UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

OR

□ TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 1-475

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

A. O. Smith Retirement Security Plan

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

A. O. Smith Corporation 11270 West Park Place Milwaukee, WI 53224

REQUIRED INFORMATION

- 1. Not Applicable.
- 2. Not Applicable.
- 3. Not Applicable.
- 4. The A. O. Smith Retirement Security Plan (the "Plan") is subject to the requirements of the Employee Retirement Income Security Act of 1974 ("ERISA"). Attached hereto is a copy of the most recent financial statements and schedules of the Plan prepared in accordance with the financial reporting requirements of ERISA.

Signature

Exhibits

23.1 Consent of Independent Auditors

Table of Contents

A. O. SMITH RETIREMENT SECURITY PLAN Milwaukee, Wisconsin

AUDITED FINANCIAL STATEMENTS

Years Ended December 31, 2010 and 2009

TABLE OF CONTENTS

	Page
Report of Independent Registered Public Accounting Firm	1
Statements of Net Assets Available for Benefits	2
Statements of Changes in Net Assets Available for Benefits	3
Notes to Financial Statements	4 - 14
Schedule of Assets Held for Investment	15

Table of Contents

Report of Independent Registered Public Accounting Firm

Benefits Committee A.O. Smith Retirement Security Plan Milwaukee, Wisconsin

We have audited the accompanying statements of net assets available for benefits of the A.O. Smith Retirement Security Plan (the Plan) as of December 31, 2010 and 2009, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2010 and 2009, and the changes in its net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Schedule of Assets Held for Investment – December 31, 2010, is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ REILLY, PENNER & BENTON LLP

June 10, 2011 Milwaukee, Wisconsin

Statements of Net Assets Available for Benefits December 31, 2010 and 2009

	2010	2009
Assets:		
Investments in Master Trust:		
Investment options at fair value	\$266,002,126	\$222,148,031
Total investments	266,002,126	222,148,031
Receivables:		
Notes receivable from participants	4,236,780	2,389,494
Company contributions	170,016	4,467,824
Due from brokers for securities transactions (Net)	—	273,845
Accrued Interest	27,187	17,374
Total receivables	4,433,983	7,148,537
Liabilities:		
Due to brokers for securities transactions (Net)	(457,783)	—
Net assets reflecting all investments at fair value	269,978,326	229,296,568
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(2,557,181)	(204,720)
Net assets available for benefits	\$267,421,145	\$229,091,848

The accompanying notes to the financial statements are an integral part of this statement

Statements of Changes in Net Assets Available for Benefits Years Ended December 31, 2010 and 2009

	2010	2009
Increases:		
Net income from the Master Trust:		
Investment options	\$ 25,215,783	\$ 28,977,797
Interest income from participant loans	182,458	138,681
Net income	25,398,241	29,116,478
Contributions:		
Company	4,452,185	4,467,963
Participants	10,243,495	7,460,564
Rollovers	512,725	156,391
Total contributions	15,208,405	12,084,918
Total increases	40,606,646	41,201,396
Decreases:		
Benefit and withdrawal payments	18,471,873	15,753,569
Change in net assets before transfers	22,134,773	25,447,827
Transfers from other plans	16,194,524	3,159
Change in net assets available for benefits	38,329,297	25,450,986
Net assets available for benefits:		
Beginning of year	229,091,848	203,640,862
End of year	267,421,145	\$229,091,848

The accompanying notes to the financial statements are an integral part of this statement.

