MKS INSTRUMENTS INC
Form 10-Q
August 07, 2008

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
FORM 10-Q

(MARK ONE)

þ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2008

or

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 0-23621

MKS INSTRUMENTS, INC.

(Exact name of registrant as specified in its charter)

Massachusetts	04-2277512
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
2 Tech Drive, Suite 201, Andover, Massachusetts	01810
(Address of principal executive offices)	*(Zip Code)*

Registrant s telephone number, including area code (978) 645-5500

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer þ	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. Yes o No þ

Number of shares outstanding of the issuer s common stock as of July 31, 2008: 49,199,555

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

MKS INSTRUMENTS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	June 30, 2008 (unaudited)	December 31, 2007
ASSETS		
Current assets:		
Cash and cash equivalents	$ 170,925	$ 223,968
Short-term investments	89,018	99,797
Trade accounts receivable, net	109,512	107,504
Inventories	152,468	150,731
Deferred income taxes	17,982	17,984
Other current assets	13,316	9,996
Total current assets	553,221	609,980
Property, plant and equipment, net	80,138	81,365
Goodwill	337,765	337,473
Acquired intangible assets, net	31,052	36,141
Other assets	12,010	11,301
Total assets	$ 1,014,186	$ 1,076,260
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Short-term borrowings	$ 17,339	$ 18,967
Current portion of capital lease obligations	1,035	1,236
Accounts payable	24,416	28,683
Accrued compensation	15,934	17,842
Income taxes payable	1,765	3,649
Other accrued expenses	29,492	25,368
Total current liabilities	89,981	95,745
Long-term debt	5,000	5,000
Long-term portion of capital lease obligations	563	871
Other liabilities	22,624	20,635
Commitments and contingencies (Note 8)		
Stockholders equity:		
Preferred Stock, $0.01 par value, 2,000,000 shares authorized; none issued and outstanding		
Common Stock, no par value, 200,000,000 shares authorized; 49,712,411 and 54,261,947 shares issued and outstanding at June 30, 2008 and December 31, 2007, respectively	113	113

Additional paid-in capital	637,104	685,465
Retained earnings	245,559	255,244
Accumulated other comprehensive income	13,242	13,187
Total stockholders equity	896,018	954,009
Total liabilities and stockholders equity	$ 1,014,186	$ 1,076,260

The accompanying notes are an integral part of the consolidated financial statements.

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MKS INSTRUMENTS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Net Revenues				
Products	$ 148,077	$ 185,912	$ 319,842	$ 379,476
Services	22,925	18,066	44,608	35,934
Total net revenues	171,002	203,978	364,450	415,410
Cost of revenues				
Cost of products	85,250	106,161	182,873	213,190
Cost of services	15,264	11,787	29,182	23,328
Total cost of revenues	100,514	117,948	212,055	236,518
Gross profit	70,488	86,030	152,395	178,892
Research and development	20,486	18,351	39,735	36,650
Selling, general and administrative	35,113	35,928	66,822	70,504
Amortization of acquired intangible assets	1,984	4,108	5,089	8,215
Income from operations	12,905	27,643	40,749	63,523
Interest expense	64	216	522	433
Interest income	1,700	3,797	4,334	7,319
Impairment of investments	(251)		(1,412)	
Income before income taxes	14,290	31,224	43,149	70,409
Provision for income taxes	5,056	8,697	13,533	20,592
Net income	$ 9,234	$ 22,527	$ 29,616	$ 49,817
Net income per share:				
Basic	$ 0.19	$ 0.40	$ 0.58	$ 0.88
Diluted	$ 0.18	$ 0.39	$ 0.57	$ 0.86
Weighted average common shares outstanding:				
Basic	49,691	56,820	50,712	56,587
Diluted	50,866	57,939	51,718	57,633

The accompanying notes are an integral part of the consolidated financial statements.

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MKS INSTRUMENTS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Six Months Ended June 30,	
	2008	2007
Cash flows from operating activities:		
Net income	$ 29,616	$ 49,817
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	12,216	15,435
Stock-based compensation	7,595	6,895
Tax benefit from stock-based compensation	(29)	2,511
Excess tax benefit from stock-based compensation	(1,330)	(1,025)
Impairment of investments	1,412	
Other	(694)	1,504
Changes in operating assets and liabilities, net of businesses acquired:		
Trade accounts receivable	(953)	(2,739)
Inventories	(791)	(14,154)
Other current assets	(2,377)	(4,825)
Accrued expenses and other current liabilities	3,883	8,983
Accounts payable	(4,397)	(560)
Income taxes payable	(1,991)	(16,671)
Net cash provided by operating activities	42,160	45,171
Cash flows from investing activities:		
Purchases of short-term and long-term available for sale investments	(118,931)	(113,809)
Maturities and sales of short-term and long-term available for sale investments	128,116	69,721
Purchases of property, plant and equipment	(5,446)	(6,898)
Other	524	557
Net cash provided by (used in) investing activities	4,263	(50,429)
Cash flows from financing activities:		
Proceeds from short-term borrowings	63,882	56,992
Payments on short-term borrowings	(66,516)	(53,943)
Repurchases of common stock	(101,938)	(31,719)
Principal payments on long-term debt and capital lease obligations	(783)	(640)
Proceeds from exercise of stock options and employee stock purchase plan	6,538	38,968
Excess tax benefit from stock-based compensation	1,330	1,025
Net cash provided by (used in) financing activities	(97,487)	10,683
Effect of exchange rate changes on cash and cash equivalents	(1,979)	520

Increase (decrease) in cash and cash equivalents	(53,043)	5,945
Cash and cash equivalents at beginning of period	223,968	215,208
Cash and cash equivalents at end of period	$ 170,925	$ 221,153

The accompanying notes are an integral part of the consolidated financial statements.

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(Tables in thousands, except share and per share data)

1) Basis of Presentation

The terms MKS and the Company refer to MKS Instruments, Inc. and its subsidiaries. The interim financial data as of June 30, 2008 and for the three and six months ended June 30, 2008 and 2007 is unaudited; however, in the opinion of MKS, the interim data includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the results for the interim periods. The unaudited consolidated financial statements presented herein have been prepared in accordance with the instructions to Form 10-Q and do not include all of the information and note disclosures required by United States generally accepted accounting principles. The consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the MKS Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission on February 28, 2008.

