

ABB LTD  
Form 20-F  
March 15, 2012

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SCHEDULES](#)

[Table of Contents](#)

As filed with the Securities and Exchange Commission on March 15, 2012

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

---

**FORM 20-F**

o **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

**OR**

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

For the fiscal year ended December 31, 2011

**OR**

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

**OR**

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

**Commission file number: 001-16429**

---

**ABB Ltd**

(Exact name of registrant as specified in its charter)

**Switzerland**

(Jurisdiction of incorporation or organization)

**Affolternstrasse 44  
CH-8050 Zurich  
Switzerland**

(Address of principal executive offices)

Edgar Filing: ABB LTD - Form 20-F

Richard A. Brown  
Affolternstrasse 44  
CH-8050 Zurich  
Switzerland  
Telephone: +41-43-317-7111  
Facsimile: +41-43-317-7992

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
American Depositary Shares, each representing one Registered Share	New York Stock Exchange
Registered Shares, par value CHF 1.03	New York Stock Exchange*

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None.**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None.**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 2,314,743,264 Registered Shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

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  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing: U.S. GAAP   
International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. item 17  item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

\*  
Listed on the New York Stock Exchange not for trading or quotation purposes, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

Table of Contents

## TABLE OF CONTENTS

	<b>Page</b>
<u>PART I</u>	<u>3</u>
<u>Item 1.</u>	<u>Identity of Directors, Senior Management and Advisers</u>
	<u>3</u>
<u>Item 2.</u>	<u>Offer Statistics and Expected Timetable</u>
	<u>3</u>
<u>Item 3.</u>	<u>Key Information</u>
	<u>4</u>
<u>Item 4.</u>	<u>Information on the Company</u>
	<u>15</u>
<u>Item 4A.</u>	<u>Unresolved Staff Comments</u>
	<u>32</u>
<u>Item 5.</u>	<u>Operating and Financial Review and Prospects</u>
	<u>32</u>
<u>Item 6.</u>	<u>Directors, Senior Management and Employees</u>
	<u>83</u>
<u>Item 7.</u>	<u>Major Shareholders and Related Party Transactions</u>
	<u>100</u>
<u>Item 8.</u>	<u>Financial Information</u>
	<u>102</u>
<u>Item 9.</u>	<u>The Offer and Listing</u>
	<u>104</u>
<u>Item 10.</u>	<u>Additional Information</u>
	<u>104</u>
<u>Item 11.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
	<u>118</u>
<u>Item 12.</u>	<u>Description of Securities Other than Equity Securities</u>
	<u>120</u>
<u>PART II</u>	<u>121</u>
<u>Item 13.</u>	<u>Defaults, Dividend Arrearages and Delinquencies</u>
	<u>121</u>
<u>Item 14.</u>	<u>Material Modifications to the Rights of Security Holders and Use of Proceeds</u>
	<u>121</u>
<u>Item 15.</u>	<u>Controls and Procedures</u>
	<u>121</u>
<u>Item 15T.</u>	<u>Controls and Procedures</u>
	<u>122</u>
<u>Item 16A.</u>	<u>Audit Committee Financial Expert</u>
	<u>122</u>
<u>Item 16B.</u>	<u>Code of Ethics</u>
	<u>122</u>
<u>Item 16C.</u>	<u>Principal Accountant Fees and Services</u>
	<u>122</u>
<u>Item 16D.</u>	<u>Exemptions from the Listing Standards for Audit Committees</u>
	<u>123</u>
<u>Item 16E.</u>	<u>Purchase of equity securities by Issuer &amp; Affiliated Purchases</u>
	<u>123</u>
<u>Item 16F.</u>	<u>Change in Registrant's Certifying Accountant</u>
	<u>123</u>
<u>Item 16G.</u>	<u>Corporate Governance</u>
	<u>123</u>
<u>PART III</u>	<u>123</u>
<u>Item 17.</u>	<u>Financial Statements</u>
	<u>123</u>
<u>Item 18.</u>	<u>Financial Statements</u>
	<u>123</u>
<u>Item 19.</u>	<u>Exhibits</u>
	<u>124</u>

Table of Contents

**INTRODUCTION**

ABB Ltd is a corporation organized under the laws of Switzerland. In this Annual Report, "the ABB Group," "ABB," the "Company," "we," "our" and "us" refer to ABB Ltd and its consolidated subsidiaries (unless the context otherwise requires). We also use these terms to refer to ABB Asea Brown Boveri Ltd and its subsidiaries prior to the establishment of ABB Ltd as the holding company for the entire ABB Group in 1999, as described in this Annual Report under "Item 4. Information on the Company Introduction History of the ABB Group." Our American Depositary Shares (each representing one registered share of ABB Ltd) are referred to as "ADSs." The registered shares of ABB Ltd are referred to as "shares." Our principal corporate offices are located at Affolternstrasse 44, CH-8050 Zurich, Switzerland, telephone number +41-43-317-7111.

**FINANCIAL AND OTHER INFORMATION**

ABB Ltd has prepared its statutory unconsolidated financial statements in accordance with the Swiss Code of Obligations. The Consolidated Financial Statements of ABB Ltd, including the notes thereto, as of December 31, 2011 and 2010 and for each of the years in the three-year period ended December 31, 2011 (our Consolidated Financial Statements) have been prepared in accordance with United States generally accepted accounting principles (U.S. GAAP).

In this Annual Report: (i) "\$," "U.S. dollar" and "USD" refer to the lawful currency of the United States of America; (ii) "CHF" and "Swiss franc" refer to the lawful currency of Switzerland; (iii) "EUR" and "euro" refer to the lawful currency of the participating member states of the European Economic and Monetary Union (Eurozone); (iv) "SEK" and "Swedish krona" refer to the lawful currency of Sweden; (v) "GBP" and "pound sterling" refer to the lawful currency of the United Kingdom; (vi) "Indian rupee" refers to the lawful currency of India; (vii) "Chinese renminbi" refers to the lawful currency of the People's Republic of China; and (viii) "AED" refers to the lawful currency of the United Arab Emirates.

Except as otherwise stated, all monetary amounts in this Annual Report are presented in U.S. dollars. Where specifically indicated, amounts in Swiss francs have been translated into U.S. dollars. These translations are provided for convenience only, and they are not representations that the Swiss franc could be converted into U.S. dollars at the rate indicated. These translations have been made using the twelve o'clock buying rate in the City of New York for cable transfers as certified for customs purposes by the Federal Reserve Bank of New York as of December 30, 2011, unless otherwise indicated. The twelve o'clock buying rate for Swiss francs on December 30, 2011 was \$1.00 = CHF 0.9374. The twelve o'clock buying rate for Swiss francs on March 9, 2012 was \$1.00 = CHF 0.92.

**FORWARD-LOOKING STATEMENTS**

This Annual Report includes forward-looking statements. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "intends," "may," "will," or "should" or, in each case, their negative, or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this Annual Report and include statements regarding our intentions, beliefs or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, dispositions, strategies and the countries and industries in which we operate.

These forward-looking statements include, but are not limited to the following:

statements in "Item 3. Key Information Dividends and Dividend Policy" regarding our policy on future dividend payments,

statements in "Item 3. Key Information Risk Factors,"

Table of Contents

statements in "Item 4. Information on the Company" regarding the timing of intended capital expenditures,

statements in "Item 5. Operating and Financial Review and Prospects" regarding our management objectives, including our mid-term outlook, as well as trends in results, prices, volumes, operations, margins and overall market trends, and

statements in "Item 8. Financial Information Legal Proceedings" regarding the outcome of certain legal and compliance matters.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the countries and industries in which we operate, may differ materially from those described in or suggested by the forward-looking statements contained in this Annual Report. In addition, even if our results of operations, financial condition and liquidity, and the development of the countries and industries in which we operate, are consistent with the forward-looking statements contained in this Annual Report, those results or developments may not be indicative of results or developments in subsequent periods. Important factors that could cause actual results to differ materially from our expectations are contained in cautionary statements in this Annual Report and include, without limitation, the following:

Our business is exposed to risks associated with the volatile global economic environment and political conditions.

Illegal behavior by any of our employees or agents could have a material adverse impact on our consolidated operating results, cash flows, and financial position as well as on our reputation and our ability to do business.

Our operations in emerging markets expose us to risks associated with conditions in those markets.

Undertaking long-term, fixed price or turnkey projects exposes our businesses to risk of loss should our actual costs exceed our estimated or budgeted costs.

We operate in very competitive markets and could be adversely affected if we fail to keep pace with technological changes.

Our international operations expose us to the risk of fluctuations in currency exchange rates.

Our hedging activities may not protect us against the consequences of significant fluctuations in exchange rates, interest rates or commodity prices on our earnings and cash flows.

Increases in costs or limitation of supplies of raw materials may adversely affect our financial performance.

An inability to protect our intellectual property rights could adversely affect our business.

Many of our contracts contain performance obligations that require innovative design capabilities, are technologically complex, require state-of-the-art manufacturing expertise or are dependent upon factors not wholly within our control. Failure to meet these obligations could adversely affect our profitability and future prospects.

## Edgar Filing: ABB LTD - Form 20-F

Industry consolidation could result in more powerful competitors and fewer customers.

We are subject to environmental laws and regulations in the countries in which we operate. We incur costs to comply with such regulations, and our ongoing operations may expose us to environmental liabilities.

Table of Contents

We may be the subject of product liability claims.

We may encounter difficulty in managing our business due to the global nature of our operations.

If we are unable to obtain performance and other guarantees from financial institutions, we may be prevented from bidding on, or obtaining, some contracts, or our costs with respect to such contracts could be higher.

Examinations by tax authorities and changes in tax regulations could result in lower earnings and cash flows.

If we are unable to attract and retain qualified management and personnel then our business may be adversely affected.

Anticipated benefits of mergers, acquisitions, joint ventures or strategic alliances may not be realized.

We could be affected by future laws or regulations enacted to address climate change concerns as well as the physical effects of climate change.

Increased information technology (IT) security threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks, products, solutions and services.

We urge you to read the sections of this Annual Report entitled "Item 3. Key Information Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects" for a more complete discussion of the factors that could affect our future performance and the countries and industries in which we operate. In light of these risks, uncertainties and assumptions, the forward-looking circumstances described in this Annual Report and the assumptions underlying them may not occur.

Except as required by law or applicable stock exchange rules or regulations, we undertake no obligation to update or revise publicly any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by the cautionary statements referred to above and contained elsewhere in this Annual Report.

**PART I**

**Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable

**Item 2. Offer Statistics and Expected Timetable**

Not applicable

Table of Contents**Item 3. Key Information****SELECTED FINANCIAL DATA**

The following table presents our selected financial and operating information at the dates and for each of the periods indicated. You should read the following information together with the information contained in "Item 5. Operating and Financial Review and Prospects," as well as our Consolidated Financial Statements and the Notes thereto, included elsewhere in this Annual Report.

Our selected financial data are presented in the following tables in accordance with U.S. GAAP and have been derived from our published Consolidated Financial Statements. Our Consolidated Financial Statements as of and for each of the years ended December 31, 2011, 2010, 2009, 2008 and 2007 were audited by Ernst & Young AG.

**INCOME STATEMENT DATA:**

(\$ in millions, except per share data in \$)	2011	2010	2009	2008	2007
<b>Total revenues</b>	<b>37,990</b>	<b>31,589</b>	<b>31,795</b>	<b>34,912</b>	<b>29,183</b>
<b>Total cost of sales</b>	<b>(26,556)</b>	<b>(22,060)</b>	<b>(22,470)</b>	<b>(23,972)</b>	<b>(20,215)</b>
<b>Gross profit</b>	<b>11,434</b>	<b>9,529</b>	<b>9,325</b>	<b>10,940</b>	<b>8,968</b>
Selling, general and administrative expenses	(5,373)	(4,615)	(4,491)	(4,795)	(4,104)
Non-order related research and development expenses	(1,371)	(1,082)	(1,037)	(1,027)	(871)
Other income (expense), net	(23)	(14)	329	(566)	30
<b>Earnings before interest and taxes</b>	<b>4,667</b>	<b>3,818</b>	<b>4,126</b>	<b>4,552</b>	<b>4,023</b>
Interest and dividend income	90	95	121	315	273
Interest and other finance expense <sup>(1)</sup>	(207)	(173)	(127)	(349)	(383)
<b>Income from continuing operations before taxes and cumulative effect of accounting change</b>	<b>4,550</b>	<b>3,740</b>	<b>4,120</b>	<b>4,518</b>	<b>3,913</b>
Provision for taxes	(1,244)	(1,018)	(1,001)	(1,119)	(595)
<b>Income from continuing operations before cumulative effect of accounting change, net of tax</b>	<b>3,306</b>	<b>2,722</b>	<b>3,119</b>	<b>3,399</b>	<b>3,318</b>
Income (loss) from discontinued operations, net of tax <sup>(2)</sup>	9	10	17	(21)	586
<b>Income before cumulative effect of accounting change, net of tax</b>	<b>3,315</b>	<b>2,732</b>	<b>3,136</b>	<b>3,378</b>	<b>3,904</b>
Cumulative effect of accounting change, net of tax <sup>(1)</sup>					(49)
<b>Net income</b>	<b>3,315</b>	<b>2,732</b>	<b>3,136</b>	<b>3,378</b>	<b>3,855</b>
Net income attributable to noncontrolling interests	(147)	(171)	(235)	(260)	(244)
<b>Net income attributable to ABB</b>	<b>3,168</b>	<b>2,561</b>	<b>2,901</b>	<b>3,118</b>	<b>3,611</b>
<i>Amounts attributable to ABB shareholders:</i>					
Income from continuing operations before cumulative effect of accounting change, net of tax	3,159	2,551	2,884	3,142	3,083
Net income	3,168	2,561	2,901	3,118	3,611
<i>Basic earnings per share attributable to ABB shareholders:</i>					
Income from continuing operations before cumulative effect of accounting change, net of tax	1.38	1.12	1.26	1.37	1.37
Net income	1.38	1.12	1.27	1.36	1.60
<i>Diluted earnings per share attributable to ABB shareholders:</i>					
Income from continuing operations before cumulative effect of accounting change, net of tax	1.38	1.11	1.26	1.37	1.34
Net income	1.38	1.12	1.27	1.36	1.57
<i>Weighted-average number of shares outstanding (in millions) used to compute:</i>					
Basic earnings per share attributable to ABB shareholders	2,288	2,287	2,284	2,287	2,258
Diluted earnings per share attributable to ABB shareholders	2,291	2,291	2,288	2,296	2,308



Table of Contents**BALANCE SHEET DATA:**

(\$ in millions)	December 31,				
	2011	2010	2009	2008	2007
Cash and equivalents	4,819	5,897	7,119	6,399	4,650
Marketable securities and short-term investments	948	2,713	2,433	1,354	3,240
Total assets	39,648	36,295	34,728	33,011	30,841
Long-term debt	3,231	1,139	2,172	2,009	2,138
Total debt <sup>(3)</sup>	3,996	2,182	2,333	2,363	2,674
Capital stock and additional paid-in capital	1,621	1,454	3,943	4,841	5,780
Total stockholders' equity (including noncontrolling interests)	16,336	15,458	14,473	11,770	11,549

**CASH FLOW DATA:**

(\$ in millions)	2011	2010	2009	2008	2007
Net cash provided by operating activities	3,612	4,197	4,027	3,958	3,054
Net cash provided by (used in) investing activities	(3,253)	(2,747)	(2,172)	114	(2,291)
Net cash used in financing activities	(1,208)	(2,530)	(1,349)	(2,119)	(625)

- (1) In 2009, we adopted a new accounting standard that changed the accounting for convertible debt instruments that contained cash settlement features. Although we did not have any convertible debt instruments outstanding at December 31, 2009, 2008 and 2007, we adopted the provisions of this new standard on a retroactive basis to January 1, 2007, as they related to our 1 billion Swiss francs 3.5% convertible bonds (issued 2003) fully converted by bondholders in 2007. The impact on our Consolidated Income Statement in 2007 was (i) a loss of \$49 million from the effect of the accounting change and (ii) a loss of \$97 million from the conversion of bonds and amortization of discount, recorded in "Interest and other finance expense". As permitted under this standard, we elected to apply the provisions of the standard only to those convertible instruments outstanding at any time during the periods presented in our Consolidated Financial Statements as of and for the each of the three years ended December 31, 2009.
- (2) Income (loss) from discontinued operations, net of tax, in 2007 primarily related to the gain of \$530 million realized on the sale of the downstream oil and gas business.
- (3) Total debt is equal to the sum of short-term debt (including current maturities of long-term debt) and long-term debt.

**DIVIDENDS AND DIVIDEND POLICY**

Payment of dividends is subject to general business conditions, ABB's current and expected financial condition and performance and other relevant factors including growth opportunities. ABB's current dividend policy is to pay a steadily rising, sustainable annual dividend over time.

Dividends may be paid only if ABB Ltd has sufficient distributable profits from previous fiscal years or sufficient free reserves to allow the distribution of a dividend. In addition, at least 5 percent of ABB Ltd's annual net profits must be retained and booked as legal reserves (which is comprised of ordinary reserves, capital contribution reserve and reserve for own shares), unless these reserves already amount to 20 percent of ABB Ltd's share capital. As a holding company, ABB Ltd's main sources of income are dividend and interest from its subsidiaries. At December 31, 2011, of the CHF 12,483 million of stockholders' equity recorded in the unconsolidated statutory financial statements of ABB Ltd prepared in accordance with Swiss law, CHF 2,384 million was attributable to share capital, CHF 6,780 million was attributable to legal reserves (of which CHF 5,269 million was attributable to the capital contribution reserve and CHF 512 million was attributable to the reserve for own shares), and CHF 3,318 million was attributable to free reserves, principally representing net income and retained earnings available for distribution.

ABB Ltd may only pay out a dividend if it has been proposed by a shareholder or the board of directors of ABB Ltd and approved at a general meeting of shareholders, and the auditors confirm that the dividend conforms to statutory law and the Articles of Incorporation of ABB Ltd. In practice, the shareholders' meeting usually approves dividends as proposed by the board of directors, if the board of directors' proposal is confirmed by the statutory auditors.

Table of Contents

Dividends are usually due and payable no earlier than three trading days after the shareholders' resolution, and when paid by way of a nominal value reduction after a two month period from public calls to creditors and certain subsequent actions as required under Swiss law. Dividends not collected within five years after the due date accrue to ABB Ltd and are allocated to its other reserves. For information about the deduction of withholding taxes from dividend payments, see "Item 10. Additional Information Taxation."

We have established a dividend access facility for shareholders who are resident in Sweden under which these shareholders may register with Euroclear Sweden AB, as a holder of up to 600,004,716 shares, and receive dividends in the Swedish kronor equivalent to the dividend paid in Swiss francs without deduction of Swiss withholding tax. For further information, see "Item 10. Additional Information Taxation."

Because ABB Ltd pays cash dividends, if any, in Swiss francs (subject to the exception for certain shareholders in Sweden described above), exchange rate fluctuations will affect the U.S. dollar amounts received by holders of ADSs upon conversion of those cash dividends by Citibank, N.A., the depository, in accordance with the Amended and Restated Deposit Agreement dated May 7, 2001.

With respect to each of the years ended December 31, 2007 and 2008, ABB Ltd paid a dividend of CHF 0.48 (USD 0.46 for 2007 and USD 0.45 for 2008) and with respect to the years ended December 31, 2009 and 2010, ABB Ltd paid a dividend of CHF 0.51 (USD 0.48) per share and CHF 0.60 (USD 0.52) per share, respectively. The dividends with respect to each of the years ended December 31, 2007, 2008 and 2009, were paid by way of a nominal value reduction (reduction in the par value of each share). The USD amounts for each of the foregoing dividend payments made in CHF have been translated using the average rates of the month in which the dividends were paid.

With respect to the year ended December 31, 2011, ABB Ltd's board of directors has proposed to pay a dividend of CHF 0.65 per share, subject to approval by shareholders at ABB's 2012 Annual General Meeting.

## RISK FACTORS

*You should carefully consider all of the information set forth in this Annual Report and the following description of risks and uncertainties that we currently believe may exist. Our business, financial condition or results of operations could be adversely affected by any of these risks. Additional risks of which we are unaware or that we currently deem immaterial may also impair our business operations. This Annual Report also contains forward-looking statements that involve risks and uncertainties. Our results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those described below and elsewhere in this Annual Report. See "Forward-Looking Statements."*

***Our business is exposed to risks associated with the volatile global economic environment and political conditions.***

Adverse changes in economic or political conditions, both inside and outside the U.S., could have a material adverse effect on our business, financial condition, results of operations and liquidity. Volatility in the global financial markets continues to be at high levels. Volatile oil prices, equity market values, disruptions in the financial markets, weakened consumer confidence, risks of increased inflation and deflation and increased unemployment rates have created fears of a recession. These disruptions may continue to have an ongoing adverse effect on the world economy. Continuing economic volatility and financial market disruptions may adversely impact the demand for our products and services. These and other factors may prevent our customers and suppliers from obtaining the financing required to pursue their business activities as planned, which may force them to modify, delay or cancel plans to purchase or supply our products or services. In addition, if our customers do not generate sufficient revenue, or fail to obtain access to the capital markets, they may not be able to pay, or may delay

Table of Contents

payment of, the amounts they owe us. Customers with liquidity issues may lead to additional bad debt expense for us, which may adversely affect our results of operations and cash flows. We are also subject to the risk that the counterparties to our credit agreements and hedging transactions may go bankrupt if they suffer catastrophic demand on their liquidity that prevents them from fulfilling their contractual obligations to us.

Apart from effects relating to the financial crisis and the global economic slowdown that it entailed, our business environment is influenced by numerous other economic or political uncertainties which will affect the global economy and the international capital markets. In periods of slow economic growth or decline, our customers are more likely to decrease expenditures on the types of products and systems we supply and we are more likely to experience decreased revenues as a result. Our power technology divisions are affected by the level of investments by utilities, and our automation technology divisions are affected by conditions in a broad range of industries, including the automotive, pharmaceutical, pulp and paper, marine, metals and minerals and manufacturing and consumer industries. At various times during the last several years, we also have experienced, and may experience in the future, gross margin declines in certain businesses, reflecting the effect of items such as competitive pricing pressures, inventory write-downs, charges associated with the cancellation of planned expansion, increases in pension and postretirement benefit expenses, and increases in component and manufacturing costs resulting from higher labor and material costs borne by our manufacturers and suppliers that, as a result of competitive pricing pressures or other factors, we are unable to pass on to our customers. Economic downturns also may lead to restructuring actions and associated expenses. Uncertainty about future economic conditions makes it difficult for us to forecast operating results and to make decisions about future investments.

In addition, we are subject to the risks that our business operations in or with certain countries may be adversely affected by trade or economic sanctions or other restrictions imposed on these countries and that actual or potential investors that object to these business operations may adversely affect the price of our shares by disposing of, or deciding not to, purchase our shares. These countries may from time to time include countries that are identified by the United States as state sponsors of terrorism. In 2011, our total revenues from business with countries identified by the U.S. government as state sponsors of terrorism represented a very small percent of our total revenues. Based on the amount of revenues and other relevant quantitative and qualitative factors we have determined that our business in 2011 with countries identified by the U.S. government as state sponsors of terrorism was not material.

***Illegal behavior by any of our employees or agents could have a material adverse impact on our consolidated operating results, cash flows, and financial position as well as on our reputation and our ability to do business.***

Certain of our employees or agents have taken, and may in the future take, actions that violate or are alleged to violate the U.S. Foreign Corrupt Practices Act of 1977 (FCPA), legislation promulgated pursuant to the 1997 Organisation for Economic Co-operation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, applicable antitrust laws and other applicable laws or regulations. For more information regarding investigations of past actions taken by certain of our employees, see "Item 8. Financial Information - Legal Proceedings." Such actions have resulted, and in the future could result, in governmental investigations, enforcement actions and civil and criminal penalties, including monetary penalties and other sanctions. It is possible that any governmental investigation or enforcement action arising from such matters could conclude that a violation of applicable law has occurred and the consequences of any such investigation or enforcement action may have a material adverse impact on our consolidated operating results, cash flows and financial position. In addition, such actions, whether actual or alleged, could damage our reputation and ability to do business.

Table of Contents

Further, detecting, investigating and resolving such actions could be expensive and could consume significant time and attention of our senior management. While we are committed to conducting business in a legal and ethical manner, our internal control systems have not been, and in the future may not be, completely effective to prevent and detect such improper activities by our employees and agents.

***Our operations in emerging markets expose us to risks associated with conditions in those markets.***

A significant amount of our operations is conducted in the emerging markets of Latin America, Asia, the Middle East and Africa. In 2011, approximately half of our consolidated revenues were generated from these emerging markets. Operations in emerging markets can present risks that are not encountered in countries with well-established economic and political systems, including:

economic instability, which could make it difficult for us to anticipate future business conditions in these markets, cause delays in the placement of orders for projects that we have been awarded and subject us to volatile geographic markets,

political or social instability, such as the recent political unrest in Egypt and Libya, which could make our customers less willing to make cross-border investments in such regions and could complicate our dealings with governments regarding permits or other regulatory matters, local businesses and workforces,

boycotts and embargoes that may be imposed by the international community on countries in which we operate could adversely affect the ability of our operations in those countries to obtain the materials necessary to fulfill contracts and our ability to pursue business or establish operations in those countries,

foreign state takeovers of our facilities in these countries,

significant fluctuations in interest rates and currency exchange rates,

the imposition of unexpected taxes or other payments on our revenues in these markets,

the ability to obtain financing and/or insurance coverage from export credit agencies, and

the introduction of exchange controls and other restrictions by foreign governments.

Additionally, political and social instability resulting from increased violence in certain countries in which we do business has raised concerns about the safety of our personnel. These concerns may hinder our ability to send personnel abroad and to hire and retain local personnel. Such concerns may require us to increase security for personnel traveling to such facilities or to conduct more operations from our other facilities rather than from facilities located in these political and socially unstable countries, which may negatively impact our operations and result in higher costs and inefficiencies.

In addition, the legal and regulatory systems of many emerging market countries are less developed and less well-enforced than in industrialized countries. Therefore, our ability to protect our contractual and other legal rights in these countries could be limited. Consequently, our exposure to the conditions in or affecting emerging markets may adversely affect our business, financial condition, results of operations and liquidity.

***Undertaking long-term, fixed price or turnkey projects exposes our businesses to risk of loss should our actual costs exceed our estimated or budgeted costs.***

We derive a portion of our revenues from long-term, fixed price or turnkey projects that are awarded on a competitive basis and can take many months, or even years, to complete. Such contracts involve substantial risks, including the possibility that we may underbid and the fact that we typically assume substantially all of the risks associated with completing the project and the post-completion



Table of Contents

warranty obligations. These risks include the project's technical risk, meaning that we must tailor our products and systems to satisfy the technical requirements of a project even though, at the time we are awarded the project, we may not have previously produced such a product or system. The revenue, cost and gross profit realized on such contracts can vary, sometimes substantially, from our original projections because of changes in conditions, including but not limited to:

unanticipated technical problems with the equipment being supplied or developed by us which may require us to incur incremental expenses to remedy the problem,

changes in the cost of components, materials or labor,

difficulties in obtaining required governmental permits or approvals,

project modifications that create unanticipated costs,

delays caused by force majeure or local weather and geological conditions, including natural disasters,

customer delays,

shortages of construction equipment,

changes in law or government policy,

supply bottlenecks, especially of key components, and

suppliers', subcontractors' or consortium partners' failure to perform.

These risks are exacerbated if the duration of the project is extended because then there is an increased risk that the circumstances upon which we originally bid and quoted a price change in a manner that increases our costs. In addition, we sometimes bear the risk of delays caused by unexpected conditions or events. Our project contracts often make us subject to penalties if we cannot complete portions of the project in accordance with agreed-upon time limits and guaranteed performance levels.

***We operate in very competitive markets and could be adversely affected if we fail to keep pace with technological changes.***

We operate in very competitive environments in particular with respect to product performance, developing integrated systems and applications that address the business challenges faced by our customers, pricing, new product introduction time and customer service. The relative importance of these factors differs across the geographic markets and product areas that we serve. The markets for our products and services are characterized by evolving industry standards (particularly for our automation technology products and systems), rapidly changing technology and increased competition as a result of privatization (particularly for our power products and systems). For example, as power transmission and distribution providers throughout the world have been undergoing substantial privatization, their need has increased for timely product and service innovations that increase efficiency and allow them to compete in a deregulated environment. Additionally, the continual development of advanced technologies for new products and product enhancements is an important way in which we maintain acceptable pricing levels. If we fail to keep pace with technological changes in the industrial sectors that we serve, we may experience price erosion and lower margins.

The principal competitors for our automation technology products, systems and services include Emerson, Honeywell, Invensys, Schneider and Siemens. We primarily compete with Alstom, Schneider and Siemens in sales of our power technology products and systems. All of our primary competitors are sophisticated companies with significant resources that may develop products and services that are superior to our

products and services or may adapt more quickly than we do to new technologies,

Table of Contents

industry changes or evolving customer requirements. We are also facing increased competition from low cost competitors in emerging markets, which may give rise to increased pressure to reduce our prices. Our failure to anticipate or respond quickly to technological developments or customer requirements could adversely affect our business, results of operations, financial condition and liquidity.

***Our international operations expose us to the risk of fluctuations in currency exchange rates.***

Exchange rate fluctuations have had, and could continue to have, a material impact on our operating results, the comparability of our results between periods, the value of assets or liabilities as recorded on our Consolidated Balance Sheet and the price of our securities. The global financial crisis has led to increased volatility in exchange rates, which makes it harder to predict exchange rates and thus do accurate financial planning. Changes in exchange rates can unpredictably and adversely affect our consolidated operating results, and could result in exchange losses.

**Currency Translation Risk.** The results of operations and financial position of most of our non-U.S. companies are initially recorded in the currency, which we call "local currency," of the country in which the respective company resides. That financial information is then translated into U.S. dollars at the applicable exchange rates for inclusion in our Consolidated Financial Statements. The exchange rates between local currencies and the U.S. dollar can fluctuate substantially, which could have a significant translation effect on our reported consolidated results of operations and financial position.

Increases and decreases in the value of the U.S. dollar versus local currencies will affect the reported value of our local currency assets, liabilities, revenues and costs in our Consolidated Financial Statements, even if the value of these items has not changed in local currency terms. These translations could significantly and adversely affect our results of operations and financial position from period to period.

**Currency Transaction Risk.** Currency risk exposure also affects our operations when our sales are denominated in currencies that are different from those in which our manufacturing or sourcing costs are incurred. In this case, if after the parties agree on a price, the value of the currency in which the price is to be paid were to weaken relative to the currency in which we incur manufacturing or sourcing costs, there would be a negative impact on the profit margin for any such transaction. This transaction risk may exist regardless of whether or not there is also a currency translation risk as described above.

Currency exchange rate fluctuations in those currencies in which we incur our principal manufacturing expenses or sourcing costs may adversely affect our ability to compete with companies whose costs are incurred in other currencies. If our principal expense currencies appreciate in value against such other currencies, our competitiveness may be weakened.

***Our hedging activities may not protect us against the consequences of significant fluctuations in exchange rates, interest rates or commodity prices on our earnings and cash flows.***

Our policy is to hedge material currency exposures by entering into offsetting transactions with third party financial institutions. Given the effective horizons of our risk management activities and the anticipatory nature of the exposures intended to be hedged, there can be no assurance that our currency hedging activities will fully offset the adverse financial impact resulting from unfavorable movements in foreign exchange rates. In addition, the timing of the accounting for recognition of gains and losses related to a hedging instrument may not coincide with the timing of gains and losses related to the underlying economic exposures.

