
U.S. Retail Trade Industry: Employment, Taxes, and Corporate Tax Reform

*U.S. Retail Trade
Industry: Employment,
Taxes, and Tax Reform*

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Prepared for

**The Retail Industry
Leaders Association**



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U.S. Retail Trade Industry: Employment, Taxes, and Corporate Tax Reform

Executive Summary

The Retail Industry Leaders Association ("RILA") engaged PwC to quantify the retail trade industry's employment, contribution to gross domestic product (GDP), and corporate effective tax rates and to analyze the potential impact of revenue neutral corporate tax reform on the industry.

The Retail Industry in the U.S. Economy

The retail trade industry (excluding eating and drinking facilities that are classified in the accommodation and food services industry) employed 17.8 million full-time and part-time workers in 2010, including self-employed business owners. These jobs account for 12.1 percent of all private nonfarm employment in the United States. The high job intensity of the industry is evidenced by that fact that the industry's share of private sector employment (12.1 percent) is 2/3rds greater than its share of private sector GDP (7.1 percent) (see **Table E-1**).

Table E-1.—The Retail Trade Industry in the U.S. Economy, 2010

Item	Direct National Impact	Percent of Private Nonfarm Economy
Employment (Jobs) ⁽¹⁾	17,762,800	12.1%
GDP	\$884.9 billion	7.1%

Source: PwC calculations using data from the U.S. Bureau of Economic Analysis.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

Of the 19 major industrial categories, the retail industry was the second largest employer, accounting for 12.1 percent of all private nonfarm sector jobs in 2010 (see **Table E-2**).

Table E-2.—Employment by Major Industry, 2010

NAICS Code	Industry	Employment (Jobs) ⁽¹⁾	Share of Private Nonfarm Economy
00	All private nonfarm employment	146,422,400	100.0%
62	Health care and social assistance	19,062,300	13.0%
44-45	Retail trade	17,762,800	12.1%
31-33	Manufacturing	12,206,900	8.3%
72	Accommodation and food services	12,048,000	8.2%
54	Professional, scientific, and technical services	11,727,700	8.0%
56	Administrative and support and waste management and remediation services	10,478,800	7.2%
81	Other services (except public administration)	9,858,700	6.7%
52	Finance and insurance	9,651,300	6.6%
23	Construction	8,914,200	6.1%
53	Real estate and rental and leasing	7,459,200	5.1%
42	Wholesale trade	6,045,400	4.1%
48-49	Transportation and warehousing	5,504,400	3.8%
61	Educational services	4,076,600	2.8%
71	Arts, entertainment, and recreation	3,777,100	2.6%
51	Information	3,210,700	2.2%
55	Management of companies and enterprises	2,038,000	1.4%
21	Mining, quarrying, and oil and gas extraction	1,185,500	0.8%
11	Agriculture, forestry, fishing and hunting	835,800	0.6%
22	Utilities	579,000	0.4%

Source: U.S. Bureau of Economic Analysis. Note: Details may not add to total due to rounding.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

The Retail Industry's Total Economic Impact

The total economic impact of the retail trade industry extends beyond the industry's own activities (**direct** economic impact) to include the economic activity caused by the industry's non-inventory purchases from its supply chain (**indirect** economic impact) and the purchases made by the employees in the industry and its supply chain (**induced** economic impact).

Including the direct, indirect, and induced impacts, the retail trade industry's total economic impact amounted to 28.6 million jobs (19.6 percent of all private nonfarm jobs) and \$1.9 trillion of GDP (15.1 percent of U.S. private sector GDP) in 2010 (see **Table E-3**).

Table E-3.—The Retail Industry's Total Economic Impact, 2010

Item	Direct, Indirect, and Induced Impact	Percent of Private Nonfarm Economy
Employment (Jobs) ⁽¹⁾	28,647,000	19.6%
GDP	\$1,876 billion	15.1%

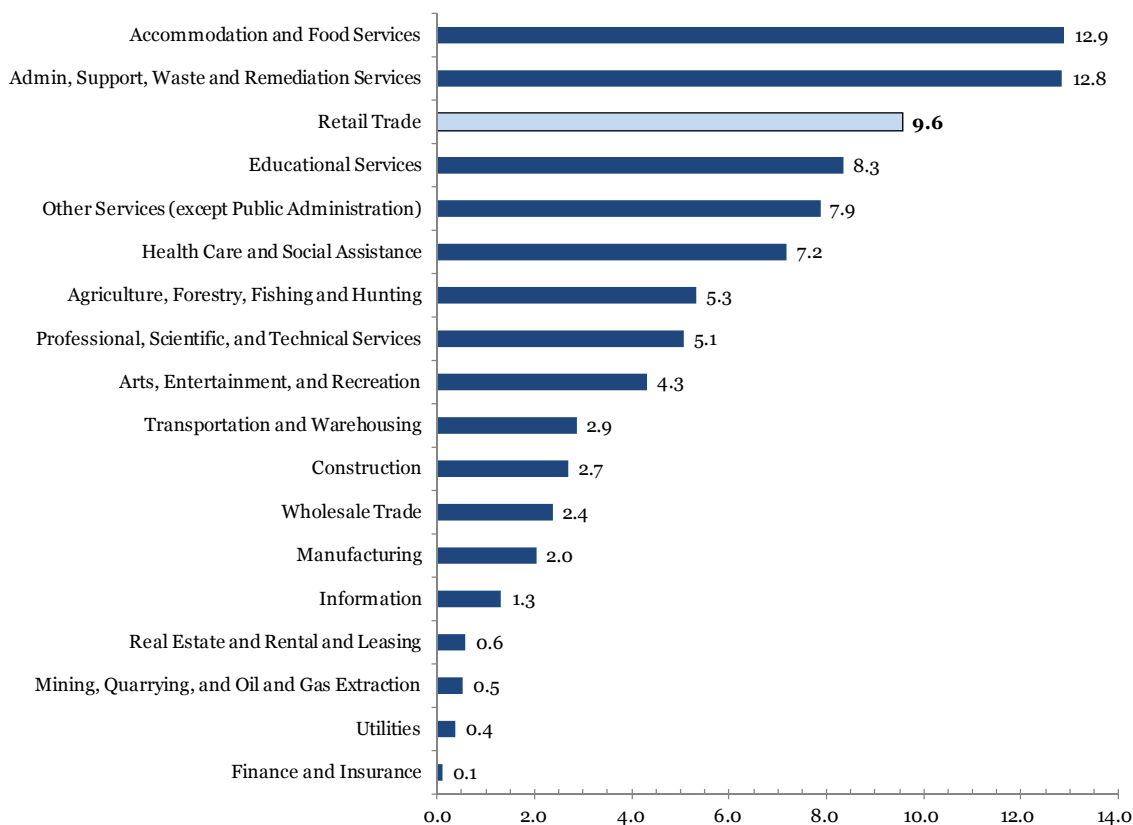
Source: Bureau of Economic Analysis and PwC calculations using the IMPLAN modeling system (2011 model based on 2010 data).

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

Job intensity

Based on financial statement data for public companies, the retail industry ranked third out of 18 private sector industries for which data are available in terms of employees per \$1 million of total assets (see **Figure E-1**).

Figure E-1.—Employees per \$1 Million of Total Assets, 2010



Source: PwC calculations based on data from S&P's Compustat database.

The Retail Industry in the States

Table E-4, below, lists the top 10 states in terms of the retail industry's share of total employment, excluding government and farm jobs. The retail industry *directly* accounts for at least one out of seven jobs in New Hampshire, Maine, West Virginia, South Dakota, and Montana and at least one out of eight jobs in North Dakota, Idaho, Mississippi, New Mexico, and Iowa.

**Table E-4.—Employment in the Retail Industry, 2010
Top 10 States, Ranked by Employment Share**

State	Jobs ⁽¹⁾	Percent of All Private Nonfarm Employment in the State
New Hampshire	110,500	15.4%
Maine	100,200	14.7%
West Virginia	106,000	14.7%
South Dakota	63,600	14.5%
Montana	71,200	14.3%
North Dakota	54,200	14.0%
Idaho	99,600	14.0%
Mississippi	162,300	13.9%
New Mexico	111,800	13.6%
Iowa	216,500	13.6%

Source: PwC calculations based on data from the U.S. Bureau of Economic Analysis.

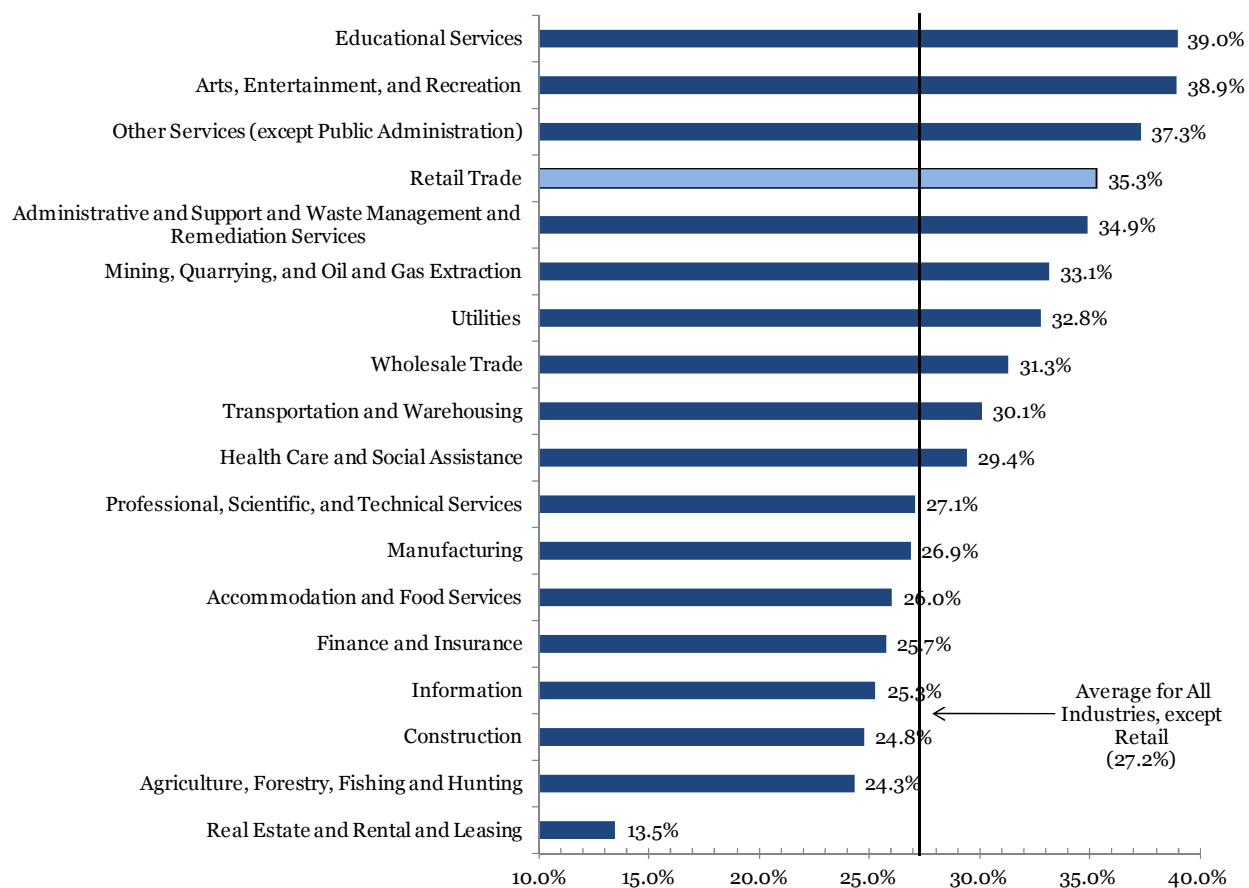
(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

Corporate Tax Rates

Measured by publicly available financial statement data, the U.S. retail industry's effective tax rate is among the highest of all major U.S. industries.

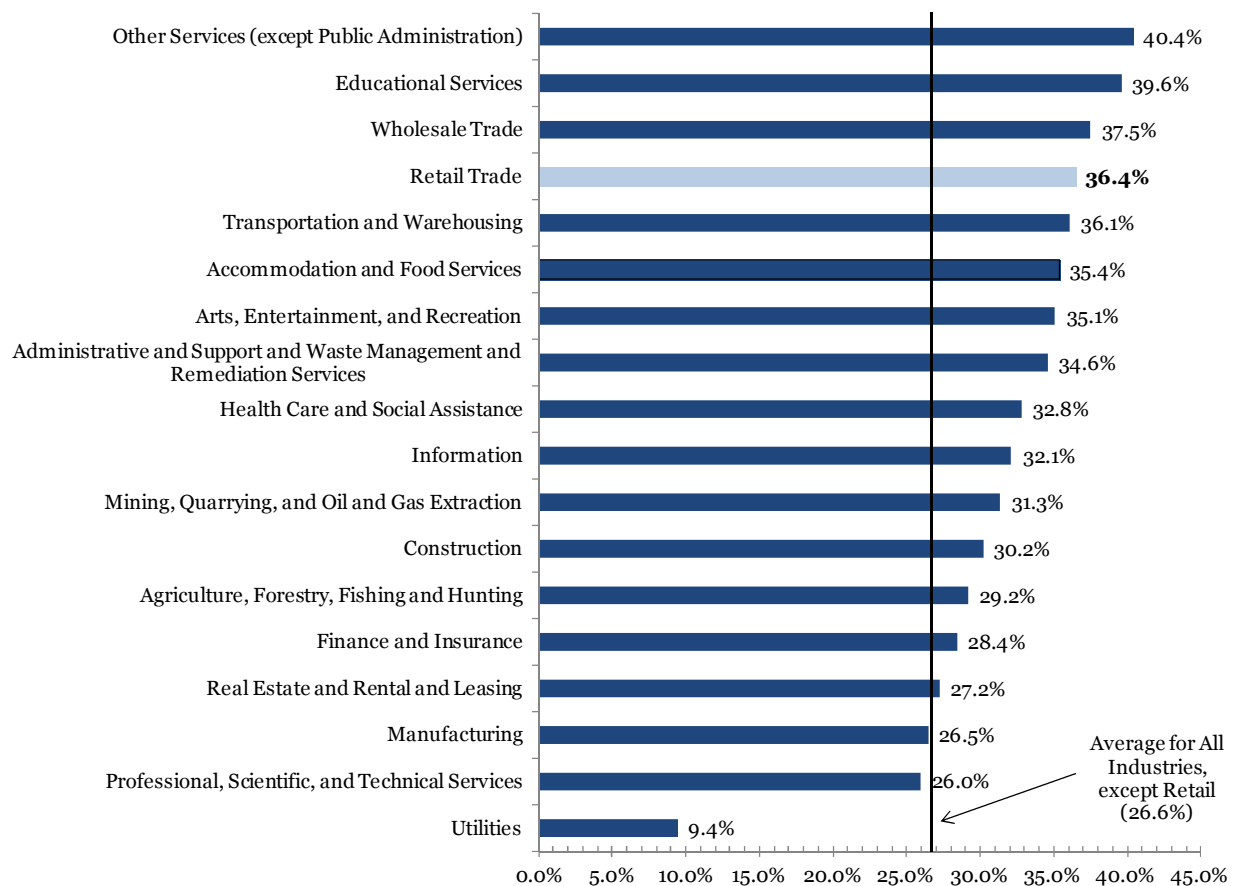
Over the 2007-2011 period, financial statements of public companies show the retail industry's *worldwide* financial statement effective tax rate (including federal, state and foreign income taxes) was 35.3 percent, 8.1 percentage points (or 30 percent) higher than the average for companies in all other industries (27.2 percent) (see **Figure E-2**). The retail industry's *domestic* financial statement effective tax rate (including federal and state income taxes) was 36.4 percent, 9.8 percentage points (or 36.8 percent) higher than the average for all other industries (26.6 percent) (see **Figure E-3**).

