



**FISCAL
FACT**
No. 644
Mar. 2019

Tax Treatment of Worker Training

Erica York
Analyst

Key Findings

- Education and training are investments in human capital and, over time, increase productivity and economic growth as human capital accumulates.
- Research shows that human capital investment and accumulation leads to widespread economic gains for individuals, firms, and economies.
- Tax treatment affects decisions to invest in human capital and can lead to distortions in the decision-making process for both firms and individuals. Currently, firms and individuals can deduct certain types and amounts of human capital investments, while individuals have access to some tax credits.
- Several proposals exist to expand the deductibility of, or even to subsidize, human capital investments. Many of these proposals point to factors such as positive externalities and the skills gap as reasons to improve tax treatment.
- Lawmakers ought to consider streamlining or consolidating existing provisions, and strive to make new proposals simple, efficient, easy to administer, and neutral.

The Tax Foundation is the nation's leading independent tax policy research organization. Since 1937, our research, analysis, and experts have informed smarter tax policy at the federal, state, and local levels. We are a 501(c)(3) nonprofit organization.

©2019 Tax Foundation
Distributed under
Creative Commons CC-BY-NC 4.0

Editor, Rachel Shuster
Designer, Dan Carvajal

Tax Foundation
1325 G Street, NW, Suite 950
Washington, DC 20005

202.464.6200

taxfoundation.org

Introduction

Education and training are investments in human capital that can increase productivity over time, similar to the way investments in physical capital, such as machinery and equipment, can increase productivity. However, while physical capital accumulation can occur quickly, human capital accumulation occurs over a longer period.¹

The tax treatment of different types of investments, such as those in research and development (R&D), physical capital, and human capital, varies. R&D expenses are immediately deductible and eligible for tax credits. Many physical capital investments are immediately deductible. Only certain categories of human capital investments are deductible for firms and individuals, and some credits are available for individuals.

Currently, employers can deduct certain qualified education and training expenses for tax purposes, and certain qualified educational benefits are excludable from the taxable portion of employees' wages. Generally, at the firm level, only education expenses which improve worker skills for their current positions are deductible. If the education would qualify workers for a new type of work, the expenses are not deductible. At the individual level, the tax treatment of educational expenses varies by income level and type of education.

These differences are important because tax treatment is relevant to human capital investment decisions,² and human capital accumulation is a key driver of economic growth.³ Differing tax treatment can distort costs of investments and decision-making by firms and individuals.

Several proposals exist to expand the deductibility of education and training expenses and to subsidize these expenditures by creating a tax credit. These proposals should be evaluated in the context of neutrality, externalities, and other policies which affect education and training.⁴

This paper reviews background information about human capital investment, how taxation affects human capital decisions, tax treatment across various jurisdictions, and proposals which would change the tax treatment of human capital investment in the United States.

Background on human capital investment

Human capital investment and accumulation leads to widespread gains for individuals, firms, and economies; however, as noted earlier, human capital accumulation does not occur quickly. The amount that a company spends on education and training can be thought of as a form of investment.

1 Robert J. Barro, "Human Capital and Economic Growth," Federal Reserve Bank of Kansas City, 1992, 204, <https://www.kansascityfed.org/publicat/sympos/1992/s92barro.pdf>.

2 Carolina Torres, "Taxes and Investment in Skills," OECD Publishing, Sept. 17, 2012, <https://www.oecd-ilibrary.org/docserver/5k92sn0qv5mp-en.pdf?expires=1541711985&id=id&accname=guest&checksum=9A12B5C137E1092337D6CEDB684135C5>.

3 Rui Costa, Nikhil Datta, Stephen Machin, and Sandra McNally, "Investing in People: The Case for Human Capital Tax Credits," Centre for Economic Performance, February 2018, <http://cep.lse.ac.uk/pubs/download/is01.pdf>.