The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments, including those related to revenue recognition, stock-based compensation, inventory, intangible assets, goodwill and other long-lived assets, in-process research and development expenses, merger expenses, income taxes and investments. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

2) Goodwill and Intangible Assets

Intangible Assets

Acquired amortizable intangible assets consisted of the following as of June 30, 2008:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Completed technology	$ 93,204	$ (78,775)	$ 14,429
Customer relationships	23,542	(10,863)	12,679
Patents, trademarks, tradenames and other	29,729	(25,785)	3,944
	$ 146,475	$ (115,423)	$ 31,052

Acquired amortizable intangible assets consisted of the following as of December 31, 2007:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Completed technology	$ 93,204	$ (75,681)	$ 17,523

Customer relationships	23,542	(9,644)	13,898
Patents, trademarks, tradenames and other	29,729	(25,009)	4,720
	$ 146,475	$ (110,334)	$ 36,141

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

Aggregate amortization expense related to acquired intangibles for the three and six months ended June 30, 2008 was $1,984,000 and $5,089,000, respectively. Aggregate amortization expense related to acquired intangibles for the three and six months ended June 30, 2007 was $4,108,000 and $8,215,000, respectively. Estimated amortization expense for each of the five succeeding fiscal years is as follows:

Year	Amount
2008 (remaining)	$3,912
2009	7,751
2010	6,309
2011	5,764
2012	3,488

Goodwill

The changes in the carrying amount of goodwill during the three and six months ended June 30, 2008 were not material.

3) Net Income Per Share

The following table sets forth the computation of basic and diluted net income per share:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Numerator:				
Net income	$ 9,234	$ 22,527	$ 29,616	$ 49,817
Denominator:				
Shares used in net income per common share basic	49,691	56,820	50,712	56,587
Effect of dilutive securities:				
Stock options, restricted stock and employee stock purchase plan	1,175	1,119	1,006	1,046
Shares used in net income per common share diluted	50,866	57,939	51,718	57,633
Net income per common share:				
Basic	$ 0.19	$ 0.40	$ 0.58	$ 0.88
Diluted	$ 0.18	$ 0.39	$ 0.57	$ 0.86

The computation of diluted net income per common share excludes the effect of the potential exercise of options to purchase approximately 3,133,941 and 3,200,458 shares for the three and six months ended June 30, 2008 and approximately 1,997,191 and 2,744,392 shares for the three and six months ended June 30, 2007, respectively, because the option exercise price was greater than the average market price of our common shares and the effect of including these options would have been anti-dilutive.

4) Inventories

Inventories consist of the following:

	June 30, 2008	December 31, 2007
Raw material	$ 86,874	$ 73,529
Work in process	23,019	26,171
Finished goods	42,575	51,031
	$ 152,468	$ 150,731

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

5) Stockholders Equity

Comprehensive Income

Components of comprehensive income were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Net income	$ 9,234	$ 22,527	$ 29,616	$ 49,817
Other comprehensive income (loss):				
Changes in value of financial instruments designated as cash flow hedges (net of tax)	3,792	148	840	(154)
Foreign currency translation adjustment	(2,681)	(95)	(601)	255
Unrealized gain (loss) on investments (net of tax)	(174)	44	(184)	71
Other comprehensive income	937	97	55	172
Total comprehensive income	$ 10,171	$ 22,624	$ 29,671	$ 49,989

Stock Repurchase Program

On February 12, 2007, MKS Board of Directors approved a share repurchase program (the Program) for the repurchase of up to $300.0 million of its outstanding stock over the subsequent two years. The repurchases may be made from time to time on the open market or through privately negotiated transactions. The timing and amount of any shares repurchased under the Program will depend on a variety of factors, including the price of our common stock, corporate and regulatory requirements, capital availability, and other market conditions. The Program may be discontinued at any time at the discretion of the Company and its Board of Directors. During the three months ended June 30, 2008, we repurchased 1,582,000 shares of common stock for $36,666,000 for an average price of $23.18 per share and during the six months ended June 30, 2008, we repurchased 5,051,000 shares of common stock for $101,939,000 for an average price of $20.18 per share. During the three months ended June 30, 2007, we repurchased 690,765 shares of common stock for $18,844,000 for an average price of $27.28 per share and during the six months ended June 30, 2007, we repurchased 1,201,000 shares of common stock for $31,719,000 for an average price of $26.42 per share.

6) Income Taxes

The Company adopted FASB Interpretation 48, Accounting for Uncertainty in Income Taxes (FIN 48) in 2007. At December 31, 2007, the total amount of gross unrecognized tax benefits, which excludes interest and penalties discussed below, was approximately $16,100,000. If these benefits were recognized in a future period, the timing of which is not estimable, the net unrecognized tax benefit of approximately $13,200,000 would impact the Company s effective tax rate. The total amount of gross unrecognized tax benefits at June 30, 2008 was approximately $16,900,000. The increase from January 1, 2008 was primarily attributable to tax positions taken by the Company in the six months ended June 30, 2008.

MKS and its subsidiaries are subject to U.S. federal income tax as well as the income tax of multiple state and foreign jurisdictions. The Company has concluded all U.S. federal income tax matters for years through 2002. The 2003 federal tax year remains open to the extent of the loss carryforward to 2004 and 2005. Currently, the Company is under a federal audit for the 2005 tax year. As of June 30, 2008, there were ongoing audits in various other tax jurisdictions.

Within the next 12 months, it is reasonably possible that the Company may recognize $4,500,000 to $5,000,000 of previously unrecognized tax benefits related to various federal, state, and foreign tax positions as a result of the conclusion of various audits and the expiration of the statute of limitations. The following tax years, in the major tax jurisdictions noted, are open for assessment or refund: U.S. Federal: 2003 to 2007, Germany: 2001 to 2007, Korea: 2005 to 2007, Japan: 2001 to 2007, and the United Kingdom: 2006 and 2007.

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

The Company will accrue interest and, if applicable, penalties, for any uncertain tax positions. This interest and penalty expense will be a component of income tax expense. At June 30, 2008 and December 31, 2007, the Company had approximately $1,900,000 and $1,500,000, respectively, accrued for interest on unrecognized tax benefits.