Figure E-2– Worldwide (Federal, State and, Foreign) Financial Statement Effective Tax Rate, 2007-2011 Weighted Average [Companies with Net Income]



Source: PwC calculations based on data from the company financial statements obtained from S&P's Compustat North America® database.

Figure E-3– Domestic (Federal and State) Financial Statement Effective Tax Rate, 2007-2011 Weighted Average [Companies with Net Income]



Source: PwC calculations based on data from the company financial statements obtained from S&P's Compustat North America® database.

Potential Effects of Equalizing Current Federal Financial Statement Tax Rates

There have been a number of proposals for revenue-neutral corporate tax reform that would lower tax rates and limit corporate tax preferences.

To model *revenue neutral* corporate tax reform, we assume a change in the federal statutory corporate income tax rate that would equalize the current federal tax rates (on a GAAP basis) across all industries and we calculate the tax savings for the retail trade industry on this basis. Based on financial statement data for fiscal years 2007 through 2011, this implies a 30.2 percent reduction in federal income taxes for the retail trade sector, which translates into an average reduction in federal income taxes after credits of \$7.7 billion per year over the 2005-2009 period (see **Table E-6**).

Table E-6—Potential Retail Trade Industry Tax Savings from a Reduction in the Corporate Tax Rate, 2005-2009
[Dollar amounts in millions]

Year	Income Tax after Credits	Percent Reduction	Tax Saving
2005	\$27,905	30.2%	\$8,441
2006	29,172	30.2%	8,824
2007	27,251	30.2%	8,243
2008	20,046	30.2%	6,064
2009	<u>23,375</u>	30.2%	<u>7,071</u>
5-year avg.	\$25,550	30.2%	\$7,729

Source: PwC calculations using data from the IRS Statistic of Income Division and S&P's Compustat North America® database.

The impact of a corporate tax rate reduction on the retail trade industry would depend on how retailers use the tax savings. Possible uses of tax savings include increases in employment, increases in wages and salaries, or lower retail prices. Tax savings could also increase shareholder wealth through higher profits and dividends.

It is important to note that it is unlikely that the entire tax saving would be used for a single purpose. Instead, the tax savings would likely be used for a combination of these and other possible uses, such as increased capital investment in the form of new stores or improvements to existing stores. As such, our estimates provide upper bounds for the actual impacts.

1. *Potential Increase in Employment* - If the entire tax savings were used to increase employment, we estimate an average increase in retail sector employment of 1.8 percent. This translates to an additional 327,200 jobs in

2010. The estimated increase in employment is projected to grow to 357,800 by 2019.
2. *Potential Increase in Wages and Salaries* - Assuming that the entire tax savings were used to increase wages and salaries, we estimate an average increase in retail sector wages and salaries of 1.8 percent -- or an additional \$10.2 billion in total labor income in 2010.
 3. *Potential Reduction in Retail Prices* - If the entire tax saving were used to reduce consumer prices, we estimate that retail prices would decline by an average of 0.53 percent, which translates into consumer savings of approximately \$10.2 billion.
 4. *Potential Increase in Shareholder Wealth* - If the entire tax savings were used to increase profits available to owners, we estimate that retail company stock prices could potentially increase by an average of 9.7 percent or \$88.7 billion at 2010 levels.

U.S. Retail Trade Industry: Employment, Taxes, and Corporate Tax Reform

I. Introduction

The Retail Industry Leaders Association ("RILA") engaged PwC to quantify the retail trade industry's employment, contribution to gross domestic product (GDP), and corporate effective tax rates and to analyze the potential impacts of revenue neutral corporate tax reform on the industry.

Section II, below, provides data on the employment and value added by the retail trade industry at the national and state levels for 2010 and makes comparisons with the other major industries in the economy. Measures of job intensity also are discussed.

As discussed below, the total economic impact of the retail trade industry extends beyond the industry's own activities to include the economic activity caused by the industry's purchases from its (noninventory) supply chain and the purchases made by the employees in the industry and its supply chain. This report provides estimates of the retail trade industry's total economic impact at the national level for 2010.

Section III provides estimates of the U.S. corporate cash tax rate and financial statement effective tax rate faced by the U.S. retail trade industry and other major U.S. industries. The estimates are calculated for the most recent five years for which data are available from financial statements of public companies (2007-2011).

Section IV estimates the tax savings of the retail trade industry resulting from a hypothetical revenue-neutral corporate tax reform which equalizes the effective tax rate across all industries. Alternative uses of the tax savings are discussed, including increased employment, higher wages, and lower prices. We also estimate the potential increase in shareholder wealth in the industry. Each of these is discussed in isolation, assuming all tax savings are utilized for a single purpose.

II. *The U.S. Retail Industry: Employment and GDP in 2010*

The retail trade industry employed more than 17.8 million full-time and part-time workers, generated total sales of \$3.8 trillion, and contributed \$885 billion to U.S. gross domestic product in 2010.

This section provides data on employment and value added by the U.S. retail industry and estimates the industry's total economic contribution to the national economy in 2010. In evaluating the total economic impact of the retail trade industry, we consider the industry's direct, indirect, and induced impacts:

- **Direct impacts** are measured as the jobs and GDP within the retail industry.
- **Indirect impacts** are the jobs and GDP occurring in other industries due to the retail industry's purchases of inputs other than merchandise for resale.
- **Induced impacts** are the jobs and GDP resulting from household spending of income earned directly or indirectly from the retail industry's economic activity.

In order to provide context, the retail industry's direct impact is compared with other major sectors of the economy.

A. *The Retail Trade Industry Defined*

The retail trade industry is comprised of a number of retail segments ranging from car dealers to gas stations and from home furnishing stores to department stores and super markets. Retailers can loosely be grouped into two types. *Store retailers* operate fixed point-of-sale locations designed to attract a high volume of walk-in customers. *Nonstore retailers* do not have a fixed point-of-sale location and instead reach customers through a variety of methods, such as the broadcasting of "infomercials," the broadcasting and publishing of direct-response advertising, the publishing of paper and electronic catalogs, door-to-door solicitation, in-home demonstration, selling from portable stalls (street vendors, except food), and distribution through vending machines. Businesses in this subsector include mail-order houses, vending machine operators, home delivery sales, door-to-door sales, electronic shopping (online retailers), and street vendors (excluding food sales).

In the *North American Industry Classification System* ("NAICS"), the retail trade sector is defined by two 2-digit NAICS codes: 44 and 45. This definition excludes food services and drinking places. Retail industry subsectors are shown in **Table 1**, below.¹

¹ For a detailed description of each retail segment, please see the Census Bureau's 2007 NAICS site at <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007>

Table 1.—Composition of the Retail Trade Industry

NAICS Code	Description
441	Motor vehicle and parts dealers
442	Furniture and home furnishing stores
443	Electronics and appliance stores
444	Building material and garden equipment and supplies dealers
445	Food and beverage stores
446	Health and personal care stores
447	Gasoline stations
448	Clothing and clothing accessories stores
451	Sporting goods, hobby, book, and music stores
452	General merchandise stores
453	Miscellaneous store retailers
454	Nonstore retailers*

*Includes online retailers.

B. The Retail Trade Industry in the U.S. Economy

In 2010, the retail industry directly employed 17.8 million workers, accounting for 12.1 percent of all private nonfarm employment in the United States (see **Table 2**). The retail industry contributed \$885 billion to GDP, representing 7.1% of the national total.

Table 2.—The Retail Trade Industry in the U.S. Economy, 2010

Item	Direct National Impact	Percent of Private Nonfarm Economy
Employment (Jobs) ⁽¹⁾	17,762,800	12.1%
GDP	\$884.9 billion	7.1%

Source: PwC calculations using data from the U.S. Bureau of Economic Analysis.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

The retail industry subsectors with the highest employment are general merchandise (3,042,500) and food and beverage stores (3,036,300) (see **Table 3**). The retail industry subsectors with the largest contribution to GDP are general merchandise stores (\$144.3 billion) and food and beverage stores (\$144.1 billion).

Table 3.—The Retail Trade Industry by Subsector, 2010

NAICS Code	Subsector Description	Employment (Jobs)⁽¹⁾	GDP (\$ billions)
441	Motor vehicle and parts dealers	1,884,300	121.522
442	Furniture and home furnishing stores	502,200	33.206
443	Electronics and appliance stores	548,000	39.349
444	Building materials and garden equipment and supplies dealers	1,213,400	74.919
445	Food and beverage stores	3,036,300	144.079
446	Health and personal care stores	1,135,600	66.619
447	Gasoline stations	877,400	51.793
448	Clothing and clothing accessories stores	1,580,800	58.744
451	Sporting goods, hobby, book and music stores	780,400	28.133
452	General merchandise stores	3,042,500	144.350
453	Miscellaneous store retailers	1,567,000	58.016
454	Nonstore retailers	1,594,900	64.147
	Total Retail Industry	17,762,800	\$884.877

Source: Bureau of Economic Analysis and the IMPLAN modeling system (2011 model based on 2010 data).

Detail may not add to totals due to rounding.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

The retail trade sector accounted for 17,762,800 jobs in 2010, second highest out of the 19 major industry categories, with 46 percent more jobs than manufacturing (12,206,900) (see **Table 4**). Excluding government and farm employment, the retail sector accounted for 12.1 percent of all private nonfarm jobs in 2010.

The retail trade industry ranked 6th out of the 19 major industry categories in 2010 in terms of contribution to GDP (see **Table 5**).

Table 4.—Employment by 2-Digit NAICS Sector, 2010

NAICS Code	Industry	Employment (Jobs)	Share of Private Nonfarm Economy
00	All private nonfarm employment	146,422,400	100.0%
62	Health care and social assistance	19,062,300	13.0%
44-45	Retail trade	17,762,800	12.1%
31-33	Manufacturing	12,206,900	8.3%
72	Accommodation and food services	12,048,000	8.2%
54	Professional, scientific, and technical services	11,727,700	8.0%
56	Administrative and support and waste management and remediation services	10,478,800	7.2%
81	Other services (except public administration)	9,858,700	6.7%
52	Finance and insurance	9,651,300	6.6%
23	Construction	8,914,200	6.1%
53	Real estate and rental and leasing	7,459,200	5.1%
42	Wholesale trade	6,045,400	4.1%
48-49	Transportation and warehousing	5,504,400	3.8%
61	Educational services	4,076,600	2.8%
71	Arts, entertainment, and recreation	3,777,100	2.6%
51	Information	3,210,700	2.2%
55	Management of companies and enterprises	2,038,000	1.4%
21	Mining, quarrying, and oil and gas extraction	1,185,500	0.8%
11	Agriculture, forestry, fishing and hunting	835,800	0.6%
22	Utilities	579,000	0.4%

Source: U.S. Bureau of Economic Analysis. Note: Details may not add to total due to rounding.

Table 5.—Gross Domestic Product by 2-Digit NAICS Sector, 2010

NAICS Code	Industry	GDP (\$ Billions)	Share of Private Nonfarm Economy
00	All private nonfarm GDP	\$12,425.4	100%
53	Real estate and rental and leasing	1,765.2	14.2%
31-33	Manufacturing	1,701.9	13.7%
52	Finance and insurance	1,241.9	10.0%
62	Health care and social assistance	1,109.2	8.9%
54	Professional, scientific, and technical services	1,095.8	8.8%
44-45	Retail trade	884.9	7.1%
42	Wholesale trade	797.3	6.4%
51	Information	623.5	5.0%
23	Construction	511.6	4.1%
56	Administrative and support and waste management and remediation services	423.4	3.4%
72	Accommodation and food services	416.7	3.4%
48-49	Transportation and warehousing	402.5	3.2%
81	Other services (except public administration)	356.8	2.9%
22	Utilities	264.9	2.1%
55	Management of companies and enterprises	263.7	2.1%
21	Mining, quarrying, and oil and gas extraction	239.5	1.9%
61	Educational services	163.1	1.3%
71	Arts, entertainment, and recreation	139.1	1.1%
11	Agriculture, forestry, fishing and hunting	24.4	0.2%

Source: U.S. Bureau of Economic Analysis. Note: Details may not add to total due to rounding.