4 Note that the federal government administers 47 job training programs (as of 2011). This paper does not specifically address these programs; however, at least some research indicates they may not be an effective way to boost wages or create jobs. Deductibility at the firm level for human capital investment is likely a better alternative. See Matthew D. Mitchell and Tamara Winter, "Helping Displaced Workers without Corporate Welfare," Mercatus Center, May 2, 2018, <https://www.mercatus.org/bridge/commentary/helping-displaced-workers-without-corporate-welfare>.

Under a neutral tax system, all investment expenses would be immediately deductible, including business investment in worker education and training and individuals' investments in their own education.⁵ Thus the correct tax treatment for human capital investment is deducting the training expenses and taxing the higher income levels that accrue due to training.

Workers with higher levels of educational attainment tend to earn higher wages and experience lower rates of unemployment. For example, in 2017, the unemployment rate and median usual weekly earnings across all workers was 3.6 percent and \$907, respectively; for workers with a bachelor's degree, these were 2.5 percent and \$1,173, respectively.⁶ Employer-supported training has benefits for employees and firms: it can raise employees' wages or improve their job stability, and increase firm productivity or decrease turnover.⁷

Similarly, employer-provided training, whether formal or informal, has been shown to have positive effects on worker productivity and wages. In one study, hours of training were shown to be positively related to productivity and wage growth; the effects of formal training were much larger than those for informal training.⁸ Likewise, formal training has a positive effect on labor productivity.⁹

While this evidence shows the benefits of educational attainment and worker training at the individual level, there are also benefits to firms. For example, formal employee training programs can bring below-average firms up to the performance level of comparable businesses.¹⁰

However, some research indicates there may be underinvestment in human capital which contributes to the so-called skills gap. One reason why firms may underinvest is due to the public good component of training. For example, if Company A trained a worker in a skill, that could increase the return to all companies if the skill was transferable. To the extent that the skills obtained by training would be transferable to competitors, firms may underprovide training.

Workers in many industries need to regularly update their skills as the constant development of new technologies and processes results in new methods of production.¹¹ For example, by 2020, more than one-third of the core skill sets of most occupations will be skills that are not considered crucial to today's workforce.¹² These rapid changes indicate a need for continual training.¹³

5 If portions of education-related expenditures represent consumption, rather than investment, then deductibility would not be the appropriate tax treatment. See Erica York, "Evaluating Education Tax Provisions," Tax Foundation, Feb. 20, 2019, <https://taxfoundation.org/education-tax-provisions/> and Gerald Prante, "Education Tax 'Subsidies' – Justified or Not?" Tax Foundation, May 13, 2008, <https://taxfoundation.org/education-tax-subsidies-justified-or-not/>.

6 U.S. Bureau of Labor Statistics, *Employment Projections*, March 27, 2018, <https://www.bls.gov/emp/chart-unemployment-earnings-education.htm>.

7 Linda Levine, "Employer-Provided Training," Congressional Research Service, May 3, 2000, <http://congressionalresearch.com/RL30546/document.php?study=EMPLOYER-PROVIDED+TRAINING>.

8 Harry J. Holzer, "The Determinants of Employee Productivity and Earnings: Some New Evidence," National Bureau of Economic Research Working Paper No. 2782, December 1988.

9 Ann P. Bartel, "Formal Employee Training Program and Their Impact on Labor Productivity: Evidence From a Human Resources Survey," National Bureau of Economic Research Working Paper No. 3026, July 1989.

10 Ann P. Bartel, "Productivity Gains from the Implementation of Employee Training Programs," National Bureau of Economic Research Working Paper No. 3893, November 1991, 18.

11 Michael D. Farren, "Bridging the Skills Gap," Testimony before the House Small Business Committee, Subcommittee on Economic Growth, Tax, and Capital Access: Examining the Small Business Labor Market, Sept. 7, 2017, 4, <https://www.mercatus.org/publications/bridging-skills-gap>.

12 World Economic Forum, "The Future of Jobs," January 2016, 3, http://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf.