The Company s effective tax rate for the three and six months ended June 30, 2008 was 35.4% and 31.4%, respectively. The effective tax rate for the six months ending June 30, 2008 is less than the statutory tax rate primarily due to the profits of the Company s international subsidiaries being taxed at rates lower than the U.S. statutory tax rate. The Company s effective tax rate for the three and six month periods ended June 30, 2007 was 27.9% and 29.2%, respectively. The effective tax rate for the three and six month periods ended June 30, 2007 is less than the statutory tax rate primarily due to the profits of our international subsidiaries being taxed at rates lower than the U.S. statutory tax rate and the benefit from U.S. research and development credits.

7) Geographic, Product and Significant Customer Information

The Company operates in one segment for the development, manufacturing, sales and servicing of products that measure, control, power and monitor critical parameters of advanced manufacturing processes. The Company s chief decision-maker reviews consolidated operating results to make decisions about allocating resources and assessing performance for the entire Company.

Information about the Company s operations in different geographic regions is presented in the tables below. Net revenues to unaffiliated customers are based on the location in which the sale originated. Transfers between geographic areas are at negotiated transfer prices and have been eliminated from consolidated net revenues.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Geographic net revenues:				
United States	$ 97,883	$ 127,505	$ 220,905	$ 257,852
Japan	23,653	27,897	49,899	53,943
Europe	28,802	22,009	54,513	42,936
Asia (excluding Japan)	20,664	26,567	39,133	60,679
	$ 171,002	$ 203,978	$ 364,450	$ 415,410

	June 30, 2008	December 31, 2007
Long-lived assets:		
United States	$ 62,350	$ 63,731
Japan	7,015	6,520
Europe	4,236	4,386
Asia (excluding Japan)	8,901	9,269
	$ 82,502	$ 83,906

The Company groups its products into three product groups. Net product and service revenues for these product groups are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Instruments and Control Systems	$ 90,238	$ 97,338	$ 187,208	$ 198,529
Power and Reactive Gas Products	64,736	86,813	140,786	172,380
Vacuum Products	16,028	19,827	36,456	44,501
	$ 171,002	$ 203,978	$ 364,450	$ 415,410

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

The company had one customer comprising 20% of net revenues for the three months ended June 30, 2008 and one customer comprising 20% of net revenues for the six months ended June 30, 2008. The Company had one customer comprising 21% of net revenues for the three months ended June 30, 2007 and one customer comprising 20% of net revenues for the six months ended June 30, 2007.

8) Commitments and Contingencies

The Company is subject to various legal proceedings and claims which have arisen in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Company s results of operations, financial condition or cash flows.

The Company reviewed its contractual obligations and commercial commitments as of June 30, 2008 and determined that there were no significant changes from the ones set forth in the Notes to the Company s Annual Report on Form 10-K for the year ended December 31, 2007.

9) Product Warranties

The Company provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company s warranty obligation is affected by shipment volume, product failure rates, utilization levels, material usage, and supplier warranties on parts delivered to the Company. Should actual product failure rates, utilization levels, material usage, or supplier warranties on parts differ from the Company s estimates, revisions to the estimated warranty liability would be required.

Product warranty activities for the six months ended June 30 were as follows:

	2008	2007
Balance at January 1	$ 9,497	$ 11,549
Provisions for product warranties	2,937	4,020
Direct charges to warranty liability	(2,979)	(4,211)
Balance at June 30	$ 9,455	$ 11,358

10) Cash and Cash Equivalents and Investments

All highly liquid investments with a maturity date of three months or less at the date of purchase are considered to be cash equivalents. The appropriate classification of investments in securities is determined at the time of purchase. Debt securities that the Company does not have the intent and ability to hold to maturity are classified as available-for-sale and are carried at fair value. Unrealized gains and losses on securities classified as available-for-sale are included in accumulated other comprehensive income in consolidated stockholders equity.

The Company reviews its investment portfolio on a monthly basis to identify and evaluate individual investments that have indications of possible impairment. The factors considered in determining whether a loss is other-than-temporary include: the length of time and extent to which fair market value has been below the cost basis, the financial condition and near-term prospects of the issuer, credit quality, and the Company s ability to

hold the investment for a period of time sufficient to allow for any anticipated recovery in fair value. At December 31, 2007, the Company determined that declines in the fair value of two of its investments in certain commercial paper were other-than-temporary. This commercial paper was issued by two structured investment vehicles (SIVs) that entered into receivership during the fourth quarter of 2007 and failed to make payment at maturity. Due to the mortgage-related assets held by these issuers, they were exposed to adverse market conditions that affected the value of their collateral and their ability to access short-term funding. These investments were not trading on active markets, and therefore, had no readily determinable market value. Therefore, as of December 31, 2007, the Company recorded a $1,457,000 impairment charge to earnings based upon it receiving contemporaneous quotes from established third-party pricing services. This resulted in a new cost basis for the securities of $4,275,000 at December 31, 2007.

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

During the Company s review of its investment portfolio as of June 30, 2008, the Company determined that further declines in the value of these two investments were other-than-temporary. As a result of the Company s evaluation as of June 30, 2008, it recorded an additional $251,000 impairment charge to earnings during the three months ended June 30, 2008, based upon the Company receiving limited quotes from established third-party pricing services on markets that are not active. For the six months ended June 30, 2008, the Company has recorded impairment charges of $1,412,000 on these two investments. This resulted in a new cost basis for the securities of $2,373,000 at June 30, 2008.

11) Recently Issued Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board (the FASB) issued SFAS No. 141(R), Business Combinations, which replaces SFAS No. 141. This revised standard requires assets, liabilities and non-controlling interests acquired to be measured at fair value and requires that costs incurred to effect the acquisition be recognized separately from the business combination. In addition, this statement expands the scope to include all transactions and other events in which one entity obtains control over one or more businesses. This statement is effective for all business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. The Company is in the process of evaluating whether the adoption of this standard will have a material effect on its consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an Amendment of ARB No. 51. This statement establishes accounting and reporting standards for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. This statement is effective for fiscal years beginning on or after December 15, 2008. The Company is in the process of evaluating whether the adoption of this standard will have a material effect on its financial position, results of operations or cash flows.