Total Economic Impact of the Retail Trade Industry

The total economic contribution of the retail trade industry extends beyond the industry's own **direct** employment and operations. Retailers purchase inputs from a variety of other industries (including real estate, business services, finance, transportation, and wholesale trade). These industries, in turn, purchase goods and services from their supply chain, spurring further economic activity. These supply chain effects (excluding purchases for resale) represent the retail trade industry's **indirect** economic impact.

Additionally, the employees and business owners in the retail trade industry and its supply chain, in their role as consumers, purchase an array of goods and services generating further demand that ripples through the economy generating additional economic activity. This activity represents the retail trade industry's **induced** economic impact.

The total economic impact of the retail trade industry is comprised of the industry's direct, indirect, and induced impacts.

PwC estimates that at the national level, the direct, indirect, and induced economic impact of the retail trade industry totaled 28.6 million full-time and part-time jobs and \$1.9 trillion to the nation's GDP in 2010 (see **Table 6**).

Table 6. – The Retail Industry's Total Economic Impact, 2010

Item	Total National Impact	Percent of Private Nonfarm Economy
Employment (Jobs) ⁽¹⁾	28,647,000	19.6%
GDP	\$1,876 billion	15.1%

Source: Bureau of Economic Analysis and PwC calculations using the IMPLAN modeling system (2011 model based on 2010 data).

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

In addition to the 17.8 million direct jobs in the retail trade industry, the industry supports an additional 10.9 million indirect and induced jobs across a number of other industries in 2010 (see **Table 7**). The service sector accounts for the largest number of indirect and induced jobs attributable to the retail trade industry (6.5 million) followed by the finance, insurance, real estate, rental and leasing industry (2.0 million).

Table 7.—The U.S. Retail Industry's Indirect and Induced Economic Impacts by Industry, 2010

Industry Affected	Employment (Jobs) ⁽¹⁾		GDP (\$Millions)	
	Indirect	Induced	Indirect	Induced
Agriculture, forestry and fishing	28,200	196,000	\$1,218.1	\$7,916.7
Mining	16,000	40,500	\$3,094.9	\$7,810.2
Utilities	24,200	34,800	\$11,804.1	\$16,989.2
Construction	70,800	57,000	\$4,382.2	\$3,523.3
Manufacturing	182,700	412,900	\$21,106.6	\$59,582.0
Wholesale trade	88,500	271,000	\$11,865.1	\$36,333.8
Transportation and warehousing	487,400	242,800	\$30,456.6	\$17,412.5
Information	109,300	146,100	\$22,242.3	\$29,624.7
Finance, insurance, real estate, rental and leasing	662,700	1,319,500	\$127,718.0	\$235,322.8
Services	1,833,000	4,660,800	\$112,315.0	\$230,908.3
Total	3,502,700	7,381,500	\$346,202.8	\$645,423.5

Source: PwC calculations using the IMPLAN modeling system (2011 model based on 2010 data).

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

Job Intensity in the Retail Trade Industry

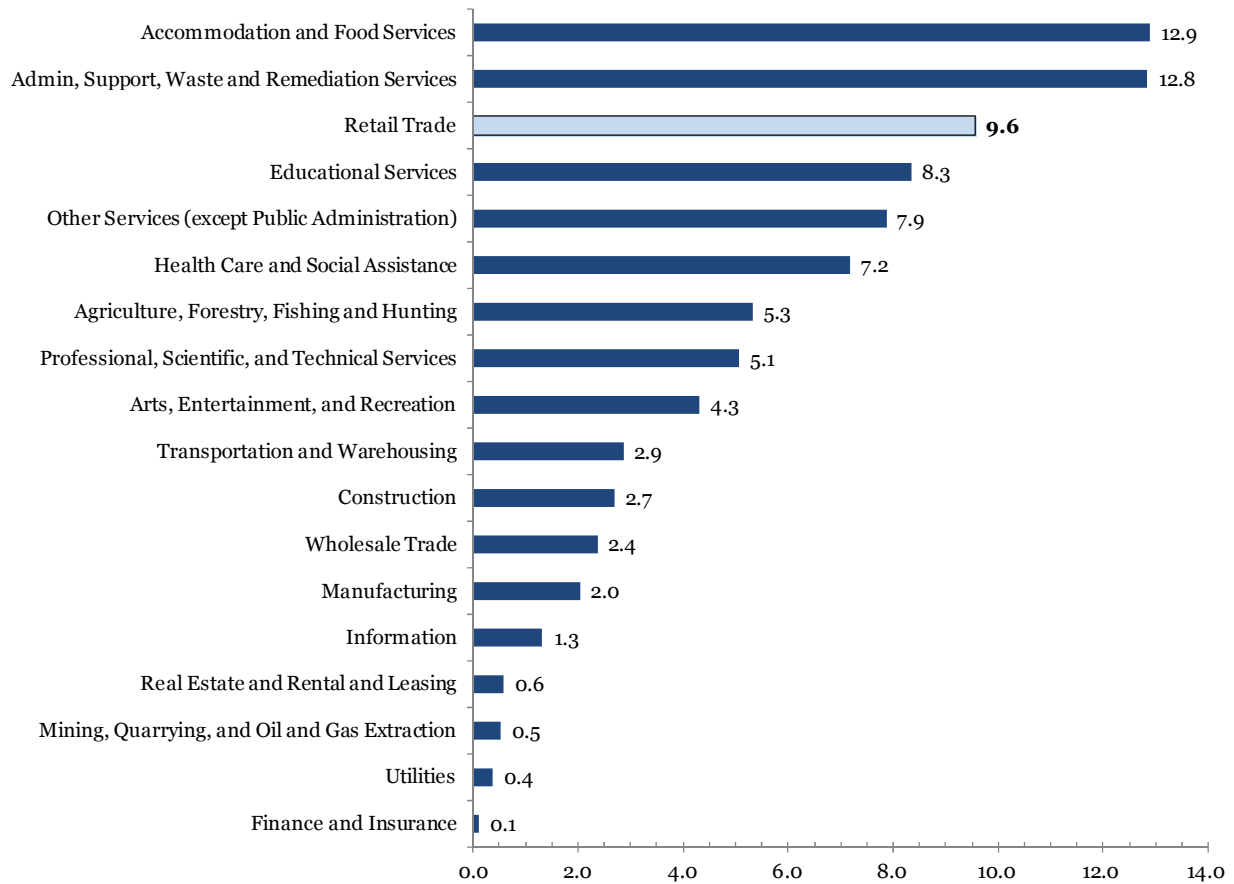
Based on financial statement data for public companies, the retail industry ranked 3rd in job intensity out of 18 private sector industries² for which data are available in terms of employees per \$1 million of total assets (9.6 employees per \$1 million of assets), over ten times more jobs intensive than the weighted average for all industries (0.9 employee per \$1 million of assets) (see **Table 8** and **Figure 1**).

Measured in terms of employees per \$1 million of net income, the retail industry ranked 4th in job intensity out 18 industries (135.3 employees per \$1 million of net income), over four times more jobs intensive than the average for all industries (33.1 employees per \$1 million of net income) (see **Table 8**).

² Data on publicly traded companies was obtained from Standard and Poor's Compustat North America® database to estimate alternative measures of labor intensity in the major sectors of the economy. Compustat assigns industry classifications based on the company's principal activity. The Compustat database does not have a category for management of companies or enterprises and as such has only 18 major industry categories compared to the 19 industries reported by the Bureau of Economic Analysis.

Measured in terms of employees per \$1 million of market value, the retail industry ranked 5th in job intensity out 18 industries (9.1 employees per \$1 million of market value), 3.8 times more jobs intensive than the average for all industries (2.4 employees per \$1 million of market value).

Figure 1.—Employees per \$1 Million of Total Assets, 2010



Source: PwC calculations based on data from S&P's Compustat database.

Table 8.—Alternative Measures of Job Intensity for U.S. Corporations by Industry, FY 2010

NAICS Code	Industry	Employees per \$1 Million of Assets		Employees per \$1 Million of Net Income*		Employees per \$1 Million of Market Value	
		Jobs	Rank	Jobs	Rank	Jobs	Rank
00	All Private Industries	0.9		33.1		2.4	
11	Agriculture, Forestry, Fishing and Hunting	5.3	7	68.5	8	4.6	8
21	Mining, Quarrying, and Oil and Gas Extraction	0.5	16	8.0	18	0.5	18
22	Utilities	0.4	17	12.9	17	1.0	16
23	Construction	2.7	11	49.5	10	2.2	12
31-33	Manufacturing	2.0	13	25.6	14	1.8	13
42	Wholesale Trade	2.4	12	46.7	12	3.4	11
44-45	Retail Trade	9.6	3	135.3	4	9.1	5
48-49	Transportation and Warehousing	2.9	10	48.4	11	3.7	10
51	Information	1.3	14	20.1	15	1.4	15
52	Finance and Insurance	0.1	18	14.8	16	1.4	14
53	Real Estate and Rental and Leasing	0.6	15	25.6	13	0.9	17
54	Professional, Scientific, and Technical Services	5.1	8	51.3	9	4.1	9
56	Administrative and Support and Waste Management and Remediation Services	12.8	2	270.9	1	13.2	2
61	Educational Services	8.3	4	72.6	6	6.6	7
62	Health Care and Social Assistance	7.2	6	108.6	5	10.9	3
71	Arts, Entertainment, and Recreation	4.3	9	71.8	7	7.0	6
72	Accommodation and Food Services	12.9	1	137.6	3	9.2	4
81	Other Services (except Public Administration)	7.9	5	254.0	2	14.3	1

Source: PwC calculations using company financial statement data from S&P's Compustat North America database (downloaded April 5, 2012).

Note: Jobs include full-time and part-time wage and salary employees. All data include both the domestic and foreign operations of U.S. companies.

* Only includes companies with positive net income.

C. The Retail Trade Industry in the States

The retail trade industry is prevalent in all 50 states and the District of Columbia.

Table 9, on the next page, provides the industry's direct employment and GDP by state.

Table 9.—The Retail Trade Industry in the States, 2010

State	Direct Employment ⁽¹⁾		Direct GDP	
	Jobs	Percent of State Total*	\$ Millions	Percent of State Total*
Alabama	272,500	13.4%	12,763	9.2%
Alaska	44,200	13.0%	1,994	5.2%
Arizona	358,000	13.1%	18,692	8.6%
Arkansas	159,600	12.7%	7,579	8.9%
California	1,905,000	11.3%	116,756	7.1%
Colorado	302,600	11.4%	14,663	6.7%
Connecticut	217,300	11.4%	11,573	5.8%
Delaware	59,100	13.0%	2,474	4.3%
District of Columbia	21,700	3.9%	1,158	1.7%
Florida	1,092,600	12.7%	55,887	8.8%
Georgia	531,500	12.0%	25,396	7.4%
Hawaii	83,200	13.0%	4,508	9.2%
Idaho	99,600	14.0%	4,238	9.3%
Illinois	700,000	11.1%	38,001	6.6%
Indiana	373,500	12.4%	16,425	7.0%
Iowa	216,500	13.6%	8,493	7.3%
Kansas	179,800	12.5%	8,324	8.1%
Kentucky	244,800	13.1%	10,370	7.9%
Louisiana	261,400	12.4%	13,123	6.4%
Maine	100,200	14.7%	4,430	10.3%
Maryland	335,500	12.1%	16,449	6.9%
Massachusetts	396,600	10.8%	17,548	5.1%
Michigan	544,100	12.6%	26,050	8.2%
Minnesota	344,500	11.8%	14,767	6.2%
Mississippi	162,300	13.9%	7,671	10.1%
Missouri	369,900	12.8%	16,052	7.7%
Montana	71,200	14.3%	2,562	8.8%
Nebraska	130,000	13.0%	5,355	7.4%
Nevada	153,900	11.7%	8,122	7.2%
New Hampshire	110,500	15.4%	4,755	8.6%
New Jersey	517,600	12.0%	29,938	7.0%
New Mexico	111,800	13.6%	5,026	8.3%
New York	1,036,900	11.0%	58,554	5.8%
North Carolina	531,600	12.4%	23,504	6.6%
North Dakota	54,200	14.0%	2,247	8.1%
Ohio	671,600	12.1%	31,097	7.6%
Oklahoma	213,700	12.8%	9,782	8.2%
Oregon	230,400	12.6%	8,855	5.5%
Pennsylvania	765,000	12.3%	32,604	6.6%
Rhode Island	55,900	10.9%	2,713	6.4%
South Carolina	269,800	13.3%	12,357	9.4%
South Dakota	63,600	14.5%	2,702	9.1%
Tennessee	385,200	12.8%	19,443	8.7%
Texas	1,419,400	11.8%	72,538	6.8%
Utah	175,200	12.7%	8,205	8.0%
Vermont	47,200	13.3%	2,090	9.8%
Virginia	475,100	12.4%	21,889	6.4%
Washington	383,800	12.5%	23,666	8.4%
West Virginia	106,000	14.7%	4,656	9.3%
Wisconsin	368,600	12.6%	14,884	6.9%
Wyoming	38,500	12.9%	1,950	6.4%
U.S. Total	17,762,800	12.1%	884,877	7.1%

Source: PwC calculations based on data from the U.S. Bureau of Economic Analysis.

Details may not add to totals due to rounding. *Percent of private nonfarm economy.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time.

The number of jobs directly attributable to the retail industry ranged from a low of 21,700 in the District of Columbia to a high of 1.9 million in California. The top 10 states, in terms of retail sector jobs in 2010 were California, Texas, Florida, New York, Pennsylvania, Illinois, Ohio, Michigan, North Carolina, and Georgia (see **Table 10a**).