13 Some may contest the skills gap argument; for example, see Andrew Weaver, "The Myth of the Skills Gap," *MIT Technology Review*, Aug. 25, 2017, <https://www.technologyreview.com/s/608707/the-myth-of-the-skills-gap/>. However, regardless of disagreement over the skills gap, worker training remains important, as does communication between businesses and workers about what training is needed.

Recent survey data confirms that firms acknowledge employees lack needed skills; however, it also shows that these same firms are not investing in training programs in a significant way.¹⁴ It seems likely that employers are underinvesting in worker training for several reasons. Firms may have a lower incentive to provide worker training as employees accrue most of the gains from training, which results in increased bargaining power, and because employees can leave for or be poached by competitors.¹⁵

Some evidence suggests human capital may have positive externalities; that is, an individual's human capital accumulation may provide benefits to others, or society at large. Externalities may occur through several channels, such as enhancing the productivity of others, reducing criminal behavior, or improving social cohesion—however, some studies suggest that empirical evidence for positive externalities is weak.¹⁶ This may be because the benefits of education are internalized by individuals or firms in the form of higher returns.

One policy change that may aid employers in recouping the costs of training would be to change its tax treatment.¹⁷ And, given the evidence that employers may be underinvesting in worker training and that there may be positive externalities to training, there may be justification to subsidize worker training beyond allowing deductibility for expenses. However, when weighing these considerations, policymakers should consider the broader context of all worker training and education-related policies, not just tax policy:¹⁸

Solutions that directly tackle market failures or distortive institutional labor market settings that result in human capital underinvestment are generally more efficient than fiscal solutions, such as tax incentives or public subsidies. However, direct solutions may not always be feasible, for example due to political considerations or due to the nature of human capital (e.g., it cannot be used as collateral). Under these circumstances, fiscal incentives may provide a second-best solution.

14 Udey, "Companies See Widespread Skills Gaps, But Most Spend Minimally On Training," March 26, 2015, <https://about.udemy.com/press-releases/companies-see-widespread-skills-gaps-but-most-spend-minimally-on-training/>.

15 Carolina Torres, "Taxes and Investment in Skills," 11.

16 Fabian Lange and Robert Topel, "The Social Value of Education and Human Capital," Revised Sept. 2004, 2-3, <https://economics.yale.edu/sites/default/files/files/Workshops-Seminars/Labor-Public/lange-041105.pdf>.

17 Caleb Watney, "Reducing Entry Barriers in the Development and Application of AI," R Street, Oct. 9, 2018.

18 Carolina Torres, "Taxes and Investment in Skills," 8.

How taxation affects human capital investment decisions

The decision about whether to invest in education or training depends on the cost and the expected return of a given investment choice. Numerous factors can affect both the cost and the expected return, including taxation.

An OECD report entitled “Taxes and Investment in Skills” outlines seven channels through which taxes impact the incentive to invest in skills formation:¹⁹

(1) the tax treatment of the direct costs (e.g., tuition fees), (2) the tax treatment of savings (or equity), debt, income and fringe benefits (e.g., employer-paid training) used to finance the investment, (3) the (notional) tax treatment of foregone earnings or profits, (4) the (notional) tax treatment of foregone capital income, (5) the tax treatment of gross financial benefits (higher earnings for individuals and higher profits for employers), (6) tax features that provide insurance against the uncertainty of investment returns, and (7) earmarked taxes on employers or tax-like mechanisms that ensure a minimum level of investment in training.

Various tax policies can have opposing effects on human capital investment decisions, and other government or fiscal policies can also affect these decisions.²⁰

Tax treatment in the United States

Generally, in the United States, businesses can deduct most training expenses; certain employer-provided education assistance is excluded from employee wages; and individuals may access a variety of education-related tax provisions.