As a resource-intensive operation, we are exposed to a variety of market and asset risks, including the effects of changes in commodity prices and interest rates. We monitor and manage these exposures as an integral part of our overall risk management program, which recognizes the unpredictability of



Table of Contents

markets and seeks to reduce the potentially adverse effects on our business. Nevertheless, changes in commodity prices and interest rates cannot always be predicted or hedged.

If we are unable to successfully manage the risk of changes in exchange rates, interest rates or commodity prices or if our hedging counterparties are unable to perform their obligations under our hedging agreements with them, then changes in these rates and prices could have an adverse effect on our financial condition and results of operations.

***Increases in costs or limitation of supplies of raw materials may adversely affect our financial performance.***

We purchase large amounts of commodity-based raw materials, including steel, copper, aluminum, and oil. Prevailing prices for such commodities are subject to fluctuations due to changes in supply and demand and a variety of additional factors beyond our control, such as global political and economic conditions. Historically, prices for some of these raw materials have been volatile and unpredictable, and such volatility is expected to continue. Therefore, commodity price changes may result in unexpected increases in raw material costs, and we may be unable to increase our prices to offset these increased costs without suffering reduced volumes, revenues or operating income. We do not fully hedge against changes in commodity prices and our hedging procedures may not work as planned.

We depend on third parties to supply raw materials and other components and may not be able to obtain sufficient quantities of these materials and components, which could limit our ability to manufacture products on a timely basis and could harm our profitability. For some raw materials and components, we rely on a single supplier or a small number of suppliers. If one of these suppliers were unable to provide us with a raw material or component we need, our ability to manufacture some of our products could be adversely affected until we are able to establish a new supply arrangement. We may be unable to find a sufficient alternative supply channel in a reasonable time period or on commercially reasonable terms, if at all. If our suppliers are unable to deliver sufficient quantities of materials on a timely basis, the manufacture and sale of our products may be disrupted, we might have obligations under our performance guarantees and our sales and profitability could be materially adversely affected.

***An inability to protect our intellectual property rights could adversely affect our business.***

Our intellectual property rights are fundamental to all of our businesses. We generate, maintain, utilize and enforce a substantial portfolio of trademarks, trade dress, patents and other intellectual property rights. We use our intellectual property rights to protect the goodwill of our products, promote our product recognition, protect our proprietary technology and development activities, enhance our competitiveness and otherwise support our business goals and objectives. However, there can be no assurance that the steps we take to obtain, maintain and protect our intellectual property rights will be adequate. Our intellectual property rights may fail to provide us with significant competitive advantages, particularly in foreign jurisdictions that do not have, or do not enforce, strong intellectual property rights. The weakening of protection of our trademarks, trade dress, patents and other intellectual property rights could adversely affect our business.

***Many of our contracts contain performance obligations that require innovative design capabilities, are technologically complex, require state-of-the-art manufacturing expertise or are dependent upon factors not wholly within our control. Failure to meet these obligations could adversely affect our profitability and future prospects.***

We design, develop and manufacture technologically advanced and innovative products and services applied by our customers in a variety of environments. Problems and delays in development or delivery as a result of issues with respect to design, technology, licensing and patent rights, labor, learning curve assumptions or materials and components could prevent us from achieving contractual requirements.

Table of Contents

In addition, our products cannot be tested and proven in all situations and are otherwise subject to unforeseen problems. Examples of unforeseen problems that could negatively affect revenue and profitability include premature failure of products that cannot be accessed for repair or replacement, problems with quality, country of origin, delivery of subcontractor components or services and unplanned degradation of product performance. Among the factors that may affect revenue and profits could be unforeseen costs and expenses not covered by insurance or indemnification from the customer, diversion of management focus in responding to unforeseen problems, loss of follow-on work, and, in the case of certain contracts, repayment to the customer of contract cost and fee payments we previously received.

***Industry consolidation could result in more powerful competitors and fewer customers.***

Competitors in the industries in which our business divisions operate are consolidating. In particular, the automation industry is undergoing consolidation that is reducing the number but increasing the size of companies that compete with us. As our competitors consolidate, they likely will increase their market share, gain economies of scale that enhance their ability to compete with us and/or acquire additional products and technologies that could displace our product offerings.

Our customer base also is undergoing consolidation. Consolidation within our customers' industries (such as the marine and cruise industry, the automotive, aluminum, steel, pulp and paper and pharmaceutical industries and the oil and gas industry) could affect our customers and their relationships with us. If one of our competitors' customers acquires any of our customers, we may lose that business. Additionally, as our customers become larger and more concentrated, they could exert pricing pressure on all suppliers, including us. For example, in an industry such as power transmission, which historically has consisted of large and concentrated customers such as utilities, price competition can be a factor in determining which products and services will be selected by a customer.

***We are subject to environmental laws and regulations in the countries in which we operate. We incur costs to comply with such regulations, and our ongoing operations may expose us to environmental liabilities.***

Our operations are subject to U.S., European and other laws and regulations governing the discharge of materials into the environment or otherwise relating to environmental protection. Our manufacturing facilities use and produce paint residues, solvents, metals, oils and related residues. We use petroleum-based insulation in transformers, polyvinylchloride (PVC) resin to manufacture PVC cable and chloroparaffin as a flame retardant. We have manufactured and sold, and we are using in some of our factories, certain types of transformers and capacitors containing polychlorinated biphenyls (PCBs). These are considered to be hazardous substances in many jurisdictions in which we operate. We may be subject to substantial liabilities for environmental contamination arising from the use of such substances. All of our manufacturing operations are subject to ongoing compliance costs in respect of environmental matters and the associated capital expenditure requirements.

In addition, we may be subject to significant fines and penalties if we do not comply with environmental laws and regulations including those referred to above. Some environmental laws provide for joint and several or strict liability for remediation of releases of hazardous substances, which could result in us incurring a liability for environmental damage without regard to our negligence or fault. Such laws and regulations could expose us to liability arising out of the conduct of operations or conditions caused by others, or for our acts which were in compliance with all applicable laws at the time the acts were performed. Additionally, we may be subject to claims alleging personal injury or property damage as a result of alleged exposure to hazardous substances. Changes in the environmental laws and regulations, or claims for damages to persons, property, natural resources or the environment, could result in substantial costs and liabilities to us.

Table of Contents

***We may be the subject of product liability claims.***

We may be required to pay for losses or injuries purportedly caused by the design, manufacture or operation of our products and systems. Additionally, we may be subject to product liability claims for the improper installation of products and systems designed and manufactured by others.

Product liability claims brought against us may be based in tort or in contract, and typically involve claims seeking compensation for personal injury or property damage. If the claimant runs a commercial business, claims are often made also for financial losses arising from interruption of operations. Based on the nature and application of many of the products we manufacture, a defect or alleged defect in one of these products could have serious consequences. For example:

If the products produced by our power technology divisions are defective, there is a risk of fires, explosions and power surges and significant damage to electricity generating, transmission and distribution facilities as well as electrical shock causing injury or death.

If the products produced by our automation technology divisions are defective, our customers could suffer significant damage to facilities and equipment that rely on these products and systems to properly monitor and control their manufacturing processes. Additionally, people could be exposed to electrical shock and/or other harm causing injury or death.

If any of the products produced by us contain hazardous substances then there is a risk that such products or substances could injure or kill people.

If we were to incur a very large product liability claim, our insurance protection might not be adequate or sufficient to cover such a claim in terms of paying any awards or settlements, and/or paying for our defense costs. Further, some claims may be outside the scope of our insurance coverage. If a litigant were successful against us, a lack or insufficiency of insurance coverage could result in an adverse effect on our business, financial condition, results of operations and liquidity. Additionally, a well-publicized actual or perceived problem could adversely affect our market reputation which could result in a decline in demand for our products.

***We may encounter difficulty in managing our business due to the global nature of our operations.***

We operate in approximately 100 countries around the world and, as of December 31, 2011, employed approximately 133,600 people. As of December 31, 2011, approximately 45 percent of our employees were located in Europe, approximately 19 percent in the Americas, approximately 28 percent in Asia and approximately 8 percent in the Middle East and Africa. In order to manage our day-to-day operations, we must overcome cultural and language barriers and assimilate different business practices. In addition, we are required to create compensation programs, employment policies and other administrative programs that comply with the laws of multiple countries. We also must communicate and monitor group-wide standards and directives across our global network. Our failure to manage successfully our geographically diverse operations could impair our ability to react quickly to changing business and market conditions and to enforce compliance with group-wide standards and procedures.

***If we are unable to obtain performance and other guarantees from financial institutions, we may be prevented from bidding on, or obtaining, some contracts, or our costs with respect to such contracts could be higher.***

In the normal course of our business and in accordance with industry practice, we provide a number of guarantees including bid-bonds, advance payment guarantees and performance guarantees, which guarantee our own performance. These guarantees may include guarantees that a project will be completed or that a project or particular equipment will achieve defined performance criteria. If we fail to attain the defined criteria, we must make payments in cash or in kind. Performance guarantees frequently are requested in relation to large projects in our core power and automation businesses.

Table of Contents

Some customers require that performance guarantees be issued by a financial institution. In considering whether to issue a guarantee on our behalf, financial institutions consider our credit ratings. In addition, the global financial crisis has made it more difficult and expensive to obtain these guarantees. If, in the future, we cannot obtain such a guarantee from a financial institution on reasonable terms, we could be prevented from bidding on, or obtaining, some contracts, or our costs with respect to such contracts could be higher, which would reduce the profitability of the contracts. If we cannot obtain guarantees on commercially reasonable terms from financial institutions in the future, there could be a material impact on our business, financial condition, results of operations or liquidity.

***Examinations by tax authorities and changes in tax regulations could result in lower earnings and cash flows.***

We operate in approximately 100 countries and therefore are subject to different tax regulations. Changes in tax law could result in higher tax expense and payments. Furthermore, this could materially impact our tax receivables and liabilities as well as deferred tax assets and deferred tax liabilities. In addition, the uncertainty of tax environment in some regions could limit our ability to enforce our rights. As a globally operating organization, we conduct business in countries subject to complex tax rules, which may be interpreted in different ways. Future interpretations or developments of tax regimes may affect our tax liability, return on investments and business operations. We are regularly examined by tax authorities in various jurisdictions.

***If we are unable to attract and retain qualified management and personnel then our business may be adversely affected.***

Our success depends in part on our continued ability to hire, assimilate and retain our highly qualified personnel, particularly our senior management team and key employees. Competition for highly qualified management and technical personnel remains intense in the industries and regions in which we operate. If we are unable to attract and retain members of our senior management team and key employees this could have an adverse effect on our business.

***Anticipated benefits of mergers, acquisitions, joint ventures or strategic alliances may not be realized.***

As part of our overall strategy, we may, from time to time, merge with or acquire businesses or interests in businesses, including noncontrolling interests, or form joint ventures or create strategic alliances. Whether we realize the anticipated benefits from these transactions depends, in part, upon the integration between the businesses involved, the performance and development of the underlying products, capabilities or technologies, our correct assessment of assumed liabilities and the management of the operations in question. Accordingly, our financial results could be adversely affected by unanticipated performance and liability issues, transaction-related charges, amortization related to intangibles, charges for impairment of long-term assets and partner performance. Although we believe that we have established appropriate and adequate procedures and processes to identify and mitigate these risks, there is no assurance that these transactions will be successful.

***We could be affected by future laws or regulations enacted to address climate change concerns as well as the physical effects of climate change.***

Although we do not believe existing or pending laws and regulations intended to address climate change concerns will materially adversely affect our current business or operations, such laws and regulations could materially affect us in the future. We may need to incur additional costs to comply with these laws and regulations. We could also be affected indirectly by increased prices for goods or services provided to us by companies that are directly affected by these laws and regulations and pass their increased costs through to their customers. At this time, we cannot estimate what impact such costs may have on our business, results of operations or financial condition. We could also be affected

Table of Contents

by the physical consequences of climate change itself, although we cannot estimate what impact those consequences might have on our business or operations.

***Increased information technology (IT) security threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks, products, solutions and services.***

We have observed a global increase in IT security threats and more sophisticated and targeted computer crime, which pose a risk to the security of systems and networks and the confidentiality, availability and integrity of our data. While we attempt to mitigate these risks by employing a number of measures, including employee training, comprehensive monitoring of our networks and systems, and maintenance of backup and protective systems such as firewalls and virus scanners, our systems, networks, products, solutions and services remain potentially vulnerable to attacks. Depending on their nature and scope, such attacks could potentially lead to the compromising of confidential information, improper use of our systems and networks, manipulation and destruction of data, defective products, production downtimes and supply shortages, which in turn could adversely affect our reputation, competitiveness and results of operations.

**Item 4. Information on the Company**

**INTRODUCTION**

**About ABB**

We are a global leader in power and automation technologies aimed at improving performance and lowering the environmental impact for our utility and industrial customers. We provide a broad range of products, systems, solutions and services that are designed to improve power grid reliability, increase industrial productivity and enhance energy efficiency. Our power businesses focus on power transmission, distribution and power-plant automation and serve electric, gas and water utilities, as well as industrial and commercial customers. Our automation businesses serve a full range of industries with measurement, control, protection and process optimization applications.

**History of the ABB Group**

The ABB Group was formed in 1988 through a merger between Asea AB and BBC Brown Boveri AG. Initially founded in 1883, Asea AB was a major participant in the introduction of electricity into Swedish homes and businesses and in the development of Sweden's railway network. In the 1940s and 1950s, Asea AB expanded into the power, mining and steel industries. Brown Boveri and Cie. (later renamed BBC Brown Boveri AG) was formed in Switzerland in 1891 and initially specialized in power generation and turbines. In the early to mid-1900s, it expanded its operations throughout Europe and broadened its business operations to include a wide range of electrical engineering activities.

In January 1988, Asea AB and BBC Brown Boveri AG each contributed almost all of their businesses to the newly formed ABB Asea Brown Boveri Ltd, of which they each owned 50 percent. In 1996, Asea AB was renamed ABB AB and BBC Brown Boveri AG was renamed ABB AG. In February 1999, the ABB Group announced a group reconfiguration designed to establish a single parent holding company and a single class of shares. ABB Ltd was incorporated on March 5, 1999, under the laws of Switzerland. In June 1999, ABB Ltd became the holding company for the entire ABB Group. This was accomplished by having ABB Ltd issue shares to the shareholders of ABB AG and ABB AB, the two companies that formerly owned the ABB Group. The ABB Ltd shares were exchanged for the shares of those two companies, which, as a result of the share exchange and certain related transactions, became wholly-owned subsidiaries of ABB Ltd. ABB Ltd shares are currently listed on the SIX Swiss Exchange, the NASDAQ OMX Stockholm Exchange and the New York Stock Exchange (in the form of American Depositary Shares).

Table of Contents

**Organizational structure**

Our business is international in scope and we generate revenues in numerous currencies. We operate in approximately 100 countries across four regions: Europe, the Americas, Asia, and the Middle East and Africa (MEA). We are headquartered in Zurich, Switzerland.

We manage our business based on a divisional structure, with five divisions: Power Products, Power Systems, Discrete Automation and Motion, Low Voltage Products and Process Automation. For a breakdown of our consolidated revenues (i) by operating division and (ii) derived from each geographic region in which we operate, see "Item 5. Operating and Financial Review and Prospects Analysis of Results of Operations Revenues."

Our principal corporate offices are located at Affolternstrasse 44, CH-8050 Zurich, Switzerland, telephone number +41-43-317-7111. Our agent for U.S. federal securities law purposes is ABB Holdings Inc., located at 12040 Regency Parkway, Suite 200, Cary, North Carolina 27518.

**BUSINESS DIVISIONS**

**Industry background**

Our five divisions operate across two key markets: the power market and the automation market. Our divisions serve these markets through a global production, engineering and service base. The markets and our divisions are discussed in more detail below. Revenue figures presented in this Business Divisions section are before interdivisional eliminations.

*Power Market*

The power market uses products, systems and services designed primarily to deliver electricity. Electricity is generated in power stations of various types, including thermal, wind, solar and hydro plants and is then fed into an electricity grid, transmitted and distributed to consumers. Transmission systems link power generation sources to distribution systems, often over long distances. Distribution systems then branch out over shorter distances to carry electricity to end users. These electricity networks incorporate sophisticated devices to efficiently and reliably transmit electricity and control and monitor operations.

The primary demand drivers in the power market are the growing need for reliable electricity supplies to support economic growth and the global climate change challenge which has created increased demand for renewable energy and high-efficiency power systems and equipment. Additional drivers vary by region. Capacity addition across the power value chain is the key market driver in emerging markets such as Asia, Middle East and South America. In North America the focus is on replacing aged infrastructure, improving grid reliability and enabling smarter power networks. In Europe the focus is on upgrading the power infrastructure, integrating renewable energy sources such as wind power, and building interconnections to allow energy trading and more efficient use of power. Improving energy efficiency is another key focus area for power investment.

Furthermore, as new power sources and loads are added to networks, there is a need for grids and power networks to become more flexible, reliable and smarter. Power quality, stability and security of supply become key priorities. These requirements stimulate the need for power products and systems solutions from generation through transmission and distribution. These demands are met by our two power divisions that together offer customers a most comprehensive portfolio to help them become more competitive while lowering environmental impact.

Table of Contents

*Automation Market*

The automation market uses products, systems and services designed primarily to improve product quality, energy efficiency and productivity in industrial and manufacturing applications. The automation market can be divided into three sectors:

Process automation refers to control systems, plant electrification and other applications used in processes where the main objective is continuous production, such as in the oil and gas, power, chemicals, minerals, metals and pulp and paper industries. Product lines for this market include plant electrification, instrumentation, analytical measurement and control products and systems, as well as motors and drives.

Factory automation refers to discrete operations that manufacture individual items in applications such as foundry, metal fabrication, packaging, welding and painting. Typical industries where factory automation is used include automotive, consumer electronics and food and beverage. Product lines for this market include robots and application equipment, product and system services and modular manufacturing solutions, as well as motors, drives, and low-voltage products for control and power applications.

Building automation comprises product lines and applications aimed at improving the energy efficiency of buildings through automated control of indoor climate, lighting and security. Product lines for this market include a wide range of low-voltage products.

**Power Products Division**

*Overview*

Our Power Products division primarily serves electric utilities, as well as gas and water utilities and industrial and commercial customers, with a vast portfolio of products and services across a wide voltage range to facilitate power generation, transmission and distribution. Direct sales account for a majority of the division's total product sales, and sales through external channel partners, such as wholesalers, distributors and original equipment manufacturers (OEMs), account for the remainder. Key technologies include high- and medium-voltage switchgear, circuit breakers for a range of current ratings and voltage levels, power, distribution, traction and other special transformers, as well as products to help control and protect electrical networks. The division had approximately 35,100 employees as of December 31, 2011 and generated \$10.9 billion of revenues in 2011.

*The Power Products Division*

Our Power Products division manufactures products that can be placed in three broad categories: high-voltage products, medium-voltage products and transformers. The division sells primarily to utilities and also through channels such as distributors, wholesalers, installers and OEMs. Some of the division's products are also integrated into the turnkey offerings of the Power Systems and Process Automation divisions or sold through engineering, procurement and construction (EPC) firms.

The high voltage products business provides high-voltage equipment, ranging from 50 to 1,200 kilovolts, mainly to serve power transmission utilities. This equipment primarily enables the transmission grid to operate more reliably and efficiently, minimizing environmental impact at the same time all significant focus areas for the power sector and our customers. As part of its portfolio, this business unit designs and manufactures a range of air, gas insulated and hybrid switchgear, generator circuit breakers, capacitors, high-voltage circuit breakers, surge arresters, instrument transformers, cable accessories and a variety of high voltage components.

The medium-voltage business unit offers products and services that largely serve the power distribution sector, often serving as the link between high voltage transmission systems and lower

Table of Contents

voltage users. Medium-voltage products help utility and industrial customers to improve power quality and control, reduce outage time and enhance operational reliability and efficiency. This business reaches customers directly and through distributors and OEMs with a comprehensive line of medium-voltage equipment (1 to 50 kilovolts), including products such as indoor and outdoor circuit breakers, reclosers, fuses, contactors, relays, instrument transformers, sensors, motor control centers, ring main units for primary and secondary distribution, as well as a range of air- and gas-insulated switchgear. It also produces indoor and outdoor modular systems and other solutions to facilitate power distribution.

The transformers business unit of the division designs and manufactures power transformers (72.5 to 1,200 kilovolts) for utility and industrial customers and also supplies transformer components and insulation material, such as bushings and tap changers. It also manufactures a wide range of distribution transformers (up to 72.5 kilovolts) for use in the power distribution sector, industrial facilities and commercial buildings. These transformers are designed to step down electrical voltage bringing it to consumption levels. They can be oil or dry-type and, although oil-type transformers are more commonly used, demand for dry-type transformers is growing because they minimize fire hazards and are well suited for applications such as office buildings, windmills, offshore drilling platforms, marine vessels and large industrial plants. This business unit also produces traction transformers for use in electric locomotives and other special application transformers as well as a wide range of service and retrofit solutions for utilities and industry customers.

*Customers*

The Power Products division serves electric utilities including owners and operators of power generating plants as well as power transmission and distribution networks. Other customers include gas, water and other utilities, as well as industrial and commercial customers, including operators of heavy industrial plants and large commercial buildings.

*Sales and Marketing*

The Power Products division sells its products individually and as part of larger systems through our Systems divisions. Direct sales account for a majority of the division's business but a significant amount of products also go through external channel partners, such as wholesalers, distributors, system integrators, EPCs and OEMs. As the Power Products and Power Systems divisions share many of the same customers and technologies and are influenced by similar market drivers, they also have a common front-end sales organization that helps maximize market synergies across countries and regions.

*Competition*

On a global basis, the main competitors for the Power Products division are Siemens, Alstom (which also includes the former transmission portfolio of Areva), and Schneider Electric (which also includes the former distribution portfolio of Areva). The division also faces global competition in some product categories from South Korean, Chinese, Indian and Brazilian companies. It also competes in specific geographies with companies such as Cooper, Eaton Corporation, Hyundai, Hyosung, Crompton Greaves, Larsen and Toubro, and Bharat Heavy Electricals.

*Capital Expenditure*

The Power Products division's capital expenditures for property, plant and equipment totaled \$192 million in 2011, compared to \$200 million and \$272 million in 2010 and 2009, respectively. Principal investments in 2011 were in China, Sweden, Germany and United States respectively. Geographically, in 2011, Europe represented 52 percent of the capital expenditures, followed by Asia (25 percent), the Americas (19 percent) and the MEA (4 percent).



Table of Contents

**Power Systems Division**

*Overview*

Our Power Systems division serves utilities, as well as industrial and commercial customers with system solutions and services for the generation, transmission and distribution of electricity. Turnkey solutions include power plant electrification and automation, bulk power transmission, substations and network management. The division had approximately 19,400 employees as of December 31, 2011 and generated \$8.1 billion of revenues in 2011.

*The Power Systems Division*

Our Power Systems division delivers solutions through four business units: power generation, grid systems, substations and network management. The scope of work in a typical turnkey contract includes design, system engineering, supply, installation, commissioning and testing of the system. As part of the business model, the Power Systems division integrates products from both the Power Products division and external suppliers, adding value through design, engineering and project management to deliver turnkey solutions.

Our power generation business is a leading provider of integrated power and automation solutions for all types of power generation plants, including coal, gas, combined-cycle, nuclear, waste-to-energy and a range of renewables including hydro, solar, and bio-mass. With an extensive offering that includes electrical balance of plant and instrumentation and control systems, ABB technologies help optimize performance, improve reliability, enhance efficiency and minimize environmental impact throughout the plant life-cycle. The business also serves the water industry, including applications such as pumping stations and desalination plants.

As part of the grid systems business, ABB provides a comprehensive offering of alternating current (AC) and direct current (DC) transmission systems, which help customers to reduce transmission losses, maximize efficiency and improve grid reliability. ABB pioneered HVDC (high-voltage direct current) technology more than 50 years ago. HVDC technology is designed for high-efficiency power transmission via overhead transmission lines and underground or submarine cables. HVDC is also widely used for grid interconnections. HVDC Light®, a more compact form of ABB's classic HVDC technology, is ideal for linking offshore installations, such as wind farms or oil and gas platforms, to mainland grids. It is used to transmit electricity efficiently and reliably with minimum losses. The environmental benefits of HVDC Light®, include neutral electromagnetic fields, oil-free cables and compact converter stations.

Also part of the grid systems offering, FACTS (flexible alternating current transmission systems) technologies improve power quality and can significantly increase the capacity of existing AC transmission lines by as much as 50 percent while maintaining or improving system reliability. FACTS technologies also boost transmission efficiency, relieve bottlenecks and can be used for the safe integration of intermittent power sources, such as wind and solar, into the grid. By enhancing the capacity of existing transmission infrastructure, FACTS solutions can alleviate the need for capital investment, reducing the time, cost and environmental impact associated with the construction of new generating facilities and transmission lines. By improving efficiency, FACTS technologies help to deliver more power to consumers, reducing the need for more electricity generation, and improving power supply and quality. ABB has around 750 FACTS installations in operation or under construction around the world.

ABB also offers a comprehensive range of land and submarine cables through its grid systems business, as well as accessories and services for a range of applications from medium- to high-voltage AC and DC systems. The portfolio includes high-performance XLPE (cross-linked polyethylene) insulated cables for high efficiency transmission systems at voltages up to 320 kilovolts. ABB has

Table of Contents

delivered more than 7,000 kilometers of XLPE cables for voltages in excess of 100 kilovolts for projects around the world. When it comes to transmission grid solutions, ABB manufactures its own power semiconductors, which is a key enabler for HVDC, FACTS and other technologies, serving a range of industries including transportation and wind.

Substations are key installations in the power grid that facilitate the efficient transmission and distribution of electricity with minimal environmental impact. They perform the vital function of monitoring and controlling power flows, feeding power from generating stations into the grid and providing the link between transmission and distribution networks as well as end consumers. ABB has successfully delivered air- and gas-insulated substations in all kinds of environments, from deserts and mountains to offshore rigs and crowded city centers. ABB's substation automation offering is compliant with IEC 61850, the open communication standard, which provides a common framework for substation control and protection and facilitates interoperability across devices and systems. ABB's substation offering covers a range of voltage levels up to 1,100 kilovolts, serving utility, industry and commercial customers as well as sectors like railways, urban transportation and renewables.

ABB's network management business offers solutions to help manage power networks. The offering covers network management and utility communications solutions to monitor, control, operate and protect power systems. These solutions are designed to ensure the reliability of electricity supplies and enable real-time management of power plants, transmission grids, distribution networks and energy trading markets. The portfolio includes control and protection systems for power generation, transmission and distribution, supervisory control and data acquisition (SCADA) systems, as well as software solutions for central electricity markets and mixed utilities (electricity, district heating, gas and water). The portfolio also covers wireless and fixed communication systems for power, water and gas utilities. It includes fiber optics, microwave radio and power line applications for data networking and broadband network management, as well as teleprotection and substation communication networks and voice switching management systems.

Network management systems are key smart-grid enablers by providing automated power systems to incorporate and manage centralized and distributed power generation, intermittent sources of renewable energy, real-time pricing and load-management data. The recent Ventyx and Mincom acquisitions make ABB a global leader in enterprise software and services for essential industries such as energy, mining, public infrastructure and transportation. These solutions bridge the gap between information technologies (IT) and operational technologies (OT), enabling clients to make faster, better-informed decisions in both daily operations and long-term planning strategies. Some of the world's largest private and public enterprises rely on Ventyx solutions to minimize risk, enhance operational and financial performance, and execute the right strategies for the future.

In addition, the Power Systems division offers a range of services aimed at optimizing operations and reducing maintenance requirements of customers, across the value chain. These services range from support agreements and retrofits to spare parts, service and training. The division also undertakes consulting activities such as energy efficiency studies for power plants and grids, analyses and design of new transmission and distribution systems as well as asset optimization based on technical, economic and environmental considerations.

*Customers*

The Power Systems division's principal customers include power generation utilities and companies, transmission and distribution utilities, owners and operators as well as industrial and commercial customers. Other customers include gas and water utilities including multi-utilities, which are involved in the transmission or distribution of more than one commodity.

Table of Contents

*Sales and Marketing*

The Power Systems division promotes its offering primarily through a direct sales force of specialized sales engineering teams. Some sales are also handled through third-party channels, such as EPC firms, OEMs and system integrators. As the Power Products and Power Systems divisions share many of the same customers and technologies and are influenced by similar market drivers, they also have a common front-end sales organization that helps maximize market synergies across countries and regions.

*Competition*

On a global basis, the Power Systems division faces competition mainly from Siemens and Alstom. Emerson Electric, General Electric, Prysmian and Nexan are additional competitors seen in parts of the business. The division also sees emerging competitors in specific regions.

*Capital Expenditure*

The Power Systems division's capital expenditures for property, plant and equipment totaled \$136 million in 2011, compared to \$119 million and \$131 million in 2010 and 2009, respectively. Principal investments in 2011 were related to capacity expansion as well as the replacement of existing equipment, particularly in the United States, Switzerland and Sweden. Geographically, in 2011, Europe represented 53 percent of the capital expenditures, followed by the Americas (38 percent), Asia (5 percent) and the MEA (4 percent).

**Discrete Automation and Motion Division**

*Overview*

The Discrete Automation and Motion division offers a wide range of products and services including drives, motors, generators, power electronics systems, rectifiers, power quality products, photovoltaic inverters, programmable logic controllers (PLCs), and robots. These products help customers to improve productivity, save energy, improve quality, and generate energy. Key applications include energy conversion, data processing, actuation, automation, standardized manufacturing cells for applications such as machine tending, welding, cutting, painting, finishing, palletizing and packing, and engineered systems for the automotive industry. The majority of these applications are for industrial applications, with others provided for buildings, transportation, and utilities. The division also provides a full range of life-cycle services, from product and system maintenance to system design, including energy appraisals and preventive maintenance services.

Revenues are generated both from direct sales to end users as well as from indirect sales through distributors, machine builders and OEMs, system integrators, and panel builders.

In January 2011, the Discrete Automation and Motion division expanded its product offering and geographic scope through our acquisition of Baldor Electric Corporation, a U.S.-based manufacturer of high-efficiency industrial motors. The acquisition supported ABB's strategy to build its position in the North American industrial automation market.

The Discrete Automation and Motion division had approximately 27,600 employees worldwide as of December 31, 2011, and generated \$8.8 billion of revenues in 2011 through activities in more than 100 countries.

*The Discrete Automation and Motion division*

The Discrete Automation and Motion division provides low-voltage and medium-voltage drive products and systems for industrial, commercial and residential applications. Drives provide speed,

Table of Contents

motion and torque control for equipment such as fans, pumps, compressors, conveyors, kilns, centrifuges, mixers, hoists, cranes, extruders, printing machinery and textile machines. The drives are used in the building automation, marine, power, transportation and manufacturing industries, among others.

The division also produces a range of power electronics products. These include static excitation and synchronizing systems that provide stability for power stations, as well as high power rectifiers that convert AC power to DC power for very high-amperage applications such as furnaces in zinc plants and aluminum and magnesium smelters. The division also manufactures frequency converters that use semiconductor technology to convert electrical power into the type and frequency required by individual customers. Further, the division offers a range of solutions for the charging of electric vehicles.

Discrete Automation and Motion supplies a comprehensive range of electrical motors and generators, including high-efficiency motors that conform to leading environmental and efficiency standards. Efficiency is an important criterion for selection by customers, because electric motors account for nearly two-thirds of the electricity consumed by industrial plants. The Discrete Automation and Motion division manufactures synchronous motors for the most demanding applications and a full range of low and high-voltage induction motors, for both IEC (International Electrotechnical Commission) and NEMA (National Electrical Manufacturers Association) standards.