Notes to Financial Statements December 31, 2010 and 2009

1. Description of Plan and Significant Accounting Policies

The A. O. Smith Retirement Security Plan (the Plan) was originally established as the A.O. Smith Profit Sharing Retirement Plan (Plan) in 1956. Effective January 1, 2010, the Plan was renamed the A. O. Smith Retirement Security Plan and the accounts of all non-union participants maintained under of the A. O. Smith Corporation Savings Plan (the Plan) were transferred into the Plan. As of January 1, 2010, the Plan generally covers salaried or commissioned employees of the A. O. Smith Corporation (the Company), its subsidiaries and affiliates and the non-union hourly employees of the Company plants in Charlotte, NC; McBee, SC; El Paso, TX; LaVergne, TN; and Ashland City, TN, providing a convenient means of savings with the assistance of the Company. To be eligible, certain employees must either be employed at a rate expected to work 1,000 hours of service in a plan year or actually complete 1,000 hours of service during their first 12 months of employment or any plan year thereafter. Employees are eligible to participate in the Plan on the first day of the month after the individual qualifies as an eligible employee. Employees elect to participate by designating a portion of their earnings to be contributed to an account maintained on behalf of the participant. Participants direct the investment of their contributions into various investment options offered by the Plan.

Effective January 1, 2010, the Plan was revised to satisfy the safe harbor requirements of Internal Revenue Code 401(k)(13) as follows:

- a. An automatic enrollment feature was instituted, along with an annual automatic increase in employee pre-tax contributions;
- b. Plan participants have the ability to contribute up to 100% of eligible compensation on a pre-tax basis;
- c. The Company will make a matching contribution equal to 100% of the first 1% of a participant's compensation and 50% on the next 5% of a participant's compensation contributed to the Plan, for a maximum annual matching contribution of 3.5%; and
- d. All matching contributions vest after two years of vesting service.

The Plan was also revised to permit the Company to make an additional matching contribution to be allocated as of the last day of the plan year for those participants who are employed on such date or who terminated during the year on or after attainment of age 65, death, total and permanent disability, or termination resulting directly from job abolishment.

Also, effective January 1, 2010, all participants who are not eligible to accrue a benefit under any of the Company's qualified defined benefit pension plans will be eligible for an annual nonelective employer contribution equal to 3% of the participant's total compensation for the plan year, and will be eligible for an annual discretionary annual nonelective employer contribution in an amount determined by the Company, if any. In order to receive a nonelective employer contribution for a plan year, an eligible participant must be employed in a full-time equivalent position for the plan year or complete 1,000 hours of service during a plan year and be employed on the last day of the plan year or terminate employment during the plan year as a result of death, disability, retirement, or termination resulting from job abolishment. This nonelective contribution will vest after three years of vesting service.

Contributions

The Plan is a defined contribution plan to which participants may make contributions of not less than 1% and up to 100% of their earnings. The Plan provides for all participant contributions to be made with tax-deferred dollars under Section 401(k) of the Internal Revenue Code. These contributions are excluded from the participant's current wages for federal income tax purposes. The Internal Revenue Code has set a maximum of \$16,500 for tax-deferred contributions that may be excluded for any individual participant in 2010 and 2009.

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

1. Description of Plan and Significant Accounting Policies (Continued)

Contributions (Continued)

The Internal Revenue Code also allows additional catch-up contributions for participants age fifty or older. The maximum additional contribution allowed was \$5,500 in 2010 and 2009. The Plan also provides for Company contributions in the form of matching contributions and nonelective contributions.

No federal income tax is paid on the participant and Company contributions and growth thereon until the participant withdraws them from the Plan.

Contributions from participants are recorded when the Company makes payroll deductions from Plan participants. Contributions from the Company are accrued in the period in which they become obligations of the Company in accordance with terms of the Plan.

The Company makes a matching contribution equal to 100% on the first 1% of a participant's compensation and 50% on the next 5% of a participant's compensation that is contributed to the Plan, for a maximum annual matching contribution of 3.5%. In addition to the matching contribution, the Company also makes a non-elective contribution of 3% of pay for certain participants. The Company will make a non-elective contribution for a participant for a plan year if the participant was not eligible to accrue a benefit under any defined benefit pension plan or money purchase pension plan sponsored or contributed to by the Company for such plan year, the participant was either employed as a full-time equivalent employee for the plan year or is credited with 1,000 hours of service for the plan year, and the participant was employed by the Company on December 31 of the plan year or terminated during the plan year after having attained age 65 or as a result of death, disability or job elimination.