In March 2008, the FASB issued SFAS No. 161, Disclosures about Derivative Instruments and Hedging Activities, an amendment of FASB Statement No. 133 (SFAS 161). This statement is intended to improve transparency in financial reporting by requiring enhanced disclosures of an entity s derivative instruments and hedging activities and their effects on the entity s financial position, financial performance, and cash flows. SFAS 161 applies to all derivative instruments within the scope of SFAS 133, Accounting for Derivative Instruments and Hedging Activities (SFAS 133). Entities with instruments subject to SFAS 161 must provide more robust qualitative disclosures and expanded quantitative disclosures. SFAS 161 is effective prospectively for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application permitted. The Company is currently evaluating the disclosure implications of this statement.

12) Fair Value Measurements

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment of FASB Statement No. 115, (SFAS 159) which is effective for fiscal years beginning after November 15, 2007. This statement permits entities to choose to measure many financial instruments and certain other items at fair value. This statement also establishes presentation and disclosure requirements designed to facilitate comparisons between entities that choose different measurement attributes for similar types of assets and liabilities. Unrealized gains and losses on items for which the fair value option is elected would be reported in earnings. On January 1, 2008, the Company adopted SFAS 159 and has elected not to measure any additional financial instruments and other items at fair value.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements, (SFAS 157), which is effective for fiscal years beginning after November 15, 2007 and for interim periods within those years. This statement defines fair value, establishes a framework for measuring fair value and expands the related disclosure requirements. This statement applies under other accounting pronouncements that require or permit fair value measurements. The statement indicates, among other things, that a fair value measurement assumes that the transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. SFAS 157 defines fair value based upon an exit price model.

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

Relative to SFAS 157, the FASB issued FASB Staff Positions (FSP) 157-1 and 157-2. FSP 157-1 amends SFAS 157 to exclude SFAS No. 13, Accounting for Leases, (SFAS 13) and its related interpretive accounting pronouncements that address leasing transactions, while FSP 157-2 delays the effective date of the application of SFAS 157 to fiscal years beginning after November 15, 2008 for all nonfinancial assets and nonfinancial liabilities that are recognized or disclosed at fair value in the financial statements on a nonrecurring basis.

The Company adopted SFAS 157 as of January 1, 2008, with the exception of the application of the statement to non-recurring nonfinancial assets and nonfinancial liabilities. Non-recurring nonfinancial assets and nonfinancial liabilities for which we have not applied the provisions of SFAS 157 include those measured at fair value in goodwill impairment testing, indefinite lived intangible assets measured at fair value for impairment testing, asset retirement obligations initially measured at fair value, and those initially measured at fair value in a business combination.

SFAS 157 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset and liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Level 1 assets and liabilities include debt and equity securities and derivative contracts that are traded in an active exchange market.

Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include debt securities with quoted prices that are traded less frequently than exchange-traded instruments and derivative contracts whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data. This category generally includes certain U.S. Government and agency mortgage-backed debt securities, corporate debt securities, and non-exchange traded derivative contracts.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Assets and liabilities of the Company measured at fair value on a recurring basis as of June 30, 2008, are summarized as follows:

		Fair Value Measurements at Reporting Date Using		
Description	6/30/08	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)

Assets				
Cash equivalents	$ 80,581	$ 80,581	$	$
Available-for-sale-securities	89,017	86,644	2,373	
Derivatives Currency Forward Contracts	882		882	
Total assets	$ 170,480	$ 167,225	$ 3,255	$

Cash Equivalents

Cash equivalents of $80,581,000, consisting of Federal Government and Government Agency Obligations, Commercial Paper, and Other Corporate Obligations, are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets.

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MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data)

Available-For-Sale Securities

Available-for-sale securities of $86,644,000, consisting of Federal Government and Government Agency Obligations, Commercial Paper, and Other Corporate Obligations, are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets.

Available-for-sale securities of $2,373,000, consisting of two structured investment vehicles (SIVs) that entered into receivership during the fourth quarter of 2007 and failed to make payment at maturity, are classified within Level 2 of the fair value hierarchy due to the investments having quoted prices that are traded less frequently than exchange-traded instruments.

Derivatives

As a result of the Company s global operating activities, the Company is exposed to market risks from changes in foreign currency exchange rates, which may adversely affect its operating results and financial position. When deemed appropriate, the Company minimizes its risks from foreign currency exchange rate fluctuations through the use of derivative financial instruments. The forward foreign currency exchange contracts are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within Level 2.

The table below presents a reconciliation for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the period from January 1, 2008 to June 30, 2008.

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Available-for-sale-Securities
Beginning balance at January 1, 2008	$ 4,275
Total gains or losses (realized/unrealized)	
Included in earnings (or changes in net assets)	(1,412)
Included in other comprehensive income	
Purchases, issuances, and settlements	(490)
Transfers in and/or out of Level 3	(2,373)
Ending balance at June 30, 2008	$ 0
The amount of total gains or losses for the period included in earnings (or changes in net assets) attributable to the change in unrealized gains or losses relating to assets still held at the reporting date	$ (1,412)

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MKS INSTRUMENTS, INC.

ITEM 2. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

We believe that this Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act and Section 21E of the Securities Exchange Act. When used herein, the words believes, anticipates, plans, expects, estimates, would, intends and similar expressions are intended to identify forward-looking statements. These forward-looking statements reflect management s current opinions and are subject to certain risks and uncertainties that could cause results to differ materially from those stated or implied. While we may elect to update forward looking statements at some point in the future, we specifically disclaim any obligation to do so even if our estimates or expectations change. Risks and uncertainties include, but are not limited to those discussed in our Annual Report on Form 10-K for the year ended December 31, 2007 in the section entitled Risk Factors.

Overview

We are a leading worldwide provider of instruments, components, subsystems and process control solutions that measure, control, power, monitor and analyze critical parameters of semiconductor and other advanced manufacturing processes.

We are managed as one operating segment which is organized around three product groups: Instruments and Control Systems, Power and Reactive Gas Products and Vacuum Products. Our products are derived from our core competencies in pressure measurement and control, materials delivery, gas composition analysis, electrostatic charge management, control and information technology, power and reactive gas generation and vacuum technology. Our products are used in diverse markets, applications and processes. Our primary served markets are manufacturers of capital equipment for semiconductor devices, and for other thin film applications including flat panel displays, solar cells, data storage media and other advanced coatings. We also leverage our technology in other markets with advanced manufacturing applications including medical equipment, pharmaceutical manufacturing, energy generation and environmental monitoring.

