates from their relationship with the Trust and the Morgan Stanley Fund Complex, such as commissions on the purchase and sale of Trust shares and "float" benefits derived from handling of checks for such purchases and sales of Trust shares, through a broker-dealer affiliate of the Adviser. The Board concluded that the float benefits were relatively small and that the commissions were competitive with those of other broker-dealers.

Soft Dollar Benefits

The Board considered whether the Adviser realizes any benefits from commissions paid to brokers who execute securities transactions for the Trust ("soft dollars"). The Board noted that the Trust invests only in fixed income securities, which do not generate soft dollars.

9

Adviser Financially Sound and Financially Capable of Meeting the Trust's Needs

The Board considered whether the Adviser is financially sound and has the resources necessary to perform its obligations under the Management Agreement. The Board concluded that the Adviser has the financial resources necessary to fulfill its obligations under the Management Agreement.

Historical Relationship Between the Trust and the Adviser

The Board also reviewed and considered the historical relationship between the Trust and the Adviser, including the organizational structure of the Adviser, the policies and procedures formulated and adopted by the Adviser for managing the Trust's operations and the Board's confidence in the competence and integrity of the senior managers and key personnel of the Adviser. The Board concluded that it is beneficial for the Trust to continue its relationship with the Adviser.

Other Factors and Current Trends

The Board considered the controls and procedures adopted and implemented by the Adviser and monitored by the Trust's Chief Compliance Officer and concluded that the conduct of business by the Adviser indicates a good faith effort on its part to adhere to high ethical standards in the conduct of the Trust's business.

General Conclusion

After considering and weighing all of the above factors, the Board concluded that it would be in the best interest of the Trust and its shareholders to approve renewal of the Management Agreement for another year.

10

Morgan Stanley Insured Municipal Income Trust

Portfolio of Investments April 30, 2007 (unaudited)

PRINCIPAL AMOUNT IN THOUSANDS

COUPON MATURITY
RATE DATE VALUE

Tax-Exempt Municipal Bonds (157.9%)