**Table 10a.– Employment in the Retail Industry, 2010
Top 10 States, Ranked by Total Retail Jobs**

State	Jobs ⁽¹⁾	Percent of All Private Nonfarm Employment in State
California	1,905,000	11.3%
Texas	1,419,400	11.8%
Florida	1,092,600	12.7%
New York	1,036,900	11.0%
Pennsylvania	765,000	12.3%
Illinois	700,000	11.1%
Ohio	671,600	12.1%
Michigan	544,100	12.6%
North Carolina	531,600	12.4%
Georgia	531,500	12.0%

Source: PwC calculations based on data from the U.S. Bureau of Economic Analysis.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

The top 10 states in terms of the percentage of total employment directly attributable to the retail industry in 2010 were New Hampshire, Maine, West Virginia, South Dakota, Montana, North Dakota, Idaho, Mississippi, New Mexico, and Iowa (see **Table 10b**). The retail trade industry accounts for at least 13.6 percent of total nonfarm private employment in each of these states.

**Table 10b.– Employment in the Retail Industry, 2010
Top 10 States, Ranked by Employment Share**

State	Jobs ⁽¹⁾	Percent of All Private Nonfarm Employment in State
New Hampshire	110,500	15.4%
Maine	100,200	14.7%
West Virginia	106,000	14.7%
South Dakota	63,600	14.5%
Montana	71,200	14.3%
North Dakota	54,200	14.0%
Idaho	99,600	14.0%
Mississippi	162,300	13.9%
New Mexico	111,800	13.6%
Iowa	216,500	13.6%

Source: PwC calculations based on data from the U.S. Bureau of Economic Analysis.

(1) Employment is defined as the number of payroll and self-employed jobs, including part-time jobs.

III. The U.S. Retail Trade Industry: Financial Statement Tax Rates

This section quantifies calculations of the tax rate faced by the U.S. retail trade industry and other major industries. The estimates were calculated for the most recent five years for which data were available (2007-2011) using data from the financial statements of public companies.

All of the tax rate measures discussed in this section are measures of the corporate *income* tax rate faced by U.S. companies. It should be noted, however, that income taxes represent only a portion of the total tax burden faced by U.S. corporations. Companies are subject to a wide variety of non-income taxes, such as property taxes. These taxes are directly borne by the company but are not separately shown in company financial statements or reflected in the tax rate calculations in this report. Companies also provide an important service by collecting and remitting employee payroll taxes as well as sales taxes on the goods and services they sell.

Data Source and Methodology

PwC obtained data on income and taxes reported on 2007-2011 financial statements, for all active U.S. listed corporations from the April 2012 Compustat® database. For purposes of this study, investment funds, publicly traded partnerships, LLCs, and all corporations headquartered outside of the U.S. were removed from the sample. We also removed subsidiaries that are included in the consolidated annual financial statements of other corporations.

For the remaining corporations, five separate financial statement tax rate measures were calculated for each industry³:

- 1. Worldwide effective tax rate ("ETR")** -- Total provision for income tax (federal, state, and foreign) including both current and deferred income taxes, divided by worldwide pretax income.
- 2. Worldwide current tax rate** -- The current provision for income tax (federal, state, and foreign) divided by worldwide pretax income.
- 3. Worldwide cash tax rate** -- Income taxes paid (federal, state, and foreign) divided by worldwide pretax income.
- 4. Domestic effective tax rate** -- Total provision for domestic (federal and state) income taxes, including both current and deferred income taxes, divided by domestic pretax income. (For companies without foreign operations this is the same as the worldwide total effective tax rate).

³ Compustat® classifies businesses according to their principal business activity and does not include a classification for management of companies and enterprises. As such, there are only 18 industries in the following tables, as opposed to the 19 industries reported by the Bureau of Economic Analysis.

5. Domestic current tax rate -- Current provision for domestic (federal and state) income taxes divided by domestic pretax income. (For companies without foreign operations this is the same as the worldwide current tax rate).

Companies that reported negative pretax income in a particular year are excluded from the calculations for that year. Tax rates for companies with negative income are difficult to interpret and can be misleading as to the true burden of the tax system. In a limited number of cases, Compustat® reports missing values as zero. In these cases the company was dropped from the calculations for the particular year. True zeros were included in the calculations.

It should be noted that effective tax rates have been declining in recent years. Corporate profits are highly cyclical, rising as the economy grows and declining during recessions. While corporate profits have rebounded since 2009, following the worst recession since the Great Depression, the recovery in corporate income tax revenues has lagged. The lag in the recovery of corporate taxes relative to corporate profits is often the case following economic downturns and is in part due to policy measures used to stimulate the economy (e.g., bonus depreciation) and in part due to the utilization of net operating losses incurred in prior years and carried forward.⁴

As the economy continues to recover from the recession and the temporary stimulus measures expire, corporate tax receipts are expected to rebound. In fact, over the next three years, the Congressional Budget Office projects corporate tax revenues to grow over 25 percent annum — far faster than overall economy and corporate profits — from \$181 billion in 2011 to \$363 billion in 2014. The corporate effective tax rate is also expected to rebound over this period.

Results for the Retail Trade Industry

Over the 2007-2011 period, on a *worldwide* basis, companies in the retail trade industry faced a weighted-average financial statement ETR of 35.3 percent, a *current* financial statement tax rate of 33.9 percent, and a *cash* tax rate of 32.4 percent (see **Table 11**).

Over the same period, on a *domestic* basis, companies in the retail trade industry faced a weighted average financial statement ETR of 36.4 percent and a *current* financial statement tax rate of 34.2 percent.

⁴ Temporary provisions such as bonus depreciation also lower the current and cash book effective tax rates, but do not have an impact on total effective tax rates.

Table 11—Retail Industry Financial Statement Effective and Cash Tax Rates, FY 2007-2011

Effective Tax Rate Measure	2007	2008	2009	2010	2011	Weighted Average
Worldwide						
ETR	35.9%	36.3%	34.8%	34.7%	35.1%	35.3%
	(161)	(120)	(151)	(153)	(146)	(731)
Current Tax Rate	36.8%	34.2%	34.4%	32.6%	31.8%	33.9%
	(136)	(107)	(131)	(135)	(132)	(641)
Cash Tax Rate	34.4%	34.5%	31.9%	32.3%	29.5%	32.4%
	(154)	(118)	(144)	(147)	(143)	(706)
Domestic						
ETR	36.8%	37.7%	35.7%	35.9%	36.3%	36.4%
	(103)	(80)	(97)	(99)	(92)	(471)
Current Tax Rate	36.9%	34.8%	34.6%	32.9%	31.9%	34.2%
	(103)	(80)	(97)	(99)	(92)	(471)

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

Source: PwC calculations based on data from S&P's Compustat® North America database (June 2012 edition).

The weighted average financial statement ETR for companies in the retail industry was significantly higher for both domestic and worldwide income than the weighted average for companies in all industries combined (see **Table 12 and Figure 2**).

Over the 2007-2011 period, on a worldwide basis, companies in the retail trade industry had a weighted average financial statement ETR 7.6 percentage points higher than for all industries, a *current* financial statement tax rate 8.9 percentage points higher, and a *cash* tax rate 9.1 percentage points higher.

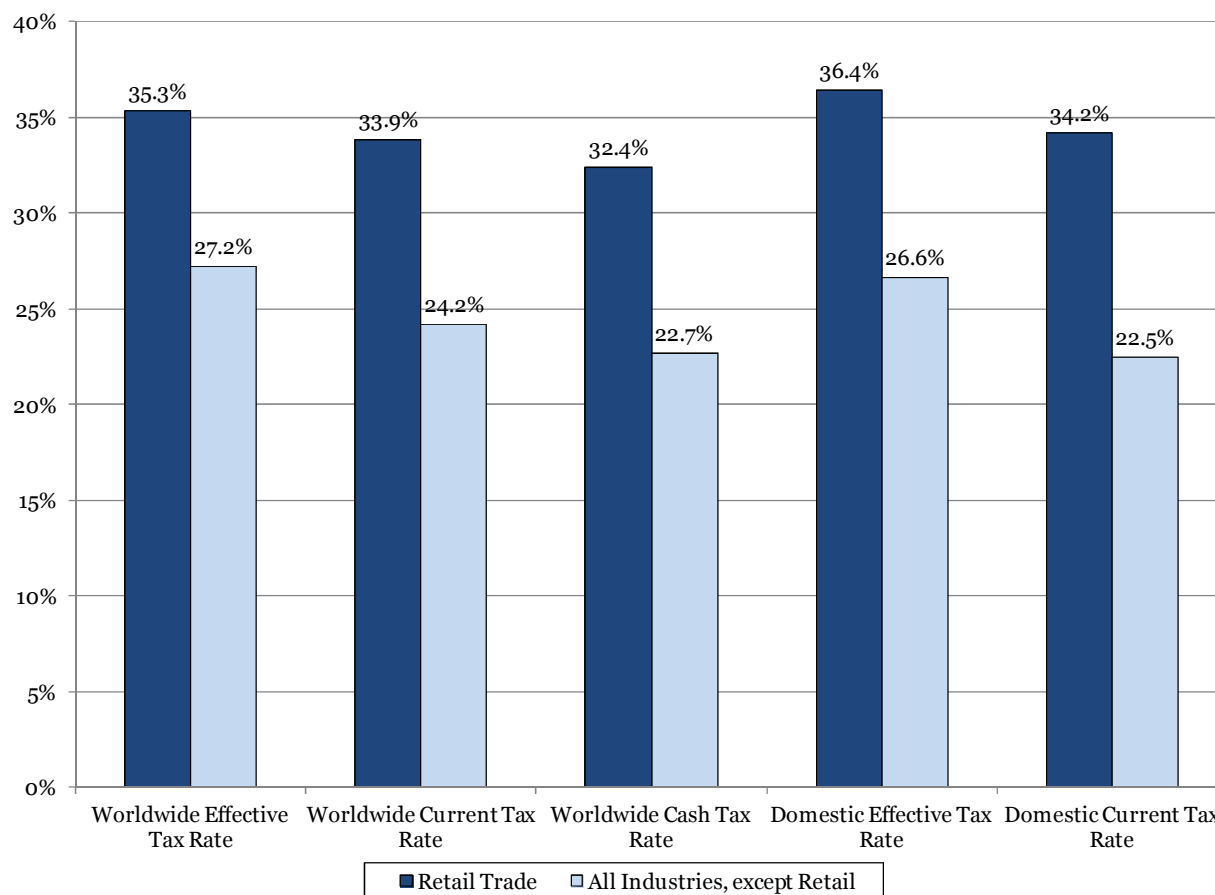
Over the same period, on a domestic basis, companies in the retail trade industry faced a weighted average financial statement ETR 8.7 percentage points higher than for all industries and a *current* financial statement tax rate 10.3 percentage points higher.

Table 12—Industry Comparison of Financial Statement Effective Tax Rates, Weighted Average FY 2007-2011

Effective Tax Rate Measure	Retail Trade Industry	All Industries, except Retail	Percentage Point Difference
Worldwide			
Effective Tax Rate	35.3% (731)	27.2% (15,285)	8.1
Current Tax Rate	33.9% (641)	24.2% (10,258)	9.7
Cash Tax Rate	32.4% (706)	22.7% (12,398)	9.7
Domestic			
Effective Tax Rate	36.4% (471)	26.6% (7,324)	9.8
Current Tax Rate	34.2% (471)	22.5% (7,317)	11.7

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.
Source: PwC calculations based on data from S&P's Compustat® North America database.

Figure 2—Industry Comparison of Financial Statement Effective and Cash Tax Rates, Weighted Average FY 2007-2011



Source: PwC calculations based on data from S&P's Compustat® North America database.

Comparison with Other Industries

Worldwide effective tax rates. Over the FY 2007-2011 period, among the major industry groups, the retail trade industry ranked 4th in terms of worldwide financial statement effective tax rate, 2nd in terms of worldwide *current* financial statement tax rate, and 2nd in terms of worldwide *cash* tax rate (see **Table 13** and **Figure 3**).

Domestic effective tax rates. Over the FY 2007-2011 period, among the major industry groups, the retail trade industry ranked 4th in terms of domestic financial statement effective tax rate and 2nd in terms of domestic *current* financial statement tax rate (see **Table 14** and **Figure 4**).⁵

Detailed year-by-year estimates for each of the five alternative financial statement tax rate measures are shown in **Appendix B** of this report.

⁵ Cash tax rates are reported only on a worldwide basis.