The Discrete Automation and Motion division offers robot products, systems and services for the automotive manufacturers and their sub-suppliers as well as for general manufacturing industries, to improve product quality, productivity and consistency in manufacturing processes. Robots are also used in inhospitable environments which may be hazardous to employee health and safety, such as repetitive lifting, cold rooms or painting booths. In the automotive industry, the robot products and systems are used in such areas as press shop, body shop, paint shop, power train assembly, trim and final assembly. General industry segments in which robotics solutions are used range from metal fabrication, foundry, plastics, food and beverage, chemicals and pharmaceuticals to consumer electronics, solar and wood. Typical general industry applications include welding, material handling, painting, picking, packing and palletizing.

The division also offers services that complement its products, including design and project management, engineering, installation, training and life-cycle care, energy appraisals and preventive maintenance.

*Customers*

The Discrete Automation and Motion division serves a wide range of customers. Customers include machinery manufacturers, process industries such as pulp and paper, oil and gas and metals and mining companies, rail equipment manufacturers, discrete manufacturing companies, utilities and renewable energy suppliers, particularly in the wind and solar sectors, as well as customers in the automotive industry.

*Sales and Marketing*

Sales are made both through direct sales forces as well as through third-party channel partners, such as distributors, wholesalers, installers, machine builders and OEMs, system integrators, and panel builders. The proportion of direct sales compared to channel partner sales varies among the different industries, product technologies and geographic markets.

Table of Contents

*Competition*

The Discrete Automation and Motion division's principal competitors vary by product line but include Alstom, Fanuc Robotics, Kuka Robot Group, Rockwell Automation, Schneider, Siemens, Yaskawa, and WEG Industries.

*Capital Expenditures*

The Discrete Automation and Motion division's capital expenditures for property, plant and equipment totaled \$202 million in 2011, compared to \$98 million and \$119 million in 2010 and in 2009, respectively. Principal investments in 2011 were primarily related to replacements, upgrades and maintenance of existing machinery and equipment. Geographically, in 2011, Europe and the Americas represented 43 percent of the capital expenditures each, followed by Asia (13 percent) and the MEA (1 percent).

**Low Voltage Products Division**

*Overview*

The Low Voltage Products division helps customers to improve productivity, save energy and increase safety. The division offers a wide range of products and systems, with related services, that provide protection, control and measurement for electrical installations, enclosures, switchboards, electronics and electromechanical devices for industrial machines and plants. The main applications are in industry, building, infrastructures, rail and sustainable transportation, renewable energies and e-mobility applications.

The Low Voltage Products division had approximately 21,100 employees worldwide as of December 31, 2011, and generated \$5.3 billion of revenues in 2011 through activities in more than 100 countries.

A majority of the division's revenues comes from sales through distributors, wholesalers, OEMs, system integrators, and panel builders, although a portion of the division's revenues comes from direct sales to end users and utilities.

*The Low Voltage Products Division*

The Low Voltage Products division offering covers a wide range of products and services including low voltage switchgears, breakers, switches, control products, DIN-rail components, automation and distribution enclosures, wiring accessories and installation material for any kind of application.

The division offers solutions for restoring service rapidly in case of a fault and providing optimum protection of the electrical installation. The product offering ranges from miniature circuit-breakers to high-capacity molded-case and air circuit-breakers, and includes safety switches used for power distribution in factories and buildings, fuse gear systems for short circuit and overload protection as well as cabling and connection components.

The Low Voltage Products division also offers terminal blocks and printed circuit board connectors used by panel builders and OEMs to produce standard distribution and control panels as well as specialized applications in industries such as traction, energy, maritime, explosive atmospheres or electronics. In addition, the division offers a range of contactors, soft starters, starters, proximity sensors, safety products for industrial protection, limit switches, manual motor starters, along with electronic relays and overload relays.

The division provides smart home and intelligent building control systems, also known as KNX protocol, a complete system for all energy reducing building application areas such as lighting and shutters, heating, ventilation, cooling and security. In addition, the division's IEC and NEMA compliant

Table of Contents

switchgear technology integrates intelligent motor and feeder control solutions to enhance protection, digital control, condition monitoring and plant wide data access by process control systems, electrical control systems and other plant computers.

The Low Voltage Products division has also developed a range of products for new markets, such as those used by electric vehicles (e-mobility) and in photovoltaic, solar and wind applications. These include energy meters, switch-disconnectors, residual current-operated circuit-breakers, interface relays and other products designed for outdoor installation.

*Customers*

The Low Voltage Products division serves a wide range of customers, including residential and commercial building contractors, process industries, rail equipment manufacturers, manufacturing companies, utilities and renewable energy suppliers, particularly in the wind and solar sectors.

*Sales and Marketing*

Sales are made both through direct sales forces as well as through third-party channel partners, such as distributors, wholesalers, installers, machine builders and OEMs, system integrators, and panel builders. The proportion of direct sales compared to channel partner sales varies among the different industries, product technologies and geographic markets.

*Competition*

The Low Voltage Products division's principal competitors vary by product line but include Eaton Corporation, Legrand, Mitsubishi, Schneider, Siemens, Leviton and Rittal.

*Capital Expenditures*

The Low Voltage Products division's capital expenditures for property, plant and equipment totaled \$149 million in 2011, compared to \$100 million and \$150 million in 2010 and 2009, respectively. Investments in 2011 aimed to increase production capacity and productivity throughout the division's global footprint. Geographically, in 2011, Europe represented 67 percent of the capital expenditures, followed by Asia (27 percent), the Americas (5 percent) and the MEA (1 percent).

**Process Automation Division**

*Overview*

The Process Automation division provides products, systems, and services for the automation and electrification of industrial processes. Our core industries are paper, metals, mining, oil, gas, petrochemicals and marine. Each industry has unique business drivers, yet share common requirements for operational productivity, safety, energy efficiency, minimized project risk and environment compliance. The division's core competence is the application of automation and electrification technologies to solve these generic requirements, but tailored to the characteristics of each of its core industries. The division is organized around industry and product business along with a specialized business focusing on performance-based outsourced maintenance contracts. The division had approximately 28,400 employees as of December 31, 2011, and generated revenues of \$8.3 billion in 2011.

The Process Automation division offering is made available as separately sold products or as part of a total automation system. The division technologies are sold both through direct sales forces and third-party channels.

Table of Contents

*The Process Automation Division*

The Process Automation division offers standalone products and engineered systems for process control and measurement, safety, plant electrification, information management, asset management and industry-specific applications for a variety of industries, primarily pulp and paper, minerals and mining, metals, chemicals and pharmaceuticals, oil and gas, turbocharging, power and the marine industry. Some of the Discrete Automation and Motion, Power Products and Low Voltage Products divisions' products are integrated into the process control and electrification systems offered by the Process Automation division.

Our automation systems are used in applications such as continuous and batch control, asset optimization, energy management and safety. They are the hubs that link instrumentation, measurement devices and systems for control and supervision of industrial processes and enable customers to integrate their production systems with their enterprise, resource and planning systems, thereby providing a link to their ordering, billing and shipping processes. This link allows customers to manage their entire manufacturing and business process based on real-time access to plant information. Additionally, it allows customers to increase production efficiency, optimize their assets and reduce environmental waste.

A key element of this division's product offering is its System 800xA process automation platform. This product extends the capability of traditional process control systems, introducing advanced functions such as batch management, asset optimization and field device integration which "plug in" to a common user environment. The same user interface may also be used to manage components of existing multiple ABB control systems that have been installed in the market over approximately the past 25 years. In this way, System 800xA gives customers a way to migrate to new functions one step at a time, rather than having to make a large-scale capital investment to replace their entire control system. By creating a common user interface that can be used to manage multiple systems, the System 800xA also reduces the research and development investment needed to achieve a "one size fits all" solution across our large installed systems base. The division also offers a full line of instrumentation and analytical products to actuate, measure, record and control industrial and power processes.

The division's product offerings for the pulp and paper industries include quality control systems for pulp and paper mills, control systems, drive systems, on-line sensors, actuators and field instruments. On-line sensors measure product properties, such as weight, thickness, color, brightness, moisture content and additive content. Actuators allow the customer to make automatic adjustments during the production process to improve the quality and consistency of the product. Field instruments measure properties of the process, such as flow rate, chemical content and temperature.

We offer our customers in the metals and minerals industries specialized products and services, as well as total production systems. We design, plan, engineer, supply, erect and commission electric equipment, drives, motors and equipment for automation and supervisory control within a variety of areas including mining, mineral handling, aluminum smelting, hot and cold steel applications and cement production.

In the oil and gas sector, we provide solutions for onshore and offshore production and exploration, refining, and petrochemical processes, and oil/gas transportation and distribution. In the pharmaceuticals and fine chemicals areas, we offer applications to support manufacturing, packaging, quality control and compliance with regulatory agencies.

In the marine field, we provide global shipbuilders with power and automation technologies for luxury cruise liners, ferries, tankers, offshore oil rigs and special purpose vessels. We design, engineer, build, supply and commission electrical systems for marine power generation, power distribution and diesel electric propulsion, as well as turbochargers to improve efficiency for diesel and gasoline engines.

Table of Contents

We also offer full-service contracts across all of our customer segments, in which we take over in-house maintenance activities for customers and apply strategies to reduce overall maintenance costs and help optimize these investments. Demand for our process automation services is increasing as our customers seek to increase productivity by improving the performance of existing assets.

*Customers*

The Process Automation division's end customers are primarily companies in the oil and gas, minerals and mining, metals, pulp and paper, chemicals and pharmaceuticals, turbocharging and the marine industries. Customers for this division are looking for complete automation and electrification solutions which demonstrate value mainly in the areas of lower capital costs, increased plant availability, lower lifecycle costs and reduced project costs.

*Sales and Marketing*

The Process Automation division uses a direct sales force as well as third-party channel partners, such as distributors, system integrators and OEMs. For the division as a whole, the majority of revenues are derived through the division's own direct sales channels.

*Competition*

The Process Automation division's principal competitors vary by industry or product line. Competitors include, but are not limited to, Emerson, Honeywell, Invensys, Metso Automation, Rockwell Automation, Schneider, Siemens, Voith, and Yokogawa Electric Corporation.

*Capital Expenditures*

The Process Automation division's capital expenditures for property, plant and equipment totaled \$72 million in 2011, compared to \$76 million and \$99 million in 2010 and 2009, respectively. Principal investments in 2011 were in oil & gas, turbocharging and measurement products. Geographically, in 2011, Europe represented 59 percent of the capital expenditures, followed by Asia (23 percent), the Americas (10 percent) and the MEA (8 percent).

**CAPITAL EXPENDITURES**

Total capital expenditures for property, plant and equipment and intangible assets (excluding intangibles acquired through business combinations) amounted to \$1,021 million, \$840 million and \$967 million in 2011, 2010 and 2009, respectively. Compared to total depreciation and amortization expense of the respective year, capital expenditures were 3 percent higher in 2011, 20 percent higher in 2010 and 48 percent higher in 2009.

Capital expenditures in 2011 remained at a significant level in mature markets, reflecting the geographic distribution of our existing production facilities. Capital expenditures in Europe and North America in 2011 were driven primarily by upgrades and maintenance of existing production facilities, mainly in Sweden, the United States, Switzerland and Germany, as well as by new facilities, principally in Sweden, the United States and Switzerland. Capital expenditures in emerging markets increased in 2011 from 2010 with expenditures highest in China, Brazil, India and Poland, mainly for new facilities. Capital expenditures in emerging markets were mostly made to expand or build new facilities to increase the production capacity. The share of emerging markets capital expenditures as a percentage of total capital expenditures was 34 percent in 2011. In 2010, capital expenditures in Europe were primarily driven by maintenance and upgrades of existing production facilities to improve productivity, mainly in Switzerland, Sweden and Germany. Capital expenditures in emerging markets decreased in 2010 compared to 2009 with expenditures highest in China, India and Poland.



Table of Contents

The carrying value of property, plant and equipment sold amounted to \$9 million, \$8 million and \$22 million in 2011, 2010 and 2009, respectively. Of the sales of property, plant and equipment in 2011, a significant portion was related to real estate properties in Venezuela, Nigeria, Germany and Switzerland. The sales of property, plant and equipment in 2010 related to real estate properties in various locations. Of the total sales of property, plant and equipment in 2009, a significant portion was related to real estate properties, mainly in Norway, France, Brazil and Switzerland.

Construction in progress for property, plant and equipment at December 31, 2011, was \$548 million, mainly in Sweden, Switzerland, the United States, Brazil and China. Construction in progress for property, plant and equipment at December 31, 2010, was \$447 million, mainly in Switzerland, Sweden, Germany, the United States, China and Poland. Construction in progress for property, plant and equipment at December 31, 2009, was \$564 million, mainly in Switzerland, Sweden, Germany, China, India and Poland.

In 2012, we plan to increase our capital expenditures and estimate the amount will be higher than our annual depreciation and amortization charge. We anticipate investments will be higher in the Americas and Asia but will remain at approximately the same level in Europe.

**SUPPLIES AND RAW MATERIALS**

We purchase a variety of raw materials for use in our production and project execution processes. The primary materials used in our products, by weight, are copper, aluminum, carbon steel, mineral oil and various plastics. We also purchase a wide variety of fabricated products and electronic components. We operate a worldwide supply chain management network with employees dedicated to this function in business units and key countries. Our commodity teams on global, divisional and/or regional level take advantage of opportunities to leverage the scale of ABB and to optimize the efficiency of our supply networks, in a sustainable manner.

Our supply chain management organization's activities have continued to expand in recent years, to:

pool and leverage procurement of materials and services,

provide full transparency of ABB's global spending through a comprehensive performance and reporting system linked to all of our enterprise resource planning (ERP) systems,

strengthen ABB's supply chain network by implementing an effective commodity management structure and extensive competency-based training, and

monitor and develop our supply base to ensure sustainability, both in terms of materials and processes used.

For many commodities we purchase, such as products based on steel, copper, aluminum and crude oil, continuing global economic growth in China and other emerging economies, coupled with the uncertainty of volatility in foreign exchange rates, led to significant fluctuations in raw material costs over the last few years. While some market volatility will be offset through the use of long-term contracts, we expect global commodity prices to remain highly volatile.

We mitigate the majority of our exposure to commodity price risk by entering into hedges. For example, we manage copper and aluminum price risk using principally swap contracts based on prices for these commodities quoted on leading exchanges. ABB's hedging policy is designed to safeguard margins by minimizing price volatility and providing a stable cost base during order execution. In addition to using hedging to reduce our exposure to fluctuations in raw materials prices, in some cases we can reduce this risk by incorporating changes in raw materials prices into the prices of our products (through price escalation clauses).

Table of Contents

During 2011, procurement personnel in our businesses, and in the countries in which we operate, along with the global commodities teams, continued to focus on component cost reduction efforts in all areas, while maintaining and improving quality and delivery performance.

**PATENTS AND TRADEMARKS**

We believe that intellectual property rights are crucial to protect the tangible assets of a technology group such as ABB. Over the past ten years, we have substantially increased the number of first patent filings, and we intend to continue our aggressive approach to seeking patent protection. Currently, we have about 22,000 patent applications and registrations, of which more than 7,400 are pending applications. In 2011, we filed patent applications for approximately 720 new inventions. Based on our existing intellectual property strategy, we believe that we have adequate control over our core technologies. The "ABB" trademarks and logo are protected in all of the countries in which we operate. We aggressively defend the reputation associated with the ABB brand and technology.

**SUSTAINABILITY ACTIVITIES**

Sustainability management is one of our highest business priorities. We seek to address sustainability issues in all our business operations in order to improve our social, safety and environmental performance continuously, and to enhance the quality of life in the communities and countries where we operate.

Our social and environmental efforts include:

regularly implementing sustainability objectives covering all relevant parts of our operations,

joining initiatives that foster economic, environmental, social and educational development, and strengthen observance of human rights in business practice,

making positive contributions in the communities where we operate so they will welcome us and consider ABB an attractive employer and a good investment,

offering our customers eco-efficient products that save energy and are safe to use, that optimize the use of natural resources, minimize waste and reduce environmental impact over their complete life cycles,

applying non-financial risk assessment to projects, and key business decision-making processes,

sharing our latest technologies with emerging markets by, for example, helping customers in developing countries implement environmentally sound processes and technologies and providing environmental awareness and safety training,

ensuring that our operations and processes comply with applicable environmental and health and safety standards and social legislation. Specifically, every operating unit must implement an environmental management system that seeks to continuously improve its environmental performance and a health and safety management system that similarly seeks to continuously improve health and safety performance.

ensuring that our social, health and safety and environmental policies are communicated and implemented,

working towards achieving best practices in occupational health and safety, and ensuring the health and safety of our employees, contractors and others involved in or affected by our activities,

ensuring that suppliers have sustainability policies and systems similar to our own, and

Table of Contents

continuing our program to decontaminate sites that were polluted by historical manufacturing processes.

To manage environmental aspects of our own operations, we have implemented environmental management systems according to the ISO 14001 standard at our manufacturing and service sites. For non-manufacturing sites we have implemented an adapted environmental management system in order to ensure management of environmental aspects and continual improvement of performance. Almost all of these sites currently work in compliance with the requirements of the standard (approximately 360 sites and offices) and our environmental management program now covers operations in 59 countries.

We have Environmental Product Declarations to communicate the environmental performance of our core products. These describe the significant environmental aspects and impacts of a product line, viewed over its complete life cycle. Declarations are based on Life Cycle Assessment studies, created according to the international standard ISO/TR 14025. More than 80 declarations for major product lines are published on our Web site (*www.abb.com*), some of which have been externally certified by agencies such as Det Norske Veritas (DNV) of Norway and the RINA Management System Certification Society in Italy.

In 2011, a total of 85 percent of our employees were covered by confirmed data gathered through ABB's formal environmental reporting system that is verified by an independent verification body. The parts of our business that are not yet covered by our reporting system, mainly sales offices in countries where we do not perform manufacturing, have very limited environmental exposure. A total of nine environmental incidents were reported in 2011, none of which had a material environmental impact.

In 2011, a total of 89 percent of employees were covered by confirmed data gathered through ABB's formal social reporting system that is verified by an independent verification body. The parts of our business that are not yet covered by our reporting system, mainly sales offices in countries where we do not perform manufacturing, have very limited social exposure.

One of our corporate objectives is to phase out the use of the hazardous substances that are recorded on our list of "restricted" substances. Priorities for replacement are set by each business using criteria such as the environmental aspects of alternatives, the risk of the substance escaping into the environment, how hazardous the substance is, whether we can use the substance under strict control and whether there are any technically acceptable alternatives.

In February 2011, we settled with Westinghouse Electric Company LLC and were released from our continuing environmental obligations related to a former site in the United States. We now retain liability for environmental remediation costs at one site in the United States that was operated by our former nuclear business, which we have sold to BNFL. The primary environmental liabilities associated with this site relate to the costs of remediating radiological contamination upon decommissioning the facilities. See "Note 15 Commitments and contingencies" to our Consolidated Financial Statements.

## **REGULATION**

Our operations are subject to numerous governmental laws and regulations including those governing antitrust and competition, corruption, the environment, securities transactions and disclosures, import and export of products, currency conversions and repatriation, taxation of foreign earnings and earnings of expatriate personnel and use of local employees and suppliers.

As a reporting company under Section 12 of the U.S. Securities Exchange Act of 1934, we are subject to the FCPA's antibribery provisions with respect to our conduct around the world.

Our operations are also subject to the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. The convention obliges signatories to adopt

Table of Contents

national legislation that makes it a crime to bribe foreign public officials. Those countries which have adopted implementing legislation and have ratified the convention include the United States and several European nations in which we have significant operations.

We conduct business in certain countries known to experience governmental corruption. While we are committed to conducting business in a legal and ethical manner, our employees or agents have taken, and in the future may take, actions that violate the U.S. FCPA, legislation promulgated pursuant to the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, antitrust laws or other laws or regulations. These actions have resulted and could result in monetary or other penalties against us and could damage our reputation and, therefore, our ability to do business. For more information, see "Item 8. Financial Information Legal Proceedings."

**SIGNIFICANT SUBSIDIARIES**

ABB Ltd, Switzerland, is the ultimate parent company of the ABB Group, which comprises 340 consolidated operating and holding subsidiaries worldwide as of February 29, 2012. ABB Ltd's shares are listed on the SIX Swiss Exchange, the NASDAQ OMX Stockholm Exchange and the New York Stock Exchange (where its shares are traded in the form of ADS each ADS representing one registered ABB share).

The only consolidated subsidiary in the ABB Group with listed shares is ABB Limited, Bangalore, India, which is listed on the Bombay Stock Exchange and the National Stock Exchange of India.

The following table sets forth, as of February 29, 2012, the name, country of incorporation and ownership interest of ABB Ltd, Switzerland, in its significant subsidiaries:

<b>Company name / location</b>	<b>Country</b>	<b>ABB Group interest %</b>
ABB S.A., Buenos Aires	ARGENTINA	100.00
ABB Australia Pty Limited, Sydney	AUSTRALIA	100.00
ABB AG, Vienna	AUSTRIA	100.00
ABB N.V., Zaventem	BELGIUM	100.00
ABB Ltda., Osasco	BRAZIL	100.00
ABB Bulgaria EOOD, Sofia	BULGARIA	100.00
ABB Inc., St. Laurent, Quebec	CANADA	100.00
ABB (China) Ltd., Beijing	CHINA	100.00
Asea Brown Boveri Ltda., Bogotá	COLOMBIA	99.99
ABB Ltd., Zagreb	CROATIA	100.00
ABB s.r.o., Prague	CZECH REPUBLIC	100.00
ABB A/S, Skovlunde	DENMARK	100.00
ABB Ecuador S.A., Quito	ECUADOR	96.87
Asea Brown Boveri S.A.E., Cairo	EGYPT	100.00
ABB AS, Jüri	ESTONIA	100.00
ABB Oy, Helsinki	FINLAND	100.00
ABB S.A., Les Ulis	FRANCE	100.00
ABB AG, Mannheim	GERMANY	100.00
ABB Automation GmbH, Mannheim	GERMANY	100.00
ABB Automation Products GmbH, Ladenburg	GERMANY	100.00
ABB Beteiligungs- und Verwaltungsges. mbH, Mannheim	GERMANY	100.00
ABB Stotz-Kontakt GmbH, Heidelberg	GERMANY	100.00
Busch-Jaeger Elektro GmbH, Mannheim/Lüdenscheid	GERMANY	100.00
Asea Brown Boveri S.A., Metamorphosis Attica	GREECE	100.00
ABB (Hong Kong) Ltd., Hong Kong	HONG KONG	100.00

Table of Contents

<b>Company name / location</b>	<b>Country</b>	<b>ABB Group interest %</b>
ABB Engineering Trading and Service Ltd., Budapest	HUNGARY	100.00
ABB Limited, Bangalore	INDIA	75.00
ABB Ltd., Dublin	IRELAND	100.00
ABB Technologies Ltd., Tirat Carmel	ISRAEL	99.99
ABB S.p.A., Milan	ITALY	100.00
ABB K.K., Tokyo	JAPAN	100.00
ABB Ltd., Seoul	KOREA, REPUBLIC OF	100.00
ABB Holdings Sdn. Bhd., Subang Jaya	MALAYSIA	100.00
Asea Brown Boveri S.A. de C.V., San Luis Potosi S.L.P	MEXICO	100.00
ABB BV, Rotterdam	NETHERLANDS	100.00
ABB Finance B.V., Amsterdam	NETHERLANDS	100.00
ABB Holdings B.V., Amsterdam	NETHERLANDS	100.00
ABB Investments B.V., Amsterdam	NETHERLANDS	100.00
ABB Limited, Auckland	NEW ZEALAND	100.00
ABB Holding AS, Billingstad	NORWAY	100.00
ABB S.A., Lima	PERU	97.18
ABB, Inc., Paranaque, Metro Manila	PHILIPPINES	100.00
ABB Sp. zo.o., Warsaw	POLAND	99.89
ABB (Asea Brown Boveri), S.A., Paco de Arcos	PORTUGAL	100.00
Asea Brown Boveri Ltd., Moscow	RUSSIAN FEDERATION	100.00
ABB Contracting Company Ltd., Riyadh	SAUDI ARABIA	65.00
ABB Holdings Pte. Ltd., Singapore	SINGAPORE	100.00
ABB Holdings (Pty) Ltd., Longmeadow	SOUTH AFRICA	80.00
Asea Brown Boveri S.A., Madrid	SPAIN	100.00
ABB AB, Västerås	SWEDEN	100.00
ABB Norden Holding AB, Västerås	SWEDEN	100.00
ABB Asea Brown Boveri Ltd, Zurich	SWITZERLAND	100.00
ABB Schweiz AG, Baden	SWITZERLAND	100.00
ABB Technology Ltd., Zurich	SWITZERLAND	100.00
ABB LIMITED, Bangkok	THAILAND	100.00
ABB Elektrik Sanayi A.S., Istanbul	TURKEY	99.95
ABB Ltd., Kiev	UKRAINE	100.00
ABB Industries (L.L.C.), Dubai	UNITED ARAB EMIRATES	49.00
ABB Holdings Limited, Warrington	UNITED KINGDOM	100.00
ABB Limited, Warrington	UNITED KINGDOM	100.00
ABB Holdings Inc., Cary, NC	UNITED STATES	100.00
ABB Inc., Cary, NC	UNITED STATES	100.00
Baldor Electric Company, Fort Smith, AR	UNITED STATES	100.00
Kuhlman Electric Corporation, Crystal Springs MS	UNITED STATES	100.00

Table of Contents

**DESCRIPTION OF PROPERTY**

As of December 31, 2011, we occupied real estate in around 100 countries throughout the world. The facilities consist mainly of manufacturing plants, office buildings, research centers and warehouses. A substantial portion of our production and development facilities are situated in the United States, China, Germany, Sweden, Switzerland, Finland, Italy, Norway, Canada and India. We also own or lease other properties, including office buildings, warehouses, research and development facilities and sales offices in many countries. We own essentially all of the machinery and equipment used in our manufacturing operations.

From time to time, we have a surplus of space arising from acquisitions, production efficiencies and/or restructuring of operations. Normally, we seek to sell such surplus space which may involve leasing property to third parties for an interim period.

The net book value of our property, plant and equipment at December 31, 2011, was \$4,922 million, of which machinery and equipment represented \$2,244 million, land and buildings represented \$2,130 million and construction in progress represented \$548 million. We believe that our current facilities are in good condition and are adequate to meet the requirements of our present and foreseeable future industrial operations.

**Item 4A. Unresolved Staff Comments**

Not applicable.

**Item 5. Operating and Financial Review and Prospects**

**MANAGEMENT OVERVIEW**

During 2011, we continued to deliver power and automation solutions that help our customers meet the challenges of a rapidly-changing world. Foremost among these are climate change and the need to use electrical energy more efficiently and with less impact on the environment. We achieved this in several ways.

One is a long-term commitment to technology leadership in areas such as high-efficiency power transmission; automation and control systems to manage complex industrial processes using less energy; and technologies to capture the full potential of renewable energies, such as wind and solar power. In 2011, for example, we were awarded orders to connect offshore wind farms to Germany's mainland power grids, to improve production capacity and reduce greenhouse gas emissions from the world's largest offshore oil platform in the North Sea, and to build high power substations in the Middle East to make better use of electricity resources.

Another is our presence in more than 100 countries around the world. This allows us to meet the needs of our customers faster and with solutions that are best suited to their local requirements. It positions us to benefit from the rapid growth expected in the emerging markets in the coming years while also supporting our large and important markets in the world's mature economies. Furthermore, our geographic scope provides us with access to a large pool of talented and highly qualified people from very diverse cultural and business backgrounds a key competitive advantage. In 2011, we generated approximately half of our revenues from emerging markets while also recording order increases of more than 10 percent in local currencies in large markets such as Germany, Brazil, the United States, China and India.

A third way is our ability to combine both power and automation technologies into packaged solutions that meet the needs of new growth sectors, such as integrating renewable energy into existing power grids, delivering high-quality "mission-critical" power to data centers and hospitals, and providing the infrastructure needed to rapidly charge electric vehicles. For example, in 2011 we

Table of Contents

embarked on a project to build a smart grid in Helsinki, Finland; delivered fast direct-current charging stations for an e-mobility project in Hong Kong; and initiated a project to apply direct-current power solutions to a new data center in Switzerland. We view this convergence of power and automation technologies as a long-term trend for which ABB is well positioned.

Economic uncertainties continued in 2011, especially in the second half of the year on increasing concerns surrounding sovereign debt levels in Europe, rising inflation in some emerging economies and signs of economic slowdown in most regions. However, the broad scope of our business portfolio helped us mitigate some of these developments. For example, demand remained steady in several of our later-cycle businesses, such as parts of our Power Products, Power Systems and Process Automation divisions. These businesses depend more on large capital expenditures by our utility and industrial customers that generally come later in the economic cycle. This helped offset the slowdown in demand we saw in the second half of 2011 in some of our early-cycle businesses, such as Low Voltage Products, which are more exposed to consumer demand and construction, and which respond early to decreased economic activity. Our strong positions in fast-growing emerging markets, our flexible global production base and technological leadership, as well as the operational improvements we continue to make in our businesses, also supported our business in 2011.

Foremost among these improvements was the successful reduction of costs to adapt to changing demand. Savings in 2011 amounted to more than \$1 billion and were principally achieved in three areas: making better use of global sourcing opportunities; eliminating operational and process inefficiencies; and optimizing our global footprint to match the geographic scope of our business with changing demand patterns, such as rapid growth in emerging markets. Our cost reduction program was key to maintaining profitability in a challenging environment.

**Strategy 2011-2015**

In November of 2011, we announced an updated strategy for the period 2011 to 2015, along with financial targets to measure our success in achieving them. The strategy is based on five priorities:

Drive competitiveness and stay relevant in our current markets by developing, producing, sourcing and selling to better match market needs, thereby profitably growing the business while increasing productivity and quality.

Capitalize on megatrends, such as the growing need for resource and energy efficiency, increasing urbanization, electrification, digitization and growth in emerging economies.

Aggressively expand our core businesses to secure the next level of growth, for example, growing the service business by tapping opportunities in our installed base and by building the software business for our core power and automation customers.

Execute a disciplined approach to value-creating acquisitions that close key gaps across product, end market and geographic lines.

Find and exploit disruptive opportunities, such as the application of direct current electricity solutions to improve power efficiency and performance compared to conventional alternating current technologies.

In addition, we provided updated financial targets at the Group and divisional levels to measure our performance. We modified our previous Group operational profitability target to Operational EBITDA as a percentage of operational revenues (Operational EBITDA margin) versus the previous measure of earnings before interest and taxes (EBIT) as a percentage of revenues (EBIT margin) for a full definition see "Performance Measures" below. We believe this more accurately reflects the operational performance of the company during a phase of growth through acquisitions by eliminating some of the non-cash effects on earnings from acquisitions.



Table of Contents

In addition, we introduced a new target measure of cash return on invested capital (CROI) that we believe provides a more accurate reflection of our operational performance by focusing on cash returns, which are less prone to non-operational accounting adjustments that may be applied to EBIT from time to time. CROI is defined as the total of net cash provided by operating activities and interest paid, as a percentage of capital invested. Capital invested is defined as the total of fixed assets, net working capital and accumulated depreciation and amortization. At the divisional level, we continued our previous practice of providing organic revenue growth targets on a compound annual growth rate basis as well as profitability targets in the form of Operational EBITDA margins.

**Outlook**

The long-term outlook for ABB remains positive, with utilities continuing to invest in grid upgrades and industries spending more on automation solutions to increase energy efficiency and productivity.

Macroeconomic volatility makes short-term forecasts more challenging. There are signs of recovery in the North American economy and China appears to be returning to a focus on growth, while uncertainty around government budget deficits in Europe remains high.