Participant Account Provisions

A separate account is maintained for each participant. The separate account balances are adjusted periodically as follows:

- a. Weekly for hourly participant contributions; semimonthly for salaried participant contributions
- b. Weekly for Company matching contributions for hourly participants; semimonthly for Company matching contributions for salaried participants
- c. Daily for a proportionate share of increases and decreases in the fair value of Plan assets
- d. At the time of benefit distribution or withdrawal, which consist of the following:
 - i. Upon retirement, death, disability, or termination of employment resulting from permanent reduction of personnel, an employee may withdraw any amount or the entire account balance for any reason. At age 70 1/2, an account distribution election must be made.
 - ii. Upon termination of employment for other reasons, the balance in the separate account (reduced for non-vested Company contributions and growth thereon based on years of service) may be paid in a lump sum.

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

1. Description of Plan and Significant Accounting Policies (Continued)

Participant Account Provisions (Continued)

- iii. An active participant age 59 1/2 or older may withdraw a lump sum of any amount up to the balance in the separate account, other than the employer nonelective contributions and earnings thereon.
- iv. A participant may withdraw all or any portion of the separate account attributable to after-tax contributions and earnings and rollover contributions and earnings. All or any portion of the balance attributable to Company contributions made prior to January 1, 2010, discretionary matching contributions, and earnings on these contributions may also be withdrawn if the participant has been employed by the Company for five full years of employment with the Company.
- v. A participant may withdraw at any time any amount attributable to participant contributions and earnings, to prevent eviction from or foreclosure on, a principal residence or to pay certain expenses (namely post-secondary education, unreimbursed medical expenses, funeral costs, and repairs to principal residence). Withdrawals may not include earnings on 401(k) contributions posted to a participant's account after 1988.
- vi. A participant may withdraw in a lump sum all participant contributions made as a result of the participant's initial automatic enrollment in the Plan within the first 90 days of the commencement of the contributions.
- vii. No lump sum cash distribution in excess of \$5,000 will be made without the consent of the participant.
- e. Daily for investment allocation changes made by participants.

Forfeitures arising from participant accounts are allocated to a Plan forfeiture account, which is reduced periodically to pay Plan expenses. Participants should refer to the Plan document for a complete description of the Plan's provisions.

Vesting

Participants of the Plan are immediately 100% vested in their own contributions to the Plan. Company matching contributions are 100% vested after two years of vesting service. Non-elective company contributions to the plan are 100% vested after three years of vesting service. However, the matching contributions made prior to 2010 with respect to a participant who is not credited with an hour of service on or after January 1, 2010 is subject to a 5-year graded vesting schedule.

Notes Receivable from Participants

Participants may borrow from their Plan accounts (excluding employer non-elective contributions and earnings thereon) a minimum of \$1,000 up to a maximum of \$50,000 or 50 percent of their account balance, whichever is less. The loans are secured by the balance in the participant's account and bear interest at rates which are commensurate with local prevailing rates as determined by the Plan's Trustee.

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

1. Description of Plan and Significant Accounting Policies (Continued)

Forfeited Accounts

At December 31, 2010 and 2009, forfeited nonvested accounts totaled \$0 and 20,380, respectively. These accounts will be used to reduce future employer contributions or future administrative expenses of the Plan.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts in the financial statements. Actual results could differ from those estimates.

Investment Valuation

At December 31, 2010 and 2009, all of the Plan's assets are held in the A.O. Smith Profit Sharing Retirement Master Trust (Master Trust). The financial statements of the Master Trust are presented separately and are incorporated by reference to the financial statements of the Plan.

Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 820, *Fair Value Measurements and Disclosures*, provides the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy under FASB ASC 820 are described as follows:

Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 – Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in inactive markets; inputs other than quoted prices that are observable for the asset or liability; inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

In accordance with accounting principles generally accepted in the United States of America, investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the plan. Accordingly, the statements of net assets available for benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The statements of changes in net assets available for benefits are prepared on a contract value basis.