According to the Internal Revenue Service (IRS), “Ordinary and necessary expenses paid for the cost of the education and training of your employees are deductible.” However, if the expenses are for training that helps the individual to meet minimum requirements of their present trade or business or qualify an individual for a new trade or business, they are not deductible.²¹

If a business pays for or reimburses an employee’s education expenses as part of a qualified educational assistance program, the payments are deductible. Additionally, businesses can exclude up to \$5,250 of educational assistance from an employee’s wages if the expenses occur under a qualified educational assistance program. If the business does not have an educational assistance plan,²² or if the assistance exceeds \$5,250, it must be included in wages unless the benefits are working condition benefits.

¹⁹ Ibid., 6.

²⁰ Ibid., 10.

²¹ Internal Revenue Service, Publication 535, “Business Expenses,” 2017, <https://www.irs.gov/forms-pubs/about-publication-535>.

²² For requirements for a qualifying program see Cornell Law School Legal Information Institute, “26 CFR § 1.127-2 - Qualified educational assistance program,” <https://www.law.cornell.edu/cfr/text/26/1.127-2>.

The IRS explains how training can qualify as working condition benefits in Publication 15-B:²³

To qualify, the education must meet the same requirements that would apply for determining whether the employee could deduct the expenses had the employee paid the expenses. Degree programs as a whole don't necessarily qualify as a working condition benefit. Each course in the program must be evaluated individually for qualification as a working condition benefit. The education must meet at least one of the following tests.

- The education is required by the employer or by law for the employee to keep his or her present salary, status, or job. The required education must serve a bona fide business purpose of the employer.

The education maintains or improves skills needed in the job. However, even if the education meets one or both of the above tests, it isn't qualifying education if it:

- Is needed to meet the minimum educational requirements of the employee's present trade or business, or
- Is part of a program of study that will qualify the employee for a new trade or business.

Individual taxpayers may access a variety of credits, deductions, exclusions, and savings plans for higher education. Most of these provisions apply to only undergraduate and graduate programs, though one tax credit, the Lifetime Learning Credit, may be used for qualifying expenses including jobs skills courses.²⁴

The progressivity of the individual income tax can also impact individual decisions to pursue human capital investments, as these depend in part on the expected return to that investment. Higher marginal tax rates can discourage long-run decisions to invest in education or improve skills.²⁵

Tax treatment across the OECD

As of 2011, 16 countries, including the United States, provide personal income tax relief for work-related professional training. Like the U.S., many countries restrict tax relief to expenses on training directly related to the taxpayer's current employment or job, while only two, Austria and Germany, provide tax relief for training which prepares the taxpayer for a new occupation.²⁶ However, types of training and education which qualify vary across the 16 countries.

23 Internal Revenue Service, Publication 15-B, "Employer's Tax Guide to Fringe Benefits," 2017, <https://www.irs.gov/forms-pubs/about-publication-15-b>.

24 See Erica York, "Evaluating Education Tax Provisions," Tax Foundation, Feb. 20, 2019, <https://taxfoundation.org/education-tax-provisions/>.

25 Garrett Watson, "Ocasio-Cortez's Proposed 70 Percent Top Marginal Income Tax Rate Would Deter Innovation," Tax Foundation, Jan. 14, 2019, <https://taxfoundation.org/ocasio-cortezs-70-percent-tax-rate-deter-innovation/>.

26 Carolina Torres, "Taxes and Investment in Skills," 43.

Corporate income tax treatment across OECD countries is less varied; in 32 countries, training expenditures are generally deductible in the year they occur. Some countries provide additional tax credits or enhanced deductions for the costs of employee training. Twenty-two of the OECD countries, including the U.S., impose restrictions that require expenses to be related to the business activity of the firm to be deductible.

Proposals to change the tax treatment

Lawmakers and others have suggested several ways to improve the tax treatment of worker training in order to encourage additional investment.