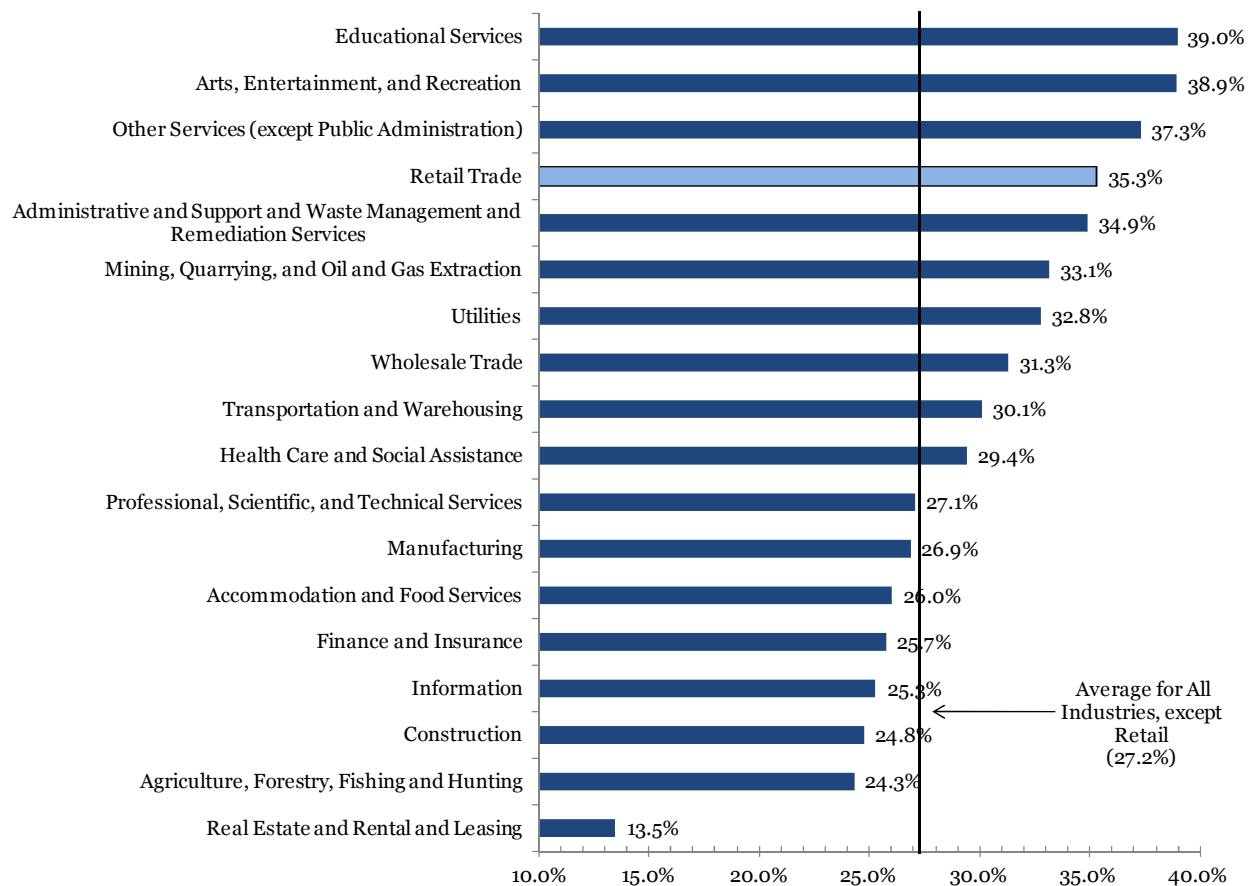
Table 13—Worldwide Financial Statement Effective Tax Rates by Industry, FY 2007-2011

Industry	Direct employment	Total ETR		Current Tax Rate		Cash Tax Rate	
		Percent	Rank	Percent	Rank	Percent	Rank
Health care and social assistance	19,062,300	29.4% (277)	10	29.5% (244)	4	29.0% (266)	3
Retail trade	17,762,800	35.3% (731)	4	33.9% (641)	2	32.4% (706)	2
Manufacturing	12,206,900	26.9% (5,370)	12	27.5% (4,208)	6	25.3% (5,101)	7
Accommodation and food services	12,048,000	26.0% (277)	13	24.1% (226)	12	22.0% (266)	11
Professional, scientific, and technical services	11,727,700	27.1% (636)	11	22.0% (522)	14	19.6% (595)	15
Admin & support, waste and remediation	10,478,800	34.9% (321)	5	30.1% (274)	3	28.7% (315)	5
Other services (except public administration)	9,858,700	37.3% (59)	3	22.3% (53)	13	20.8% (59)	13
Finance and insurance	9,651,300	25.7% (3,401)	14	24.9% (919)	11	23.7% (1,228)	9
Construction	8,914,200	24.8% (173)	16	25.0% (129)	10	23.0% (163)	10
Real estate and rental and leasing	7,459,200	13.5% (482)	18	13.4% (300)	17	9.7% (441)	18
Wholesale trade	6,045,400	31.3% (578)	8	27.2% (472)	7	26.0% (560)	6
Transportation and warehousing	5,504,400	30.1% (406)	9	18.8% (299)	16	16.6% (375)	16
Educational services	4,076,600	39.0% (118)	1	39.8% (108)	1	38.2% (112)	1
Arts, entertain and recreation	3,777,100	38.9% (80)	2	28.8% (63)	5	28.8% (71)	4
Information	3,210,700	25.3% (1,333)	15	21.4% (1,072)	15	19.9% (1,219)	14
Mining, quarrying, oil and gas extract	1,185,500	33.1% (745)	6	26.4% (438)	8	24.5% (631)	8
Agriculture, forestry, fishing and hunting	835,800	24.3% (51)	17	25.8% (32)	9	21.6% (49)	12
Utilities	579,000	32.8% (929)	7	9.6% (875)	18	11.7% (906)	17
All Industries, except Retail	128,659,600	27.2% (15,285)		24.2% (10,258)		22.7% (12,398)	
All Private Nonfarm	146,422,400	27.7% (16,016)		24.9% (10,899)		23.3% (13,104)	

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

Source: PwC calculations based on data from S&P's Compustat® North America database.

**Figure 3—Worldwide Financial Statement Effective Tax Rate, by Industry
2007-2011 Weighted Average
[Companies with Net Income]**



Source: PwC calculations based on data from the company financial statements obtained from S&P's Compustat North America® database.

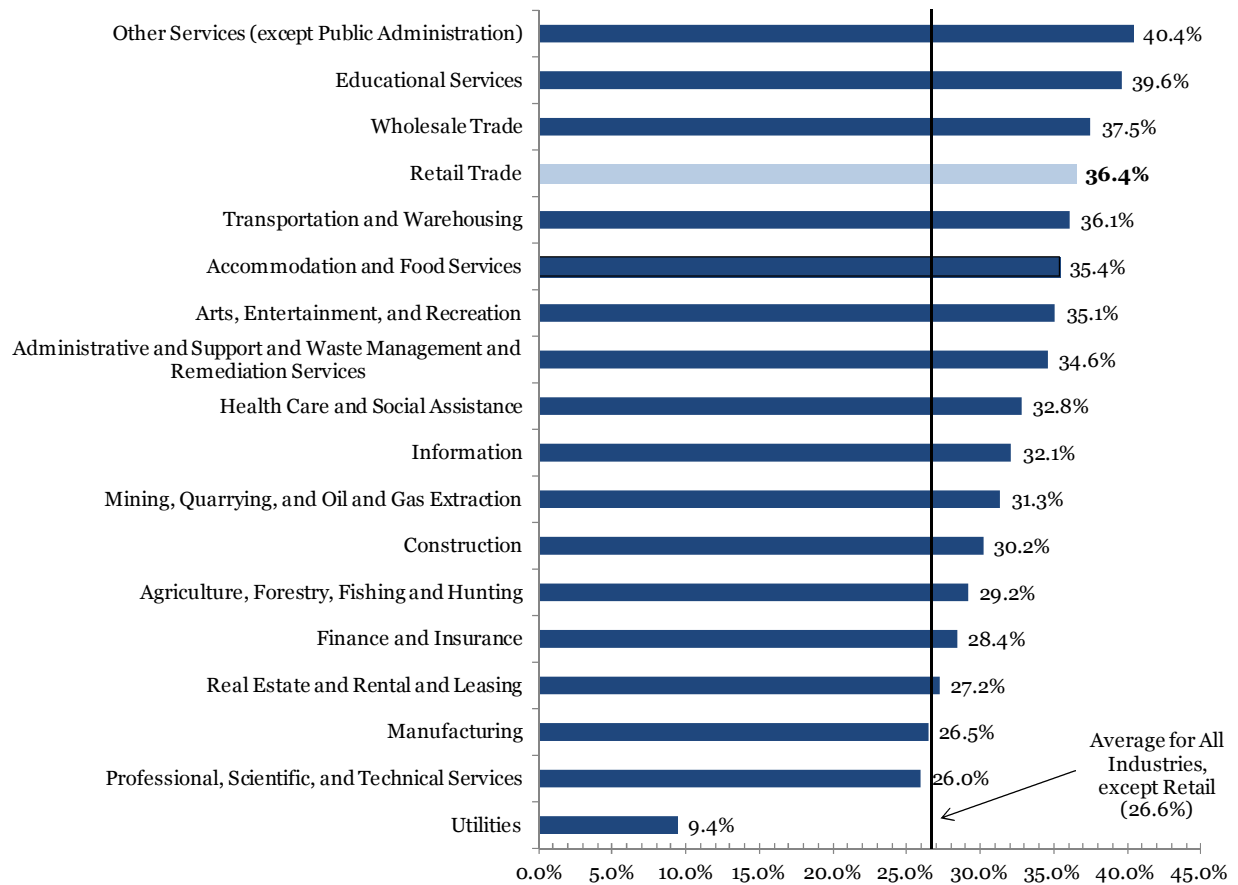
Table 14—Domestic Financial Statement Effective Tax Rates by Industry, FY 2007-2011

Industry	Direct employment	Total ETR		Current Tax Rate	
		Percent	Rank	Percent	Rank
Health care and social assistance	19,062,300	32.8% (203)	9	31.5% (203)	3
Retail trade	17,762,800	36.4% (471)	4	34.2% (471)	2
Manufacturing	12,206,900	26.5% (3,207)	16	24.1% (3,026)	12
Accommodation and food services	12,048,000	35.4% (152)	6	29.0% (152)	6
Professional, scientific, and technical services	11,727,700	26.0% (380)	17	17.1% (380)	15
Admin & support, waste manage., and remediation services	10,478,800	34.6% (188)	8	29.0% (188)	7
Other services (except public administration)	9,858,700	40.4% (46)	1	22.3% (46)	13
Finance and insurance	9,651,300	28.4% (608)	14	26.2% (608)	10
Construction	8,914,200	30.2% (88)	12	30.5% (87)	5
Real estate and rental and leasing	7,459,200	27.2% (183)	15	15.2% (181)	17
Wholesale trade	6,045,400	37.5% (371)	3	31.4% (368)	4
Transportation and warehousing	5,504,400	36.1% (183)	5	19.8% (183)	14
Educational services	4,076,600	39.6 (80)	2	38.7% (80)	1
Arts, entertainment and recreation	3,777,100	35.1% (38)	7	26.8% (38)	8
Information	3,210,700	32.1% (748)	10	26.6% (748)	9
Mining, quarrying, and oil and gas extraction	1,185,500	31.3% (283)	11	16.3% (283)	16
Agriculture, forestry, fishing and hunting	835,800	29.2% (26)	13	25.8% (26)	11
Utilities	579,000	9.4% (713)	18	9.0% (713)	18
All Industries, except Retail	128,659,600	26.6% (7,324)		22.5% (7,317)	
All Private Nonfarm	146,422,400	27.8% (7,795)		23.8% (7,788)	

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

Source: PwC calculations based on data from S&P's Compustat® North America database.

Figure 4—Domestic (Federal and State) Financial Statement Effective Tax Rate, 2007-2011 Weighted Average [Companies with Net Income]



Source: PwC calculations based on data from the company financial statements obtained from S&P's Compustat North America® database.

IV. The U.S. Retail Trade Industry: Corporate Tax Reform

There have been a number of proposals for *revenue neutral* corporate tax reform that would lower tax rates and limit corporate tax preferences, e.g., the 2010 recommendations of the President's Commission on Fiscal Responsibility and Reform and the Bipartisan Policy Center, the 2012 proposal by The House Budget Committee Chairman Paul Ryan, The Wyden-Coats bill (S. 727) introduced in 2011, and President Obama's Framework for Business Tax Reform released in February of this year.

For purposes of this report it is assumed that revenue neutral corporate tax reform would equalize the current federal tax rate (on a GAAP basis) across all industries. In particular, we calculate the tax savings for the retail trade industry by assuming that the weighted average current *federal* financial statement tax rate for the industry (29.8 percent) is reduced to the weighted average current *federal* financial statement tax rate for all industries (20.7 percent) using financial statement data for 2007-2011.⁶ Thus, to match the average corporate tax rate for companies in all industries, the tax liability of companies in the retail industry would need to be reduced by an average of 30.2 percent. If taxable income were conformed to book income, this would imply a reduction in the statutory corporate income tax rate from 35 percent to 24.4 percent.

Potential Tax Saving From Revenue Neutral Corporate Tax Reform

Based on IRS data for tax years 2005-2009 period, a 30.2 percent reduction in the retail industry's U.S. income tax after credits would result in an average of \$7.7 billion per year of corporate tax savings (see **Table 15**).

**Table 15—Potential Federal Corporate Tax Savings
in the Retail Trade Industry, 2005-2009
[Dollar amounts in millions]**

Year	Income Tax after Credits	Percent Reduction	Tax Saving
2005	\$27,905	30.2%	\$8,441
2006	29,172	30.2%	8,824
2007	27,251	30.2%	8,243
2008	20,046	30.2%	6,064
2009	<u>23,375</u>	30.2%	<u>7,071</u>
5-year avg.	\$25,550	30.2%	\$7,729

Source: PwC calculations using data from the IRS Statistic of Income Division and S&P's Compustat North America® database.

⁶ The current federal financial statement tax rates reported in this section differ from the current domestic financial statement tax rates reported in the previous section in that they exclude the current state tax provision.

Alternative Uses for Tax Savings

The impact of corporate tax reform on economic activity in the retail trade industry would depend on how the tax savings are used. Possible uses of tax savings include increases in employment, increases in average wages and salaries, lower retail prices, and increases in shareholder wealth (due to higher profits). We estimate the potential impacts of corporate tax reform assuming all tax savings are alternatively used for each of these purposes. It is important to note that it is unlikely that the entire tax saving would be used for a single purpose. Instead, the tax savings would likely be used for a combination of these and other possible uses, such as increased capital investment in the form of new stores or improvements to existing stores. As such, our estimates represent upper bounds.

Potential Increase in Employment:

To estimate the potential increase in jobs in the retail trade industry, we collected data on the number of workers as well as total labor income in the industry between 2006 and 2010. Assuming the non-corporate sector is unaffected by the reform, the overall impact on employment shown below is an average of the larger increase in the corporate sector and no increase in the non-corporate sector.

Total labor income per retail job averaged \$30,120 over the 2006-2010 period. If the entire tax savings were used to increase employment, we estimate an average increase in retail sector employment of 1.8 percent per year. This translates to an additional 327,200 jobs in 2010 (1.8 percent of 17,762,800 jobs). The estimated increase in employment is projected to grow to 357,800 by 2019.