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

1. Description of Plan and Significant Accounting Policies (Continued)

Investment Valuation (Continued)

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2010 and 2009.

Mutual funds: Valued at the net asset value (NAV) of shares held by the Plan at year-end.

Common/collective trusts: Valued at the NAV of shares of a bank collective trust held by the Plan at year-end. The NAV is based on the fair value of the underlying investments held by the fund. Participant transactions (issuances and redemptions) may occur daily. Were the Plan to initiate a full redemption of the collective trust, the investment advisor reserves the right to temporarily delay withdrawal from the trust in order to ensure that securities liquidations will be carried out in an orderly business manner.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Administrative Expenses

Expenses related to the administration of the Plan are paid out of the principal or income of the Plan. These amounts are netted with investment income on the Statements of Changes in Net Assets Available for Benefits. Administrative expenses totaled \$176,577 and \$62,639 for the years ended December 31, 2010 and 2009, respectively

Payment of Benefits

Benefits are recorded when paid. As of December 31, 2010, \$4,369 were requested by participants, but had not yet been paid from the plan.

Subsequent Events

Management has evaluated subsequent events for possible recognition or disclosure through the date of financial statement issuance. There were no subsequent events that required recognition or disclosure.

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

2. A. O. Smith Profit Sharing Retirement Master Trust

The Plan assets are held in the A. O. Smith Corporation Master Trust at the Marshall and Ilsley Trust Company. The Plan offers seventeen investment vehicles in which participants may invest their account balances. If available, quoted market prices are used to value investments. Shares of mutual funds and common collective trusts are valued at the net asset value of shares held by the plan at year end. The value of the guaranteed investment contract is calculated by discounting the related cash flows based on current yields of similar instruments with comparable durations.

The amount of Master Trust assets, income and change in value which is allocated to the Plan is determined by the ratio of participant account balances in the Plan to the total participant account balances of all participating plans. The defined contribution plans participating in the Master Trust at December 31, 2010, are the A. O. Smith Retirement Security Plan, the A. O. Smith Corporation Savings Plan, and the APCOM, Inc. Retirement and Savings Plan. At December 31, 2010 and 2009, the Plan was allocated 89.193% and 82.854%, respectively, of the Master Trust assets.

Significant information related to the investments in the Master Trust as of and for the year ended December 31, 2010, is as follows:

	December 31, 2010 Balance	2010 Income/ (Loss)	2010 Change in Fair Value
a. Mutual Funds:		<u> </u>	
American EuroPacific Growth Fund	\$ 18,456,813	\$ 1,426,562	\$ (767,540)
American Growth Fund of America	7,119,314	780,321	1,045,066
Vanguard Institutional Index Trust Fund	14,184,494	1,761,598	2,257,061
Evergreen Core Bond Fund	—	208,644	(6,457,356)
Wells Fargo Advantage Total Return Fund	10,828,182	273,210	10,828,182
American Balanced Fund	12,319,955	1,470,962	48,357
Subtotal	62,908,758	5,921,297	6,953,770
b. Common/Collective Trusts:			
A.O. Smith Stock Fund	6,111,188	1,396,209	2,001,500
M&I Target Retirement - 2010	11,913,091	1,330,662	1,556,891
M&I Target Retirement - 2020	15,442,287	1,963,278	3,719,088
M&I Target Retirement - 2030	8,519,458	1,179,290	2,133,252
M&I Target Retirement - 2040	2,717,075	360,381	1,454,325
M&I Target Retirement - 2050	839,609	104,718	406,849
A.O. Smith Fiduciary Fund	4,625,977	762,647	1,032,524
A.O. Smith Munder Midcap Fund	35,938,779	7,255,011	4,889,352
A.O. Smith M&I Midcap Fund	10,956,553	1,798,416	2,111,434
A.O. Smith First American Equity Income Fund	10,337,452	1,465,868	1,038,923
A.O. Smith Stable Asset Income Fund	127,409,146	3,309,840	3,371,282
Subtotal	234,810,615	20,926,320	23,715,420
c. Cash	512,856		489,320
Total	\$298,232,229	\$26,847,617	\$31,158,510