Our customers include manufacturers of semiconductor capital equipment and semiconductor devices; thin film capital equipment used in the manufacture of flat panel displays, solar cells, data storage media, and other coating applications; other industrial, medical and manufacturing companies; and university, government and industrial research laboratories. For the six months ended June 30, 2008 and the full year ended December 31, 2007, we estimate that approximately 61% and 68% of our net revenues, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers. We expect that revenues to the semiconductor capital equipment manufacturers and semiconductor device manufacturers will continue to account for a substantial majority of our revenues.

During 2007 and 2008, quarterly revenues ranged from $171.0 million to $211.4 million. For the third quarter of 2008, we expect that our net revenues could be slightly below this range. However, the semiconductor capital equipment industry is subject to rapid demand shifts, which are difficult to predict, and we are uncertain how long revenue levels may be maintained or the timing or extent of any future downturn or upturn in the semiconductor capital equipment industry.

A portion of our net revenues is to operations in international markets. For the six months ended June 30, 2008 and full year ended December 31, 2007, international revenues accounted for approximately 39% and 39% of net revenues, respectively.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. There have been no material changes in our critical accounting policies since December 31, 2007. For further information, please see the discussion of critical accounting policies in our Annual Report on Form 10-K for the year ended December 31, 2007 in the section captioned Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates.

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Results of Operations

The following table sets forth, for the periods indicated, the percentage of total net revenues of certain line items included in MKS consolidated statements of operations data.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Net revenues				
Product	86.6%	91.1%	87.8%	91.3%
Services	13.4	8.9	12.2	8.7
Total net revenues	100.0	100.0	100.0	100.0
Cost of revenues				
Cost of product revenues	49.9	52.0	50.2	51.3
Cost of service revenues	8.9	5.8	8.0	5.6
Total cost of revenues	58.8	57.8	58.2	56.9
Gross profit	41.2	42.2	41.8	43.1
Research and development	12.0	9.0	10.9	8.8
Selling, general and administrative	20.5	17.6	18.3	17.0
Amortization of acquired intangible assets	1.2	2.0	1.4	2.0
Income from operations	7.5	13.6	11.2	15.3
Interest income, net	1.0	1.7	1.0	1.7
Impairment of investments	(0.1)		(0.4)	
Income before income taxes	8.4	15.3	11.8	17.0
Provision for income taxes	3.0	4.3	3.7	5.0
Net income	5.4%	11.0%	8.1%	12.0%

Net Revenue (dollars in millions)

	Three Months Ended June 30,			Six Month Ended June 30,		
	2008	2007	% Change	2008	2007	% Change
Net revenues						
Product	$ 148.1	$ 185.9	(20.4)%	$ 319.8	$ 379.5	(15.7)%
Service	22.9	18.1	26.9%	44.6	35.9	24.1%
Total net revenues	$ 171.0	$ 204.0	(16.2)%	$ 364.4	$ 415.4	(12.3)%

Product revenues decreased $37.8 million during the three month period ended June 30, 2008 mainly due to a decrease in worldwide demand from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers, which resulted in a decrease in revenues of $46.6 million or 36.9% compared to the same

period for the prior year. This decrease was partially offset by an increase in revenues related to other markets, mainly solar, of $8.8 million or 14.8%.

Product revenues decreased $59.7 million during the six month period ended June 30, 2008 mainly due to a decrease in worldwide demand from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers, which resulted in a decrease in revenues of $74.5 million or 27.9% compared to the same period for the prior year. This decrease was partially offset by an increase in revenues related to other markets, mainly solar, of $14.8 million or 13.2%.

Service revenues consist mainly of fees for services relating to the maintenance and repair of our products, software maintenance, installation services and training. Service revenue increased $4.8 million and $8.7 million during the three and six month periods ended June 30, 2008, respectively, mainly due to a higher installed base of products and increased software maintenance fees.

Total international net revenues, including product and service, were $73.1 million and $143.5 million for the three and six months ended June 30, 2008 or 42.8% and 39.4% of net revenues, respectively, compared to $76.5 million and $157.6 million for the three and six months ended June 30, 2007 or 37.5% and 37.9% of net revenues, respectively.

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Gross Profit

	Three Months Ended June 30,			Six Months Ended June 30,		
	2008	2007	% Points Change	2008	2007	% Points Change
Gross profit as percentage of net revenues						
Product	42.4%	42.9%	(0.5)%	42.8%	43.8%	(1.0)%
Service	33.4%	34.8%	(1.4)%	34.6%	35.1%	(0.5)%
Total gross profit percentage	41.2%	42.2%	(1.0)%	41.8%	43.1%	(1.3)%

Gross profit on product revenues decreased 0.5 percentage points for the three months ended June 30, 2008 compared to the three months ended June 30, 2007. Our margin was negatively impacted by approximately 3.2 percentage points from lower revenue volumes and 0.8 percentage points from unfavorable foreign currency fluctuations, largely offset by 2.7 percentage points from lower overhead spending and 0.8 percentage points from reduced warranty costs and favorable product mix.

Gross profit on product revenues decreased by 1.0 percentage point during the six months ended June 30, 2008 consisting of approximately 2.2 lower percentage points from decreased revenue volumes and 0.8 percentage point from unfavorable product mix, partially offset by 2.1 percentage points from lower overhead spending.

Cost of service revenues consists primarily of costs of providing services for repair and training which includes salaries and related expenses and other fixed costs. Service gross profit decreased by 1.4 and 0.5 percentage points for the three and six month periods ended June 30, 2008, respectively, compared to the corresponding periods of the prior year, primarily as a result of higher overhead costs partially offset by increased revenue volumes.

Research and Development (dollars in millions)

	Three Months Ended June 30,			Six Months Ended June 30,		
	2008	2007	% Change	2008	2007	% Change
Research and development expenses	$20.5	$18.4	11.6%	$39.7	$36.7	8.4%

Research and development expense increased $2.1 million during the three months ended June 30, 2008 mainly due to increased compensation expense of $0.8 million, as a result of higher staffing levels, $0.6 million of higher consultant costs and $0.7 million in other research and development costs, including patent related costs.

Research and development expense increased $3.1 million during the six months ended June 30, 2008 mainly due to $1.1 million of higher consultant costs, increased compensation expense of $1.0 million, as a result of higher staffing levels and $1.0 million in other research and development costs, including patent related costs.