From the perspective of ABB's short-term business development, management expects low single-digit growth in most of its early-cycle businesses until confidence in the macroeconomic outlook improves. Price pressure is expected to continue in parts of the power business, in line with the company's previous guidance. The unfavorable business mix seen in most divisions in the fourth quarter of 2011 is expected to continue into the first quarter of 2012, weighing on margins. This trend is not expected to continue over the rest of the year. Management will continue to drive further improvements in cost and productivity going forward.

At the same time, our strong order backlog and continued customer investments in areas such as power distribution and oil and gas, as well as our exposure to fast-growing emerging markets, are expected to provide ample opportunities for profitable growth in 2012 and we will continue to expand sales forces and accelerate product development in order to capture these opportunities.

**APPLICATION OF CRITICAL ACCOUNTING POLICIES**

**General**

We prepare our Consolidated Financial Statements in accordance with U.S. GAAP and present the same in United States dollars unless otherwise stated.

The preparation of our financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis, including, but not limited to, those related to: costs expected to be incurred to complete projects; costs of product guarantees and warranties; provisions for bad debts; recoverability of inventories, investments, fixed assets, goodwill and other intangible assets; the fair values of assets and liabilities assumed in business combinations; income tax related expenses and accruals; provisions for restructuring; gross profit margins on long-term construction-type contracts; pensions and other postretirement benefit assumptions and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe 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 our estimates and assumptions.

Table of Contents

We deem an accounting policy to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made and if different estimates that reasonably could have been used, or if changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact our Consolidated Financial Statements. We also deem an accounting policy to be critical when the application of such policy is essential to our ongoing operations. We believe the following critical accounting policies require us to make difficult and subjective judgments, often as a result of the need to make estimates regarding matters that are inherently uncertain. These policies should be considered when reading our Consolidated Financial Statements.

**Revenue recognition**

We generally recognize revenues for the sale of goods when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable, and collectability is reasonably assured. With regards to the sale of products, delivery is not considered to have occurred, and therefore no revenues are recognized, until the customer has taken title to the products and assumed the risks and rewards of ownership of the products specified in the purchase order or sales agreement. Generally, the transfer of title and risks and rewards of ownership are governed by the contractually-defined shipping terms. We use various International Commercial shipping terms (as promulgated by the International Chamber of Commerce) such as Ex Works (EXW), Free Carrier (FCA) and Delivered Duty Paid (DDP). Subsequent to delivery of the products, we generally have no further contractual performance obligations that would preclude revenue recognition.

Revenues under long-term construction-type contracts are generally recognized using the percentage-of-completion method of accounting. We principally use the cost-to-cost method to measure progress towards completion on contracts. Under this method, progress of contracts is measured by actual costs incurred in relation to management's best estimate of total estimated costs, which are reviewed and updated routinely for contracts in progress. The cumulative effects of such adjustments are reported in the current period.

The percentage-of-completion method of accounting involves the use of assumptions and projections, principally relating to future material, labor and overhead costs. As a consequence, there is a risk that total contract costs will exceed those we originally estimated and the margin will decrease. This risk increases if the duration of a contract increases because there is a higher probability that the circumstances upon which we originally developed estimates will change, resulting in increased costs that we may not recover. Factors that could cause costs to increase include:

unanticipated technical problems with equipment supplied or developed by us which may require us to incur additional costs to remedy,

changes in the cost of components, materials or labor,

difficulties in obtaining required governmental permits or approvals,

project modifications creating unanticipated costs,

suppliers' or subcontractors' failure to perform,

penalties incurred as a result of not completing portions of the project in accordance with agreed-upon time limits, and

delays caused by unexpected conditions or events.

Changes in our initial assumptions, which we review on a regular basis between balance sheet dates, may result in revisions to estimated costs, current earnings and anticipated earnings. We recognize these changes in the period in which the changes in estimates are determined. By recognizing

Table of Contents

changes in estimates cumulatively, recorded revenue and costs to date reflect the current estimates of the stage of completion of each project. Additionally, losses on long-term contracts are recognized in the period when they are identified and are based upon the anticipated excess of contract costs over the related contract revenues.

Short-term construction-type contracts, or long-term construction-type contracts for which reasonably dependable estimates cannot be made or for which inherent hazards make estimates difficult, are accounted for under the completed-contract method. Revenues under the completed-contract method are recognized upon substantial completion that is: acceptance by the customer, compliance with performance specifications demonstrated in a factory acceptance test or similar event.

For non construction-type contracts that contain customer acceptance provisions, revenue is deferred until customer acceptance occurs or we have demonstrated the customer-specified objective criteria have been met or the contractual acceptance period has lapsed.

Revenues from service transactions are recognized as services are performed. For long-term service contracts, revenues are recognized on a straight-line basis over the term of the contract or, if the performance pattern is other than straight-line, as the services are provided. Service revenues reflect revenues earned from our activities in providing services to customers primarily subsequent to the sale and delivery of a product or complete system. Such revenues consist of maintenance-type contracts, field service activities that include personnel and accompanying spare parts, and installation and commissioning of products as a stand-alone service or as part of a service contract.

Revenues for software license fees are recognized when persuasive evidence of a non-cancelable license agreement exists, delivery has occurred, the license fee is fixed or determinable, and collection is probable. In software arrangements that include rights to multiple software products and/or services, the total arrangement fee is allocated using the residual method, under which revenue is allocated to the undelivered elements based on vendor-specific objective evidence (VSOE) of fair value of such undelivered elements and the residual amounts of revenue are allocated to the delivered elements. Elements included in multiple element arrangements may consist of software products, maintenance (which includes customer support services and unspecified upgrades), hosting, and consulting services. VSOE is based on the price generally charged when an element is sold separately or, in the case of an element not yet sold separately, the price established by authorized management, if it is probable that the price, once established, will not change once the element is sold separately. If VSOE does not exist for an undelivered element, the total arrangement fee will be taken to revenue over the life of the contract or upon delivery of the undelivered element.

We offer multiple element arrangements to meet our customers' needs. These arrangements may involve the delivery of multiple products and/or performance of services (such as installation and training) and the delivery and/or performance may occur at different points in time or over different periods of time. If certain criteria are met, we allocate revenues to each delivery of product or performance of service based on the individual elements' relative fair value. A hierarchy of selling prices is used to determine the selling price of each specific deliverable that includes vendor-specific objective evidence (if available), third-party evidence (if vendor-specific evidence is not available), or estimated selling price if neither of the first two are available. The estimated selling prices reflect our best estimate of what the selling prices of elements would be if the elements were sold on a stand-alone basis. Revenue is allocated between the elements of an arrangement consideration at the inception of the arrangement. Such arrangements generally include industry-specific performance and termination provisions, such as in the event of substantial delays or non-delivery.

Revenues are reported net of customer rebates and similar incentives. Taxes assessed by a governmental authority that are directly imposed on revenue-producing transactions between us and our customers, such as sales, use, value-added and some excise taxes are presented on a net basis (excluded from revenues).

Table of Contents

These revenue recognition methods require the collectability of the revenues recognized to be reasonably assured. When recording the respective accounts receivable, allowances are calculated to estimate those receivables that will not be collected. These reserves assume a level of default based on historical information, as well as knowledge about specific invoices and customers. The risk remains that a different number of defaults will occur than originally estimated. As such, the amount of revenues recognized might exceed or fall below that which will be collected, resulting in a change in earnings in the future. The risk of deterioration is likely to increase during periods of significant negative industry, economic or political trends.

As a result of the above policies, judgment in the selection and application of revenue recognition methods must be made.

**Contingencies**

As more fully described in the section below entitled "Environmental liabilities", in "Item 8. Financial Information Legal Proceedings" and in "Note 15 Commitments and contingencies" to our Consolidated Financial Statements, we are subject to proceedings, litigation or threatened litigation and other claims and inquiries related to taxes other than income tax, environmental, labor, product, regulatory and other matters. We are required to assess the likelihood of any adverse judgments or outcomes to these matters, as well as potential ranges of probable losses. A determination of the provision required, if any, for these contingencies is made after analysis of each individual issue, often with assistance from both internal and external legal counsel and technical experts. The required amount of a provision for a contingency of any type may change in the future due to new developments in the particular matter, including changes in the approach to its resolution.

We record provisions for our contingent obligations when it is probable that a loss will be incurred and the amount can be reasonably estimated. Any such provision is generally recognized on an undiscounted basis using our best estimate of the amount of loss incurred or at the lower end of an estimated range when a single best estimate is not determinable. In some cases, we may be able to recover a portion of the costs relating to these obligations from insurers or other third parties; however, we record such amounts only when it is probable that they will be collected.

We provide for anticipated costs for warranties when we recognize revenues on the related products or contracts. Warranty costs include calculated costs arising from imperfections in design, material and workmanship in our products. We generally make individual assessments on contracts with risks resulting from order-specific conditions or guarantees and assessments on an overall, statistical basis for similar products sold in larger quantities. There is a risk that actual warranty costs may exceed the amounts provided for, which would result in a deterioration of earnings in the future when these actual costs are determined.

We may have a legal obligation to perform environmental clean-up activities as a result of the normal operation of our business or have other asset retirement obligations. In some cases, the timing or the method of settlement, or both are conditional upon a future event that may or may not be within our control, but the underlying obligation itself is unconditional and certain. We recognize a provision for these and other asset retirement obligations when a liability for the retirement or clean-up activity has been incurred and a reasonable estimate of its fair value can be made. These provisions are initially recognized at fair value, and subsequently adjusted for accrued interest and changes in estimates. Provisions for environmental obligations are not discounted to their present value when the timing of payments cannot be reasonably estimated.

**Pension and postretirement benefits**

As more fully described in "Note 17 Employee benefits" to our Consolidated Financial Statements, we have a number of defined benefit pension and other postretirement plans and recognize an asset for

Table of Contents

a plan's overfunded status or a liability for a plan's underfunded status in our Consolidated Balance Sheets. We measure such a plan's assets and obligations that determine its funded status as of the end of the year.

We recognize actuarial gains and losses gradually over time. Any cumulative unrecognized actuarial gain or loss that exceeds 10 percent of the greater of the present value of the projected benefit obligation (PBO) and the fair value of plan assets is recognized in income over the expected average remaining working lives of the employees participating in the plan. Otherwise, the actuarial gain or loss is not recognized.

We use actuarial valuations to determine our pension and postretirement benefit costs and credits. The amounts calculated depend on a variety of key assumptions, including discount rates, mortality rates and expected return on plan assets. Under U.S. GAAP, we are required to consider current market conditions in making these assumptions. In particular, the discount rates are reviewed annually based on changes in long-term, highly-rated corporate bond yields. Decreases in the discount rates result in an increase in the PBO and in pension costs. Conversely, an increase in the discount rates results in a decrease in the PBO and in pension costs. The mortality assumptions are reviewed annually by management. Decreases in mortality rates result in an increase in the PBO and in pension costs. Conversely, an increase in mortality rates results in a decrease in the PBO and in pension costs.

Holding all other assumptions constant, a 0.25 percentage point decrease in the discount rate would have increased the PBO related to our pension plans by approximately \$307 million, while a 0.25 percentage point increase in the discount rate would have decreased the PBO related to our pension plans by approximately \$290 million.

The expected return on plan assets is reviewed regularly and considered for adjustment annually based on current and expected asset allocations and represents the long-term return expected to be achieved. Decreases in the expected return on plan assets result in an increase to pension costs. An increase or decrease of 0.25 percent in the expected long-term rate of asset return would have decreased or increased, respectively, the net periodic benefit cost in 2011 by approximately \$22 million.

The funded status, which can increase or decrease based on the performance of the financial markets or changes in our assumptions, does not represent a mandatory short-term cash obligation. Instead, the funded status of a pension plan is the difference between the PBO and the fair value of the plan assets. At December 31, 2011, our pension plans were \$950 million underfunded compared to an underfunding of \$327 million at December 31, 2010. Our other postretirement plans were underfunded by \$260 million and \$214 million at December 31, 2011 and 2010, respectively.

We have multiple non-pension postretirement benefit plans. Our health care plans are generally contributory with participants' contributions adjusted annually. For purposes of estimating our health-care costs, we have assumed health-care cost increases to be 9 percent per annum for 2012, gradually declining to 5 percent per annum by 2028 and to remain at that level thereafter.

**Income taxes**

In preparing our Consolidated Financial Statements, we are required to estimate income taxes in each of the jurisdictions in which we operate. Tax expense from continuing operations is reconciled to the weighted-average global tax rate, rather than to the Swiss domestic statutory tax rate, as i) the parent company of the ABB Group, ABB Ltd, is domiciled in Switzerland. Income which has been generated in jurisdictions outside of Switzerland (hereafter "foreign jurisdictions") and has already been subject to corporate income tax in those foreign jurisdictions is, to a large extent, tax exempt in Switzerland. Therefore, generally no or only limited Swiss income tax has to be provided for on the repatriated earnings of foreign subsidiaries. There is no requirement in Switzerland for a parent company of a group to file a tax return of the group determining domestic and foreign pre-tax income,

Table of Contents

and ii) our consolidated income from continuing operations is predominantly earned outside of Switzerland, and therefore corporate income tax in foreign jurisdictions largely determines our global tax rate.

We account for deferred taxes by using the asset and liability method. Under this method, we determine deferred tax assets and liabilities based on temporary differences between the financial reporting and the tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. We recognize a deferred tax asset when it is more likely than not that the asset will be realized. We regularly review our deferred tax assets for recoverability and establish a valuation allowance based upon historical losses, projected future taxable income and the expected timing of the reversals of existing temporary differences. To the extent we increase or decrease this allowance in a period, we recognize the change in the allowance within "Provision for taxes" in the Consolidated Income Statements unless the change relates to discontinued operations, in which case the change is recorded in "Income from discontinued operations, net of tax". Unforeseen changes in tax rates and tax laws, as well as differences in the projected taxable income as compared to the actual taxable income, may affect these estimates.

Certain countries levy withholding taxes, dividend distribution taxes or additional corporate income taxes (hereafter "withholding taxes") on dividend distributions. Such taxes cannot always be fully reclaimed by the shareholder, although they have to be declared and withheld by the subsidiary. Switzerland has concluded double taxation treaties with many countries in which we operate. These treaties either eliminate or reduce such withholding taxes on dividend distributions. It is our policy to distribute retained earnings of subsidiaries, in so far as such earnings are not permanently reinvested or no other reasons exist that would prevent the subsidiary from distributing them. No deferred tax liability is set up, if retained earnings are considered as permanently reinvested, and used for financing current operations as well as business growth through working capital and capital expenditure in those countries.

We operate in numerous tax jurisdictions and, as a result, are regularly subject to audit by tax authorities. We provide for tax contingencies, including potential tax audits, on the basis of the technical merits of the contingency, including applicable tax law, OECD guidelines, as well as on items relating to potential audits by tax authorities based on our evaluations of facts and circumstances. Changes in the facts and circumstances could result in a material change to the tax accruals. We provide for tax contingencies whenever it is deemed more likely than not that a tax asset has been impaired or a tax liability has been incurred for events such as tax claims or changes in tax laws. Although we believe that our tax estimates are reasonable and that appropriate tax reserves have been made, the final determination of tax audits and any related litigation could be different than that which is reflected in our income tax provisions and accruals.

An estimated loss from a tax contingency must be accrued as a charge to income if it is more likely than not that a tax asset has been impaired or a tax liability has been incurred and the amount of the loss can be reasonably estimated. We apply a two-step approach to recognize and measure uncertainty in income taxes. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50 percent likely of being realized upon ultimate settlement. The required amount of provisions for contingencies of any type may change in the future due to new developments.

Table of Contents

**Business combinations**

The amount of goodwill initially recognized in a business combination is based on the excess of the purchase price of the acquired company over the fair value of the assets acquired and liabilities assumed. The determination of these fair values requires us to make significant estimates and assumptions. For instance, when assumptions with respect to the timing and amount of future revenues and expenses associated with an asset are used to determine its fair value, but the actual timing and amount differ materially, the asset could become impaired. In some cases, particularly for large acquisitions, we engage independent third-party appraisal firms to assist in determining the fair values.

Critical estimates in valuing certain intangible assets include but are not limited to: future expected cash flows of the acquired business, brand awareness and market position, and discount rates.

The fair values assigned to the intangible assets acquired are described in "Note 3 Acquisitions, increases in controlling interests and divestments" as well as "Note 11 Goodwill and other intangible assets", to our Consolidated Financial Statements.

**Goodwill and other intangible assets**

We review goodwill for impairment annually as of October 1, or more frequently if events or circumstances indicate the carrying value may not be recoverable. We perform a two-step impairment test on a reporting unit level.

Our reporting units are the same as our divisions for Power Systems, Discrete Automation and Motion, and Low Voltage Products. For Power Products and Process Automation, we determined the reporting units to be one level below the division, as the different products produced or services provided by these divisions do not share sufficiently similar economic characteristics to permit testing of goodwill on a total operating segment level. In the case of Power Products, there are separate reporting units based on the category of product produced High-Voltage Products, Medium-Voltage Products and Transformers. In the case of Process Automation, we have determined that there are two reporting units, the Turbocharger product business and the remainder of Process Automation.

In the first step of the impairment test, we compare the fair value of each reporting unit to its carrying value. The fair value of each reporting unit is calculated using an income approach, whereby the fair value is calculated based on the present value of future cash flows, applying a discount rate that represents our weighted-average cost of capital. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not impaired and no further testing is performed. If the carrying value of a reporting unit is zero or negative we additionally assess the likelihood that goodwill is impaired. On October 1, 2011, none of our goodwill reporting units had a carrying value that was zero or negative.

The future cash flows are based on approved business plans for the reporting units which currently cover a period of four years plus a terminal value. The future cash flows require significant estimates and judgments involving variables such as future sales volumes, sales prices, production and other operating costs, capital expenditures and other economic factors. The post-tax weighted-average cost of capital, of currently 9 percent, is based on variables such as the risk-free rate derived from the yield of 10-year U.S. treasury bonds as well as an ABB specific risk premium. The terminal value growth rate is assumed to be 1 percent. The mid-term tax rate used in the test is currently 27 percent.

We assess the reasonableness of the fair value calculations of our reporting units by reconciling the sum of the fair values for all our reporting units to our total market capitalization. On October 1, 2011, the calculated fair values for each of our reporting units exceeded their respective carrying values by at least 250 percent and we concluded that none was "at risk" of failing the goodwill impairment test. Consequently, the second step of the impairment test was not performed. The assumptions used in the fair value calculation are challenged each year (through the use of sensitivity analysis) to determine the

Table of Contents

impact on the resulting fair value of the reporting units. Our sensitivity analysis in 2011 showed no significant change in fair values if the assumptions change. A 1 percentage-point increase in the discount rate would reduce the calculated fair values by approximately 12 percent. A 1 percentage-point decrease in the terminal value growth rate would reduce the calculated fair values by approximately 9 percent.

However, if the carrying value of the net assets assigned to the reporting unit were to exceed its fair value, then we would perform the second step of the impairment test to determine the implied fair value of the reporting unit's goodwill and compare it to the carrying value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill were to exceed its implied fair value, then we would record an impairment loss equal to the difference. Any goodwill impairment losses would be recorded as a separate line item in the income statement in continuing operations, unless related to a discontinued operation, in which case the losses would be recorded in "Income from discontinued operations, net of tax". There were no goodwill impairment charges in 2011, 2010 and 2009.

We review intangible assets for recoverability whenever events or changes in circumstances indicate that the carrying amount may not be recoverable upon the occurrence of certain triggering events, such as a decision to divest a business or projected losses of an entity. We record impairment charges in "Other income (expense), net", in our Consolidated Income Statements, unless they relate to a discontinued operation, in which case the charges are recorded in "Income from discontinued operations, net of tax".

Cash flow models used in evaluating impairments are dependent on a number of factors including estimates of future cash flows and other variables and require that we make significant estimates and judgments, involving variables such as sales volumes, sales prices, sales growth, production and operating costs, capital expenditures, market conditions and other economic factors. Further, discount rates used in discounted cash flow models to calculate fair values require the determination of variables such as the risk-free rates and equity market risk premiums. We base our fair value estimates on assumptions we believe to be reasonable, but which are inherently uncertain. Actual future results may differ from those estimates.

#### **NEW ACCOUNTING PRONOUNCEMENTS**

For a description of accounting changes and recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our Consolidated Financial Statements, see "Note 2 Significant accounting policies" to our Consolidated Financial Statements.

#### **RESEARCH AND DEVELOPMENT**

Each year, we invest significantly in research and development. Our research and development focuses on developing and commercializing the technologies of our businesses that are of strategic importance to our future growth. In 2011, 2010 and 2009, we invested \$1,371 million, \$1,082 million and \$1,037 million, respectively, or approximately 3.6 percent, 3.4 percent, and 3.3 percent of our annual consolidated revenues, respectively, on research and development activities. We also had expenditures of \$338 million, \$253 million and \$265 million, respectively, or approximately 0.9 percent, 0.8 percent and 0.8 percent, respectively, of our annual consolidated revenues in 2011, 2010 and 2009, on order-related development activities. These are customer- and project-specific development efforts that we undertake to develop or adapt equipment and systems to the unique needs of our customers in connection with specific orders or projects. Order-related development amounts are initially recorded in inventories as part of the work in process of a contract and then are reflected in cost of sales at the time revenue is recognized in accordance with our accounting policies.



Table of Contents

In addition to continuous product development, and order-related engineering work, we develop platforms for technology applications in our automation and power businesses in our research and development laboratories, which operate on a global basis. Through active management of our investment in research and development, we seek to maintain a balance between short-term and long-term research and development programs and optimize our return on investment.

Our research and development strategy focuses on three objectives:

to monitor and develop emerging technologies and create an innovative, sustainable technology base for ABB,

to develop technology platforms that enable efficient product design for our power and automation customers, and

to create the next generation of power and automation products and systems that we believe will be the engines of profitable growth.

Universities are incubators of future technology, and a central task of our research and development team is to transform university research into industry-ready technology platforms. We collaborate with a number of universities and research institutions to build research networks and foster new technologies. We believe these collaborations shorten the amount of time required to turn basic ideas into viable products, and they additionally help us recruit and train new personnel. We have built numerous university partnerships in the U.S., Europe and Asia, including long-term, strategic relationships with the Massachusetts Institute of Technology, Carnegie Mellon University, Cambridge University, ETH Zurich, KTH Stockholm and Imperial College London. Our collaborative projects include research on materials, sensors, micro-engineered mechanical systems, robotics, controls, manufacturing, distributed power and communication. Common platforms for power and automation technologies are developed around advanced materials, efficient manufacturing, information technology and data communication, as well as sensor and actuator technology.

Common applications of basic power and automation technologies can also be found in power electronics, electrical insulation, and control and optimization. Our power technologies, including our insulation technologies, current interruption and limitation devices, power electronics, flow control and power protection processes, apply as much to large, reliable, blackout-free transmission systems as they do to everyday household needs. Our automation technologies, including our control and optimization processes, power electronics, sensors and microelectronics, mechatronics and wireless communication processes, are designed to improve efficiency in plants and factories around the world, including our own.

## **ACQUISITIONS, INVESTMENTS AND DIVESTITURES**

### **Acquisitions**

During 2011, 2010 and 2009, ABB invested \$3,805 million, \$1,275 million and \$159 million in 10, 9 and 8 new businesses and joint ventures, respectively. The amounts exclude changes in cost and equity investments.

The principal acquisition in 2011 was Baldor Electric Company (Baldor). On January 26, 2011, we acquired 83.25 percent of the outstanding shares of Baldor for \$63.50 per share in cash. On January 27, 2011, we exercised our top-up option contained in the merger agreement, bringing our shareholding in Baldor to 91.6 percent, allowing us to complete a short-form merger under Missouri, United States, law. On the same date, we completed the purchase of the remaining 8.4 percent of outstanding shares. Baldor markets, designs and manufactures industrial electric motors, mechanical power transmission products, drives and generators. The acquisition broadens the product offering of our Discrete Automation and Motion division, closing the gap in our automation portfolio in North America by

Table of Contents

adding Baldor's NEMA (National Electrical Manufacturers Association) motors product line, as well as adding Baldor's growing mechanical power transmission business.

The principal acquisition in 2010 was Ventyx group. On June 1, 2010, we acquired all of the shares of Ventyx Inc., Ventyx Software Inc. and Ventyx Dutch Holding B.V., representing substantially all of the revenues, assets and liabilities of the Ventyx group. Ventyx provides software solutions to global energy, utility, communications and other asset intensive businesses and was integrated into the network management business within the Power Systems division to form a single unit for energy management software solutions.

During 2009, acquisitions were not significant either individually or in aggregate.

For more information on our acquisitions, see "Note 3 Acquisitions, increases in controlling interests and divestments" to our Consolidated Financial Statements.

**Increase in controlling interests in India**

In 2010, we increased our ownership interest in ABB Limited, India (our publicly-listed subsidiary in India) from approximately 52 percent to 75 percent. Cash paid in 2010, including transaction costs, amounted to \$956 million. The offer of 900 rupees per share resulted in a charge to "Capital stock and additional paid-in capital" of \$838 million, including expenses related to the transaction.

**ABB to acquire Thomas & Betts Corporation**

On January 30, 2012, we announced that we had reached an agreement to acquire the Thomas & Betts Corporation. Thomas & Betts designs, manufactures and markets essential components used to manage the connection, distribution, transmission and reliability of electrical power in industrial, construction and utility applications. We anticipate cash outflows upon closing the transaction amounting to approximately \$3.9 billion, based on a purchase price of \$72 per share for the acquisition of the outstanding shares. The transaction is subject to approval by Thomas & Betts shareholders as well as to customary regulatory approvals, and is expected to close by the middle of 2012.

**Divestitures**

In 2011, 2010 and 2009, we received cash, net of cash disposed, from sales of businesses and equity-accounted companies of \$8 million, \$83 million and \$16 million, respectively. Gains and losses on these transactions were not significant.

For more information on our divestments, see "Note 3 Acquisitions, increases in controlling interests and divestments" to our Consolidated Financial Statements.

**EXCHANGE RATES**

We report our financial results in U.S. dollars. Due to our global operations, a significant amount of our revenues, expenses, assets and liabilities are denominated in other currencies. As a consequence, movements in exchange rates between currencies may affect:

our profitability,

the comparability of our results between periods, and

the carrying value of our assets and liabilities.

We translate non-USD denominated results of operations, assets and liabilities to USD in our Consolidated Financial Statements. Balance sheet items are translated to USD using year-end currency exchange rates. Income statement and cash flow items are translated to USD using the average currency exchange rate over the relevant period.



Table of Contents

Increases and decreases in the value of the USD against other currencies will affect the reported results of operations in our Consolidated Income Statements and the value of certain of our assets and liabilities in our Consolidated Balance Sheets, even if our results of operations or the value of those assets and liabilities have not changed in their original currency. Because of the impact foreign exchange rates have on our reported results of operations and the reported value of our assets and liabilities, changes in foreign exchange rates could significantly affect the comparability of our reported results of operations between periods and result in significant changes to the reported value of our assets, liabilities and shareholders' equity, as has been the case during the period from 2009 through 2011.

While we operate globally and report our financial results in USD, exchange rate movements between the USD and both the euro and the Swiss franc are of particular importance to us due to (i) the location of our significant operations and (ii) our corporate headquarters being in Switzerland.

The exchange rates between the USD and the EUR and the USD and the CHF at December 31, 2011, 2010 and 2009, were as follows:

Exchange rates into \$	2011	2010	2009
EUR 1.00	1.29	1.34	1.44
CHF 1.00	1.06	1.07	0.97

The average exchange rates between the USD and the EUR and the USD and the CHF for the years ended December 31, 2011, 2010 and 2009, were as follows:

Exchange rates into \$	2011	2010	2009
EUR 1.00	1.39	1.33	1.40
CHF 1.00	1.13	0.97	0.93

When we incur expenses that are not denominated in the same currency as the related revenues, foreign exchange rate fluctuations could affect our profitability. To mitigate the impact of exchange rate movements on our profitability, it is our policy to enter into forward foreign exchange contracts to manage the foreign exchange transaction risk of our operations.

In 2011, approximately 85 percent of our consolidated revenues were reported in currencies other than USD. Of that amount, the following percentages were reported in the following currencies:

Euro, approximately 24 percent,

Chinese renminbi, approximately 10 percent,

Swiss franc, approximately 6 percent,

Swedish krona, approximately 6 percent, and

Indian rupee, approximately 4 percent.

In 2011, approximately 82 percent of our cost of sales and selling, general and administrative expenses were reported in currencies other than USD. Of that amount, the following percentages were reported in the following currencies:

Euro, approximately 22 percent,

Chinese renminbi, approximately 10 percent,

Swedish krona, approximately 4 percent,

Swiss franc, approximately 4 percent, and

Indian rupee, approximately 5 percent.

Table of Contents

We also incur expenses other than cost of sales and selling, general and administrative expenses in various currencies.

The results of operations and financial position of many of our subsidiaries outside of the United States are reported in the currencies of the countries in which those subsidiaries are located. We refer to these currencies as "local currencies." Local currency financial information is then translated into USD at applicable exchange rates for inclusion in our Consolidated Financial Statements.

The discussion of our results of operations below provides certain information with respect to orders, revenues, earnings before interest and taxes and other measures as reported in USD (as well as in local currencies). We measure period-to-period variations in local currency results by using a constant foreign exchange rate for all periods under comparison. Differences in our results of operations in local currencies as compared to our results of operations in USD are caused exclusively by changes in currency exchange rates.

While we consider our results of operations as measured in local currencies to be a significant indicator of business performance, local currency information should not be relied upon to the exclusion of U.S. GAAP financial measures. Instead, local currencies reflect an additional measure of comparability and provide a means of viewing aspects of our operations that, when viewed together with the U.S. GAAP results and our reconciliations, provide a more complete understanding of factors and trends affecting the business. Because local currency information is not standardized, it may not be possible to compare our local currency information to other companies' financial measures that have the same or a similar title. We encourage investors to review our financial statements and publicly-filed reports in their entirety and not to rely on any single financial measure.

## ORDERS

We book and report an order when a binding contractual agreement has been concluded with a customer covering, at a minimum, the price and scope of products or services to be supplied, the delivery schedule and the payment terms. The reported value of an order corresponds to the undiscounted value of revenues that we expect to recognize following delivery of the goods or services subject to the order, less any trade discounts and excluding any value added or sales tax. The value of orders received during a given period of time represents the sum of the value of all orders received during the period, adjusted to reflect the aggregate value of any changes to the value of orders received during the period and orders existing at the beginning of the period. These adjustments, which may in the aggregate increase or decrease the orders reported during the period, may include changes in the estimated order price up to the date of contractual performance, changes in the scope of products or services ordered and cancellations of orders.

The undiscounted value of revenues we expect to generate from our orders at any point in time is represented by our order backlog. Approximately 18 percent of the value of total orders we recorded in 2011 were "large orders," which we define as orders from third parties involving a value of at least \$15 million for products or services. Approximately 62 percent of the large orders in 2011 were recorded by our Power Systems division and approximately 24 percent in our Process Automation division. The Power Products, Discrete Automation and Motion, as well as the Low Voltage Products divisions accounted for the remainder of the total large orders recorded during 2011. The remaining portion of total orders recorded in 2011 was "base orders," which we define as orders from third parties with a value of less than \$15 million for products or services.

The level of orders fluctuates from year to year. Arrangements included in any particular order can be complex and unique to that order. Portions of our business involve orders for long-term projects that can take months or years to complete and many large orders result in revenues in periods after the order is booked. However, the level of large orders and orders generally cannot be used to accurately predict future revenues or operating performance. Orders that have been placed can be cancelled,

Table of Contents

delayed or modified by the customer. These actions can reduce or delay any future revenues from the order or may result in the elimination of the order.