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

2. A. O. Smith Profit Sharing Retirement Master Trust (Continued)

The following summarizes the classification of investments by classification and method of valuation in accordance with accounting principles generally accepted in the United States of America as of December 31, 2010:

		Fair Value Measurement at Reporting Date Using		
Description	Total	Quoted Prices in Active markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Mutual funds:				
Domestic stock	\$ 7,119,314	\$ 7,119,314	\$ —	\$ —
Foreign stock	18,456,813	18,456,813	—	—
Index	14,184,494	14,184,494	—	_
Balanced	12,319,955	12,319,955	_	_
Fixed income	10,828,182	10,828,182	—	
Total mutual funds	62,908,758	62,908,758	_	
Common collective trusts:				
Lifecycle	39,431,520	_	39,431,520	_
Domestic stock	67,969,949		67,969,949	
Stable return	127,409,146		127,409,146	
Total common collective trusts	234,810,615		234,810,615	
Cash	512,856	_	512,856	_
Total	\$298,232,229	\$ 62,908,758	\$235,323,471	\$

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

2. A. O. Smith Profit Sharing Retirement Master Trust (Continued)

Significant information related to the investments in the Master Trust as of and for the year ended December 31, 2009, is as follows:

	December 31, 2009 Balance	2009 Income/ (Loss)	2009 Change in Value
a. Mutual Funds:			
American EuroPacific Growth Fund	\$ 19,224,353	\$ 4,944,668	\$ 7,026,746
American Growth Fund of America	6,074,248	1,419,816	2,487,167
Vanguard Institutional Index Trust Fund	11,927,433	2,395,079	2,394,765
Evergreen Core Bond Fund	6,457,356	804,869	1,711,221
American Balanced Fund	12,271,598	2,087,501	1,410,014
Subtotal	55,954,988	11,651,933	15,029,913
b. Common/Collective Trusts:			
A.O. Smith Stock Fund	4,109,688	1,316,715	1,654,709
M&I Target Retirement - 2010	10,356,200	1,910,597	2,435,339
M&I Target Retirement - 2020	11,723,199	2,561,119	5,254,658
M&I Target Retirement - 2030	6,386,206	1,496,321	2,549,027
M&I Target Retirement - 2040	1,262,750	333,180	592,814
M&I Target Retirement - 2050	432,760	106,932	241,847
A.O. Smith Fiduciary Fund	3,593,453	607,683	2,305,248
A.O. Smith Munder Midcap Fund	31,049,427	7,538,237	5,814,083
A.O. Smith M&I Midcap Fund	8,845,119	2,218,621	2,324,844
A.O. Smith First American Equity Income Fund	9,298,529	1,661,082	882,604
A.O. Smith Stable Asset Income Fund	124,037,864	3,317,283	(11,843,808)
Subtotal	211,095,195	23,067,770	12,211,365
c. Cash	23,536	_	13,604
Total	\$267,073,719	\$34,719,703	\$ 27,254,882

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

2. A. O. Smith Profit Sharing Retirement Master Trust (Continued)

The following summarizes the classification of investments by classification and method of valuation in accordance with accounting principles generally accepted in the United States of America as of December 31, 2009:

		Fair Value Measurement at Reporting Date Using		
Description	Total	Quoted Prices in Active markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Mutual funds:				
Domestic stock	\$ 6,074,248	\$ 6,074,248	\$ —	\$ —
Foreign stock	19,224,353	19,224,353	—	
Index	11,927,433	11,927,433	—	
Balanced	12,271,598	12,271,598	—	_
Fixed income	6,457,356	6,457,356	—	
Total mutual funds	55,954,988	55,954,988		
Common collective trusts:				
Lifecycle	30,161,115	_	30,161,115	_
Domestic stock	47,597,687	_	47,597,687	
Stable return	124,037,864		124,037,864	
Total common collective trusts	211,095,195		211,095,195	
Cash	23,536	_	23,536	_
Total	\$267,073,719	\$ 55,954,988	\$211,118,731	\$

