

The provision for income taxes differs from the amount computed by applying the statutory federal income tax rate as follows (in millions):

	Year Ended		
	April 26, 2019	April 27, 2018	April 28, 2017
Tax computed at federal statutory rate	\$ 266	\$ 366	\$ 218
State income taxes, net of federal benefit	16	18	8
Foreign earnings in lower tax jurisdictions	(84)	(108)	(100)
Stock-based compensation	(19)	(23)	16
Research and development credits	(17)	(10)	(8)
Resolution of income tax examinations	(48)	—	—
Domestic production activities deduction	(13)	(7)	(4)
Global minimum tax on intangible income	22	—	—
Tax rate changes	—	108	5
Non-taxable gain on joint venture formation	(14)	—	—
Transition tax	(5)	732	—
Other	(5)	7	5
Provision for income taxes	<u>\$ 99</u>	<u>\$ 1,083</u>	<u>\$ 140</u>

We generated foreign earnings in lower tax jurisdictions primarily related to income from our European operations.

In February 2019, the Internal Revenue Service completed the examination of our fiscal 2012 to fiscal 2013 income tax returns. During fiscal 2019, we recognized a tax benefit of \$48 million attributable to the effective settlement and the release of related tax reserves.

On December 22, 2017, the Tax Cuts and Jobs Act (TCJA) was enacted into law. The TCJA made significant changes to the U.S. corporate income tax system including a reduction of the U.S. federal corporate income tax rate from 35% to 21%, the imposition of a one-time transition tax on deferred foreign earnings, and the creation of new taxes on certain foreign-sourced earnings. ASC 740, Income Taxes, requires companies to recognize the effect of the tax law changes in the period of enactment. However, the SEC staff issued Staff Accounting Bulletin 118, which allowed companies to record provisional amounts during a measurement period not to extend beyond one year from the TCJA enactment date.

As a result of the U.S. federal corporate income tax rate change, effective as of January 1, 2018, we remeasured our deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future periods. During fiscal 2018, we recorded \$108 million of tax expense related to all tax rate changes. Upon finalization of our provisional estimates during the third quarter of fiscal 2019, we recorded tax expense of \$6 million related to deferred tax assets for equity-based compensation awards to our executives.

The TCJA imposes a mandatory, one-time transition tax on accumulated foreign earnings and profits not previously subject to U.S. income tax at a rate of 15.5% on earnings to the extent of foreign cash and other liquid assets, and 8% on the remaining earnings. In fiscal 2018, we recorded a \$732 million discrete tax expense for the estimated U.S. federal and state income tax impacts of the transition tax. In the third quarter of fiscal 2019, we finalized our computation of the transition tax and recorded a reduction of \$5 million to our provisional estimate.

As of April 26, 2019, we have completed the accounting for the tax impacts of the TCJA, however, we will continue to assess the impact of further guidance from federal and state tax authorities on our business and consolidated financial statements, and recognize any adjustments in the period in which they are determined.

Under the TCJA, the global minimum tax on intangible income (GMT) provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. Under U.S. GAAP, companies are allowed to make an accounting policy election to either (i) account for GMT as a component of tax expense in the period in which a company is subject to the rules, or (ii) account for GMT in a company's measurement of deferred taxes. We have elected to recognize the GMT as a period cost and thus recorded \$22 million of tax expense for federal and state impacts for fiscal 2019.

In October 2016, the FASB issued an ASU which eliminates the deferred tax effects of intra-entity asset transfers other than inventory. As a result, tax expense from the sale of an asset in the seller's tax jurisdiction is recognized when the transfer occurs, even though the pre-tax effects of that transaction are eliminated in consolidation.

During fiscal 2017, we adopted a new accounting standard that simplifies stock-based compensation income tax accounting and presentation within the financial statements and recorded a tax charge of \$18 million following the post-adoption rules which require that all excess tax benefits and deficiencies from stock-based compensation be recognized as a component of income tax expense.

The components of our deferred tax assets and liabilities are as follows (in millions):

	April 26, 2019	April 27, 2018
Deferred tax assets:		
Reserves and accruals	\$ 50	\$ 57
Net operating loss and credit carryforwards	139	131
Stock-based compensation	16	22
Deferred revenue	205	156
Other	16	29
Gross deferred tax assets	426	395
Valuation allowance	(123)	(109)
Deferred tax assets, net of valuation allowance	303	286
Deferred tax liabilities:		
Prepays and accruals	31	21
Acquired intangibles	32	29
Property and equipment	31	25
Other	10	14
Total deferred tax liabilities	104	89
Deferred tax assets, net of valuation allowance and deferred tax liabilities	\$ 199	\$ 197

The valuation allowance increased by \$14 million in fiscal 2019. The increase is mainly attributable to corresponding changes in deferred tax assets, primarily foreign tax credit carryforwards and certain state tax credit carryforwards.

As of April 26, 2019, we have federal net operating loss and tax credit carryforwards of approximately \$2 million and \$3 million, respectively. In addition, we have gross state net operating loss and tax credit carryforwards of \$25 million and \$138 million, respectively. The majority of the state credit carryforwards are California research credits which are offset by a valuation allowance as we believe it is more likely than not that these credits will not be utilized. We also have \$4 million of foreign net operating losses, and \$43 million of foreign tax credit carryforwards generated by our Dutch subsidiary which are fully offset by a valuation allowance. Certain acquired net operating loss and credit carryforwards are subject to an annual limitation under Internal Revenue Code Section 382, but are expected to be realized with the exception of those which have a valuation allowance. The federal, state, and foreign net operating loss carryforwards and credits will expire in various years from fiscal 2020 through 2038. The California research credit and Dutch foreign tax credit carryforwards do not expire.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	Year Ended		
	April 26, 2019	April 27, 2018	April 28, 2017
Balance at beginning of period	\$ 348	\$ 218	\$ 216
Additions based on tax positions related to the current year	11	131	7
Additions for tax positions of prior years	26	—	7
Decreases for tax positions of prior years	(35)	(1)	—
Settlements	(54)	—	(12)
Balance at end of period	\$ 296	\$ 348	\$ 218

As of April 26, 2019, we had \$296 million of gross unrecognized tax benefits, of which \$252 million has been recorded in other long-term liabilities. Unrecognized tax benefits of \$246 million, including penalties, interest and indirect benefits, would affect our provision for income taxes if recognized. As a result of U.S. tax reform, we recorded provisional gross unrecognized tax benefits of \$114 million during fiscal 2018.

We recognized a benefit for adjustments to accrued interest and penalties related to unrecognized tax benefits in the income tax provision of approximately \$4 million in fiscal 2019 and expense of \$5 million in each of fiscal 2018 and 2017. Accrued interest and penalties of \$18 million and \$22 million were recorded in the consolidated balance sheets as of April 26, 2019 and April 27, 2018, respectively.