**PERFORMANCE MEASURES**

During 2011, we changed our primary measures of segment performance from earnings before interest and taxes (EBIT) to Operational EBITDA and Operational EBITDA margin. As a result, we evaluate the performance of our divisions primarily based on orders received, revenues, Operational EBITDA and Operational EBITDA as a percentage of Operational revenues (Operational EBITDA margin).

Operational EBITDA represents EBIT excluding depreciation and amortization, restructuring and restructuring-related expenses, adjusted for the following: (i) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (ii) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, (iii) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities), (iv) acquisition-related expenses and (v) certain non-recurring items.

Operational revenues are total revenues adjusted for the following: (i) unrealized gains and losses on derivatives, (ii) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (iii) unrealized foreign exchange movements on receivables (and related assets).

See "Note 22 Operating segment and geographic data" to our Consolidated Financial Statements for a reconciliation of Operational EBITDA to EBIT.

Table of Contents**ANALYSIS OF RESULTS OF OPERATIONS**

Our consolidated results from operations were as follows:

<b>(\$ in millions, except per share data in \$)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Orders	40,210	32,681	30,969
Order backlog at December 31,	27,508	26,193	24,771
Revenues	37,990	31,589	31,795
Cost of sales	(26,556)	(22,060)	(22,470)
<b>Gross profit</b>	<b>11,434</b>	<b>9,529</b>	<b>9,325</b>
Selling, general and administrative expenses	(5,373)	(4,615)	(4,491)
Non-order related research and development expenses	(1,371)	(1,082)	(1,037)
Other income (expense), net	(23)	(14)	329
<b>Earnings before interest and taxes</b>	<b>4,667</b>	<b>3,818</b>	<b>4,126</b>
Net interest and other finance expense	(117)	(78)	(6)
Provision for taxes	(1,244)	(1,018)	(1,001)
<b>Income from continuing operations, net of tax</b>	<b>3,306</b>	<b>2,722</b>	<b>3,119</b>
Income from discontinued operations, net of tax	9	10	17
<b>Net income</b>	<b>3,315</b>	<b>2,732</b>	<b>3,136</b>
Net income attributable to noncontrolling interests	(147)	(171)	(235)
<b>Net income attributable to ABB</b>	<b>3,168</b>	<b>2,561</b>	<b>2,901</b>
<i>Amounts attributable to ABB shareholders:</i>			
Income from continuing operations, net of tax	3,159	2,551	2,884
Net income	3,168	2,561	2,901
<i>Basic earnings per share attributable to ABB shareholders:</i>			
Income from continuing operations, net of tax	1.38	1.12	1.26
Net income	1.38	1.12	1.27
<i>Diluted earnings per share attributable to ABB shareholders:</i>			
Income from continuing operations, net of tax	1.38	1.11	1.26
Net income	1.38	1.12	1.27

A more detailed discussion of the orders, revenues and Operational EBITDA for our divisions follows in the sections of "Divisional analysis" below entitled "Power Products," "Power Systems," "Discrete Automation and Motion," "Low Voltage Products," "Process Automation" and "Corporate and Other." Orders and revenues of our divisions include interdivisional transactions which are eliminated in the "Corporate and Other" line in the tables below.



Table of Contents**Orders**

(\$ in millions)	2011	2010	2009	% Change	
				2011	2010
Power Products	11,068	9,778	10,940	13%	(11)%
Power Systems	9,278	7,896	7,830	18%	1 %
Discrete Automation and Motion	9,566	5,862	4,702	63%	25 %
Low Voltage Products	5,364	4,686	4,079	14%	15 %
Process Automation	8,726	7,383	6,684	18%	10 %
<b>Operating divisions</b>	<b>44,002</b>	<b>35,605</b>	<b>34,235</b>	<b>24%</b>	<b>4 %</b>
Corporate and Other <sup>(1)</sup>	(3,792)	(2,924)	(3,266)	n.a.	n.a.
<b>Total</b>	<b>40,210</b>	<b>32,681</b>	<b>30,969</b>	<b>23%</b>	<b>6 %</b>

(1) Includes interdivisional eliminations

In 2011, total order volume increased by 23 percent (18 percent in local currencies, 11 percent excluding the Baldor acquisition). Customer investments to increase operational efficiency and services translated into higher orders for the automation divisions, where the pace of order growth in the second half of 2011 slowed versus the growth rates of the first half of the year. The need to strengthen power distribution networks, driven in part by industrial growth in emerging markets, as well as the integration of renewable energy supplies into power grids, lifted orders in the power businesses.

In 2011, orders in the Power Products division grew by 13 percent (8 percent in local currencies) and were higher in all businesses. The order increase was driven primarily by continued strength in the industrial and power distribution sectors as well as large orders in the transmission sector. Continuing investments in grid upgrades and the integration of renewable energy sources fuelled an 18 percent (12 percent in local currencies) orders increase in the Power Systems division. In August, ABB won its largest-ever power transmission order, worth around \$1 billion, to supply a power link connecting offshore North Sea wind farms to the German mainland grid. The strong growth in the Discrete Automation and Motion division reflected continued demand for energy-efficient automation solutions leading to an increase in orders of 63 percent (57 percent in local currencies, 21 percent excluding the Baldor acquisition). While all businesses contributed to the increase in orders in that division, Robotics and Power Electronics posted the highest growth rates. Orders were 14 percent higher in Low Voltage Products (9 percent in local currencies), mainly on increased demand for low-voltage systems to improve electrical efficiency in industry. Order growth slowed in that division in the second half of the year on a combination of more difficult comparisons with the strong growth recorded in 2010, slowing demand in most early-cycle industries and cutback in renewable investments compared to the previous year. The Process Automation division saw orders up 18 percent (12 percent in local currencies), mainly on continuing demand from the oil and gas and related marine industry. Service orders in Process Automation grew at a double-digit pace as well.

Base orders grew significantly in the first half of 2011, as the global economic upturn continued. Although the development slowed in the second half of the year amid increased uncertainties about the global macroeconomic outlook, growth rates remained double digit. For ABB as a whole, base orders grew by 21 percent (16 percent in local currencies), as all divisions reported an increase in base orders in 2011. Additionally, a number of sizeable projects in the tender backlog materialized into large orders, which led to significant growth in the year. After a decline in 2010, large orders rebounded and grew 32 percent (25 percent in local currencies).

Total orders in 2010 increased 6 percent (4 percent in local currencies) compared to 2009 as the global economy began to recover, as reflected in increased spending by industrial customers in

Table of Contents

energy-efficient automation and power solutions to increase productivity and quality. Investments by utilities in large power transmission projects, however, remained cautious.

In 2010, orders in our Power Products division decreased 11 percent (13 percent in local currencies) as transmission spending remained low, resulting in lower order volumes, especially in large power transformers and high-voltage equipment. The economic recovery however did lead to an increase in the power distribution segments with higher orders in the medium-voltage product lines. Orders in our Power Systems division were up 1 percent (down 1 percent in local currencies). Large orders were down, while the division saw a large increase in base orders in substations and power generation due to an ongoing focus on renewable energy and grid reliability. Orders in our automation divisions, which are typically earlier in the business cycle, have benefited from increased investments by industrial customers on the back of an upturn in the global economy. Discrete Automation and Motion orders grew 25 percent (23 percent in local currencies) as industrial customers increased investments in automation solutions to improve productivity and energy efficiency. Within the Discrete Automation and Motion division, order growth was especially strong in the Robotics business, which experienced a turnaround, and in the low-voltage drives business. Towards the end of 2010, mid- to late-cycle businesses also began seeing order growth. Orders in the Low Voltage Products division increased 15 percent (15 percent in local currencies) as demand from general industry and construction improved in most regions. In our Process Automation division, orders grew 10 percent (7 percent in local currencies) as investments in the energy and commodity-based sectors recovered and activity in the marine business also improved, however from low levels.

As base orders began recovering on the upturn in the global economy, we continued to see for the first half of 2010 that large scale investments in both industry and utilities were delayed as customers assessed the stability of the recovery. Later in 2010 customers became more optimistic, which materialized into a number of large order awards in the fourth quarter of 2010. However, this attitude shift was not enough to compensate the low levels of large orders in the first half of 2010. Consequently, large orders were down 17 percent (20 percent in local currencies).

We determine the geographic distribution of our orders based on the location of the customer, which may be different from the ultimate destination of the products' end use. The geographic distribution of our consolidated orders was as follows:

(\$ in millions)				% Change	
	2011	2010	2009	2011	2010
Europe	15,202	13,781	11,983	10%	15 %
The Americas	9,466	6,223	5,996	52%	4 %
Asia	12,103	8,720	8,197	39%	6 %
Middle East and Africa	3,439	3,957	4,793	(13)%	(17)%
<b>Total</b>	<b>40,210</b>	<b>32,681</b>	<b>30,969</b>	<b>23%</b>	<b>6 %</b>

Orders in 2011 grew in the Americas 52 percent (50 percent in local currencies) driven by the Baldor acquisition as well as by organic growth. The U.S., Canada and Brazil were the main growth drivers in this region, as Brazil recorded large orders in the Power Systems division, as well as in the Power Automation division from the oil & gas and minerals sectors. In Asia, orders were up 39 percent (32 percent in local currencies) on double-digit growth in all divisions. In China, large orders for Power Systems and for Power Products as well as base order growth in the Discrete Automation and Motion and Low Voltage Products divisions drove significant order growth. India returned to double-digit order growth after a contraction in 2010 and South Korea recorded large orders from the marine sector. Europe grew 10 percent (4 percent in local currencies), on growth in the industrial sectors. Additionally, a large order for offshore wind farm connection in Germany was repeated in 2011 (at a higher amount than in the previous year) and Norway won large orders in the oil and gas sector. Order

Table of Contents

volumes decreased in the MEA by 13 percent (15 percent in local currencies) as large orders from the power sector in Saudi Arabia and from the oil & gas sector in Congo were offset by a lower orders level in the Power Systems division in Kuwait, Qatar and the United Arab Emirates.

In 2010, order volumes grew in all markets except in the MEA which was down 17 percent (19 percent in local currencies), where we were unable to repeat the large order intake of 2009 from utility and oil and gas customers in Algeria, Kuwait and Saudi Arabia. Orders from Europe grew 15 percent (16 percent in local currencies) as a result of large order awards to the Power Systems division from Belgium, Germany, Norway and Sweden as well as a turnaround in the Robotics business of the Discrete Automation and Motion division. In the Americas, orders increased 4 percent (down 1 percent in local currencies) on strong growth in the automation divisions, while Power Systems' orders were down as the level of large orders in Brazil in 2009 could not be matched in 2010. Orders received in the Power Products division in the Americas remained at the same level as 2009 as lower volumes in the transformer business were offset by growth in high- and medium-voltage equipment. Orders in Asia increased 6 percent (2 percent in local currencies) as growth in the automation divisions offset lower volumes in the transformer business in China.

**Order backlog**

(\$ in millions)	December 31,			% Change	
	2011	2010	2009	2011	2010
Power Products	8,029	7,930	8,226	1%	(4)%
Power Systems	11,570	10,929	9,675	6%	13 %
Discrete Automation and Motion	4,120	3,350	3,046	23%	10 %
Low Voltage Products	887	838	734	6%	14 %
Process Automation	5,771	5,530	5,523	4%	%
<b>Operating divisions</b>	<b>30,377</b>	<b>28,577</b>	<b>27,204</b>	<b>6%</b>	<b>5 %</b>
Corporate and Other <sup>(1)</sup>	(2,869)	(2,384)	(2,433)	n.a.	n.a.
<b>Total</b>	<b>27,508</b>	<b>26,193</b>	<b>24,771</b>	<b>5%</b>	<b>6 %</b>

(1) Includes interdivisional eliminations

In 2011, orders grew at a higher rate than revenues leading to an increase in group order backlog by 5 percent (9 percent in local currencies) compared to 2010. The increase in order backlog in the Power Systems division is largely based on large orders for grid upgrades and the integration of renewable energy sources. The order backlog in the Power Products division grew slightly in 2011 after a decline in 2010. Despite slowing growth in global industrial demand in the second half of 2011, order backlog in the Discrete Automation and Motion division, only partly driven by the Baldor acquisition, and in the Low Voltage Products division continued to grow in 2011. The Process Automation division benefited from large orders in the oil & gas related marine sectors, which increased order backlog.

In 2010, order backlog increased 6 percent (4 percent in local currencies) compared to 2009, following the growth in orders received. Growth of order backlog in the Power Systems division continued to be driven by large orders which typically have longer execution times. Order backlog also increased in the Discrete Automation and Motion and Low Voltage Products divisions as orders received grew faster than revenues reflecting market recovery in the industrial sector. Order backlog in the Process Automation division was flat and in the Power Products division backlog declined, primarily due to weak orders in the transmission sector.

Table of Contents**Revenues**

(\$ in millions)	2011	2010	2009	% Change	
				2011	2010
Power Products	10,869	10,199	11,239	7%	(9)%
Power Systems	8,101	6,786	6,549	19%	4 %
Discrete Automation and Motion	8,806	5,617	5,405	57%	4 %
Low Voltage Products	5,304	4,554	4,071	16%	12 %
Process Automation	8,300	7,432	7,839	12%	(5)%
<b>Operating divisions</b>	<b>41,380</b>	<b>34,588</b>	<b>35,103</b>	<b>20%</b>	<b>(1)%</b>
Corporate and Other <sup>(1)</sup>	(3,390)	(2,999)	(3,308)	n.a.	n.a.
<b>Total</b>	<b>37,990</b>	<b>31,589</b>	<b>31,795</b>	<b>20%</b>	<b>(1)%</b>

(1) Includes interdivisional eliminations

Revenues in 2011 increased 20 percent (15 percent in local currencies) on the back of strong orders recorded in the previous year as well as on improving revenues from early-cycle business in the first half of the year. Excluding the Baldor acquisition, revenues increased 14 percent (9 percent in local currencies).

Revenues in the Power Products division increased 7 percent (2 percent in local currencies) following two years of revenue declines, mainly on growth in medium-voltage products but also on higher revenues in transformers and high-voltage products. In the Power Systems division, revenues increased 19 percent (14 percent in local currencies) on the successful execution of large orders placed in the previous year in the grid systems and power generation businesses. Revenues rose 57 percent (51 percent in local currencies) in the Discrete Automation and Motion division and 22 percent (16 percent in local currencies) excluding the Baldor acquisition. The Robotics business confirmed the turnaround seen in 2010 and grew at a double-digit pace in 2011. Revenues growth softened in the second half of the year in Low Voltage Products resulting in 16 percent higher revenues in 2011 (11 percent in local currencies) compared to the previous year. Revenues in the Process Automation division, which is later in the economic cycle, were 12 percent (6 percent in local currencies) higher, supported by solid orders received in minerals, pulp and paper, turbo chargers and oil & gas businesses.

Revenues in 2010 declined 1 percent (2 percent in local currencies) due primarily to the impact of lower orders received in the prior year. The short-cycle business improvement in the second half of the year and the good large order execution in 2010 could not compensate for the impact of weak revenues generated at the beginning of the year.

Revenues in the Power Products division decreased 9 percent (11 percent in local currencies) due to lower opening backlog and continued weak orders in high-voltage and transformers products. The Power Systems division's revenues increased 4 percent (2 percent in local currencies) on order execution especially in substations and power generation projects. Revenues in the Discrete Automation and Motion division increased 4 percent (3 percent in local currencies) driven by a turnaround in the Robotics business, as well as growth in industrial and commercial sectors in many countries around the world. Revenues rose 12 percent (13 percent in local currencies) in the Low Voltage Products division reflecting a strong recovery of our short-cycle business. In the Process Automation division, revenues decreased 5 percent (6 percent in local currencies) mainly due to a decline of orders in the metal and marine businesses and in our performance-based outsourced maintenance contracts business.

Table of Contents

We determine the geographic distribution of our revenues based on the location of the customer, which may be different from the ultimate destination of the products' end use. The geographic distribution of our consolidated revenues was as follows:

(\$ in millions)	2011	2010	2009	% Change	
				2011	2010
Europe	14,657	12,378	13,093	18%	(5)%
The Americas	9,043	6,213	6,049	46%	3 %
Asia	10,136	8,872	8,684	14%	2 %
Middle East and Africa	4,154	4,126	3,969	1%	4 %
<b>Total</b>	<b>37,990</b>	<b>31,589</b>	<b>31,795</b>	<b>20%</b>	<b>(1)%</b>

In 2011, revenues in Europe grew 18 percent (11 percent in local currencies) on the execution of large Power Systems orders, as well as on demand for automation products across the region. Revenues from the Americas increased 46 percent (43 percent in local currencies and 14 percent excluding the Baldor acquisition). In the U.S., industrial demand grew significantly and the transmission and distribution markets recovered from a low level, while Brazil revenues grew on the execution of large orders. Revenues from Asia increased 14 percent (9 percent in local currencies) on growth from the industrial automation sector in China and India. Revenues in MEA increased 1 percent, however declined 2 percent in local currencies. Weaker large orders in the previous year lead to a decline in revenues in the utilities and oil & gas sector, which offset higher revenues from the other industrial automation sectors.

In 2010, revenues in Europe decreased 5 percent (4 percent in local currencies) driven mainly by weak revenue generation from the utilities sector in Germany and Spain as well as from the industrial sector in Finland, Denmark and Norway. Revenues in other major countries in the region were slightly lower or nearly flat compared to 2009 except in Italy and Netherlands where revenues increased in all divisions. Revenues from the Americas increased 3 percent (decreased 1 percent in local currencies) as a result of higher invoicing from the execution of large orders in Brazil which more than offset lower revenues in the U.S. transmission and distribution market. Revenues from Asia increased 2 percent (decreased 2 percent in local currencies) as revenues increased in China, triggered by growth in the industrial sector and decreased in India (in local currencies) on account of weak orders in both utilities and industrial sectors. Revenues in MEA increased 4 percent (4 percent in local currencies) driven by the execution of large orders in system businesses in Kuwait, Iraq, Saudi Arabia and Algeria which were partly offset by lower revenues in Congo and Qatar.

**Cost of sales**

Cost of sales consists primarily of labor, raw materials and components but also includes expenses for warranty, contract losses and project penalties, as well as order-related development expenses incurred in connection with projects for which corresponding revenues were recognized.

In 2011, cost of sales increased 20 percent (16 percent in local currencies) to \$26,556 million. The increase in the cost of sales reflects the growth in revenues from organic businesses and new acquisitions. Cost of sales was negatively affected by higher prices in certain commodities and an unfavorable change in business mix. The increase in the cost of sales in 2011 was partly offset by savings realized from the cost saving initiatives, mainly in the areas of supply management and operational excellence. As a percentage of revenues, cost of sales remained stable at 69.9 percent, as the cost saving initiatives helped to offset continued pricing pressure on revenues.

In 2010, cost of sales decreased 2 percent (3 percent in local currencies) to \$22,060 million in line with the decline in revenues volume. Cost of sales, as a percentage of revenues, decreased to

Table of Contents

69.8 percent from 70.7 percent in 2009. The reduction in cost of sales reflected measures mainly taken in the areas of supply management, global footprint and operational excellence as part of the cost take-out program. Restructuring programs implemented in many countries also helped to reduce costs as our operations benefited from higher production utilization. Savings from these programs were however partly offset by cost overruns in our cables business in our Power Systems division (see "Item 5. Operating and Financial Review and Prospects Analysis of Results of Operations Power Systems"). Improvement in the cost of sales as a percentage of revenues in 2010 was also limited by the continued impact of price erosion.

**Selling, general and administrative expenses**

The components of selling, general and administrative expenses were as follows:

(\$ in millions)	2011	2010	2009
Selling expenses	(3,533)	(2,947)	(2,868)
<i>Selling expenses as a percentage of orders received</i>	<i>8.8%</i>	<i>9.0%</i>	<i>9.3%</i>
General and administrative expenses	(1,840)	(1,668)	(1,623)
<i>General and administrative expenses as a percentage of revenues</i>	<i>4.8%</i>	<i>5.3%</i>	<i>5.1%</i>
<b>Total selling, general and administrative expenses</b>	<b>(5,373)</b>	<b>(4,615)</b>	<b>(4,491)</b>
<i>Total selling, general and administrative expenses as a percentage of revenues</i>	<i>14.1%</i>	<i>14.6%</i>	<i>14.1%</i>
<i>Total selling, general and administrative expenses as a percentage of the average of orders received and revenues</i>	<i>13.7%</i>	<i>14.4%</i>	<i>14.3%</i>

In 2011, selling expenses increased 20 percent (14 percent in local currencies). Excluding the expenses from Baldor, selling expenses were 14 percent (8 percent in local currencies) higher as compared to 2010. Increase in selling expenses in 2011 continued to be driven by a larger sales force employed by all divisions to strengthen their market presence particularly in the emerging countries. Selling expenses further increased following the growth in orders as certain elements of such expenses, in particular expenses related to order pursuing activities and sales commissions, are variable expenses.

In 2010, selling expenses increased 3 percent (2 percent in local currencies) due to (i) expenses from newly acquired companies, (ii) more sales resources employed, especially in emerging markets to support order growth and (iii) an increase in variable selling expenses, such as commissions and the costs associated with pursuing orders. Due to the higher orders volume, selling expenses as a percentage of orders received decreased to 9.0 percent from 9.3 percent in 2009.

In 2011, general and administrative expenses increased 10 percent (6 percent in local currencies). Excluding expenses from Baldor, general and administrative expenses increased 5 percent (1 percent in local currencies). The increase in general and administrative expenses in 2011 was driven primarily by initiatives to strengthen functional support areas especially in the emerging markets such as China, India and the Middle East countries. As a percentage of revenues, general and administrative expenses decreased to 4.8 percent from 5.3 percent in 2010 reflecting a strong increase in revenues on relatively stable expenses achieved through higher efficiency derived from continuous process improvement and improved cost management.

In 2010, general and administrative expenses increased 3 percent (2 percent in local currencies) compared to 2009. Excluding expenses from newly acquired companies, general and administrative expenses were flat (decreased 1 percent in local currencies).

While selling, general and administrative expenses increased, the expenses as a percentage of average orders and revenues decreased 0.7 percentage points to 13.7 percent in 2011.

Table of Contents**Non-order related research and development expenses**

In 2011, non-order related research and development expenses increased 27 percent (18 percent in local currencies), as we accelerated efforts to keep ahead with technology advancements in order to maintain industry leadership. The increase was also due to incremental costs of the newly-acquired companies. In 2010, compared to 2009, non-order related research and development expenses increased 4 percent (4 percent in local currencies) to \$1,082 million in line with our commitment to maintain a high level of research and development activity.

Non-order related research and development expenses as a percentage of revenues increased to 3.6 percent in 2011 after increasing to 3.4 percent in 2010 from 3.3 percent in 2009.

**Other income (expense), net**

(\$ in millions)	2011	2010	2009
Restructuring expenses <sup>(1)</sup>	(26)	(54)	(111)
Capital gains, net	40	51	14
Asset write-downs	(29)	(57)	(50)
Income from equity-accounted companies and other income (expense)	(8)	46	476
<b>Total</b>	<b>(23)</b>	<b>(14)</b>	<b>329</b>

(1) Excluding asset write-downs

"Other income (expense), net", typically consists of restructuring expenses, net capital gains (which include gains or losses from the sale of businesses and gains or losses from the sale or disposal of property, plant and equipment), asset write-downs, as well as our share of income or loss from equity-accounted companies and license income.

Restructuring and related expenses are recorded in various lines within the Consolidated Income Statements, depending on the nature of the charges. In 2011, restructuring expenses reported in "Other income (expense), net" amounted to \$26 million. The expenses were primarily related to Low Voltage Products restructuring initiatives in Germany, France and the U.S., a Power Products restructuring project in Spain and Discrete Automation and Motion restructuring initiatives in the U.S. In 2010, restructuring expenses reported in "Other income (expense), net" were incurred for restructuring projects across all our divisions, principally in the Process Automation, Discrete Automation and Motion, as well as the Power Products divisions. In 2009, restructuring expenses reported in "Other income (expense), net" were incurred for restructuring projects in all of our divisions but mainly in the Discrete Automation and Motion and Process Automation divisions.

In 2011, "Capital gains, net" amounted to \$40 million and included a \$45 million net gain from the sales of land and buildings mainly in Venezuela, Nigeria, Sweden, Brazil and Switzerland. "Capital gains, net", in 2010, consisted mainly of \$35 million in gains on the sale of land and buildings, mainly in Sweden, Norway and Austria, as well as a \$13 million gain on the sale of an equity-accounted company in Colombia. In 2009, "Capital gains, net" consisted primarily of gains from the sale of real estate, mainly in Norway, France, Switzerland and the Netherlands.

In 2011, "Asset write-downs" amounted to \$29 million, reflecting a total of \$20 million write-downs and impairment of tangible and intangible assets related mainly to restructuring projects in various countries, and a \$9 million impairment on the investment in the shares of a listed company. "Asset write-downs" in 2010, included \$23 million for the impairment, prior to sale, of two equity-accounted companies in the Ivory Coast, and other impairments and write-downs of tangible and intangible assets primarily related to Russia, Thailand, Czech Republic and the United States. "Asset write-downs" in

Table of Contents

2009 included a \$10 million impairment of certain fixed assets in the United States and other impairments and write-downs of tangible and intangible assets primarily relating to ongoing restructuring programs in various countries.

"Income from equity-accounted companies and other income (expense)" in 2011 amounted to a net loss of \$8 million mainly due to charges related to the deconsolidation of a Russian subsidiary, partly offset by income from equity-accounted companies and income from license fees. In 2010, "Income from equity-accounted companies and other income (expense)" primarily consisted of a \$22 million release of provisions and income of \$13 million from a break-fee related to the withdrawn bid to acquire Chloride Group PLC. In 2009, "Income from equity-accounted companies and other income (expense)" primarily consisted of the partial release of provisions related to the investigations in the power transformers business after the European Commission imposed a fine of 33.75 million euro (equivalent to \$49 million on date of payment) in October 2009. Additionally, license income of approximately \$5 million, mainly from Switzerland and Germany, was included in this line item.

**Earnings before interest and taxes**

(\$ in millions)	2011	2010	2009	% Change	
				2011	2010
Power Products	1,476	1,636	1,959	(10)%	(16)%
Power Systems	548	114	394	381%	(71)%
Discrete Automation and Motion	1,294	911	574	42%	59 %
Low Voltage Products	904	788	518	15%	52 %
Process Automation	963	759	626	27%	21 %
<b>Operating divisions</b>	<b>5,185</b>	<b>4,208</b>	<b>4,071</b>	<b>23%</b>	<b>3 %</b>
Corporate and Other	(450)	(402)	50	(12)%	n.a.
Intersegment elimination	(68)	12	5		
<b>Total</b>	<b>4,667</b>	<b>3,818</b>	<b>4,126</b>	<b>22%</b>	<b>(7)%</b>

In 2011, EBIT increased 22 percent (14 percent in local currencies) while in 2010, EBIT decreased 7 percent (8 percent in local currencies) as a result of the factors discussed above.

EBIT margins were as follows:

(in %)	2011	2010	2009
Power Products	13.6	16.0	17.4
Power Systems	6.8	1.7	6.0
Discrete Automation and Motion	14.7	16.2	10.6
Low Voltage Products	17.0	17.3	12.7
Process Automation	11.6	10.2	8.0
<b>Operating divisions</b>	<b>12.5</b>	<b>12.2</b>	<b>11.6</b>
<b>Total</b>	<b>12.3</b>	<b>12.1</b>	<b>13.0</b>

In 2011, EBIT margin increased 0.2 percentage points to 12.3 percent. The increase in EBIT and EBIT margin reflects the contribution from higher volumes including the \$1,950 million of revenues from Baldor. Costs savings generated in 2011 further improved the EBIT and EBIT margin as the amount of those savings more than offset the impact from price pressure that continued particularly in the power sector. Profitability was affected by an unfavorable business mix, higher amortization from the intangibles from the Baldor acquisition and continued investments in sales and research and development offset by the non-recurrence of project-related charges in 2010 in the Power Systems division.



Table of Contents

In 2010, EBIT margin in the operating divisions increased, driven by a strong recovery in the short-cycle business, particularly in our automation divisions. Price pressures continued in 2010; however the impact on earnings was more than offset by savings generated from the cost take-out program. EBIT margin in 2010 was lower in the Power Products division compared to 2009, mainly due to lower revenues (see "Item 5. Operating and Financial Review and Prospects Analysis of Results of Operations Power Products"), while in the Power Systems division EBIT margin declined as a result of losses in the cables business (see "Item 5. Operating and Financial Review and Prospects Analysis of Results of Operations Power Systems").

For further detail of Operational EBITDA and Operational EBITDA margin see " Divisional analysis" below and see "Note 22 Operating segment and geographic data" to our Consolidated Financial Statements for a reconciliation of Operational EBITDA to EBIT.

**Net interest and other finance expense**

Net interest and other finance expense consists of "Interest and dividend income" offset by "Interest and other finance expense".

"Interest and other finance expense" includes interest expense on our debt, the amortization of upfront costs associated with our credit facility and our debt securities, commitment fees on our bank facility and exchange losses on financial items, offset by gains on marketable securities and exchange gains on financial items.

(\$ in millions)	2011	2010	2009
Interest and dividend income	90	95	121
Interest and other finance expense	(207)	(173)	(127)
<b>Net interest and other finance expense</b>	<b>(117)</b>	<b>(78)</b>	<b>(6)</b>

In 2011, "Interest and dividend income" declined compared to 2010, primarily due to the lower average aggregate level of "Cash and equivalents" and "Marketable securities and short-term investments" in 2011 compared to 2010, as the funds were used to finance the acquisition of businesses such as Baldor (a cash outflow of \$4,276 million in January 2011 see "Note 3 Acquisitions, increases in controlling interests and divestments" to our Consolidated Financial Statements).

"Interest and dividend income" decreased in 2010 compared to 2009. This decrease was primarily due to the lower level of interest rates during 2010 as a whole, compared to 2009. During the first six months of 2009, interest rates on EUR-denominated balances, which constituted a significant portion of our total "Cash and equivalents" and "Marketable securities and short-term investments" balances, were higher than during the rest of 2009 and 2010.

In 2011, "Interest and other finance expense" increased compared to 2010, primarily reflecting i) the increase in long-term debt (from \$1,139 million at December 31, 2010, to \$3,231 million at December 31, 2011) as a result of the bonds issued in 2011 see "Liquidity and Capital Resources" for a further discussion, ii) the increase in EUR-denominated interest rates (our EUR-denominated bonds have been swapped into floating rate obligations see "Note 12 Debt" to our Consolidated Financial Statements) and iii) movements in foreign exchange rates that have resulted in higher foreign exchange losses on financial items in 2011 than in 2010.

"Interest and other finance expense" increased in 2010 compared to 2009. However, the 2009 figure of \$127 million is a net figure that includes the realization of foreign exchange gains on certain government bonds that were recorded in "Accumulated other comprehensive loss" at December 31, 2008. If these gains are excluded from the 2009 figure, "Interest and other finance expense" decreased in 2010 compared to 2009, reflecting the continued low level of interest rates throughout 2010.

Table of Contents**Provision for taxes**

(\$ in millions)	2011	2010	2009
Income from continuing operations, before taxes	4,550	3,740	4,120
Provision for taxes	(1,244)	(1,018)	(1,001)
Effective tax rate for the year	27.3%	27.2%	24.3%

The provision for taxes in 2011 represented an effective tax rate of 27.3 percent and included:

tax credits, arising in foreign jurisdictions, for which the technical merits did not allow a benefit to be taken, and

the net reduction in valuation allowance on deferred taxes of approximately \$22 million, as we determined it was more likely than not that such deferred tax assets would be realized.

The provision for taxes in 2010 represented an effective tax rate of 27.2 percent and included:

a net increase in valuation allowance on deferred taxes by \$60 million, as we determined it was no longer more likely than not that such deferred tax assets would be realized. This amount included \$44 million related to certain of our operations in Central Europe.