Our research and development is primarily focused on developing and improving our instruments, components, subsystems and process control solutions to improve process performance and productivity.

We have hundreds of products and our research and development efforts primarily consist of a large number of projects focused on developing and improving our instruments, components, subsystems and process control solutions to improve process performance and productivity, none of which is individually material to us. Current projects typically have a duration of 12 to 30 months depending upon whether the product is an enhancement of existing

technology or a new product. Our current initiatives include projects to enhance the performance characteristics of older products, to develop new products and to integrate various technologies into subsystems. These projects support in large part the transition in the semiconductor industry to larger wafer sizes and smaller integrated circuit geometries, which require more advanced process control technology. Research and development expenses consist primarily of salaries and related expenses for personnel engaged in research and development, fees paid to consultants, material costs for prototypes and other expenses related to the design, development, testing and enhancement of our products.

We believe that the continued investment in research and development and ongoing development of new products are essential to the expansion of our markets, and expect to continue to make significant investment in research and development activities. We are subject to risks if products are not developed in a timely manner, due to rapidly changing customer requirements and competitive threats from other companies and technologies. Our success primarily depends on our products being designed into new generations of equipment for the semiconductor industry. We develop products that are technologically advanced so that they are positioned to be chosen for use in each successive generation of semiconductor capital equipment. If our products are not chosen to be designed into our customers products, our net revenues may be reduced during the lifespan of those products.

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Selling, General and Administrative (dollars in millions)

	Three Months Ended June 30,			Six Months Ended June 30,		
	2008	2007	% Change	2008	2007	% Change
Selling, general and administrative expenses	$35.1	$35.9	(2.3)%	$66.8	$70.5	(5.2)%

Selling, general and administrative expenses decreased $0.8 million for the three months ended June 30, 2008 due mainly to a $1.6 million decrease in consulting costs, primarily related to IT infrastructure, and $0.6 million decrease in professional fees, partially offset by $0.7 million in foreign exchange losses and $0.5 million in higher facilities costs.

Selling, general and administrative expenses decreased $3.7 million for the six months ended June 30, 2008 mainly due to $2.9 million in lower consulting costs, primarily related to IT infrastructure, a $2.2 million reduction in foreign exchange as a result of foreign exchange gains of $1.5 million in 2008 compared to foreign exchange losses of $0.7 million in 2007, partially offset by $0.9 million in higher facility costs. The foreign exchange gains in 2008 were primarily attributable to the settlement of cash and intercompany loans at different foreign exchange rates in connection with a legal entity consolidation in the first quarter between some of our foreign subsidiaries.

Amortization of Acquired Intangible Assets (dollars in millions)

	Three Months Ended June 30,			Six Months Ended June 30,		
	2008	2007	% Change	2008	2007	% Change
Amortization of acquired intangible assets	$2.0	$4.1	(51.7)%	$5.1	$8.2	(38.1)%

Amortization expense for the three and six months ended June 30, 2008 decreased $2.1 million and $3.1 million, respectively, as certain acquired intangible assets became fully amortized during 2007 and 2008.

Interest Income, Net (dollars in millions)

	Three Months Ended June 30,			Six Months Ended June 30,		
	2008	2007	% Change	2008	2007	% Change
Interest income, net	$1.6	$3.6	(54.3)%	$3.8	$6.9	(44.6)%

Interest income, net decreased $2.0 million and $3.1 million during the three and six month periods ended June 30, 2008, respectively, mainly as a result of lower average cash and cash equivalent balances and lower interest rates in 2008. The lower outstanding cash balances are primarily a result of our stock repurchase program.

Impairment of Investments (dollars in millions)

	Three Months Ended June 30,			Six Months Ended June 30,		
	2008	2007	% Change	2008	2007	% Change
Impairment of investments	$0.3	$	100%	$1.4	$	100%

During the fourth quarter of 2007, we determined that declines in the fair value of our investments in certain commercial paper were other-than-temporary. This commercial paper was issued by two structured investment vehicles (SIVs) that entered into receivership during the fourth quarter of 2007 and failed to make payments at maturity. Due to the mortgage-related assets these issuers held, they were exposed to the adverse market conditions that affected the value of their collateral and their ability to access short-term funding. These investments were not currently trading on active markets, and therefore, had no readily determinable market value. As a result of our assessment as of December 31, 2007, we recorded a $1.5 million impairment charge to earnings, based upon the Company receiving contemporaneous quotes from established third-party pricing services.

During the three and six months ended June 30, 2008, we determined that further declines in the value of these two investments were other-than-temporary. As a result we recorded additional impairment charges of $0.3 million and $1.4 million, respectively. This resulted in a new cost basis for these securities of $2.4 million at June 30, 2008.

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Provision for Income Taxes (dollars in millions)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Provision for income taxes	$5.1	$8.7	$13.5	$20.6

Our effective tax rate for the three and six month periods ending June 30, 2008 was 35.4% and 31.4%, respectively. The effective tax rate for the six months ended June 30, 2008, is less than the statutory tax rate primarily due to the profits of our international subsidiaries being taxed at rates lower than the U.S. statutory tax rate.

Our effective tax rate for the three and six month periods ended June 30, 2007 was 27.9% and 29.2%, respectively. The effective tax rate is less than the statutory tax rate primarily due to the profits of our international subsidiaries being taxed at rates lower than the U.S. statutory tax rate and the benefit from U.S. research and development credits.

We adopted FASB Interpretation 48, Accounting for Uncertainty in Income Taxes (FIN 48) in 2007. At December 31, 2007, the total amount of gross unrecognized tax benefits, which excludes interest and penalties discussed below, was approximately $16.1 million. If these benefits were recognized in a future period, the timing of which is not estimable, the net unrecognized tax benefit of approximately $13.2 million would impact the Company s effective tax rate. The total amount of gross unrecognized tax benefits at June 30, 2008 was approximately $16.9 million. The increase from January 1, 2008 was primarily attributable to tax positions taken by the Company in the six months ended June 30, 2008.