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

3. A.O. Smith Stable Asset Income Fund

The master trust in which the plan's assets are invested owns shares of the A.O. Smith Stable Asset Income Fund (the Fund). The Fund owns shares of one collective investment fund which hold guaranteed investment contracts. Information pertaining to this fund for the year ended December 31, 2010, is as follows:

	Average Yield	Crediting Interest Rate	Investments at Fair Value	Investments at Contract Value	Adjustment to Contract Value
Wells Fargo Stable Return Fund G	2.38%	2.90%	118,792,702	116,235,521	(2,557,181)

Information pertaining to the two funds for the year ended December 31, 2009, is as follows:

	Average Yield	Crediting Interest Rate	Investments at Fair Value	Investments at Contract Value	Adjustment to Contract Value
Wells Fargo Stable Return Fund G	3.40%	3.32%	102,564,872	102,360,152	(204,720)

4. Income Tax Status

The Plan obtained its latest determination letter on October 21, 1999, in which the Internal Revenue Service stated the Plan as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. The Plan administrator and the Plan's tax counsel believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the plan and recognize a tax liability (or asset) if the plan has taken an uncertain position that more likely than not would not be sustained upon examination by the Department of Labor or Internal Revenue Service. The plan administrator has analyzed the tax positions taken by the plan, and has concluded that as of December 31, 2010, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The plan administrator believes it is no longer subject to income tax examinations for years prior to 2007.

5. Plan Termination

While the Company has not expressed any intent to terminate the Plan, it is free to do so at any time. In the event of termination, each participant automatically becomes vested to the extent of the balance in their separate account.

Notes to Financial Statements December 31, 2010 and 2009 (Continued)

6. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks of loss such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

7. Reported Financial Information

As discussed in Note 2, all of the Plan's investments are held in a Master Trust. Assets held for investment purposes and 5% reportable transactions are reported at the Master Trust level and not at the Plan level. These schedules have been included in the Master Trust filing.

8. Reconciliation of Financial Statements to Schedule H Form 5500

The following is the reconciliation between the financial statements and Form 5500:

	2010	2009
Total net assets per Form 5500, Schedule H	\$269,978,326	\$229,296,568
Adjustment from fair value to contract value for fully benefit-responsive		
investment contracts	(2,557,181)	(204,720)
Net Assets available for benefits per financial statements	\$267,421,145	\$229,091,848
Increase in net assets per Form 5500, Schedule H	\$ 40,681,758	\$ 25,655,706
Adjustment from fair value to contract value for fully benefit-responsive		
investment contracts-December 31, 2010	(2,557,181)	—
Adjustment from fair value to contract value for fully benefit-responsive		
investment contracts-December 31, 2009	204,720	(204,720)
	\$ 38,329,297	\$ 25,450,986

EIN 39-0619790, Plan 018 Schedule H, line 4i - Schedule of Assets Held for Investment

December 31, 2010

(b) (a) <u>Identity</u>	of Issue	(c) Description of Investment	(d) Cost	(e) Current Value
* Partic	ipant Loans	3.49% - 9.25%	\$—	\$4,236,780

* -Denotes a party-in-interest

See Report of Independent Registered Public Accounting Firm

Pursuant to the requirements of the Securities Exchange Act of 1934, the persons who administer the employee benefit plan have duly cause this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

A. O. Smith Retirement Security Plan

/s/ Sherry Lundell

Sherry Lundell, Manager, Retirement Plans

16

Dated: June 13, 2011

CONSENT OF REILLY, PENNER & BENTON LLP

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-05799) pertaining to the A. O. Smith Retirement Security Plan (the Plan) of our report dated June 10, 2011 with respect to the financial statements and schedules of the Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2010.

Milwaukee, Wisconsin June 10, 2011 /s/ REILLY, PENNER & BENTON LLP