estimated. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from any provisions made with respect to their resolution. See Note 18 to the Consolidated Financial Statements for further discussion. We recorded sales to the U.S. Government of $10.1 billion in 2012, $9.1 billion in 2011, and $9.1 billion in 2010.

Employee Benefit Plans. We sponsor domestic and foreign defined benefit pension and other postretirement plans. Major assumptions used in the accounting for these employee benefit plans include the discount rate, expected return on plan assets, rate of increase in employee compensation levels, and health care cost increase projections. Assumptions are determined based on company data and appropriate market indicators, and are evaluated each year at December 31. A change in any of these assumptions would have an effect on net periodic pension and postretirement benefit costs reported in the Consolidated Financial Statements.

In the following table, we show the sensitivity of our pension and other postretirement benefit plan liabilities and net annual periodic cost to a 25 basis point change in the discount rate as of December 31, 2012:

(DOLLARS IN MILLIONS)	Increase in Discount Rate of 25 bps	Decrease in Discount Rate of 25 bps
Pension plans		
Projected benefit obligation	$ (1,073)	$ 1,111
Net periodic pension cost	(85)	88
Other postretirement benefit plans		
Accumulated postretirement benefit obligation	(20)	21
Net periodic postretirement benefit cost	1	(1)

Pension expense is also sensitive to changes in the expected long-term rate of asset return. An increase or decrease of 25 basis points in the expected long-term rate of asset return would have decreased or increased 2012 pension expense by approximately $67 million.

The weighted-average discount rate used to measure pension liabilities and costs is set by reference to UTC specific analysis using each plan's specific cash flows and is then compared to high-quality bond indices for reasonableness. Global market interest rates have decreased in 2012 as compared with 2011 and, as a result, the weighted-average discount rate used to measure pension liabilities decreased from 4.7% in 2011 to 4.0% in 2012. In December 2009, we amended the salaried retirement plans (qualified and non-qualified) to change the retirement formula effective January 1, 2015. At that time, final average earnings (FAE) and credited service will stop under the formula applicable for hires before July 1, 2002. Employees hired after 2009 are not eligible for any defined benefit pension plan and will instead receive an enhanced benefit under the UTC Savings Plan. As of July 26, 2012 the same amendment was applied to legacy Goodrich salaried employees. The continued recognition of prior pension losses and the impact of a lower discount rate, partially offset by additional funding and the positive returns experienced during 2012, are expected to increase pension expense in 2013 by approximately $250 million as compared to 2012. See Note 12 to the Consolidated Financial Statements for further discussion.

Inventory Valuation Reserves. Inventory valuation reserves are established in order to report inventories at the lower of cost or market value on our Consolidated Balance Sheet. The determination of inventory valuation reserves requires management to make estimates and judgments on the future salability of inventories. Valuation reserves for excess, obsolete, and slow-moving inventory are estimated by comparing the inventory levels of individual parts to both future sales forecasts or production requirements and historical usage rates in order to identify inventory where the resale value or replacement value is less than inventoriable cost. Other factors that management considers in determining the adequacy of these reserves include whether individual inventory parts meet current specifications and cannot be substituted for a part currently being sold or used as a service part, overall market conditions, and other inventory management initiatives.

As of December 31, 2012 and 2011, we had $866 million and $884 million, respectively, of inventory valuation reserves recorded. Although management believes these reserves are adequate, any abrupt changes in market conditions may require us to record additional inventory valuation reserves.

OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

We extend a variety of financial guarantees to third parties in support of unconsolidated affiliates and for potential financing requirements of commercial aerospace customers. We also have obligations arising from sales of certain businesses and assets, including indemnities for representations and warranties and environmental, health and safety, tax and employment matters. Circumstances that could cause the contingent obligations and liabilities arising from these arrangements to come to fruition include changes in an underlying transaction (e.g., hazardous waste discoveries, etc.), nonperformance under a contract, customer requests for financing, or deterioration in the financial condition of the guaranteed party.

A summary of our consolidated contractual obligations and commitments as of December 31, 2012 is as follows:

		Payments Due by Period			
(DOLLARS IN MILLIONS)	**Total**	2013	2014 – 2015	2016 – 2017	Thereafter
Long-term debt—principal	**$ 22,365**	$ 1,121	$ 2,773	$ 2,841	$ 15,630
Long-term debt—future interest	**14,628**	1,023	1,982	1,708	9,915
Operating leases	**2,486**	646	888	413	539
Purchase obligations	**16,076**	8,389	5,376	982	1,329
Other long-term liabilities	**4,586**	862	1,369	1,272	1,083
Total contractual obligations	**$ 60,141**	$ 12,041	$ 12,388	$ 7,216	$ 28,496