MKS and its subsidiaries are subject to U.S. federal income tax as well as the income tax of multiple state and foreign jurisdictions. We have concluded all U.S. federal income tax matters for years through 2002. The 2003 federal tax year remains open to the extent of the loss carryforward to 2004 and 2005. Currently the Company is under a federal income tax audit for the 2005 tax year. As of June 30, 2008, there were ongoing audits in various other tax jurisdictions. We do not expect any material changes to the returns as filed from these open audits.

Within the next 12 months, it is reasonably possible that the Company may recognize $4.5 million to $5.0 million of previously unrecognized tax benefits related to various federal, state, and foreign tax positions as a result of the conclusion of various audits and the expiration of the statute of limitations. The following tax years, in the major tax jurisdictions noted, are open for assessment or refund: U.S. Federal: 2003 to 2007, Germany: 2001 to 2007, Korea: 2005 to 2007, Japan: 2001 to 2007, and the United Kingdom: 2006 and 2007.

We will accrue interest and, if applicable, penalties, for any uncertain tax positions. This interest and penalty expense will be a component of income tax expense. At December 31, 2007 and June 30, 2008, we had $1.5 million and $1.9 million, respectively, accrued for interest on unrecognized tax benefits.

The U.S. Research and Development Tax Credit expired at the end of 2007 and to date has not been reinstated. As a result, we did not take any benefit for this credit in the three and six month periods ending June 30, 2008. The benefits taken in the three and six month periods ending June 30, 2007 for this credit were approximately $0.5 million and $0.8 million, respectively.

Liquidity and Capital Resources

Cash, cash equivalents and short-term investments totaled $259.9 million at June 30, 2008 compared to $323.8 million at December 31, 2007. This decrease was attributable to our share repurchase program through which we repurchased $101.9 million of our common stock during the first six months of fiscal 2008. The primary source of funds for the first six months of fiscal 2008 was cash provided by operating activities of $42.2 million.

Net cash provided by operating activities of $42.2 million for the six months ended June 30, 2008, resulted mainly from net income of $29.6 million and non-cash charges of $12.2 million for depreciation and amortization and $6.2 million for stock-based compensation and related tax benefits, offset by an increase in net operating assets of $4.1 million and a decrease in net operating liabilities of $2.5 million. The $4.1 million increase in operating assets consisted primarily of a $2.4 million increase in other current assets, mainly due to increases in value added tax

receivables at foreign locations and a $1.0 million increase in accounts receivable. The net decrease in operating liabilities is mainly caused by a decrease of $4.4 million in accounts payable and $2.0 million in income taxes payable, offset by an increase of $3.9 million in accrued expenses and other liabilities. Net cash provided by operating activities of $45.2 million for the six months ended June 30, 2007, resulted mainly from net income of $49.8 million, non-cash charges of $15.4 million for depreciation and amortization and $8.4 million for stock-based compensation and related tax benefits, offset by an increase in net operating assets of $21.7 million and an $8.2 million decrease in net operating liabilities. The $21.7 million increase in net operating assets consisted primarily of a $14.2 million increase in inventory, to support our then increased revenues and to support the increased inventory levels required for our planned China facility

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relocation in the second half of 2007, and a $4.8 million increase in other current assets, primarily related to prepaid taxes. The decrease in net operating liabilities of $8.2 million is mainly caused by a decrease of $16.7 million in current income taxes payable, primarily due to payments of estimated U.S. taxes, offset by an increase of $8.9 million in accrued expenses and other liabilities.

Net cash provided by investing activities of $4.3 million for the six months ended June 30, 2008, resulted primarily from net sales of $9.2 million of available for sale investments, offset by $5.5 million in purchases of property, plant and equipment. Net cash used in investing activities of $50.4 million for the six months ended June 30, 2007, resulted primarily from net purchases of $44.1 million of available for sale investments.

Net cash used in financing activities of $97.5 million for the six months ended June 30, 2008, consisted primarily of repurchases of common stock of $101.9 million and $2.6 million in net payments on short-term borrowings, offset by $6.5 million in proceeds from the exercise of stock options and purchases under our employee stock purchase plan. Net cash provided by financing activities of $10.7 million for the six months ended June 30, 2007, consisted primarily of $39.0 million in proceeds from the exercise of stock options and purchases under our employee stock purchase plan, offset by repurchases of common stock of $31.7 million.

On February 12, 2007, our Board of Directors approved a share repurchase program (the Program) for the repurchase of up to $300.0 million of our outstanding stock over two years. The repurchases may be made from time to time on the open market or through privately negotiated transactions. The timing and amount of any shares repurchased under the Program will depend on a variety of factors, including the price of our common stock, corporate and regulatory requirements, capital availability, and other market conditions. The Program may be discontinued at any time at the discretion of the Company and our Board of Directors. During the six months ended June 30, 2008, we repurchased 5.1 million shares of common stock for $101.9 million for an average price of $20.18 per share and during the six months ended June 30, 2007, we repurchased 1.2 million shares of common stock for $31.7 million for an average price of $26.42 per share.

We believe that our working capital, together with the cash anticipated to be generated from operations, will be sufficient to satisfy our estimated working capital, stock repurchase program activity and planned capital expenditure requirements through at least the next 12 months.

To the extent permitted by Massachusetts law, our Restated Articles of Organization, as amended, require us to indemnify any of our current or former officers or directors or any person who has served or is serving in any capacity with respect to any of our employee benefit plans. Because no claim for indemnification has been pursued by any person covered by the relevant provisions of our Restated Articles of Organization, we believe that the estimated exposure for these indemnification obligations is currently minimal. Accordingly, we have no liabilities recorded for these requirements as of June 30, 2008.

We also enter into agreements in the ordinary course of business which include indemnification provisions. Pursuant to these agreements, we indemnify, hold harmless and agree to reimburse the indemnified party, generally our customers, for losses suffered or incurred by the indemnified party in connection with certain patent or other intellectual property infringement claims, and, in some instances, other claims, by any third party with respect to our products. The terms of these indemnification obligations are generally perpetual after execution of the agreements. The maximum potential amount of future payments we could be required to make under these indemnification agreements is, in some instances, not contractually limited. We have never incurred costs to defend lawsuits or settle claims related to these indemnification obligations. As a result, we believe the estimated fair value of these obligations is minimal. Accordingly, we have no liabilities recorded for these obligations as of June 30, 2008.