The provision for taxes in 2009 represented an effective tax rate of 24.3 percent and included:

the net reduction in valuation allowance of approximately \$46 million on deferred taxes, as we determined it was more likely than not that such deferred tax assets would be realized. This net reduction in valuation allowance included a benefit of \$60 million related to our operations in Central Europe.

a benefit of approximately \$74 million related to the release of provisions for previously disclosed investigations by European authorities into suspect payments and alleged anti-competitive practices that were recognized as income for financial accounting purposes, but were not taxable.

**Income from continuing operations, net of tax**

As a result of the factors discussed above, income from continuing operations, net of tax, increased by \$584 million to \$3,306 million in 2011 compared to 2010, and decreased by \$397 million to \$2,722 million in 2010 compared to 2009.

**Net income attributable to ABB**

As a result of the factors discussed above, net income attributable to ABB increased \$607 million to \$3,168 million in 2011 compared to 2010 and decreased \$340 million to \$2,561 million in 2010 compared to 2009.

**Earnings per share attributable to ABB shareholders**

(in \$)	2011	2010	2009
<i>Income from continuing operations, net of tax:</i>			
Basic	1.38	1.12	1.26
Diluted	1.38	1.11	1.26
<i>Net income attributable to ABB:</i>			
Basic	1.38	1.12	1.27
Diluted	1.38	1.12	1.27

Table of Contents

Basic earnings per share is calculated by dividing income by the weighted-average number of shares outstanding during the year. Diluted earnings per share is calculated by dividing income by the weighted-average number of shares outstanding during the year, assuming that all potentially dilutive securities were exercised, if dilutive. Potentially dilutive securities comprise: outstanding written call options; outstanding options and shares granted subject to certain conditions under our share-based payment arrangements. See "Note 20 Earnings per share" to our Consolidated Financial Statements.

*Divisional analysis**Power Products*

The financial results of our Power Products division were as follows:

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009	% Change	
				2011	2010
Orders	11,068	9,778	10,940	13%	(11)%
Order backlog at December 31,	8,029	7,930	8,226	1%	(4)%
Revenues	10,869	10,199	11,239	7%	(9)%
Operational EBITDA	1,782	1,861	2,136	(4)%	(13)%
<i>Operational EBITDA Margin %<sup>(1)</sup></i>	<i>16.3%</i>	<i>18.2%</i>	<i>19.0%</i>	<i>n.a.</i>	<i>n.a.</i>
EBIT	1,476	1,636	1,959	(10)%	(16)%

(1) Operational EBITDA Margin % is calculated as Operational EBITDA divided by Operational revenues.

*Reconciliation to Financial Statements*

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009
<b>Operational revenues</b>	<b>10,901</b>	<b>10,202</b>	<b>11,229</b>
FX/commodity timing differences on Revenues <sup>(1)</sup>	(32)	(3)	10
<b>Revenues (as per Financial Statements)</b>	<b>10,869</b>	<b>10,199</b>	<b>11,239</b>
<b>Operational EBITDA</b>	<b>1,782</b>	<b>1,861</b>	<b>2,136</b>
FX/commodity timing differences on EBIT <sup>(1)</sup>	(36)	(4)	85
Restructuring-related costs	(70)	(44)	(77)
Reversal of depreciation and amortization	(200)	(177)	(185)
<b>EBIT (as per Financial Statements)</b>	<b>1,476</b>	<b>1,636</b>	<b>1,959</b>
<b>Operational EBITDA Margin %</b>	<b>16.3%</b>	<b>18.2%</b>	<b>19.0%</b>

(1) For further details of FX/commodity timing differences, see "Note 22 Operating segment and geographic data".

*Orders*

In 2011, orders were up 13 percent (8 percent in local currencies) driven by investments in the power distribution and industry sectors. Both large and base orders grew during the year.

In 2010, orders were down 11 percent (13 percent in local currencies) primarily due to lower large orders in the transmission sector, which could not be compensated by an improvement in the distribution and industrial sectors. Order intake was further impacted by lower price levels due to weaker market conditions and increased competition.



Table of Contents

The geographic distribution of orders for our Power Products division was as follows:

(in %)	2011	2010	2009
Europe	32	35	34
The Americas	26	26	23
Asia	33	29	33
Middle East and Africa	9	10	10
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

In 2011, the contribution of orders from the Americas remained at the same level, but volumes were higher than in 2010, mainly driven by demand for distribution and transmission-related products. Europe's share declined due to slowdown in investments as a result of the macroeconomic situation. We saw a growth in Asia's contribution with significant large order wins in China as well as higher base orders. The share of MEA remained around the same level as in 2010.

In 2010, the share of orders from Europe and the Americas improved despite declining order intake due to lower volumes in emerging markets. We saw a significant slowdown in China, resulting from local buying preference, and also in India. MEA remained flat as a percentage of total orders but declined in volume terms due to less large orders.

*Order backlog*

In 2011, order backlog increased 1 percent (4 percent in local currencies) after decreasing 4 percent (5 percent in local currencies) in 2010 compared to 2009. The increase in order backlog in 2011 reflects the higher order intake from the power distribution and industry sectors as well as some significant large orders in the transmission sector.

*Revenues*

In 2011, revenues grew 7 percent (2 percent in local currencies) due to higher volumes in the short- and mid-cycle business such as medium-voltage equipment and distribution transformers. Revenues from late-cycle businesses such as large power transformers were flat partly as a result of the lower transmission-related order backlog. Service revenues saw a double-digit growth.

In 2010, revenues decreased 9 percent (11 percent in local currencies) due to the slower conversion cycle of large projects in the order backlog. However, the short- and mid-cycle businesses (for example, medium-voltage equipment and distribution transformers), increased their contribution as a result of the revival in the distribution and industrial sectors.

The geographic distribution of revenues for our Power Products division was as follows:

(in %)	2011	2010	2009
Europe	34	34	35
The Americas	27	26	25
Asia	30	31	31
Middle East and Africa	9	9	9
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

In 2011, the regions maintained their share of total revenues. The Americas showed a small increase due to growth in the U.S. Asia's share was slightly lower due to a lower transmission-related backlog.

Table of Contents

In 2010, the geographic distribution of revenues followed similar trends as orders but revenues were down in all the regions. Europe's share declined marginally due to slower order backlog conversion of large projects and the Americas' share improved due to increased book and bill revenues from the distribution-related businesses. In Asia and MEA the share of revenues remained at similar levels as the previous year.

*Operational EBITDA*

In 2011, Operational EBITDA and Operational EBITDA margin were lower primarily due to the execution of lower margin orders from the backlog, reflecting the continued pricing pressure in an extremely competitive market across all businesses. However, cost savings partly mitigated this price impact.

Lower Operational EBITDA and Operational EBITDA margin in 2010 were mainly the result of lower cost absorption on the basis of lower revenues as well as the impact of price declines in certain emerging markets.

*Fiscal year 2012 outlook*

Market uncertainty persists as a result of continued macroeconomic challenges. Debt burden in mature economies combined with inflation and interest rate challenges in large emerging markets is affecting industrial investment and utility spending in the power sector. This uncertainty is likely to continue in the short term and we expect to see focused investments in specific sectors until overall economic stability returns. While demand in the power distribution and industry sectors continues to be stable, transmission sector recovery depends on an overall improvement in economic conditions and utilities becoming more proactive on capital investment.

The medium- and long-term growth drivers for the business remain intact. These include the buildup of capacity in emerging markets, increasing focus on renewables, energy efficiency, development of smarter, more reliable and flexible grids, as well as economic stimulus packages targeted at strengthening power infrastructure.

*Power Systems*

The financial results of our Power Systems division were as follows:

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009	% Change	
				2011	2010
Orders	9,278	7,896	7,830	18%	1 %
Order backlog at December 31,	11,570	10,929	9,675	6%	13 %
Revenues	8,101	6,786	6,549	19%	4 %
Operational EBITDA	743	304	532	144%	(43)%
<i>Operational EBITDA Margin %<sup>(1)</sup></i>	<i>9.1%</i>	<i>4.5%</i>	<i>8.2%</i>	<i>n.a.</i>	<i>n.a.</i>
EBIT	548	114	394	381%	(71)%

(1) Operational EBITDA Margin % is calculated as Operational EBITDA divided by Operational revenues.

Table of Contents*Reconciliation to Financial Statements*

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009
<b>Operational revenues</b>	<b>8,128</b>	<b>6,783</b>	<b>6,508</b>
FX/commodity timing differences on Revenues <sup>(1)</sup>	(27)	3	41
<b>Revenues (as per Financial Statements)</b>	<b>8,101</b>	<b>6,786</b>	<b>6,549</b>
<b>Operational EBITDA</b>	<b>743</b>	<b>304</b>	<b>532</b>
FX/commodity timing differences on EBIT <sup>(1)</sup>	3	(58)	(2)
Restructuring-related costs	(54)	(48)	(90)
Reversal of depreciation and amortization	(144)	(84)	(46)
<b>EBIT (as per Financial Statements)</b>	<b>548</b>	<b>114</b>	<b>394</b>
<b>Operational EBITDA Margin %</b>	<b>9.1%</b>	<b>4.5%</b>	<b>8.2%</b>

(1) For further details of FX/commodity timing differences, see "Note 22 Operating segment and geographic data".

*Orders*

Order intake in 2011 increased 18 percent (12 percent in local currencies) with growth in both large and base order business. Customers in emerging countries continued to invest in infrastructure development and new capacity, while mature markets focused on grid upgrades and the integration of renewable energy sources. Demand for power solutions to support industrial growth and distribution networks also contributed to the growth. Large orders secured in 2011 included a HVDC Light® transmission link to connect offshore North Sea wind farms to the German mainland grid with a value of approximately \$1 billion, and another HVDC Light® power transmission link between Norway and Denmark, with a value of approximately \$180 million. Large orders in 2011 also included an Ultra High Voltage Direct Current (UHVDC) transmission order from India to supply hydropower across 1,700 kilometers, with a value of around \$900 million.

Continuous price pressure in some of our key geographical markets negatively impacted orders in 2011 as in 2010. Orders in 2011 included a \$47 million contribution from Mincom, an Australia-based software company specializing in solutions for mining and other asset-intensive industries, that was acquired in the third quarter of 2011.

Order intake in 2010 increased 1 percent (decreased 1 percent in local currencies). Strong growth in base orders, seen in industrial and distribution markets, more than compensated for a decrease in large orders resulting from the timing of large scale transmission infrastructure investments. The demand drivers for power systems business were favorable, led by the focus on renewable energy, interconnections and grid reliability. Large orders secured in 2010 included HVDC Light® transmission links connecting three North Sea wind farms to the German power grid, with a value of approximately \$700 million, and another between the Nordic and Baltic regions, with a value of approximately \$580 million. Orders in 2010 included \$97 million from Ventyx, a software provider and key player in the field of energy management that was acquired in the second quarter of 2010.

The geographic distribution of orders for our Power Systems division was as follows:

(in %)	2011	2010	2009
Europe	40	47	33
The Americas	17	14	22
Asia	27	15	16
Middle East and Africa	16	24	29
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table of Contents

In 2011, Europe remained the largest region in terms of order intake. As in 2010, the strong political commitment in Europe to increase the share of renewables in the energy mix contributed to order growth. We saw a substantial growth in orders from Asia in 2011, mainly on the timing of large order awards from India. The share of orders from the Americas increased in 2011, driven by the United States, Canada and Brazil. The 2011 order share from the MEA region decreased in 2011, due to the timing of large order awards, combined with increased competitiveness and pricing pressure.

In 2010, MEA was our second largest region in terms of orders, following Europe, despite a lower order intake than in 2009. The order share from the Americas decreased as a drop in large orders offset a growth in base orders. Lower orders from Asia mainly reflected an order decline in India from a high level the year before, relating to the timing of large order awards.

*Order backlog*

Order backlog at December 31, 2011, reached a record level of \$11,570 million, corresponding to an increase of 6 percent (11 percent in local currencies). Whereas the share of large orders in our order backlog remained fairly consistent, we have an increased proportion of large projects with more than 2 years execution time in the mix.

Order backlog at December 31, 2010, increased 13 percent (12 percent in local currencies), resulting mainly from a further increase in the share of large orders as a proportion of total orders. Large projects stay longer in the order backlog than base orders, as the project execution time is considerably longer.

*Revenues*

Revenues in 2011 increased 19 percent (14 percent in local currencies). Among our businesses, the revenue growth was led by Grid Systems, reflecting the strong order backlog at the beginning of the year. Revenue growth in Power Generation resulted from a strong order backlog and a higher book and bill ratio in 2011 than in 2010 (orders that can be converted to revenues within the same calendar year). A revenue increase in Network Management was helped by the software businesses acquired in 2011 and 2010. Revenues in 2011 included \$47 million from Mincom since the date of acquisition.

In 2010, revenues increased 4 percent (2 percent in local currencies). The revenue growth was led by Power Generation, reflecting a strong order backlog at the beginning of the year and higher base orders in 2010 than in 2009. Revenues in 2010 included \$97 million from Ventyx since the date of acquisition.

The geographic distribution of revenues for the Power Systems division was as follows:

(in %)	2011	2010	2009
Europe	40	34	39
The Americas	20	21	15
Asia	18	17	18
Middle East and Africa	22	28	28
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

In 2011, the share of revenues from Europe, the largest region for the division, increased further. Revenues from MEA, the second largest region, were lower, reflecting scheduled project execution. Revenues grew in the Americas, mainly driven by Brazil, while the revenue growth from Asia was led by Australia and India.

Europe was the largest region in terms of revenues in 2010, even though revenues from the region were lower than in 2009. The share of revenues from the MEA region remained largely unchanged,



Table of Contents

while revenues from the Americas increased, led by growth in Brazil. Revenues were flat in Asia, as an increase in India helped offset lower revenues from other parts of the region.

*Operational EBITDA*

In 2011, Operational EBITDA increased 144 percent (132 percent in local currencies). The higher Operational EBITDA and Operational EBITDA margin in 2011 was mainly the result of higher revenues, the non-recurrence of project-related charges in the cables business, as well as successful claims management. Sales expenses, as well as general and administrative expenses increased mainly following the acquisition of Ventyx and Mincom. The increase in sales expenses also reflected higher bad debt provisions than in 2010. Higher research and development spending, as well as the impact from lower prices on past orders now flowing through to revenues, were largely offset by cost savings.

The decrease in Operational EBITDA and Operational EBITDA margin in 2010 was primarily attributable to cost overruns exceeding \$200 million in a small number of subsea cable projects. The cost overruns mainly related to cable laying and trenching activities. Lower prices on past orders negatively impacted the gross margin and the Operational EBITDA margin. Operational EBITDA was also impacted by increased sales expenses, as well as increased spending for research and development. These negative Operational EBITDA impacts were partly offset by savings from the cost take-out program and the release of provisions related to the business in Russia and settlements with the U.S. Securities and Exchange Commission and Department of Justice.

*Fiscal year 2012 outlook*

The Power Systems market continues to be dynamic with a degree of uncertainty resulting from the macroeconomic challenges such as the debt burden in many mature economies as well as inflation and interest rate challenges in large emerging markets. However, the fundamental market drivers for the Power Systems division remain intact. This includes power infrastructure investments in new capacities in emerging markets, and aging infrastructure upgrades in mature markets as well as the increasing global focus on renewables, energy efficiency, and the development of more reliable, flexible and smarter grids.

*Discrete Automation and Motion*

The financial results of our Discrete Automation and Motion division were as follows:

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009	% Change	
				2011	2010
Orders	9,566	5,862	4,702	63%	25%
Order backlog at December 31,	4,120	3,350	3,046	23%	10%
Revenues	8,806	5,617	5,405	57%	4%
Operational EBITDA	1,664	1,026	773	62%	33%
<i>Operational EBITDA Margin %<sup>(1)</sup></i>	<i>18.9%</i>	<i>18.3%</i>	<i>14.4%</i>	<i>n.a.</i>	<i>n.a.</i>
EBIT	1,294	911	574	42%	59%

(1) Operational EBITDA Margin % is calculated as Operational EBITDA divided by Operational revenues.

Table of Contents*Reconciliation to Financial Statements*

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009
<b>Operational revenues</b>	<b>8,817</b>	<b>5,613</b>	<b>5,374</b>
FX/commodity timing differences on Revenues <sup>(1)</sup>	(11)	4	31
<b>Revenues (as per Financial Statements)</b>	<b>8,806</b>	<b>5,617</b>	<b>5,405</b>
<b>Operational EBITDA</b>	<b>1,664</b>	<b>1,026</b>	<b>773</b>
FX/commodity timing differences on EBIT <sup>(1)</sup>	(19)	(2)	29
Restructuring-related costs	(10)	(35)	(154)
Acquisition-related expenses and certain non-recurring items	(90)		
Reversal of depreciation and amortization	(251)	(78)	(74)
<b>EBIT (as per Financial Statements)</b>	<b>1,294</b>	<b>911</b>	<b>574</b>
<b>Operational EBITDA Margin %</b>	<b>18.9%</b>	<b>18.3%</b>	<b>14.4%</b>

(1) For further details of FX/commodity timing differences, see "Note 22 Operating segment and geographic data".

*Orders*

In 2011, orders increased 63 percent (57 percent in local currencies) reflecting both increased demand for energy-efficient automation solutions, as well as the contribution from the U.S.-based industrial motor manufacturer Baldor, acquired in January 2011 (approximately half of the division's order growth related to the Baldor acquisition). Highest order growth was achieved in Motors and Generators due to the Baldor integration while Robotics orders increased due to improving demand in automotive and general industry sectors.

Orders grew strongly in 2010, due to increased market demand compared to the low level of 2009. Orders in low-voltage (LV) drives and LV motors increased in 2010, as a result of increased demand in process industries segment and investments in renewable energy sectors such as wind and solar. The automotive industry recovered from the low level of 2009, and increased investments made by car manufacturers, as well as general industry customers, led to strong order growth for our Robotics business.

The geographic distribution of orders for our Discrete Automation and Motion division was as follows:

(in %)	2011	2010	2009
Europe	37	46	49
The Americas	32	16	13
Asia	28	34	33
Middle East and Africa	3	4	5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

All regions increased orders in 2011, with the highest growth in the Americas due to the Baldor acquisition. With Baldor's substantial presence in the U.S., the Americas' share of the total division's orders doubled in 2011, compared to 2010, and therefore all other regions' shares declined. The division has now a more balanced global presence with three equally strong regions - Europe, the Americas and Asia.

Orders grew in most of the regions in 2010, with the most significant increases being in Asia and the Americas. A strong recovery in the automotive and process industry markets in the United States contributed to the high increase in the Americas. Orders in China grew 44 percent, mainly driven by the Robotics and LV drives businesses. In Europe orders increased 18 percent due to improved market demand but Europe's share of total orders decreased as other regions grew more.

Table of Contents*Order backlog*

Order backlog in 2011 increased as orders were higher than revenues during the year. The highest increase came from Robotics, due to the high level of orders which will be delivered in 2012 or later.

Order backlog in 2010 increased 10 percent as orders were higher than revenues for most businesses, especially in the LV drives, Robotics and LV motors businesses. Order backlog in the large motors and generators business decreased as large orders were delivered during the year.

*Revenues*

Revenues in 2011 increased at a similar pace to orders, on the solid execution of the strong order backlog and due to the Baldor acquisition (which accounted for approximately 60 percent of the division's revenue growth). Highest growth was achieved in motors and generators, due to the acquisition of Baldor, and Robotics as a result of the strong order growth.

Revenues in 2010 increased 4 percent as a result of the high order growth for products such as LV drives, Robotics and LV motors. Longer-cycle businesses such as power electronics and large motors and generators reported lower revenues due to a weak backlog at the beginning of the year.

The geographic distribution of revenues for our Discrete Automation and Motion division was as follows:

(in %)	2011	2010	2009
Europe	38	48	54
The Americas	32	14	14
Asia	27	34	29
Middle East and Africa	3	4	3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The geographic distribution of revenues changed substantially in 2011 with the integration of Baldor causing the share of the Americas to more than double compared to 2010. All regions increased revenues on higher orders as demand increased in most markets.

A favorable market development and a focused build-up of local activities have contributed to the increased share from Asia. Europe's share declined in 2010, due to low order backlog at the beginning of the year, caused by the weak order intake in 2009.

*Operational EBITDA*

In 2011, Operational EBITDA increased 62 percent (54 percent in local currencies) while Operational EBITDA margin of 18.9 percent increased compared to 18.3 percent in 2010. The increase is based on a combination of higher revenues and the positive contribution from Baldor (approximately 23 percent of the division's Operational EBITDA). All businesses, except power electronics and medium-voltage drives improved, with the largest increase in Robotics due to the continued turnaround from the low level of 2009. Motors and generators benefited from the Baldor integration, while higher revenues in LV drives further increased Operational EBITDA.

In 2010, Operational EBITDA improved substantially as a result of cost savings and a turnaround in the Robotics business. The Robotics business returned to profitability in 2010, on the basis of higher revenues, supported by executed restructuring initiatives and cost saving measures.

Table of Contents*Fiscal year 2012 outlook*

Due to the financial turbulence in the eurozone there is increasing uncertainty about global market development in 2012. We expect most markets will have lower growth rates in 2012 compared to 2011 and some countries might even fall into a recession. Despite this we expect continued growth in orders and revenues, especially in emerging markets such as Asia and South America. Furthermore, the need for improved energy efficiency and productivity in a wide range of industries will support the demand for automation solutions and energy-efficient products provided by the Discrete Automation and Motion division.

**Low Voltage Products**

The financial results of our Low Voltage Products division were as follows:

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009	% Change	
				2011	2010
Orders	5,364	4,686	4,079	14%	15%
Order backlog at December 31,	887	838	734	6%	14%
Revenues	5,304	4,554	4,071	16%	12%
Operational EBITDA	1,059	926	679	14%	36%
<i>Operational EBITDA Margin %<sup>(1)</sup></i>	<i>19.9%</i>	<i>20.3%</i>	<i>16.7%</i>	<i>n.a.</i>	<i>n.a.</i>
EBIT	904	788	518	15%	52%

(1) Operational EBITDA Margin % is calculated as Operational EBITDA divided by Operational revenues.

*Reconciliation to Financial Statements*

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009
<b>Operational revenues</b>	<b>5,315</b>	<b>4,554</b>	<b>4,059</b>
FX/commodity timing differences on Revenues <sup>(1)</sup>	(11)		12
<b>Revenues (as per Financial Statements)</b>	<b>5,304</b>	<b>4,554</b>	<b>4,071</b>
<b>Operational EBITDA</b>	<b>1,059</b>	<b>926</b>	<b>679</b>
FX/commodity timing differences on EBIT <sup>(1)</sup>	(19)	3	6
Restructuring-related costs	(20)	(36)	(67)
Reversal of depreciation and amortization	(116)	(105)	(100)
<b>EBIT (as per Financial Statements)</b>	<b>904</b>	<b>788</b>	<b>518</b>
<b>Operational EBITDA Margin %</b>	<b>19.9%</b>	<b>20.3%</b>	<b>16.7%</b>

(1) For further details of FX/commodity timing differences, see "Note 22 Operating segment and geographic data".

*Orders*

Orders increased 14 percent (9 percent in local currencies) in 2011 and increased 15 percent (15 percent in local currencies) in 2010.

The order growth in 2011 was driven by demand from both the industrial and construction markets. Order growth was recorded across most product businesses, with a strong recovery in the systems business as market conditions improved. The renewables sector (mainly solar and wind) weakened as governmental subsidies expired in several countries reducing the demand for such investments.

Table of Contents

In 2010, orders grew on higher demand from industrial customers, the solar energy market and construction-related sectors. Strong order growth was recorded across all product businesses, whereas the system business was affected by weaker market conditions in the beginning of 2010 which gradually recovered during the second half of 2010.

The geographic distribution of orders for our Low Voltage Products division was as follows:

(in %)	2011	2010	2009
Europe	55	56	60
The Americas	9	9	8
Asia	28	26	23
Middle East and Africa	8	9	9
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

In 2011, orders continued to grow across all regions in absolute terms. The share of orders from Asia continued to grow, driven by product demand in China and strong growth in the systems business in South Asia. The Americas' share of orders remained fairly stable, with growth in South America, and despite difficult market conditions in the United States. Although its share of orders decreased, Europe remains the largest region in absolute terms.

In 2010, orders grew across all regions as market conditions improved. The share of orders from Europe, the largest region, continued to decrease as the share from Asia increased, led by strong growth in China. Orders from the Americas increased as South America continued to grow strongly, particularly from the key market of Brazil. The share of orders from MEA remained stable, although orders grew in absolute terms.

*Order backlog*

In 2011, order backlog, compared to 2010, increased by 6 percent (9 percent in local currencies). The higher backlog was mainly driven by a strong market recovery in the systems business.

Order backlog in 2010 increased 14 percent (14 percent in local currencies) as orders were higher than revenues across all businesses, especially in the LV systems business which typically has longer delivery schedules than the product business.

*Revenues*

In 2011, revenues increased 16 percent (11 percent in local currencies) due to the fast conversion cycle of the high orders received in the product business and due to the conversion of the stronger opening backlog in the LV systems business.

Revenues in 2010 increased 12 percent (13 percent in local currencies), as the strong order growth and the short execution cycle in the product business was converted to revenues. Revenues grew across all product businesses, whereas revenues in the LV systems business decreased due to a weak opening backlog.

Table of Contents

The geographic distribution of revenues for our Low Voltage Products division was as follows:

(in %)	2011	2010	2009
Europe	56	57	60
The Americas	9	9	8
Asia	28	26	24
Middle East and Africa	7	8	8
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

In 2011, the geographic distribution of revenues followed a similar trend to orders. The share of revenues from Asia continued to increase as a result of our global footprint shift to sourcing and producing locally in the emerging markets, thereby maintaining our competitiveness and ensuring shorter delivery times. Revenues in all regions grew compared to the previous year. Europe remained the largest region, despite economic downturn in several European countries.

In 2010, all regions recorded growth in revenues compared to the previous year, as the demand from the construction market started to recover from low levels. Despite positive growth, the share of revenues from Europe continued to decrease as growth rates were higher in Asia and the Americas. The increased share of revenues from Asia was the result of order growth and the build-up of local resources in sales, service and production in this region.

*Operational EBITDA*

In 2011, Operational EBITDA increased by 14 percent (8 percent in local currencies). Higher revenues and price increases offset negative impact from commodity price increases, the change in product mix and additional R&D investments. The higher share of systems revenues (which have lower margins) during the year resulted in a declining Operational EBITDA margin.

In 2010, Operational EBITDA increased 36 percent (39 percent in local currencies) as a result of higher revenues, a favorable product mix and the positive effects of cost reduction initiatives including restructuring measures.

*Fiscal year 2012 outlook*

We have experienced a slowdown of order growth in many markets during the second half of 2011. However, we expect continued growth in Asia and South America in 2012. We believe that key market drivers for the Low Voltage Products division will be renewable energy, energy efficiency applications and data centers.

*Process Automation*

The financial results of our Process Automation division were as follows:

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009	% Change	
				2011	2010
Orders	8,726	7,383	6,684	18%	10 %
Order backlog at December 31,	5,771	5,530	5,523	4%	%
Revenues	8,300	7,432	7,839	12%	(5)%
Operational EBITDA	1,028	925	861	11%	7 %
<i>Operational EBITDA Margin %<sup>(1)</sup></i>	<i>12.4%</i>	<i>12.5%</i>	<i>11.1%</i>	<i>n.a.</i>	<i>n.a.</i>
EBIT	963	759	626	27%	21 %

(1) Operational EBITDA Margin % is calculated as Operational EBITDA divided by Operational revenues.

Table of Contents*Reconciliation to Financial Statements*

(\$ in millions, except Operational EBITDA Margin %)	2011	2010	2009
<b>Operational revenues</b>	<b>8,318</b>	<b>7,427</b>	<b>7,785</b>
FX/commodity timing differences on Revenues <sup>(1)</sup>	(18)	5	54
<b>Revenues (as per Financial Statements)</b>	<b>8,300</b>	<b>7,432</b>	<b>7,839</b>
<b>Operational EBITDA</b>	<b>1,028</b>	<b>925</b>	<b>861</b>
FX/commodity timing differences on EBIT <sup>(1)</sup>	26	(46)	(41)
Restructuring-related costs	(8)	(44)	(114)
Reversal of depreciation and amortization	(83)	(76)	(80)
<b>EBIT (as per Financial Statements)</b>	<b>963</b>	<b>759</b>	<b>626</b>
<b>Operational EBITDA Margin %</b>	<b>12.4%</b>	<b>12.5%</b>	<b>11.1%</b>

(1) For further details of FX/commodity timing differences, see "Note 22 Operating segment and geographic data".

*Orders*

Orders in 2011 grew 18 percent, led by oil & gas, marine, metals and pulp and paper sectors. Large orders were strong, mainly in marine and oil & gas, where major automation and offshore projects were noted, while base orders also recorded growth. Product orders were also strong, led by measurement products. Life-cycle services grew strongly driven by several small and medium size upgrade projects.

Orders grew in 2010 despite continued uncertainty in the market regarding the strength of the industrial recovery. Base orders grew significantly recording double-digit growth compared to 2009. Order growth was led by marine, minerals and pulp and paper reflecting ongoing investments in the energy- and commodity-based sectors. Orders in oil and gas were down as large orders booked in 2009 were not repeated, while the base order business remained at a similar level. Life-cycle services orders also increased as customers brought existing capacity back online following the business downturn of 2009.

The geographic distribution of orders for our Process Automation division was as follows:

(in %)	2011	2010	2009
Europe	39	39	40
The Americas	23	22	19
Asia	30	29	22
Middle East and Africa	8	10	19
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

From a regional demand perspective, Asia and the Americas recorded strong growth. In Asia the growth was led by large projects in South Korea in the shipbuilding sector, and investments in the metals industry in China. In the Americas several large projects in oil & gas, minerals and pulp & paper sectors were recorded in South America, while growth in the U.S. was driven by our products and services business. Orders in Europe were also at a high level, driven by oil & gas investment in an offshore gas platform for Statoil in Norway. In MEA, orders were lower as fewer large projects were recorded.

In 2010, order growth was led by the emerging markets in Asia and the Americas. In South America, order growth was led by investments in the minerals sector in Chile and Peru, whereas in

Table of Contents

Asia, demand increased from the minerals sector in China and the marine sector in South Korea. Orders also increased in mature markets in Europe and North America.

*Order backlog*

Order backlog at December 31, 2011, increased 4 percent (8 percent in local currencies) compared to 2010. Order backlog growth was primarily driven by our marine and pulp & paper business. Order backlog at December 31, 2010, remained at the same level as the previous year.

*Revenues*

Revenues increased driven by our products and services businesses. Life-cycle services recorded strong growth in 2011. Systems revenues were also higher, driven by our oil & gas, pulp & paper and metals and minerals businesses, while revenues in our marine business were lower as a result of lower backlog to execute.

Revenues in 2010 were down significantly in the systems business as a result of a lower backlog, whereas revenues in products and life-cycle services grew. In the systems business, revenues were down in the metals, marine and minerals sectors, whereas the pulp and paper sector recorded an increase, reflecting the ongoing execution of projects from order backlog.

The geographic distribution of revenues for our Process Automation division was as follows:

(in %)	2011	2010	2009
Europe	39	39	42
The Americas	22	19	19
Asia	27	27	27
Middle East and Africa	12	15	12
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

In 2011, revenues increased across all regions, with the exception of MEA. Revenue growth was strongest in the Americas driven by the U.S., Canada and Brazil. Europe remained at a high level, while in Asia high growth in several economies was partly offset by lower revenues in South Korea due to the lower opening order backlog to execute. MEA declined as revenues in Congo and Algeria were lower than in the prior year.