Potential Increase in Wages and Salaries:

If the entire tax savings were used to increase salaries and wages, we estimate an average increase in labor income in the retail sector of 1.8 percent -- or an additional \$10.2 billion in total labor income in 2010.

Potential Reduction in Retail Prices:

If the entire tax savings were used to reduce retail prices, average retail prices would decline by an average of 0.53 percent, assuming no increase in the volume of sales.⁷ This translates into consumer savings of approximately \$10.2 billion.

⁷ The impact on retail prices was estimated using IRS data on total receipts (R) by the retail trade sector. The change in price is estimated to be $R/(1-t')$, where t' is the corporate income tax rate after tax reform (24.4 percent assuming taxable income conforms to book income).

Potential Increase in Shareholder Wealth:

Assuming an average reduction of 30.2 percent in current federal income taxes, we estimate an average reduction in the provision for current federal income taxes of \$5.7 billion. The calculation of tax saving is based on all publicly traded companies for which data were available in Standard and Poor's Compustat® database, which is a subset of all C corporations in the IRS data. As such, our estimated tax savings is lower than the tax savings discussed above. Given an average price-earnings ratio of 15.4 in the retail trade sector in 2010, this implies an increase in total market value for the industry of 9.7 percent, from \$914.6 billion to \$1,003.3 billion.⁸

⁸ The increase in market value is estimated to be the price-earnings ratio multiplied by the average reduction in the provision for current federal income taxes. The average P/E ratio and total market value for the retail trade industry were estimated using data from S&P's Compustat North America® database.

Appendix A

This appendix describes the data sources PwC utilized to develop estimates of the retail trade industry's direct economic impacts and the development of the indirect and induced economic impact estimates.

Data Sources

PwC developed its estimates of the retail trade industry's direct economic impacts using data from two primary sources:

- *IMPLAN® Model Data Files* – IMPLAN is a well-known economic impact modeling system developed by the Minnesota IMPLAN Group. The model is primarily based on government data sources, such as the Bureau of Economic Analysis, the U.S. Census Bureau, and the Bureau of Labor Statistics. The IMPLAN model can address a wide range of impact topics in a given region (county, State, or the country as a whole) and is built around an “input-output” table that relates the purchases that each industry has made from other industries to the value of the output of each industry. The IMPLAN sectors that correspond to PwC's definition of the retail trade industry are shown in **Table 1** of the report. This study uses the latest IMPLAN national-level database (released in October 2011) for 2010 economic activity.
- *U.S. Bureau of Economic Analysis ("BEA")* – Data on employment (jobs) and GDP by industry at the national and state levels were obtained from BEA's Regional Economic Accounts database for 2010. The BEA data provide our estimates of the direct impact of the retail trade industry for 2010.

Estimates of Indirect and Induced Economic Impacts

The initial round of output, income, and employment generated by retail operations leads to successive rounds of re-spending in the chain of production. Such indirect and induced economic impacts by the retail industry can be measured using various approaches. The most common is multiplier analysis. In broad terms, a multiplier is an index that indicates the overall change in the level of economic activity that results from a given initial change. It effectively adds up all the successive rounds of re-spending, based on a number of assumptions that are embedded in the method of estimation.

There are different methods available for calculating multipliers. The method used in this report is input-output analysis. It is the most commonly used approach in regional economic impact studies. The input-output model developed by the Minnesota IMPLAN Group is one of the best known input-output models for regional economic studies in the United States and is widely used by government, academics and private-sector researchers.

The IMPLAN model is built around an "input-output" table that relates the purchases that each industry has made from other industries to the value of the output of each industry. To meet the demand for goods and services from an industry, purchases are made in other industries according to the patterns recorded in the input-output table. These purchases in turn spark still more purchases by the industry's suppliers, and so on. Additionally, employees and business owners make personal purchases out of the additional income that is generated by this process, sending more new demands rippling through the economy. Multipliers describe these iterations. The Type I multiplier measures the direct and indirect effects of a change in economic activity. It captures the inter-industry effects only, i.e., industries buying from local industries. The Type II (Social Accounting Matrix or SAM) multiplier captures the direct and indirect effects and, in addition, it also reflects induced effects (i.e., changes in spending from households as income increases or decreases due to the changes in production). The indirect and induced impacts by the retail industry on other sectors of the economy in terms of employment and contribution to GDP were calculated through the multiplier process built in each model.⁹

For this study, PwC utilized a customized IMPLAN input-output model for the national economy to calculate the industry's indirect and induced economic impact in terms of employment and GDP.

⁹ Because the IMPLAN models are used for total impact analysis (as opposed to marginal impact analysis) in this study, necessary adjustments are made to the initial indirect and induced impact estimates to prevent double-counting. For instance, any indirect or induced effects from the initial estimates for IMPLAN sectors that are fully mapped to the retail trade industry are removed.

Appendix B

The tables and figures below provide detailed rankings of the retail industry's financial statement effective tax rate, current financial statement tax rate, and cash tax rate, on a domestic and global basis, over the 2007-2011 period, relative to other major industries.

Worldwide Financial Statement Effective Tax Rate (Table and Figure B-1)

The retail trade industry ranked 4th out of 18 industries with a worldwide financial statement effective tax rate of 35.3 percent. The educational services industry (39.0 percent) had the highest worldwide financial statement effective tax rate, followed by the arts, entertainment, and recreation industry (38.9 percent) and the other services industry (37.3 percent). The worldwide financial statement effective tax rate in the retail industry exceeded the weighted average across all 18 industries in each year.

Worldwide Current Financial Statement Tax Rate (Table and Figure B-2)

The retail trade industry had the 2nd highest worldwide current financial statement tax rate (33.9 percent) among the 18 industries over the fiscal year 2007-2011 period. The educational services industry had the highest worldwide current financial statement tax rate (39.8 percent) over this period. The worldwide current financial statement tax rate in the retail industry was higher than the weighted average across all industries in each year during this period.

Worldwide Cash Tax Rate (Table and Figure B-3)

The retail trade industry also had the 2nd highest worldwide cash tax rate (32.4 percent) over the study period. The educational services industry had the highest worldwide cash tax rate (38.2 percent). The worldwide cash tax rate in the retail industry was higher than the weighted average across all industries in each year during this period.

Domestic Financial Statement Effective Tax Rate (Table and Figure B-4)

The retail trade industry had the 4th highest domestic financial statement effective tax rate (36.4 percent) among the 18 industries over the fiscal year 2007-2011 period. The domestic financial statement effective tax rate in the retail industry was higher than the weighted average across all industries in each year during this period.

Domestic Current Financial Statement Tax Rate (Table and Figure B-5)

The retail trade industry had the 2nd highest domestic current financial statement tax rate (34.2 percent) over the study period. The educational services industry (38.7 percent) had the highest domestic current financial statement tax rate. The domestic current financial statement tax rate in the retail industry was higher than the weighted average across all industries in each year during this period.

Table B-1—Worldwide Financial Statement Effective Tax Rate by Industry, FY 2007-2011

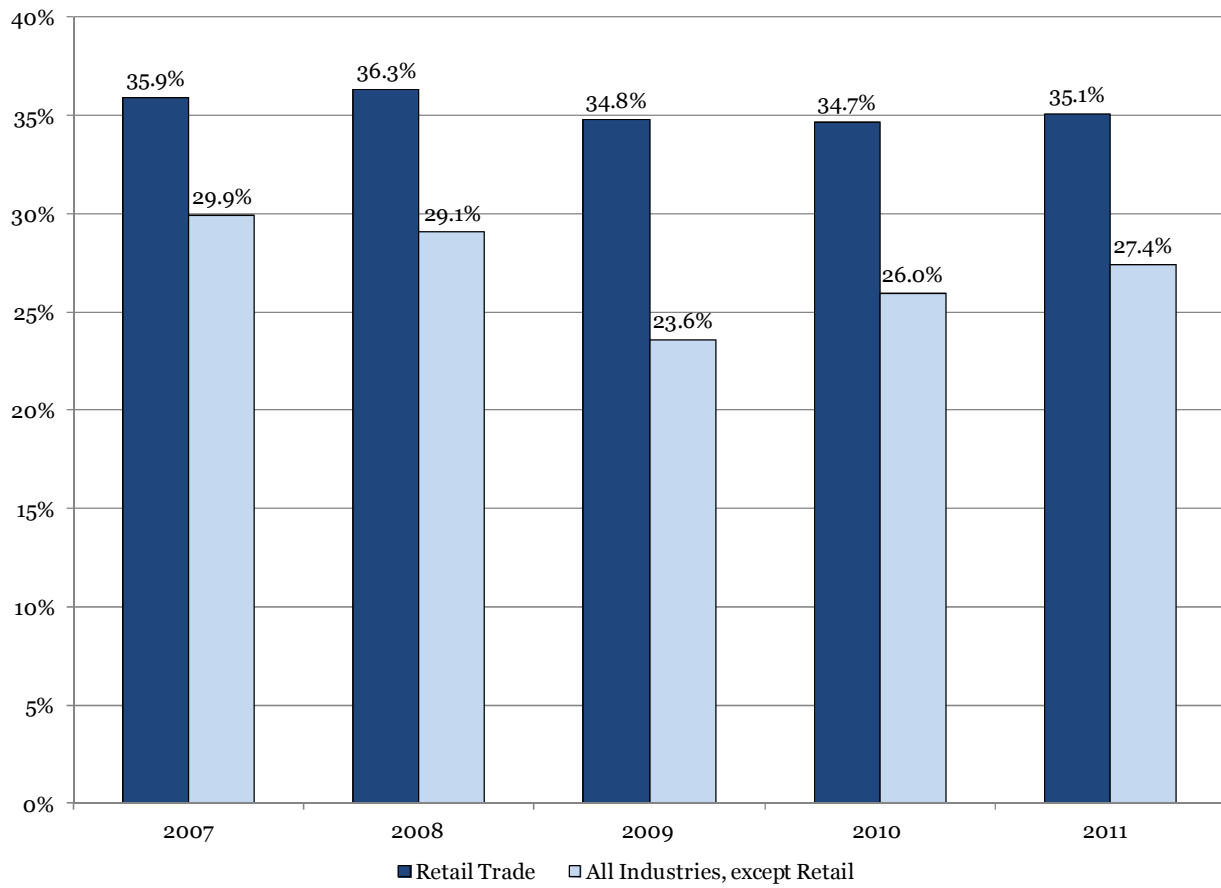
Industry	2007	2008	2009	2010	2011	Weighted Average	
						Rank	Percent
Educational Services	37.0% (23)	36.7% (27)	39.2% (25)	39.7% (23)	40.5% (20)	1	39.0% (118)
Arts, Entertainment, and Recreation	42.5% (17)	46.5% (14)	46.4% (13)	29.3% (15)	34.1% (21)	2	38.9% (80)
Other Services (except Public Administration)	35.7% (12)	39.2% (12)	40.1% (12)	37.5% (11)	35.2% (12)	3	37.3% (59)
Retail Trade	35.9% (161)	36.3% (120)	34.8% (151)	34.7% (153)	35.1% (146)	4	35.3% (731)
Admin and Support, Waste Management, and Remediation Services	35.4% (69)	37.1% (59)	32.3% (65)	36.4% (66)	33.3% (62)	5	34.9% (321)
Mining, Quarrying, and Oil and Gas Extraction	31.4% (156)	32.1% (140)	31.1% (108)	33.6% (166)	36.2% (175)	6	33.1% (745)
Utilities	32.1% (188)	32.6% (184)	32.2% (188)	34.0% (188)	32.9% (181)	7	32.8% (929)
Wholesale Trade	32.9% (121)	32.6% (108)	26.4% (114)	33.4% (123)	31.3% (112)	8	31.3% (578)
Transportation and Warehousing	28.5% (88)	29.6% (73)	28.9% (79)	31.6% (89)	31.3% (77)	9	30.1% (406)
Health Care and Social Assistance	34.0% (55)	30.9% (64)	33.7% (57)	18.9% (56)	31.2% (45)	10	29.4% (277)
Professional, Scientific, and Technical Services	31.2% (126)	27.6% (122)	27.8% (132)	23.6% (136)	26.6% (120)	11	27.1% (636)
Manufacturing	31.1% (1,124)	30.7% (989)	21.3% (974)	25.4% (1,193)	26.1% (1,090)	12	26.9% (5,370)
Accommodation and Food Services	32.2% (59)	30.0% (42)	35.1% (54)	20.9% (63)	18.4% (59)	13	26.0% (277)
Finance and Insurance	27.5% (802)	24.2% (595)	23.3% (604)	25.2% (710)	27.0% (690)	14	25.7% (3,401)
Information	31.2% (251)	26.6% (238)	21.7% (266)	22.7% (297)	24.8% (281)	15	25.3% (1,333)
Construction	25.3% (36)	25.6% (36)	26.8% (33)	20.3% (35)	25.2% (33)	16	24.8% (173)
Agriculture, Forestry, Fishing and Hunting	25.3% (9)	24.6% (10)	23.8% (11)	21.2% (10)	25.9% (11)	17	24.3% (51)
Real Estate and Rental and Leasing	16.0% (112)	3.5% (86)	22.1% (87)	13.8% (97)	11.3% (100)	18	13.5% (482)
All Industries*, except Retail	29.9% (3,259)	29.1% (2,808)	23.6% (2,834)	26.0% (3,288)	27.4% (3,096)		27.2% (15,285)
All Industries*	30.3% (3,420)	29.5% (2,928)	24.3% (2,985)	26.5% (3,441)	27.8% (3,242)		27.7% (16,016)

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

*All industries average includes companies not assigned to any particular industry.

Source: PwC calculations based on data from S&P's Compustat® North America database .

Figure B-1—Worldwide Financial Statement Effective Tax Rate, FY 2007-2011



Source: PwC calculations based on data from S&P's Compustat® North America database.