When, as part of an acquisition, we acquire all of the stock or all of the assets and liabilities of another company, we assume liability for certain events or occurrences that took place prior to the date of acquisition. The maximum potential amount of future payments we could be required to make for such obligations is undeterminable at this time. Other than obligations recorded as liabilities at the time of the acquisitions, historically we have not incurred significant costs relating to these acquired liabilities. Accordingly, no liabilities have been recorded for these obligations as of June 30, 2008.

In conjunction with certain asset sales, we may provide routine indemnifications whose terms range in duration and often are not explicitly defined. Where appropriate, an obligation for such indemnifications is recorded as a

liability. Because the amounts of liability under these types of indemnifications are not explicitly stated, the overall maximum amount of the obligation under such indemnifications cannot be reasonably estimated. Other than obligations recorded as liabilities at the time of the asset sale, historically we have not made significant payments for these obligations.

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Off-Balance Sheet Arrangements

We do not have any financial partnerships with unconsolidated entities, such as entities often referred to as structured finance, special purpose entities or variable interest entities, which are often established for the purpose of facilitating off-balance sheet arrangements or for other contractually narrow or limited purposes. Accordingly, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had such relationships.

Recently Issued Accounting Pronouncements

In December 2007, the FASB issued SFAS No. 141(R), Business Combinations, which replaces SFAS No. 141. This revised standard requires assets, liabilities and non-controlling interests acquired to be measured at fair value and requires that costs incurred to effect the acquisition be recognized separately from the business combination. In addition, this statement expands the scope to include all transactions and other events in which one entity obtains control over one or more businesses. This statement is effective for all business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. We are in the process of evaluating whether the adoption of this standard will have a material effect on our consolidated financial results.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an Amendment of ARB No. 51 (SFAS No. 160). This statement establishes accounting and reporting standards for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. This statement is effective for fiscal years beginning on or after December 15, 2008. We are in the process of evaluating whether the adoption of this standard will have a material effect on our consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, Disclosures about Derivative Instruments and Hedging Activities, an Amendment of FASB Statement No. 133 (SFAS 161). This statement is intended to improve transparency in financial reporting by requiring enhanced disclosures of an entity s derivative instruments and hedging activities and their effects on the entity s financial position, financial performance, and cash flows. SFAS 161 applies to all derivative instruments within the scope of SFAS 133, Accounting for Derivative Instruments and Hedging Activities (SFAS 133). Entities with instruments subject to SFAS 161 must provide more robust qualitative disclosures and expanded quantitative disclosures. SFAS 161 is effective prospectively for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application permitted. We are currently evaluating the disclosure implications of this statement.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Information concerning market risk is contained in the section entitled Management s Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission on February 28, 2008. There were no material changes in our exposure to market risk from December 31, 2007.

ITEM 4. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)) as of June 30, 2008. Disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported on a timely basis and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective and designed to ensure that the information required to be disclosed in our reports filed or submitted under the Exchange Act was recorded, processed, summarized and reported within the requite time periods.

Limitations on Effectiveness of Controls

Our management has concluded that our disclosure controls and procedures and internal controls provide reasonable assurance that the objectives of our control system are met. However, our management (including our Chief Executive Officer and Chief Financial Officer) does not expect that the disclosure controls and procedures or internal controls will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their

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costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, errors and instances of fraud, if any, within the Company have been or will be detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple errors or mistakes. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurances that any design will succeed in achieving its stated goals under all potential future conditions. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

We are subject to various legal proceedings and claims, which have arisen in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on our results of operations, financial condition or cash flows.

ITEM 1A. RISK FACTORS.

Information regarding risk factors affecting the Company s business are discussed in the Company s Annual Report on Form 10-K for the year ended December 31, 2007 in the section entitled Risk Factors. As of June 30, 2008, there have been no material changes from the risks disclosed therein.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

The following table provides information about purchases by MKS during the quarter ended June 30, 2008, of equity securities that are registered by MKS pursuant to Section 12 of the Exchange Act:

ISSUER PURCHASES OF EQUITY SECURITIES

Period		Total Number of Shares (or Units) Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs[2]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs[2]
4/1/08	4/30/08	660,000	$ 22.25	8,908,000	$ 118,891,000
5/1/08	5/31/08	455,000	$ 24.00	9,363,000	$ 107,963,000
6/1/08	6/30/08	467,000	$ 23.69	9,830,000	$ 96,904,000

1) We repurchased an aggregate of 9,830,000 shares of our common stock pursuant to the repurchase program that we publicly announced on

February 12, 2007 (the Program). During the six months ended June 30, 2008, we repurchased a total of 5,051,000 shares of our common stock pursuant to the Program.

2) Our board of directors approved the repurchase by us of up to an aggregate of $300.0 million of our common stock pursuant to the Program. The expiration date of this Program is February 11, 2009, unless terminated earlier by resolution of our board of directors.

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ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

At our Annual Meeting of Shareholders on May 5, 2008, the following proposals were voted upon as further specified below:

1. Election of Class III Directors for a term to expire at the 2011 annual meeting or until his successor is duly elected or qualified:

	Votes For	Votes Withheld
Robert R. Anderson	47,382,263	613,360
Gregory R. Beecher	47,473,295	522,328
John R. Bertucci	47,324,747	670,876

In addition, Cristina Amon, Leo Berlinghieri, Richard Chute, Peter Hanley, Hans Jochen Kahl, and Louis Valente continued their terms following the annual meeting.

2. Ratification of PricewaterhouseCoopers LLP as our independent auditors:

Votes For	Votes Against	Votes Abstaining
47,231,216	753,443	10,964

ITEM 6. EXHIBITS.

Exhibit No.	Exhibit Description
3.1(1)	Restated Articles of Organization
3.2(2)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 18, 2001
3.3(3)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 16, 2002
3.4(4)	Amended and Restated By-Laws
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(1) Incorporated by reference to the Registration Statement on Form S-4 (File No. 333-49738) filed with the Securities and Exchange Commission on November 13, 2000.

(2) Incorporated by reference to the Registrant s

Quarterly Report on Form 10-Q for the quarter ended June 30, 2001.

(3) Incorporated by reference to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.

(4) Incorporated by reference to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on January 28, 1999, as amended.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MKS INSTRUMENTS, INC.

August 7, 2008

By: /s/ Ronald C. Weigner
Ronald C. Weigner
Vice President and Chief Financial Officer (Principal Financial Officer)