In 2010, revenues were lower in most parts of Europe with the exception of Italy. In the Americas, the United States recorded revenue growth, although the region overall recorded a decline. In Asia, South Korea recorded double-digit growth, while India and China recorded a decrease. MEA recorded growth in revenues primarily reflecting ongoing execution of the El Merk project in Algeria.

*Operational EBITDA*

In 2011, Operational EBITDA was higher compared to 2010, as a result of higher revenues. Operational EBITDA margin remained flat compared to 2010. The margin was stronger in products, led by measurement products, and life cycle services, while it was slightly lower in our systems business.

Despite lower revenues, Operational EBITDA and Operational EBITDA margin increased in 2010, partly reflecting the successful implementation of cost reduction measures and a higher share of revenues from products and services businesses, which usually carry higher margins than the systems business. Improved project execution and project cost control also contributed to the strong result.



Table of Contents*Fiscal year 2012 outlook*

The global economy continues to be highly uncertain. Although the underlying demand is still robust in most of our end markets, we expect a continued challenging market in 2012, with customer decision-making being slow and price pressure high.

**Corporate and Other**

EBIT for Corporate and Other was as follows:

(\$ in millions)	2011	2010	2009
Corporate headquarters and stewardship	(331)	(284)	(291)
Corporate research and development	(202)	(120)	(115)
Corporate real estate	56	48	30
Equity investments		(11)	(8)
Other	(41)	(23)	439
<b>Total Corporate and Other</b>	<b>(518)</b>	<b>(390)</b>	<b>55</b>

In 2011, Corporate headquarters and stewardship costs increased driven by charges related to the deconsolidation of a Russian subsidiary and the sale of another subsidiary in Russia, certain expenses in the countries and higher spending to strengthen corporate functional areas as business volumes increased. Corporate headquarters and stewardship costs, in 2010, remained flat as a result of continued focus on cost control. Corporate costs in countries decreased and the savings generated were used to finance global corporate initiatives to support growth.

Corporate research and development costs in 2011 increased by \$82 million mainly due to the establishment of a special growth fund which was set up to finance the acceleration of the research and development programs. In 2010, Corporate research and development costs increased slightly, in line with the strategy to maintain a high focus in this area.

Corporate real estate consists primarily of rental income and gain from the sale of real estate properties. In 2011, the Corporate real estate result included \$37 million gains from the sale of real estate properties mainly in Venezuela, Sweden, Brazil and Switzerland. In 2010, Corporate real estate reported gains of \$33 million from the sale of land and buildings, mainly in Sweden, Norway, Austria and Venezuela. In 2009, gains of \$12 million from the sale of facilities mainly in Switzerland, the Netherlands and Norway were offset by a \$10 million asset impairment charge in the United States.

In 2011, EBIT from Equity investments was nil. In 2010, EBIT from Equity investments resulted in a loss of \$11 million, primarily due to an impairment of \$23 million of two equity-accounted companies in the Ivory Coast that were subsequently sold, and a net gain of \$13 million on the sale of an equity-accounted company in Colombia. In 2009, EBIT from Equity investments was an \$8 million loss, primarily representing an operating loss of our equity investment in a power plant in Colombia.

In 2011, EBIT from "Other" consists mainly of \$11 million operational costs of our Global Treasury Operations, \$17 million losses from the non-core distributed energy business in Great Britain and \$9 million impairment on the investment in the shares of a listed company. EBIT from "Other", in 2010, included \$9 million operational costs of our Global Treasury Operations and \$5 million losses from our distributed energy business in Great Britain. In 2009, EBIT from "Other" of \$439 million included primarily the partial release of provisions (related to the investigations into our Power Transformers business) following the European Commission's decision to impose a fine in October 2009. It also included the costs of our Group Treasury Operations.

Table of Contents**Restructuring programs***Cost savings initiative*

In February 2011, we announced a \$1 billion cost savings initiative for 2011 to be achieved mainly through supply management, footprint optimization and operational excellence measures.

Cost reductions for 2011 were in line with the plan and amounted to \$1.1 billion. Approximately 50 percent of these savings were achieved by optimizing global sourcing (excluding changes in commodity prices). The remainder was achieved through reductions to general and administrative expenses, as well as adjustments to our global manufacturing and engineering footprint.

The total costs associated with the program were substantially below the expected level of 0.8 percent of 2011 revenues, and amounted to \$164 million.

The following table outlines the total costs associated with the program incurred in 2011:

(\$ in millions)	Costs incurred in 2011
Power Products	70
Power Systems	54
Discrete Automation and Motion	10
Low Voltage Products	20
Process Automation	8
Corporate and Other	2
<b>Total</b>	<b>164</b>

We intend to continue the cost saving measures in 2012 to sustainably reduce ABB's costs and protect our profitability.

For details of the nature of the costs incurred and their impact on the Consolidated Financial Statements, see "Note 21 Restructuring and related expenses" to our Consolidated Financial Statements.

**LIQUIDITY AND CAPITAL RESOURCES****Principal sources of funding**

In 2011, 2010 and 2009, we met our liquidity needs principally using cash from operations, bank borrowings, the proceeds from sales of marketable securities and proceeds from the issuance of debt instruments (bonds and commercial papers).

During 2011, 2010 and 2009, our financial position was strengthened by the positive cash flow from operating activities of \$3,612 million, \$4,197 million and \$4,027 million, respectively.

Our net cash is shown in the table below:

(\$ in millions)	December 31,	
	2011	2010
Cash and equivalents	4,819	5,897
Marketable securities and short-term investments	948	2,713
Short-term debt and current maturities of long-term debt	(765)	(1,043)
Long-term debt	(3,231)	(1,139)
<b>Net cash</b> (defined as the sum of the above lines)	<b>1,771</b>	<b>6,428</b>



Table of Contents

Despite the cash generated by operations during 2011 of \$3,612 million, net cash at December 31, 2011, decreased compared to December 31, 2010, primarily due to the cash outflow for the acquisition of businesses (\$4,020 million), and the payment of dividends (\$1,569 million). See "Financial Position", "Net cash used in investing activities" and "Net cash used in financing activities" for further details.

Our Group Treasury Operations is responsible for providing a range of treasury management services to our group companies, including investing cash in excess of current business requirements. At December 31, 2011 and 2010, the proportion of our aggregate "Cash and equivalents" and "Marketable securities and short-term investments" managed by our Group Treasury Operations amounted to approximately 60 percent and 70 percent, respectively.

In January 2011, we sold the \$1,789 million money market funds acquired in 2010, and used \$4.3 billion of our cash in connection with the purchase of Baldor and the repayment of debt assumed upon acquisition. Up until mid-2011, we continued a strategy of investing our cash (in excess of current business requirements) predominantly in short-term time deposits with maturities of less than 3 months. However, in late summer of 2011, as credit risk concerns in the eurozone economic area increased, we diversified out of eurozone bank exposures. As the crisis deepened and uncertainty grew, we restricted the counterparties with whom we were prepared to place cash, such that we reduced our deposits with banks in the eurozone. Furthermore, Group Treasury Operations let any investments in approved eurozone government securities (Germany, France, the Netherlands) mature to be replaced by liquid U.S. treasuries.

In 2010, the overall investment strategy was to maintain diversification and flexibility in our investment portfolio through a mix of government securities, highly-rated corporate short-dated paper and time deposits of short duration with banks. During the second quarter of 2010, we began to invest in AAA-rated liquidity (money market) funds in order to diversify our investment base and increase the yield on our investments. At December 31, 2010, such investment represented \$1,789 million of the total marketable securities and short-term investments balance of \$2,713 million in the table above.

We actively monitor credit risk in our investment portfolio and hedging activities. Credit risk exposures are controlled in accordance with policies approved by our senior management to identify, measure, monitor and control credit risks. We closely monitor developments in the credit markets and make appropriate changes to our investment policy as deemed necessary. The rating criteria we require for our counterparts have remained unchanged during 2011 as follows: a minimum rating of A/A2 for our banking counterparts, while the minimum required rating for investments in short-term corporate paper is A-1/P-1. In addition to rating criteria, we have specific investment parameters and approved instruments as well as restricting the types of investments we make. These parameters are closely monitored on an ongoing basis and amended as we consider necessary.

We believe the cash flows generated from our business, supplemented, when necessary, through access to the capital markets (including short-term commercial paper) and our credit facilities and term loan agreement, are sufficient to support business operations, capital expenditures, business acquisitions, the payment of dividends to shareholders and contributions to pension plans. Due to the nature of our operations, our cash flow from operations generally tends to be weaker in the first half of the year than in the second half of the year. Consequently, we believe that our ability to obtain funding from these sources will continue to provide the cash flows necessary to satisfy our working capital and capital expenditure requirements, as well as meet our debt repayments and other financial commitments for the next 12 months. See "Disclosures about contractual obligations and commitments".

Table of Contents**Debt and interest rates**

Total outstanding debt was as follows:

(\$ in millions)	December 31,	
	2011	2010
Short-term debt including current maturities of long-term debt (including bonds)	765	1,043
Long-term debt:		
bonds (excluding portion due within one year)	3,059	946
other long-term debt	172	193
<b>Total debt</b>	<b>3,996</b>	<b>2,182</b>

The decrease in short-term debt in 2011 was due to the maturity of our EUR 650 million 6.5% Instruments (\$865 million at date of repayment) offset by the issuance of commercial paper (\$435 million outstanding at December 31, 2011) while the increase in long-term debt in 2011 was primarily due to the new bonds issued (see "Note 12 Debt" to our Consolidated Financial Statements).

Our debt has been obtained in a range of currencies and maturities and on various interest rate terms. We use derivatives to reduce the interest rate exposures arising on certain of our debt. For example, we use interest rate swaps to effectively convert fixed rate debt into floating rate liabilities.

After considering the effects of interest rate swaps, the effective average interest rate on our floating rate long-term debt (including current maturities) of \$1,875 million and our fixed rate long-term debt (including current maturities) of \$1,432 million was 1.6 percent and 3.7 percent, respectively. This compares with an effective rate of 3.2 percent for floating rate long-term debt of \$1,919 million and 5.6 percent for fixed-rate long-term debt of \$139 million at December 31, 2010.

For a discussion of our use of derivatives to modify the characteristics of our individual bond issuances, see "Note 12 Debt" to our Consolidated Financial Statements.

**Credit facilities**

We have a \$2 billion multicurrency revolving credit facility, maturing 2015. No amount was drawn under the credit facility at December 31, 2011 and 2010. The facility is for general corporate purposes and serves as a back-stop facility to our commercial paper programs to the extent that we issue commercial paper under the programs described below. The facility contains cross-default clauses whereby an event of default would occur if we were to default on indebtedness, as defined in the facility, at or above a specified threshold.

In February 2012, we entered a \$4 billion credit agreement for an initial term of 364 days to provide bridge financing for our planned acquisition of Thomas & Betts Corporation.

Neither the credit facility or the term credit agreement contain significant covenants that would restrict our ability to pay dividends or raise additional funds in the capital markets. For further details of the credit facility and the new term credit agreement, see "Note 12 Debt" to our Consolidated Financial Statements.

**Commercial paper**

We have in place three commercial paper programs:

a \$1 billion commercial paper program for the private placement of USD-denominated commercial paper in the United States,

Table of Contents

a \$1 billion Euro-commercial paper program for the issuance of commercial paper in a variety of currencies, and

a 5 billion Swedish krona program (equivalent to approximately \$722 million, using December 31, 2011, exchange rates), allowing us to issue short-term commercial paper in either Swedish krona or euro.

At December 31, 2011, \$435 million was outstanding under the \$1 billion program in the United States. No amounts were outstanding under any of these programs at December 31, 2010.

**European program for the issuance of debt**

At December 31, 2011 and 2010, \$910 million and \$1,828 million, respectively, of our total debt outstanding, were debt issuances under this program. During 2011, the program was updated and increased to allow the issuance of up to (the equivalent of) \$8 billion (previously \$5.25 billion) in certain debt instruments. The terms of the program do not obligate any third party to extend credit to us and the terms and possibility of issuing any debt under the program are determined with respect to, and as of the date of issuance of, each debt instrument.

**Credit ratings**

Credit ratings are assessments by the rating agencies of the credit risk associated with ABB and are based on information provided by us or other sources that the rating agencies consider reliable. Higher ratings generally result in lower borrowing costs and increased access to capital markets. Our ratings are of "investment grade" which is defined as Baa3 (or above) from Moody's and BBB- (or above) from Standard & Poor's.

At December 31, 2011, our long-term company ratings were A2 and A from Moody's and Standard & Poor's, respectively, compared to A3 and A at December 31, 2010.

**Limitations on transfers of funds**

Currency and other local regulatory limitations related to the transfer of funds exist in a number of countries where we operate, including Algeria, China, Egypt, India, Korea, Kuwait, Malaysia, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and Venezuela. Funds, other than regular dividends, fees or loan repayments, cannot be readily transferred offshore from these countries and are therefore deposited and used for working capital needs locally. In addition, there are certain countries where, for tax reasons, it is not considered optimal to transfer the cash offshore. As a consequence, these funds are not available within our Group Treasury Operations to meet short-term cash obligations outside the relevant country. The above described funds are reported as cash in our Consolidated Balance Sheets, but we do not consider these funds immediately available for the repayment of debt outside the respective countries where the cash is situated, including those described above. At December 31, 2011 and 2010, the balance of "Cash and equivalents" and "Marketable securities and other short-term investments" under such limitations (either regulatory or sub-optimal from a tax perspective) totaled approximately \$1,530 million and \$1,745 million, respectively.

During 2011, we continued to direct our subsidiaries in countries with restrictions to place such cash with our core banks or investment grade banks, in order to minimize credit risk on such cash positions. Consequently, cash placed with non-rated or sub-investment grade banks has remained at less than 5 percent of cash outside of our Group Treasury Operations. We continue to closely monitor the situation to ensure bank counterparty risks are minimized.

Table of Contents**FINANCIAL POSITION****Balance sheets**

(\$ in millions)	December 31,	
	2011	2010
<b>Current assets</b>		
Cash and equivalents	4,819	5,897
Marketable securities and short-term investments	948	2,713
Receivables, net	10,773	9,970
Inventories, net	5,737	4,878
Prepaid expenses	227	193
Deferred taxes	932	896
Other current assets	351	801
<b>Total current assets</b>	<b>23,787</b>	<b>25,348</b>

For a discussion on cash and equivalents and marketable securities and short-term investments, see "Liquidity and capital resources Principal sources of funding" for further details.

Receivables, net, at the end of 2011, increased from the end of 2010 by approximately 8.0 percent (11.6 percent in local currencies). The increase was primarily driven by the acquisitions of Baldor and Mincom. Higher revenues further drove the increase, however this was partially offset by improved collections of receivables, thus reducing the overall days of sales outstanding ratio for receivables from 115 days at the end of 2010 to 104 days at the end of 2011.

Inventories, net, increased 17.6 percent compared to the level at the end of 2010 (21.6 percent in local currencies). This increase was across almost all divisions, driven by the increasing order volumes as well as the acquisitions of Baldor and Mincom.

For a discussion on deferred taxes see "Note 16 Taxes" to our Consolidated Financial Statements.

Other current assets include derivative assets and income tax receivables. The decrease primarily reflects lower derivative market values.

(\$ in millions)	December 31,	
	2011	2010
<b>Current liabilities</b>		
Accounts payable, trade	4,789	4,555
Billings in excess of sales	1,819	1,730
Employee and other payables	1,361	1,526
Short-term debt and current maturities of long-term debt	765	1,043
Advances from customers	1,757	1,764
Deferred taxes	305	357
Provisions for warranties	1,324	1,393
Provisions and other current liabilities	2,619	2,726
Accrued expenses	1,822	1,644
<b>Total current liabilities</b>	<b>16,561</b>	<b>16,738</b>

Total current liabilities at December 31, 2011, decreased primarily due to a reduction in current maturities of long-term debt due to bond repayments of \$865 million, partially offset by the net issuance of short-term commercial paper in the amount of \$435 million. Partially offsetting the reduction in total current liabilities are increases in accounts payable and accruals arising from acquisitions. Accounts payable increased 5.1 percent (8.3 percent in local currencies) compared to the

Table of Contents

prior year mostly due to increased business volume. Likewise, the increase in Billings in excess of sales of 5.1 percent (8.4 percent in local currencies) was also driven by increased business volumes. Employee and other payables decreased from the prior year by 10.8 percent (7.9 percent in local currencies) mostly due to lower value-added tax payables compared to the prior year.

(\$ in millions)	December 31,	
	2011	2010
<b>Non-current assets</b>		
Property, plant and equipment, net	4,922	4,356
Goodwill	7,269	4,085
Other intangible assets, net	2,253	701
Prepaid pension and other employee benefits	139	173
Investments in equity-accounted companies	156	19
Deferred taxes	318	846
Other non-current assets	804	767
<b>Total non-current assets</b>	<b>15,861</b>	<b>10,947</b>

Property, plant and equipment, net, increased 13.0 percent (16.5 percent in local currencies) between December 31, 2010 and December 31, 2011, primarily due to the acquisition of Baldor (\$413 million), with the remaining increase due to investments across most divisions, including investments in manufacturing plants in Sweden, China, Switzerland and Brazil.

The increase in goodwill and other intangible assets, net was mainly due to the Baldor and Mincom acquisitions (see "Note 3 Acquisitions, increases in controlling interests and divestments" and "Note 11 Goodwill and other intangible assets" to our Consolidated Financial Statements). The decrease in prepaid pension and other employee benefits reflects the change in the funded status of our overfunded pension plans. See "Note 17 Employee benefits" to our Consolidated Financial Statements.

For an explanation of the reduction in Deferred taxes, refer to "Note 16 Taxes" to our Consolidated Financial Statements.

Other non-current assets mainly include restricted cash, derivative assets, including embedded derivatives, and shares and participations.

(\$ in millions)	December 31,	
	2011	2010
<b>Non-current liabilities</b>		
Long-term debt	3,231	1,139
Pension and other employee benefits	1,487	831
Deferred taxes	537	411
Other non-current liabilities	1,496	1,718
<b>Total non-current liabilities</b>	<b>6,751</b>	<b>4,099</b>

The increase in our long-term debt was largely due to new bond issuances which represented \$2,149 million of the December 31, 2011, balance. See "Liquidity and Capital Resources Debt and interest rates".

The increase in pension and other employee benefits substantially reflects the remeasurement (relating to our defined benefit pension plans) of benefit obligations for updated assumptions and of plan assets to fair value, partly offset by employer contributions. See "Note 17 Employee benefits" to our Consolidated Financial Statements.



Table of Contents

Other non-current liabilities decreased primarily due to a reduction in uncertain tax positions, refer to "Note 16 Taxes" to our Consolidated Financial Statements.

**Cash flows**

In the Consolidated Statements of Cash Flows, the effects of discontinued operations are not segregated.

The Consolidated Statements of Cash Flows can be summarized as follows:

(\$ in millions)	2011	2010	2009
Net cash provided by operating activities	3,612	4,197	4,027
Net cash used in investing activities	(3,253)	(2,747)	(2,172)
Net cash used in financing activities	(1,208)	(2,530)	(1,349)
Effects of exchange rate changes on cash and equivalents	(229)	(142)	214
<b>Net change in cash and equivalents continuing operations</b>	<b>(1,078)</b>	<b>(1,222)</b>	<b>720</b>

**Net cash provided by operating activities**

Net cash provided by operating activities in 2011 of \$3,612 million declined by 13.9 percent from the prior year. This decline was driven by higher trade receivables and inventories in line with the 20 percent increase in revenues. The decrease can be further attributed to a lower increase in trade payables than in the prior year. Provisions, net, were also lower due to payments related to environmental remediation liabilities in the United States and restructuring-related payments.

In 2010, operating activities provided net cash of \$4,197 million, an increase of 4 percent on the prior year, reflecting our working capital management. Stable levels of working capital were achieved despite increasing order volumes, as cash outlays for higher inventories and trade receivables could be offset through increased levels of trade payables.

Operating activities in 2009 provided net cash of \$4,027 million. Net cash provided by operating activities included a \$135 million cash outflow related to our ongoing restructuring-related activities. Net cash provided by operating activities was particularly high in our Power Products division (with the Discrete Automation and Motion and Low Voltage Products divisions also showing an increase) mainly due to lower inventories and improved cash collection. This was partially offset by lower advance payments from customers in the wake of decreasing orders.

Table of Contents**Net cash used in investing activities**

(\$ in millions)	2011	2010	2009
Purchases of marketable securities (available-for-sale)	(2,809)	(3,391)	(243)
Purchases of marketable securities (held-to-maturity)		(65)	(918)
Purchases of short-term investments	(142)	(2,165)	(3,824)
Purchases of property, plant and equipment and intangible assets	(1,021)	(840)	(967)
Acquisition of businesses (net of cash acquired) and changes in cost and equity investments	(4,020)	(1,313)	(161)
Proceeds from sales of marketable securities (available-for-sale)	3,717	807	79
Proceeds from maturity of marketable securities (available-for-sale)	483	531	855
Proceeds from maturity of marketable securities (held-to-maturity)		290	730
Proceeds from short-term investments	529	3,276	2,253
Proceeds from sales of property, plant and equipment	57	47	36
Proceeds from sales of businesses and equity-accounted companies (net of cash disposed)	8	83	16
Changes in financing and other non-current receivables, net	(55)	(7)	(28)
<b>Net cash used in investing activities</b>	<b>(3,253)</b>	<b>(2,747)</b>	<b>(2,172)</b>

The net cash inflow from marketable securities and short-term investments in 2011 reflected the use of our excess liquidity in funding primarily the acquisition of businesses.

Total cash disbursements for the purchase of property, plant and equipment and intangibles in 2011, included \$268 million for the purchase of machinery and equipment, \$128 million for the purchase of land and buildings, \$57 million for the purchase of intangible assets and \$568 million for construction in progress.

Acquisition of businesses (net of cash acquired) and changes in cost and equity investments in 2011, primarily related to the acquisition of Baldor, Mincom, Trasfor and Lorentzen & Wettre Group and other smaller acquisitions.

Net cash used in investing activities during 2010 was \$2,747 million. Aggregate purchases of marketable securities and short-term investments amounted to \$5,621 million in 2010. Compared to 2009, there was an increase in the purchases of marketable securities (available-for-sale), while at the same time a reduction in the purchases of marketable securities (held-to-maturity) and short-term investments. Aggregate proceeds from the sales and maturities of marketable securities and short-term investments during 2010 amounted to \$4,904 million.

Total cash disbursements for the purchase of property, plant and equipment and intangibles in 2010 amounted to \$840 million, including \$164 million for the purchase of machinery and equipment, \$175 million for the purchase of land and buildings, \$54 million for the purchase of intangible assets and \$447 million capital expenditures for construction in progress.

Acquisitions of businesses (net of cash acquired), in 2010, primarily related to the acquisition of Ventyx and certain smaller acquisitions such as K-TEK in the United States and the Jokab Safety in Sweden.

Net cash used in investing activities during 2009 was \$2,172 million. Aggregate purchases of marketable securities and short-term investments amounted to \$4,985 million in 2009.

Total cash disbursements for the purchase of property, plant and equipment, and intangibles in 2009 amounted to \$967 million reflecting capital expenditures to expand our manufacturing footprint in emerging markets and selective expenditures to refocus our facilities in mature markets. Capital expenditures in 2009 included \$258 million for the purchase of machinery and equipment, \$48 million

Table of Contents

for the purchase of land and buildings, \$77 million for the purchase of intangible assets and \$584 million capital expenditures for construction in progress.

Acquisitions of businesses (net of cash acquired), in 2009, mainly included the acquisition of Comem and the purchase of the remaining shares in Ensto Busch-Jaeger in Finland, a company in which ABB previously had a noncontrolling ownership stake.

Aggregate proceeds from the sales of marketable securities and short-term investments during 2009 amounted to \$3,917 million.

Cash received from the sale of property, plant and equipment during 2009 included \$23 million of proceeds from the sale of real estate properties, mainly in Norway, France, Brazil and Switzerland, and \$13 million from the sale of machinery and equipment in various locations.

In 2009, net cash inflows from the sale of businesses and equity-accounted companies amounted to \$16 million, which included approximately \$8 million net proceeds from the sale of the mechanical marine thruster business in Poland.

**Net cash used in financing activities**

(\$ in millions)	2011	2010	2009
Net changes in debt with maturities of 90 days or less	450	52	(59)
Increase in debt	2,580	277	586
Repayment of debt	(2,576)	(497)	(705)
Issuance of shares	105	16	89
Transactions in treasury shares	5	(166)	
Dividends paid	(1,569)		
Dividends paid in the form of nominal value reduction		(1,112)	(1,027)
Acquisition of noncontrolling interests	(13)	(956)	(48)
Dividends paid to noncontrolling shareholders	(157)	(193)	(193)
Other	(33)	49	8
<b>Net cash used in financing activities</b>	<b>(1,208)</b>	<b>(2,530)</b>	<b>(1,349)</b>

Our financing activities primarily include debt transactions (both from the issuance of debt securities and borrowings directly from banks), capital and treasury stock transactions, and dividends paid.

The 2011 net cash inflow from changes in debt with maturities of 90 days or less, primarily reflects the net issuance of commercial paper under our \$1 billion commercial paper program in the United States.

In 2011, the cash inflows from increases in debt principally related to the issuance of the following bonds: \$600 million aggregate principal, 2.5%, due 2016; \$650 million aggregate principal, 4.0%, due 2021; CHF 500 million aggregate principal, 1.25%, due 2016; and CHF 350 million aggregate principal, 2.25%, due 2021. In 2010 and 2009, increases in debt primarily related to short-term borrowings.

During 2011, \$2,576 million of bonds and other debt was repaid, primarily reflecting the repayment of \$1.2 billion in debt assumed upon the acquisition of Baldor in January 2011 and the repayment at maturity of 650 million euro of 6.5% EUR Instruments, due 2011, (equivalent to \$865 million at date of repayment). During 2010, \$497 million of debt was repaid at maturity. During 2009, \$705 million of bonds and other debt was repaid at maturity, including the 108 million Swiss francs of 3.75% CHF bonds, due 2009, (equivalent to \$105 million at date of repayment) and 20 million pounds sterling 10% GBP Instruments, due 2009, (equivalent to \$33 million at date of repayment, excluding the effect of cross-currency swaps).

Table of Contents

In the second quarter of 2011, a bank (to which we had sold call options in connection with our management incentive plan (MIP)) exercised a portion of the call options it held. As a result of the exercise, we received \$105 million from the bank and issued to them 6.0 million shares from contingent capital.

During 2010, we purchased, on the open market, 12.1 million of our own shares for use in connection with our employee share-based programs, resulting in a cash outflow of \$228 million. This cash outflow was offset by cash inflow of \$62 million from the issuance of 3.2 million shares out of treasury stock to employees in connection with our employee share acquisition plan (ESAP). During 2011 and 2009, there were no purchases or sales of treasury stock on the open market.

The acquisition of noncontrolling interests in 2010 of \$956 million represented the cost of increasing our ownership interest in ABB Limited, India (our publicly-listed subsidiary in India) from approximately 52 percent to 75 percent. In 2009, the \$48 million represents an increase in ownership interests, primarily in China.

**Disclosures about contractual obligations and commitments**

The contractual obligations presented in the table below represent our estimates of future payments under fixed contractual obligations and commitments. The amounts in the table may differ from those reported in our Consolidated Balance Sheet at December 31, 2011. Changes in our business needs, cancellation provisions and changes in interest rates, as well as actions by third parties and other factors, may cause these estimates to change. Therefore, our actual payments in future periods may vary from those presented in the table. The following table summarizes certain of our contractual obligations and principal and interest payments under our debt instruments, leases and purchase obligations at December 31, 2011:

(\$ in millions)	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
<b>Payments due by period</b>					
Long-term debt obligations	3,305	76	977	1,166	1,086
Interest payments related to long-term debt obligations	595	113	171	118	193
Operating lease obligations	2,086	477	741	528	340
Capital lease obligations <sup>(1)</sup>	183	27	44	28	84
Purchase obligations	5,756	4,622	936	151	47
<b>Total</b>	<b>11,925</b>	<b>5,315</b>	<b>2,869</b>	<b>1,991</b>	<b>1,750</b>

(1) Capital lease obligations represent the total cash payments to be made in the future and include interest expense of \$85 million and executory cost of \$2 million.

In the table above, the long-term debt obligations reflect the cash amounts to be repaid upon maturity of those debt obligations. As we have designated interest rate swaps as fair value hedges of certain debt obligations, the cash obligations above will differ from the long-term debt balance reflected in "Note 12 Debt" to our Consolidated Financial Statements.

We have determined the interest payments related to long-term debt obligations by reference to the payments due under the terms of our debt obligations at the time such obligations were incurred. However, we use interest rate swaps to modify the characteristics of certain of our debt obligations. The net effect of these swaps may be to increase or decrease the actual amount of our cash interest payment obligations, which may differ from those stated in the above table. For further details on our debt obligations and the related hedges, see "Note 12 Debt" to our Consolidated Financial Statements.

Of the total of \$800 million unrecognized tax benefits (net of deferred tax assets) at December 31, 2011, it is expected that \$153 million will be paid within less than a year. However, we cannot make a reasonably reliable estimate as to the related future payments for the remaining amount.

Table of Contents**Off balance sheet arrangements***Commercial commitments*

We disclose the maximum potential exposure of certain guarantees, as well as possible recourse provisions that may allow us to recover from third parties amounts paid out under such guarantees. The maximum potential exposure does not allow any discounting of our assessment of actual exposure under the guarantees. The information below reflects our maximum potential exposure under the guarantees, which is higher than our assessment of the expected exposure.

*Guarantees*

The following table provides quantitative data regarding our third-party guarantees. The maximum potential payments represent a worst-case scenario, and do not reflect our expected results.

(\$ in millions)	December 31,	
	2011	2010
	<b>Maximum potential payments</b>	
Performance guarantees	148	125
Financial guarantees	85	84
Indemnification guarantees	194	203
<b>Total</b>	<b>427</b>	<b>412</b>

The carrying amounts of liabilities recorded in the Consolidated Balance Sheets in respect of the above guarantees were not significant at December 31, 2011 and 2010, and reflect our best estimate of future payments, which we may incur as part of fulfilling our guarantee obligations.

For additional descriptions of our performance, financial and indemnification guarantees see "Note 15 Commitments and contingencies" to our Consolidated Financial Statements.

**ENVIRONMENTAL LIABILITIES**

We are engaged in environmental clean-up activities at certain sites principally in the United States, arising under various United States and other environmental protection laws and under certain agreements with third parties. In some cases, these environmental remediation actions are subject to legal proceedings, investigations or claims, and it is uncertain to which extent we are actually obligated to perform. Provisions for these unresolved matters have been set up if it is probable that we have incurred a liability and the amount of loss can be reasonably estimated. If a provision has been recognized for any of these matters we record an asset when it is probable that we will recover a portion of the costs expected to be incurred to settle them. We are of the opinion, based upon information presently available, that the resolution of any such obligations and non-collection of recoverable costs would not have a further material adverse effect on our Consolidated Financial Statements.

**Contingencies related to former Nuclear Technology business**

We retained liabilities for certain specific environmental remediation costs at two sites in the United States that were operated by our former subsidiary, ABB CE-Nuclear Power Inc., which we sold to British Nuclear Fuels PLC (BNFL) in 2000.

We established a provision of \$300 million in "Income (loss) from discontinued operations, net of tax" in 2000 for our estimated share of the remediation costs for these sites. At December 31, 2011 and 2010, we have recorded in current and non-current other liabilities provisions of \$24 million and \$181 million, respectively, net of payments from inception of \$230 million and \$85 million, respectively, as well as certain adjustments. Expenditures charged against the provision were \$145 million, \$20 million

Table of Contents

and \$11 million during 2011, 2010 and 2009, respectively. We have estimated that during 2012 we will charge expenditures of approximately \$6 million against the provision.