Table B-2—Worldwide Current Financial Statement Tax Rate by Industry, FY 2007-2011

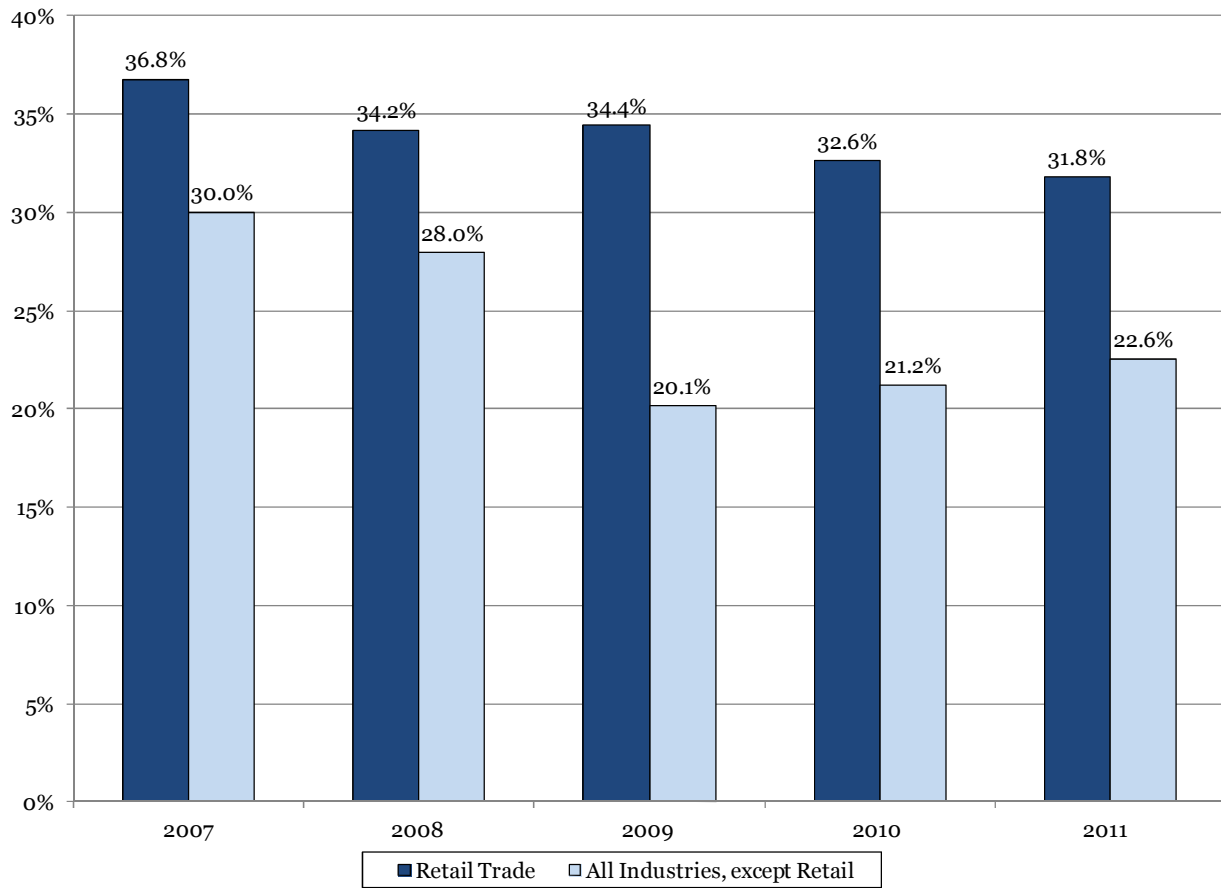
Industry	2007	2008	2009	2010	2011	Weighted Average	
						Rank	Percent
Educational Services	38.7% (19)	40.1% (25)	40.4% (23)	44.0% (22)	34.7% (19)	1	39.8% (108)
Retail Trade	36.8% (136)	34.2% (107)	34.4% (131)	32.6% (135)	31.8% (132)	2	33.9% (641)
Admin and Support, Waste Management, and Remediation Services	33.0% (58)	33.3% (50)	30.5% (54)	30.4% (55)	24.1% (57)	3	30.1% (274)
Health Care and Social Assistance	35.8% (50)	31.7% (54)	33.6% (51)	30.5% (49)	18.8% (40)	4	29.5% (244)
Arts, Entertainment, and Recreation	43.6% (13)	33.2% (11)	29.4% (11)	13.4% (13)	22.0% (15)	5	28.8% (63)
Manufacturing	31.8% (894)	31.5% (764)	22.5% (761)	25.2% (937)	27.1% (852)	6	27.5% (4,208)
Wholesale Trade	29.8% (100)	29.7% (87)	20.8% (94)	28.7% (101)	27.5% (90)	7	27.2% (472)
Mining, Quarrying, and Oil and Gas Extraction	30.8% (89)	28.5% (82)	27.6% (59)	24.8% (100)	21.9% (108)	8	26.4% (438)
Agriculture, Forestry, Fishing and Hunting	34.7% (7)	28.9% (4)	20.9% (7)	21.6% (7)	24.4% (7)	9	25.8% (32)
Construction	37.5% (25)	33.4% (25)	20.1% (25)	20.0% (29)	26.0% (25)	10	25.0% (129)
Finance and Insurance	30.5% (185)	38.9% (142)	22.8% (189)	17.7% (215)	22.7% (188)	11	24.9% (919)
Accommodation and Food Services	35.5% (47)	29.9% (36)	20.1% (40)	20.8% (53)	19.3% (50)	12	24.1% (226)
Other Services (except Public Administration)	27.7% (11)	18.6% (11)	18.6% (11)	20.8% (9)	23.3% (11)	13	22.3% (53)
Professional, Scientific, and Technical Services	28.8% (107)	19.7% (97)	21.0% (105)	19.3% (112)	22.5% (101)	14	22.0% (522)
Information	28.0% (199)	22.7% (186)	16.6% (217)	21.3% (242)	19.5% (228)	15	21.4% (1,072)
Transportation and Warehousing	21.8% (65)	24.0% (54)	14.5% (57)	18.5% (64)	15.8% (59)	16	18.8% (299)
Real Estate and Rental and Leasing	12.7% (71)	10.2% (53)	12.5% (56)	16.4% (60)	14.8% (60)	17	13.4% (300)
Utilities	24.5% (173)	13.7% (173)	6.3% (176)	2.3% (180)	1.5% (173)	18	9.6% (875)
All Industries*, except Retail	30.0% (2,118)	28.0% (1,860)	20.1% (1,940)	21.2% (2,254)	22.6% (2,086)		24.2% (10,258)
All Industries*	30.5% (2,254)	28.4% (1,967)	21.2% (2,071)	22.1% (2,389)	23.2% (2,218)		24.9% (10,899)

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

*All industries average includes companies not assigned to any particular industry.

Source: PwC calculations based on data from S&P's Compustat® North America database.

Figure B-2—Worldwide Current Financial Statement Tax Rate, FY 2007-2011



Source: PwC calculations based on data from S&P's Compustat® North America database.

Table B-3—Worldwide Cash Tax Rate by Industry, FY 2007-2011

Industry	2007	2008	2009	2010	2011	Weighted Average	
						Rank	Percent
Educational Services	34.0% (18)	36.3% (26)	36.2% (25)	42.5% (23)	38.1% (20)	1	38.2% (112)
Retail Trade	34.4% (154)	34.5% (118)	31.9% (144)	32.3% (147)	29.5% (143)	2	32.4% (706)
Health Care and Social Assistance	33.5% (51)	29.7% (61)	33.8% (56)	32.8% (53)	18.3% (45)	3	29.0% (266)
Arts, Entertainment, and Recreation	37.6% (16)	28.4% (13)	43.7% (11)	23.9% (14)	16.1% (17)	4	28.8% (71)
Admin. and Support, Waste Management, and Remediation Services	27.5% (66)	35.6% (58)	29.8% (64)	31.2% (65)	21.6% (62)	5	28.7% (315)
Wholesale Trade	25.8% (118)	25.6% (105)	22.7% (112)	28.1% (118)	27.7% (107)	6	26.0% (560)
Manufacturing	28.9% (1,064)	29.6% (941)	20.0% (927)	24.2% (1,139)	24.3% (1,030)	7	25.3% (5,101)
Mining, Quarrying, and Oil and Gas Extraction	26.1% (132)	23.9% (122)	20.3% (94)	25.5% (141)	24.8% (142)	8	24.5% (631)
Finance and Insurance	32.0% (260)	41.0% (190)	18.9% (240)	15.6% (284)	21.2% (254)	9	23.7% (1,228)
Construction	26.2% (35)	22.4% (31)	24.6% (31)	14.6% (35)	26.3% (31)	10	23.0% (163)
Accommodation and Food Services	33.1% (54)	26.0% (41)	21.3% (54)	17.6% (60)	16.9% (57)	11	22.0% (266)
Agriculture, Forestry, Fishing and Hunting	30.0% (8)	18.9% (10)	19.0% (11)	27.2% (10)	17.7% (10)	12	21.6% (49)
Other Services (except Public Administration)	20.2% (12)	27.6% (12)	18.2% (12)	18.7% (11)	19.3% (12)	13	20.8% (59)
Information	22.4% (229)	20.8% (219)	19.5% (245)	20.7% (267)	16.2% (259)	14	19.9% (1,219)
Professional, Scientific, and Technical Services	22.0% (115)	19.9% (116)	17.5% (124)	17.6% (126)	21.6% (114)	15	19.6% (595)
Transportation and Warehousing	24.1% (80)	18.5% (69)	12.8% (72)	16.5% (81)	11.4% (73)	16	16.6% (375)
Utilities	29.9% (185)	14.8% (174)	9.1% (186)	8.0% (186)	-3.5% (175)	17	11.7% (906)
Real Estate and Rental and Leasing	12.4% (101)	9.3% (83)	9.3% (80)	9.6% (84)	8.3% (93)	18	9.7% (441)
All Industries*, except Retail	27.6% (2,553)	26.4% (2,279)	19.0% (2,353)	20.8% (2,705)	20.3% (2,508)		22.7% (12,398)
All Industries*	28.0% (2,707)	26.9% (2,397)	19.8% (2,497)	21.5% (2,852)	20.9% (2,651)		23.3% (13,104)

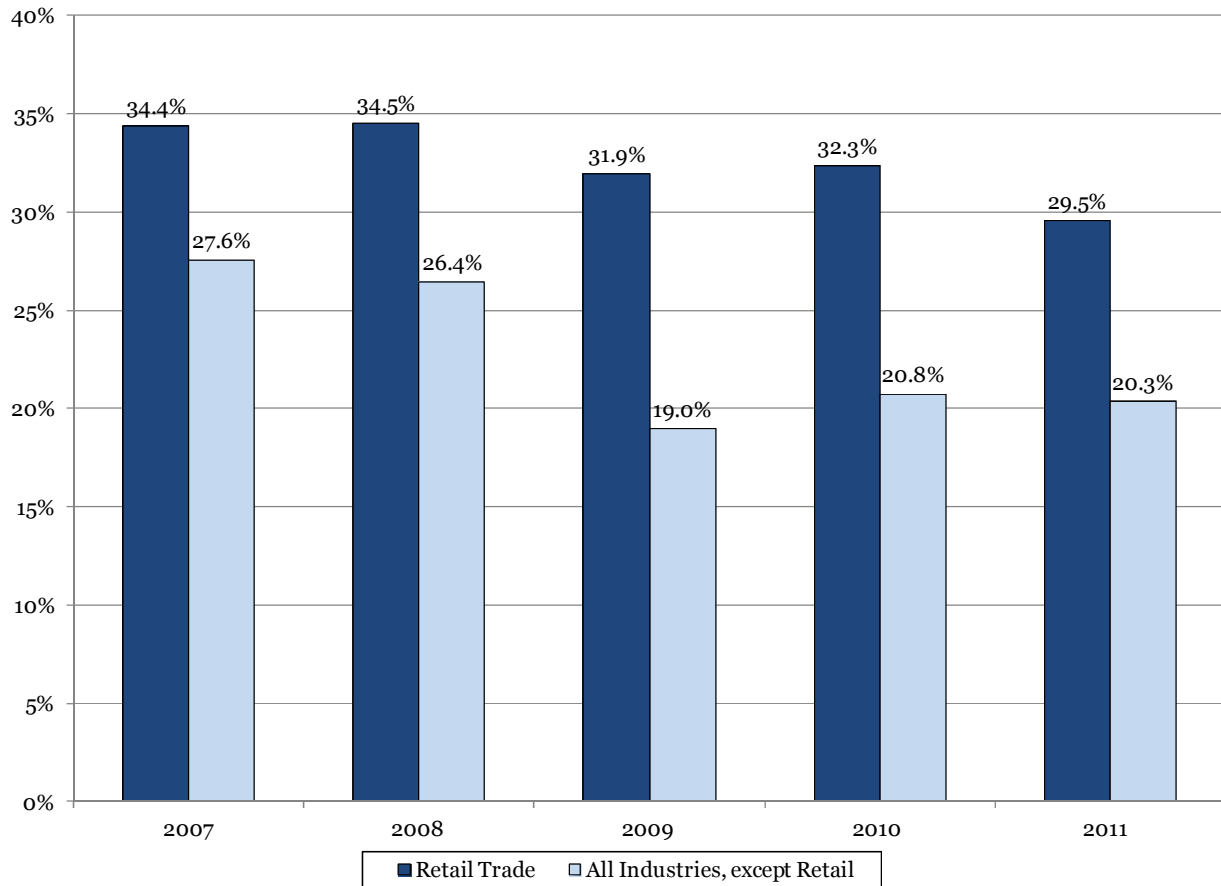
Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

Negative ETRs indicate that cash taxes paid were negative when summed across an industry.

*All industries average includes companies not assigned to any particular industry.

Source: PwC calculations based on data from S&P's Compustat® North America database.

Figure B-3—Worldwide Cash Tax Rate, FY 2007-2011



Source: PwC calculations based on data from S&P's Compustat® North America database.