For a detailed description of these and other contingencies see "Note 15 Commitments and contingencies" to our Consolidated Financial Statements.

**Item 6. Directors, Senior Management and Employees**

**Principles of Corporate Governance**

*General principles*

ABB is committed to the highest international standards of corporate governance, and supports the general principles as set forth in the Swiss Code of Best Practice for Corporate Governance, as well as those of the capital markets where its shares are listed and traded.

In addition to the provisions of the Swiss Code of Obligations, ABB's key principles and rules on corporate governance are laid down in ABB's Articles of Incorporation, the ABB Ltd Board Regulations and Corporate Governance Guidelines (which includes the regulations of ABB's board committees and the ABB Ltd Related Party Transaction Policy), and the ABB Code of Conduct and the Addendum to the ABB Code of Conduct for Members of the Board of Directors and the Executive Committee. It is the duty of ABB's Board of Directors (the Board) to review and amend or propose amendments to those documents from time to time to reflect the most recent developments and practices, as well as to ensure compliance with applicable laws and regulations.

This section of the Annual Report is based on the Directive on Information Relating to Corporate Governance published by the SIX Swiss Exchange. Where an item listed in the directive is not addressed in this report, it is either inapplicable to or immaterial for ABB.

In accordance with the requirements of the New York Stock Exchange (NYSE), a comparison of how the corporate governance practices followed by ABB differ from those required under the NYSE listing standards can be found in the section "Corporate governance Further information on corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter).

*Duties of directors and officers*

The directors and officers of a Swiss corporation are bound, as specified in the Swiss Code of Obligations, to perform their duties with all due care, to safeguard the interests of the corporation in good faith and to extend equal treatment to shareholders in like circumstances.

The Swiss Code of Obligations does not specify what standard of due care is required of the directors of a corporate board. However, it is generally held by Swiss legal scholars and jurisprudence that the directors must have the requisite capability and skill to fulfill their function, and must devote the necessary time to the discharge of their duties. Moreover, the directors must exercise all due care that a prudent and diligent director would have taken in like circumstances. Finally, the directors are required to take actions in the best interests of the corporation and may not take any actions that may be harmful to the corporation.

*Exercise of powers*

Directors, as well as other persons authorized to act on behalf of a Swiss corporation, may perform all legal acts on behalf of the corporation which the business purpose, as set forth in the articles of incorporation of the corporation, may entail. Pursuant to court practice, such directors and officers can take any action that is not explicitly excluded by the business purpose of the corporation. In so doing, however, the directors and officers must still pursue the duty of due care and the duty of loyalty described above and must extend equal treatment to the corporation's shareholders in like circumstances. ABB's Articles of Incorporation do not contain provisions concerning a director's power, in the absence of an independent quorum, to vote on the compensation to themselves or any members of their body.

Table of Contents

*Conflicts of interest*

Swiss law does not have a general provision on conflicts of interest and our Articles of Incorporation do not limit our directors' power to vote on a proposal, arrangement or contract in which the director or officer is materially interested. However, the Swiss Code of Obligations requires directors and officers to safeguard the interests of the corporation and, in this connection, imposes a duty of care and loyalty on directors and officers. This rule is generally understood and so recommended by the Swiss Code of Best Practice for Corporate Governance as disqualifying directors and officers from participating in decisions, other than in the shareholders' meeting, that directly affect them.

*Confidentiality*

Confidential information obtained by directors and officers of a Swiss corporation acting in such capacity must be kept confidential during and after their term of office.

*Sanctions*

If directors and officers transact business on behalf of the corporation with bona fide third parties in violation of their statutory duties, the transaction is nevertheless valid, as long as it is not explicitly excluded by the corporation's business purpose as set forth in its articles of incorporation. Directors and officers acting in violation of their statutory duties whether transacting business with bona fide third parties or performing any other acts on behalf of the company may, however, become liable to the corporation, its shareholders and its creditors for damages. The liability is joint and several, but the courts may apportion the liability among the directors and officers in accordance with their degree of culpability.

In addition, Swiss law contains a provision under which payments made to a shareholder or a director or any person(s) associated therewith, other than at arm's length, must be repaid to the company if the shareholder or director or any person associated therewith was acting in bad faith.

If the board of directors has lawfully delegated the power to carry out day-to-day management to a different corporate body, e.g., the executive committee, it is not liable for the acts of the members of that different corporate body. Instead, the directors can be held liable only for their failure to properly select, instruct and supervise the members of that different corporate body.

**Board of Directors**

*Responsibilities and organization*

The Board defines the ultimate direction of the business of ABB and issues the necessary instructions. It determines the organization of the ABB Group and appoints, removes and supervises the persons entrusted with the management and representation of ABB.

The internal organizational structure and the definition of the areas of responsibility of the Board, as well as the information and control instruments vis-à-vis the Group Executive Committee, are set forth in the ABB Ltd Board Regulations and Corporate Governance Guidelines, a copy of which can be found in the section "Corporate governance Further information on corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter).

The Board meets as frequently as needed but at least four times per annual Board term. Board meetings are convened by the chairman or upon request by a director or the chief executive officer (CEO). Written documentation covering the various items of the agenda for each Board meeting is sent out in advance to each Board member in order to allow each member time to study the covered matters prior to the meetings. Decisions made at the Board meetings are recorded in written minutes of the meetings.

The CEO shall regularly, and whenever extraordinary circumstances so require, report to the Board about ABB's overall business and affairs. Further, Board members are entitled to information

Table of Contents

concerning ABB's business and affairs. Additional details are set forth in the ABB Ltd Board Regulations & Corporate Governance Guidelines which can be found in the section "Corporate governance Further information on corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter).

*Term and members*

The members of the Board are elected individually at the ordinary general meeting of the shareholders for a term of one year; re-election is possible. Our Articles of Incorporation, a copy of which can be found in the section "Corporate governance Further information on corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter), do not provide for the retirement of directors based on their age. However, an age limit for members of the Board is set forth in the ABB Ltd Board Regulations and Corporate Governance Guidelines (although waivers are possible and subject to Board discretion), a copy of which can be found in the section "Corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter).

As at December 31, 2011, the members of the Board (Board term April 2011 to April 2012) were:

*Hubertus von Grünberg* has been a member and chairman of ABB's Board of Directors since May 3, 2007. He is a member of the supervisory boards of Allianz Versicherungs AG and Deutsche Telekom AG (both Germany). He is a member of the board of directors of Schindler Holding AG (Switzerland). Von Grünberg was born in 1942 and is a German citizen.

*Roger Agnelli* has been a member of ABB's Board of Directors since March 12, 2002. He was previously the president and chief executive officer of Vale S.A. (Brazil). Agnelli was born in 1959 and is a Brazilian citizen.

*Louis R. Hughes* has been a member of ABB's Board of Directors since May 16, 2003. He is the chairman of InZero Systems (formerly GBS Laboratories LLC) (U.S.). He is also a member of the boards of directors of Akzo Nobel (The Netherlands) and Alcatel Lucent (France). Hughes was born in 1949 and is a US citizen.

*Hans Ulrich Märki* has been a member of ABB's Board of Directors since March 12, 2002. He is the retired chairman of IBM Europe, Middle East and Africa (France), and a member of the board of directors of Mettler-Toledo International (U.S.) and Swiss Re and Menuhin Festival Gstaad AG (both Switzerland). He is also a member of the foundation board of Schulthess Klinik, Zurich (Switzerland) and the board of trustees of the Hermitage Museum, St. Petersburg (Russia). Märki was born in 1946 and is a Swiss citizen.

*Michel de Rosen* has been a member of ABB's Board of Directors since March 12, 2002. He is the chief executive officer of and member of the board of directors of Eutelsat Communications (France). De Rosen was born in 1951 and is a French citizen.

*Michael Treschow* has been a member of ABB's Board of Directors since May 16, 2003. He is the chairman of the boards of directors of Unilever NV (The Netherlands), and Unilever PLC (U.K.). He is also a member of the board of directors of the Knut and Alice Wallenberg Foundation (Sweden). Treschow was born in 1943 and is a Swedish citizen.

*Jacob Wallenberg* has been a member of ABB's Board of Directors since June 26, 1999. From March 1999 to June 1999, he served as a member of the board of directors of ABB Asea Brown Boveri Ltd, the former parent company of the ABB Group. He is the chairman of the board of directors of Investor AB (Sweden). He is vice chairman of Telefonaktiebolaget LM Ericsson AB, SEB Skandinaviska Enskilda Banken, Atlas Copco AB and SAS AB (all Sweden). He is also a member of the boards of directors of the Knut and Alice Wallenberg Foundation and the Stockholm School of Economics (both Sweden), and The Coca-Cola Company (U.S.). Wallenberg was born in 1956 and is a Swedish citizen.

*Ying Yeh* has been a member of ABB's Board of Directors since April 29, 2011. She is a member of the board of directors of Intercontinental Hotels Group (UK), AB Volvo AB (Sweden) and Samsonite International S.A. (Luxembourg). Yeh was born in 1948 and is a Chinese citizen.



Table of Contents

As of December 31, 2011, all Board members were non-executive and independent directors and none of ABB's Board members held any official functions or political posts. Further information on ABB's Board members can be found by clicking on the ABB Board of Directors CV link which can be found in the section "Corporate governance Further information on corporate governance" at: [www.abb.com/investorcenter](http://www.abb.com/investorcenter).

*Board committees*

From among its members, the Board has appointed two Board committees: the Governance, Nomination and Compensation Committee (GNCC) and the Finance, Audit and Compliance Committee (FACC). The duties and objectives of the Board committees are set forth in the ABB Ltd Board Regulations and Corporate Governance Guidelines, a copy of which can be found in the section "Corporate governance Further information on corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter). These committees assist the Board in its tasks and report regularly to the Board. The members of the Board committees are required to be independent.

*Governance, Nomination and Compensation Committee*

The GNCC is responsible for (1) overseeing corporate governance practices within ABB, (2) nominating candidates for the Board, the role of CEO and other positions on the Group Executive Committee, and (3) succession planning, employment and compensation matters relating to the Board and the Group Executive Committee. The GNCC is also responsible for maintaining an orientation program for new Board members and an ongoing education program for existing Board members.

The GNCC must comprise three or more independent directors. The chairman of the Board and, upon invitation by the committee's chairman, the CEO or other members of the Group Executive Committee may participate in the committee meetings, provided that any potential conflict of interest is avoided and confidentiality of the discussions is maintained.

As at December 31, 2011, the members of the GNCC were:

Hans Ulrich Märki (chairman)

Michel de Rosen

Michael Treschow

Ying Yeh

Roger Agnelli was a member of the GNCC up to the Annual General Meeting (AGM) in April 2011. Michael Treschow and Ying Yeh were elected to the GNCC subsequent to the AGM in April 2011.

*Finance, Audit and Compliance Committee*

The FACC is responsible for overseeing (1) the integrity of ABB's financial statements, (2) ABB's compliance with legal, tax and regulatory requirements, (3) the independent auditors' qualifications and independence, (4) the performance of ABB's internal audit function and external auditors and (5) ABB's capital structure, funding requirements and financial risk policies.

The FACC must comprise three or more independent directors who have a thorough understanding of finance and accounting. The chairman of the Board and, upon invitation by the committee's chairman, the CEO or other members of the Group Executive Committee may participate in the committee meetings, provided that any potential conflict of interest is avoided and confidentiality of the discussions is maintained. In addition, the Chief Integrity Officer, the Head of Internal Audit and the external auditors participate in the meetings as appropriate. As required by the U.S. Securities and Exchange Commission (SEC) at least one member of the FACC has to be an audit committee financial expert. The Board has determined that each member of the FACC is an audit committee financial expert.

As at December 31, 2011, the members of the FACC were:

Louis R. Hughes (chairman)

Table of Contents

Roger Agnelli  
Jacob Wallenberg

Bernd W. Voss was a member and the chairman of the FACC up to the AGM in April 2011. Roger Agnelli was elected to the FACC subsequent to the AGM in April 2011.

*Meetings and attendance*

The Board and its committees have regularly scheduled meetings throughout the year. These meetings are supplemented by additional meetings (either in person or by conference call), as necessary.

The table below shows the number of meetings held during 2011 by the Board and its committees, their average duration, as well as the attendance of the individual Board members. In addition, members of the Board and the Group Executive Committee participated in a two-day strategic retreat.

Meetings and attendance	Board		GNCC	FACC
	Regular	Additional		
Average duration (hours)	6.6	1	3	3.2
Number of meetings	6	3	5	6
Meetings attended:				
Hubertus von Grünberg	5	3		
Roger Agnelli <sup>(1)</sup>	6	3	2	3
Louis R. Hughes	6	3		6
Hans Ulrich Märki	6	3	5	
Michel de Rosen	6	3	5	
Michael Treschow <sup>(2)</sup>	6	3	3	
Bernd W. Voss <sup>(3)</sup>	2	2		3
Jacob Wallenberg	6	3		6
Ying Yeh <sup>(4)</sup>	4	2	3	

(1) Roger Agnelli was a member of the GNCC until the 2011 AGM. He subsequently joined the FACC.

(2) Michael Treschow joined the GNCC following the 2011 AGM.

(3) Bernd W. Voss retired from the Board and the FACC at the 2011 AGM.

(4) Ying Yeh joined the GNCC following her election to the Board at the 2011 AGM.

*Secretary to the Board*

Diane de Saint Victor is the secretary to the Board.

**Group Executive Committee***Responsibilities and organization*

The Board has delegated the executive management of ABB to the CEO and the other members of the Group Executive Committee. The CEO and under his direction the other members of the Group Executive Committee are responsible for ABB's overall business and affairs and day-to-day management.

The CEO reports to the Board regularly, and whenever extraordinary circumstances so require, on the course of ABB's business and financial performance and on all organizational and personnel matters, transactions and other issues relevant to the Group.

Each member of the Group Executive Committee is appointed and discharged by the Board.



Table of Contents

*Members of the Group Executive Committee*

As at December 31, 2011, the members of the Group Executive Committee were:

*Joe Hogan* joined ABB's Group Executive Committee as Chief Executive Officer in September 2008. Before joining ABB, Hogan was the CEO and President of General Electric's GE Healthcare unit from 2000 to 2008. From 1985 to 2000, Hogan held various positions at General Electric. Hogan was born in 1957 and is a US citizen.

*Michel Demaré* joined ABB's Group Executive Committee as Chief Financial Officer in January 2005. From October 2008 to March 2011 he was also Head of Global Markets. From February 2008 to August 2008 he was appointed interim CEO in addition to his duties as CFO. He is also vice chairman of the board of directors of UBS AG and a board member of IMD Foundation (all Switzerland). From 2002 until 2004 Demaré was vice president and chief financial officer of Baxter Europe. From 1984 until 2002, he held various positions within Dow Chemical (U.S.). Demaré was born in 1956 and is a Belgian citizen.

*Gary Steel* joined ABB's Group Executive Committee as Head of Human Resources in January 2003. Steel is a member of the board of directors of Harman International Industries Inc. (U.S.) and a director of Aquamarine Power (UK). In 2002, he was the human resources director, group finance at Royal Dutch Shell (Netherlands). Between 1976 and 2002, he held several human resources and employee relations positions at Royal Dutch Shell. Steel was born in 1952 and is a British citizen.

*Diane de Saint Victor* joined ABB's Group Executive Committee as General Counsel in January 2007. From 2004 to 2006, she was general counsel of European Aeronautic Defence and Space, EADS (France/Germany). From 2003 to 2004, she was general counsel of SCA Hygiene Products (Germany). From 1993 to 2003, she held various legal positions with Honeywell International (France/Belgium). From 1988 to 1993, she held various legal positions with General Electric (U.S.). De Saint Victor was born in 1955 and is a French citizen.

*Brice Koch* was appointed Executive Committee member responsible for Marketing and Customer Solutions in January 2010. From 2007 to 2009 he was the Manager of ABB in China and of ABB's North Asia Region. Between 1994 and 2006 he held several management positions with ABB. He is also member of the board of directors of Rector S.A., France. Koch was born in 1964 and is a French citizen.

*Frank Duggan* was appointed Executive Committee member responsible for Global Markets in March 2011. Since 2008 he is also ABB's region manager for India, Middle East and Africa. From 2008 to 2011 he was ABB's country manager for the United Arab Emirates. From 2004 to 2007 he was head of ABB's Group Account Management and ABB's country manager for Ireland. Between 1986 and 2004 he held several management positions with ABB. Duggan was born in 1959 and is an Irish citizen.

*Bernhard Jucker* was appointed Executive Committee member responsible for the Power Products division in January 2006. From 2003 to 2005, he was ABB's country manager for Germany. From 1980 to 2003 he held various positions in ABB. Jucker was born in 1954 and is a Swiss citizen.

*Peter Leupp* was appointed Executive Committee member responsible for the Power Systems division in January 2007. From 2005 to 2006, he was ABB's regional manager for North Asia and from 2001 to 2006 he was ABB's country manager for China. From 1989 to 2001, he held various positions in ABB. He is also a member of the board of directors of Gurit Holding AG (Switzerland). Leupp was born in 1951 and is a Swiss citizen.

*Ulrich Spiesshofer* was appointed Executive Committee member responsible for the Discrete Automation and Motion division in January 2010. He joined ABB in November 2005 as Executive Committee member responsible for Corporate Development. From 2002 until he joined ABB, he was senior partner, global head of operations practice at Roland Berger AG (Switzerland). Prior to 2002, he held various positions with A.T. Kearney Ltd. and its affiliates. Spiesshofer was born in 1964 and is a German citizen.

Table of Contents

*Tarak Mehta* was appointed Executive Committee member responsible for the Low Voltage Products division in October 2010. From 2007 to 2010 he was head of the Transformers business. Between 1998 and 2006 he held several management positions with ABB. Mehta was born in 1966 and is a US citizen.

*Veli-Matti Reinikkala* was appointed Executive Committee member responsible for the Process Automation division in January 2006. He is a member of the board of directors of UPM-Kymmene (Finland). In 2005, he was the head of the Process Automation business area. From 1993 to 2005, he held several positions with ABB. Reinikkala was born in 1957 and is a Finnish citizen.

In addition, as of March 1, 2012, *Peter Leupp* has decided to retire from the Executive Committee of ABB and Brice Koch will succeed him as head of the Power Systems division. During March and April 2012, the Marketing and Customer Solutions team will report to CEO Joe Hogan. As of May 1, 2012, Greg Scheu, head of ABB's Discrete Automation and Motion division in North America, has been appointed Executive Committee Member responsible for Marketing and Customer Solutions. Scheu, a former executive at Rockwell International, joined ABB in 2001 and is also currently responsible for the integration of Baldor Electric Co., which ABB acquired in January 2011. Scheu was born in 1961 and is a US citizen.

Further information about the members of the Group Executive Committee can be found by clicking on the Group Executive Committee CV link in the section "Corporate governance" at [www.abb.com/investorcenter](http://www.abb.com/investorcenter).

*Management contracts*

There are no management contracts between ABB and companies or natural persons not belonging to the ABB Group.

**Employee Participation Programs**

In order to align its employees' interests with the business goals and financial results of the company, ABB operates a number of incentive plans, linked to ABB's shares, which are summarized below (for a more detailed description of each incentive plan, please refer to "Note 18 Share-based payment arrangements" to our Consolidated Financial Statements).

*Employee Share Acquisition Plan*

The ESAP is an employee stock-option plan with a savings feature. Employees save over a 12-month period, by way of monthly salary deductions. The maximum monthly savings amount is the lower of 10 percent of gross monthly salary or the local currency equivalent of CHF 750. At the end of the savings period, employees choose whether to exercise their stock options to buy ABB shares (ADS in the case of employees in the U.S.) at the exercise price set at the grant date, or have their savings returned with interest. The savings are accumulated in a bank account held by a third-party trustee on behalf of the participants and earn interest.

The maximum number of shares that each employee can purchase has been determined based on the exercise price and the aggregate savings for the 12-month period, increased by 10 percent to allow for currency fluctuations. If, at the exercise date, the balance of savings plus interest exceeds the maximum amount of cash employees must pay to fully exercise their stock options, the excess funds will be returned to the employees. If the balance of savings and interest is insufficient to permit the employees to fully exercise their stock options, the employees have the choice, but not the obligation, to make an additional payment so that they may fully exercise their stock options.

If employees cease to be employed by ABB, the accumulated savings as of the date of cessation of employment will be returned to the employees and their right to exercise their stock options will be forfeited. Employees can withdraw from the ESAP at any time during the savings period and will be entitled to a refund of their accumulated savings.

Table of Contents

The exercise price per share and ADS of CHF 15.98 and USD 18.10, respectively, for the 2011 grant, was determined using the closing price of the ABB share on the SIX Swiss Exchange and ADS on the New York Stock Exchange on the grant date.

*Management Incentive Plan*

ABB maintains a MIP under which it offers stock options and cash-settled warrant appreciation rights (WARs) (and through the launch in 2009 also offered stock warrants) to key employees for no consideration.

The warrants and options granted under the MIP allow participants to purchase shares of ABB at predetermined prices. Participants may sell the warrants and options rather than exercise the right to purchase shares. Equivalent warrants are listed by a third-party bank on the SIX Swiss Exchange, which facilitates pricing and transferability of warrants granted under the MIP. The options entitle the holder to request that a third-party bank purchase such options at the market price of equivalent warrants listed by the third-party bank in connection with that MIP launch. If the participant elects to sell the warrants or options, the instruments will then be held by a third party and, consequently, ABB's obligation to deliver shares will be to this third party. Each WAR gives the participant the right to receive, in cash, the market price of the equivalent listed warrant on the date of exercise of the WAR. The WARs are non-transferable.

Participants may exercise or sell warrants and options and exercise WARs after the vesting period, which is three years from the date of grant. Vesting restrictions can be waived in certain circumstances, such as death or disability. All warrants, options and WARs expire six years from the date of grant.

*Long-Term Incentive Plan*

ABB has an Long-Term Incentive Plan (LTIP) for members of its Group Executive Committee and certain other executives. In 2011, the LTIP involved cash-settled conditional grants of ABB's stock and contained a retention component. The plan is described in "Remuneration Components of compensation to Executive Committee" section below.

**Remuneration**

ABB's success depends on its ability to attract and retain people who will drive the business to outperform competitors over the long term. This is an important consideration in the development of its remuneration policy, which is presented in this section of the Annual Report together with details of compensation in 2011 for members of the Board and the Executive Committee (EC).

*Remuneration principles and governance*

*Board oversight*

The Board and its GNCC have direct oversight of compensation policy at ABB. The GNCC is responsible for developing the general remuneration principles and practices of the ABB Group and for recommending them to the full Board, which takes the final decisions.

The GNCC also plays a role in setting compensation for members of the Board through recommendations that it makes to the full Board. The GNCC's recommendations are based on regular comparisons with compensation at other major Swiss companies, as outlined under the section "Components of compensation to Board of Directors" below. The full Board takes the final decisions on Board compensation.

*Remuneration principles*

The Board and GNCC are actively involved in the continuous development of ABB's executive remuneration system to reflect a remuneration philosophy that is based on the principles of market orientation, performance, shareholder value and retention. The "Components of compensation to

Table of Contents

Executive Committee" section below explains the principles and how they apply to remuneration for EC members.

Compensation for most other managers in the company reflects primarily the principles of market orientation and performance, although some managers also participate in plans that support the creation of shareholder value and encourage retention.

The GNCC acts on behalf of the Board in regularly reviewing the remuneration philosophy and structure, and in reviewing and approving specific proposals on executive compensation to ensure that they are consistent with the Group's compensation principles. Information on the number of meetings held by the GNCC in 2011 and on the attendees can be found in "Board of Directors Meetings and attendance" above.

*Annual reviews*

Every year, the Board reviews the CEO's performance and decides on any change in compensation. The CEO reviews the performance of other members of the EC and makes recommendations to the GNCC on their individual remuneration. The full Board takes the final decisions on compensation for all EC members, none of whom participates in the deliberations on their remuneration.

The CEO also recommends the Group performance targets that determine the short-term variable compensation paid to members of the EC and most other senior managers throughout the company. Short-term variable compensation for some managers with regional or country-level responsibilities is based on related targets adapted to ABB's goals in these markets. The GNCC reviews the CEO's recommendations and may make or request amendments before it submits a proposal to the Board, which is responsible for taking the final decision.

***Components of compensation to Board of Directors***

ABB sets and periodically reviews compensation for Board members based on a comparison of the compensation of non-executive board members of publicly traded companies in Switzerland that are part of the Swiss Market Index.

Members of the Board are paid for their service over a 12-month period that starts with their election at the annual general meeting. Payment to members of the Board is made in two installments, one following the first six months of their term and one at the end. Board members do not receive pension benefits and are not eligible to participate in any of ABB's employee incentive programs.

To align the interests of Board members with those of ABB's shareholders, half of their compensation is paid in the form of ABB shares, though Board members can alternatively choose to receive all their compensation in shares, and the shares are kept in a blocked account for three years. Departing Board members are entitled to the shares when they leave the Company unless agreed otherwise.

The number of shares awarded is calculated prior to each semi-annual payment by dividing the sum to which they are entitled by the average closing price of the ABB share over a predefined 30-day period.

Table of Contents**Board of Directors compensation in 2011**

Compensation for Board members is outlined in the table below and has been unchanged since the 2007/2008 term of office. Consistent with past practice, no loans or guarantees were granted to Board members in 2011.

Function	Board term	
	2011/2012	2010/2011
	CHF	CHF
Chairman of the Board	1,200,000	1,200,000
Member of the Board and Committee chairman	400,000	400,000
Member of the Board	300,000	300,000

The compensation amounts per individual are listed in the table below:

Name	Function	November		Paid in 2011 May		Total compensation paid 2011 <sup>(3)(4)(5)</sup>
		Board term 2011/2012	Settled in shares number of	Board term 2010/2011	Settled in shares number of	
		Settled in cash <sup>(1)</sup>	received <sup>(2)</sup>	Settled in cash <sup>(1)</sup>	received <sup>(2)</sup>	
		CHF		CHF		CHF
Hubertus von Grünberg	Chairman of the Board		25,917		19,303	1,200,000
Roger Agnelli <sup>(6)</sup>	Member of the Board	75,000	3,196	75,000	2,388	300,000
Louis R. Hughes <sup>(6)</sup>	Member of the Board and beginning with the 2011/2012 board term Chairman of the Finance, Audit and Compliance Committee	100,000	4,272	75,000	2,388	350,000
Hans Ulrich Märki	Member of the Board and Chairman of the Governance, Nomination and Compensation Committee		11,746		8,757	400,000
Michel de Rosen <sup>(7)</sup>	Member of the Board		6,392	75,000	2,388	300,000
Michael Treschow <sup>(7)</sup>	Member of the Board	75,000	3,251	75,000	2,419	300,000
Bernd W. Voss <sup>(8)</sup>	Member of the Board and Chairman of the Finance, Audit and Compliance Committee until the 2011/2012 board term			100,000	3,222	200,000
Jacob Wallenberg <sup>(6)</sup>	Member of the Board	75,000	3,196	75,000	2,388	300,000
Ying Yeh <sup>(7)(9)</sup>	Member of the Board	75,000	3,197			150,000
<b>Total</b>		<b>400,000</b>	<b>61,167</b>	<b>475,000</b>	<b>43,253</b>	<b>3,500,000</b>

(1) Represents gross amounts paid, prior to deductions for social security, withholding tax, etc.

(2) Number of shares per Board member is calculated based on net amount due after deductions for social security, withholding tax etc.

(3) For the 2011-2012 Board term, all members elected to receive 50 percent of their gross compensation in the form of ABB shares, except for Hubertus von Grünberg, Hans Ulrich Märki and Michel de Rosen who elected to receive 100 percent.

(4) For the 2010-2011 Board term, all members elected to receive 50 percent of their gross compensation in the form of ABB shares, except for Hubertus von Grünberg and Hans Ulrich Märki who elected to receive 100 percent.

(5) In addition to the Board remuneration stated in the above table, the Company paid CHF 213,122 in 2011 in employee social security payments.

(6) Member of the Finance, Audit and Compliance Committee.



- (7) Member of the Governance, Nomination and Compensation Committee.
- (8) Bernd W. Voss did not stand for election to the Company's Board at the AGM in April 2011.
- (9) Ying Yeh was elected to the Company's Board at the AGM in April 2011.

***Components of compensation to Executive Committee***

All senior positions in ABB have been evaluated using a consistent methodology developed by the Hay Group, whose job evaluation system is used by more than 10,000 companies around the world. The Hay methodology goes beyond job titles and company size in assessing positions. It considers the know-how required to do the job, the problem solving complexities involved, as well as the accountability for results and the freedom to act to achieve results. This approach provides a meaningful, transparent and consistent basis for comparing remuneration levels at ABB with those of

## Edgar Filing: ABB LTD - Form 20-F

### Table of Contents

equivalent jobs at other companies that have been evaluated using the same criteria. The Board primarily uses Hay's data from the European market to set EC compensation, which is around or slightly above the median values for the market.

In addition to being aligned with the market in this way, the compensation of EC members is designed to support three principles:

performance against specific and measurable Group performance targets;

shareholder value, measured as the performance of ABB's shares against those of its peers;

retention of executives and their expertise.

The compensation of EC members currently consists of the following elements which, taken together, reflect these principles: a base salary and benefits, a short-term variable component dependent on Group performance targets, and a long-term variable component designed to reward the creation of shareholder value and an executive's commitment to the company. These are described in detail in the remainder of this section.

The base salary and benefits are fixed elements of the annual compensation packages, while the other components are variable. In 2011, fixed compensation represented 30 percent of the CEO's remuneration and approximately 35 percent for the other EC members. The ratio of fixed to variable components in any given year will depend on the performance of the individuals and of the company against predefined Group performance targets.

The main components of executive compensation in 2011 are summarized in the following chart and explained in more detail below:

<b>Base salary</b>	Cash	<p style="padding-left: 40px;">Paid monthly</p> <p style="padding-left: 40px;">Competitive in respect to labor markets</p> <p style="padding-left: 40px;">Annual revisions, if any, partly based on performance</p>				
<b>Short-term variable compensation</b>	Cash	<p style="padding-left: 40px;">Conditional annual payment</p> <p style="padding-left: 40px;">Payout depends on performance in previous year against predefined Group targets</p>				
<b>Long-term variable compensation (Long-Term Incentive Plan)</b>	Cash and shares	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding-left: 40px;"><i>Performance component:</i></td> <td style="width: 50%; vertical-align: top; padding-left: 40px;"><i>Retention component:</i></td> </tr> <tr> <td style="padding-left: 40px;">Conditional grant made annually</td> <td style="padding-left: 40px;">Conditional grant made annually</td> </tr> </table>	<i>Performance component:</i>	<i>Retention component:</i>	Conditional grant made annually	Conditional grant made annually
<i>Performance component:</i>	<i>Retention component:</i>					
Conditional grant made annually	Conditional grant made annually					

## Edgar Filing: ABB LTD - Form 20-F

Payout is in cash and depends on performance of ABB shares against those of peers over a three-year period

Payout is in cash (30%) and shares (70%) and requires the executive to remain at ABB for full three-year period  
(Executives can elect to receive 100% in shares)

In addition, members of the EC are required to build up a holding of ABB shares that is equivalent to a multiple of their base salary, to ensure that their interests are aligned with those of shareholders. Since 2010, the requirement has been five times base salary for the CEO and four times base salary for the other members of the EC. New members of the EC should aim to reach these multiples within four years of their appointment. These required shareholding amounts are reviewed annually, based on salary and share price developments.

Table of Contents

*Annual base salary*

The base salary for members of the EC is set with reference to positions with equivalent responsibilities outside ABB as determined using the Hay methodology described above. It is reviewed annually principally on the basis of Hay's an