Table B-4—Domestic Financial Statement Effective Tax Rate by Industry, FY 2007-2011

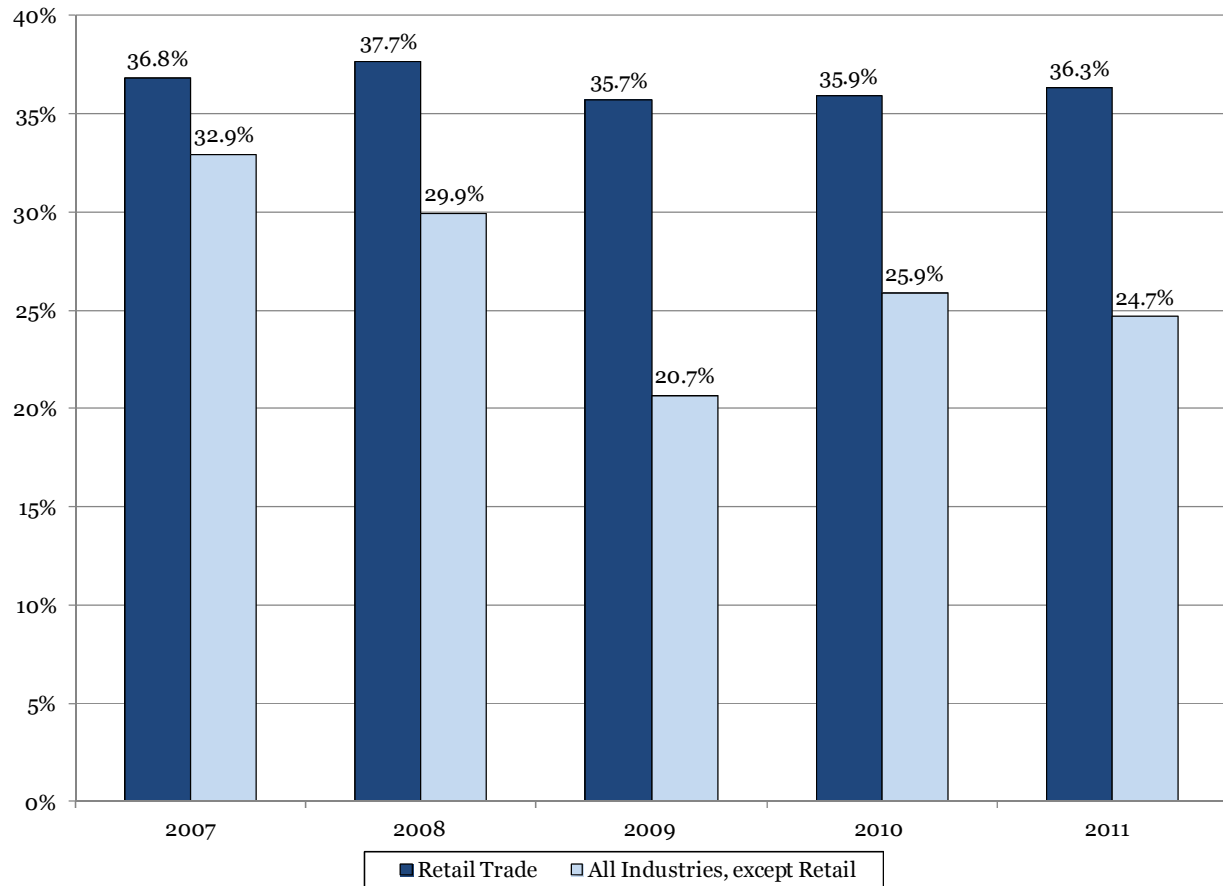
Industry	2007	2008	2009	2010	2011	Weighted Average	
						Rank	Percent
Other Services (except Public Administration)	38.3% (9)	44.1% (9)	40.2% (10)	42.2% (8)	39.0% (10)	1	40.4% (46)
Educational Services	39.8% (13)	43.0% (16)	40.2% (17)	39.7% (17)	37.9% (17)	2	39.6% (80)
Wholesale Trade	37.7% (80)	37.5% (70)	37.3% (70)	38.6% (78)	36.6% (73)	3	37.5% (371)
Retail Trade	36.8% (103)	37.7% (80)	35.7% (97)	35.9% (99)	36.3% (92)	4	36.4% (471)
Transportation and Warehousing	37.5% (38)	38.0% (37)	33.7% (32)	37.3% (40)	34.2% (36)	5	36.1% (183)
Accommodation and Food Services	25.2% (32)	32.3% (25)	46.5% (30)	35.9% (32)	33.8% (33)	6	35.4% (152)
Arts, Entertainment, and Recreation	40.5% (8)	42.2% (8)	43.3% (7)	20.5% (8)	36.1% (7)	7	35.1% (38)
Admin., Support, Waste Management, and Remediation Services	35.0% (37)	39.2% (30)	32.8% (38)	37.6% (39)	30.0% (44)	8	34.6% (188)
Health Care and Social Assistance	36.9% (44)	33.5% (45)	34.2% (42)	25.5% (41)	35.5% (31)	9	32.8% (203)
Information	35.8% (135)	35.5% (123)	28.4% (153)	33.1% (175)	27.6% (162)	10	32.1% (748)
Mining, Quarrying, and Oil and Gas Extraction	32.4% (63)	36.0% (55)	25.5% (35)	25.3% (65)	32.5% (65)	11	31.3% (283)
Construction	35.8% (16)	39.5% (16)	28.6% (16)	16.2% (20)	32.1% (20)	12	30.2% (88)
Agriculture, Forestry, Fishing and Hunting	30.9% (6)	33.0% (5)	28.4% (5)	23.5% (6)	30.2% (4)	13	29.2% (26)
Finance and Insurance	35.1% (117)	23.0% (92)	27.2% (125)	27.4% (145)	28.4% (129)	14	28.4% (608)
Real Estate and Rental and Leasing	25.9% (45)	22.6% (35)	30.0% (33)	33.1% (35)	25.6% (35)	15	27.2% (183)
Manufacturing	33.1% (647)	32.7% (542)	16.9% (529)	27.5% (682)	25.3% (627)	16	26.5% (3,027)
Professional, Scientific, and Technical Services	30.8% (74)	28.5% (66)	27.9% (78)	20.5% (84)	24.9% (78)	17	26.0% (380)
Utilities	26.3% (146)	12.3% (139)	5.6% (142)	2.8% (144)	0.6% (142)	18	9.4% (713)
All Industries*, except Retail	32.9% (1,512)	29.9% (1,314)	20.7% (1,362)	25.9% (1,621)	24.7% (1,515)		26.6% (7,324)
All Industries*	33.4% (1,615)	30.8% (1,394)	22.3% (1,459)	27.0% (1,720)	26.0% (1,607)		27.8% (7,795)

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

*All industries average includes companies not assigned to any particular industry.

Source: PwC calculations based on data from S&P's Compustat® North America database.

Figure B-4—Domestic Financial Statement Effective Tax Rate, FY 2007-2011



Source: PwC calculations based on data from S&P's Compustat® North America database.

Table B-5—Domestic Current Financial Statement Tax Rate by Industry, FY 2007-2011

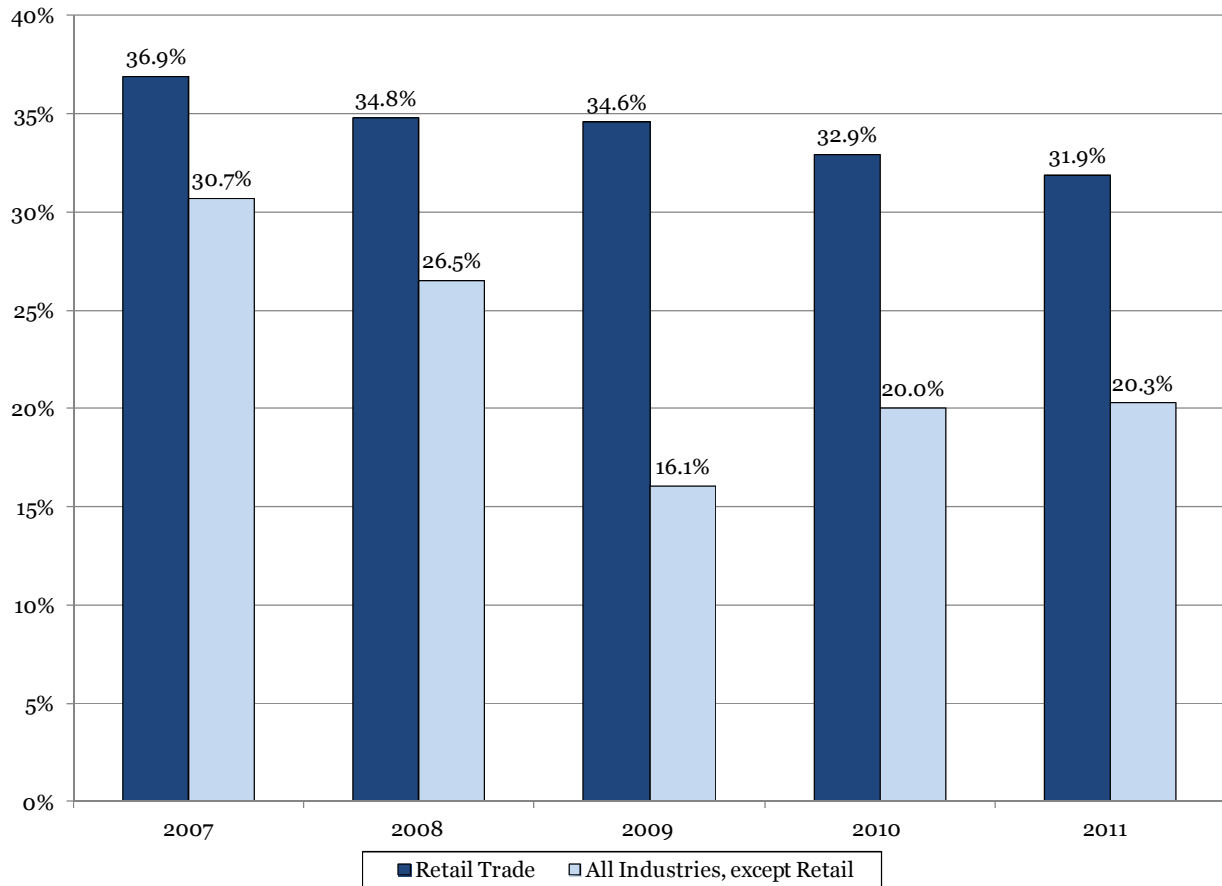
Industry	2007	2008	2009	2010	2011	Weighted Average	
						Rank	Percent
Educational Services	36.7% (13)	43.0% (16)	40.7% (17)	42.1% (17)	32.7% (17)	1	38.7% (80)
Retail Trade	36.9% (103)	34.8% (80)	34.6% (97)	32.9% (99)	31.9% (92)	2	34.2% (471)
Health Care and Social Assistance	34.3% (44)	28.1% (45)	31.0% (42)	34.1% (41)	29.5% (31)	3	31.5% (203)
Wholesale Trade	32.0% (79)	33.3% (70)	29.8% (69)	32.2% (77)	30.0% (73)	4	31.4% (368)
Construction	41.4% (15)	35.8% (16)	26.4% (16)	16.8% (20)	33.7% (20)	5	30.5% (87)
Accommodation and Food Services	28.7% (32)	29.0% (25)	18.5% (30)	39.5% (32)	30.8% (33)	6	29.0% (152)
Admin., Support, Waste Management, and Remediation Services	31.6% (37)	31.4% (30)	31.6% (38)	30.5% (39)	21.5% (44)	7	29.0% (188)
Arts, Entertainment, and Recreation	44.8% (8)	36.0% (8)	27.2% (7)	5.3% (8)	19.5% (7)	8	26.8% (38)
Information	32.6% (135)	31.1% (123)	22.2% (153)	23.6% (175)	23.6% (162)	9	26.6% (748)
Finance and Insurance	33.6% (117)	28.7% (92)	26.1% (125)	20.4% (145)	25.5% (129)	10	26.2% (608)
Agriculture, Forestry, Fishing and Hunting	41.4% (6)	33.4% (5)	21.5% (5)	17.9% (6)	20.0% (4)	11	25.8% (26)
Manufacturing	31.6% (647)	31.1% (541)	13.5% (529)	23.5% (682)	23.9% (627)	12	24.1% (3026)
Other Services (except Public Administration)	27.3% (9)	15.1% (9)	20.5% (10)	20.4% (8)	24.9% (10)	13	22.3% (46)
Transportation and Warehousing	22.5% (38)	23.3% (37)	13.3% (32)	19.8% (40)	19.4% (36)	14	19.8% (183)
Professional, Scientific, and Technical Services	27.3% (74)	15.3% (66)	15.7% (78)	13.4% (84)	16.3% (78)	15	17.1% (380)
Mining, Quarrying, and Oil and Gas Extraction	26.8% (63)	21.0% (55)	5.1% (35)	11.4% (65)	8.5% (65)	16	16.3% (283)
Real Estate and Rental and Leasing	17.2% (44)	12.9% (34)	15.2% (33)	16.2% (35)	13.6% (35)	17	15.2% (181)
Utilities	26.6% (146)	11.2% (139)	4.8% (142)	2.4% (144)	0.1% (142)	18	9.0% (713)
All Industries*, except Retail	30.7% (1,509)	26.5% (1,312)	16.1% (1,361)	20.0% (1,620)	20.3% (1,515)		22.5% (7,317)
All Industries*	31.4% (1,612)	27.5% (1,392)	18.0% (1,458)	21.6% (1,719)	21.6% (1,607)		23.8% (7,788)

Note: Number of observations in parentheses. Weighted average of companies with positive pretax income.

*All industries average includes companies not assigned to any particular industry.

Source: PwC calculations based on data from S&P's Compustat® North America database.

Figure B-5—Domestic Current Financial Statement Tax Rate, FY 2007-2011



Source: PwC calculations based on data from S&P's Compustat® North America database.