One idea is to create a Worker Training Tax Credit, which would be similar in design to the Research and Development Tax Credit.²⁷ A proposal from the Aspen Institute suggests structuring the credit as 20 percent of the difference between an established base level of training expenditures and current year expenditures, allowing small and new businesses to use the credit to offset payroll tax liability.²⁸ A handful of states utilize similar tax incentives for worker training, ranging from 5 percent to 50 percent of training expenses.²⁹

Another policy change would be to allow businesses to deduct all forms of worker training, including those which would qualify individuals for a new position, rather than limiting it to certain types of training or certain degree programs.³⁰ For example, Caleb Watney discusses deductibility in the context of worker shortages in the artificial intelligence field:³¹

Employers may currently deduct a portion of the costs of worker training as long as it is to improve productivity in a role they already occupy, but...employers may not deduct the costs if it would qualify them for a new trade or business. Expanding this deduction—both in size and scope—so that the full cost of worker training for new trades could be deducted would incentivize more investment in building the AI workforce that is needed to fuel our economy. Given the pre-existing level of interest by employers in this strategy, it seems likely this could become a fruitful part of our domestic AI pipeline, if given more support.

Proposals to change the tax treatment for individuals exist as well. Most recently, Senators Amy Klobuchar (D-MN) and Ben Sasse (R-NE) introduced Senate Bill 275, which would provide lifelong learning accounts to pay for education expenses including skills training, apprenticeships, and professional development.³²

27 Alastair Fitzpayne and Ethan Pollack, "Worker Training Tax Credit: Promoting Employer Investments in the Workforce," The Aspen Institute, Aug. 16, 2018, <https://www.aspeninstitute.org/publications/worker-training-tax-credit-update-august-2018/>.

28 The base level "would be determined by averaging the amounts spent in each of the three years prior to the current tax year." See, Alastair Fitzpayne and Ethan Pollack, "Worker Training Tax Credit: Promoting Employer Investments in the Workforce."

29 Ibid.

30 One justification for these limitations may be to prevent deductions for education pursued as a hobby or recreation, or education that may not be related to business activities. Lawmakers would need to consider this aspect as it relates to deductibility.

31 Caleb Watney, "Reducing Entry Barriers In The Development And Application Of AI."

32 Senate Bill 275 116th Congress, "Skills Investment Act of 2019," <https://www.congress.gov/bill/116th-congress/senate-bill/275?q=%7B%22search%22%3A%5B%22S.275%22%5D%7D&s=3&r=1>.

Evaluating proposals

Any proposed change should be evaluated according to the following principles: simplicity, administrability, neutrality, and efficiency.

Simplicity and Administrability

Currently, the tax code is complex and riddled with various provisions designed to promote certain activities or investments. For example, the tax code already contains at least a dozen tax-neutral savings accounts, each with their own rules and restrictions. The creation of an additional tax-neutral savings account for individuals, for example, would add to the tax code's complexity. Rather than adding to that complexity, solutions that would streamline savings options for taxpayers, such as universal savings accounts, should be considered.

Similar arguments apply to the addition of new tax credits. Currently, individual taxpayers can choose from a complex swath of education-related provisions, which leads to suboptimal utilization. On the business side, the existing R&D credit is complex and difficult to parse, which provides an advantage to larger companies that have the resources to devote to legal barriers and leads to wasteful administrative expenditures.³³ Lawmakers ought to evaluate whether additional credits, either for individuals or businesses, would add to the complexity under current law.

Another factor to consider when adding new policies is program administrability. The Internal Revenue Service is not designed to be a benefits administrator, but rather to collect taxes. Enforcement and verification of taxpayer information, such as whether they obtained qualifying education, can be difficult.

Neutrality

Lawmakers should provide neutral tax treatment to all types of investment. This means that expensing provisions should not favor one type of training or education over another, nor one type of capital over another.

Efficiency

While many of the current provisions were designed to increase educational attainment or improve the affordability of higher education, evidence suggests that they are not effectively accomplishing those goals.³⁴ For this reason, new proposals that mirror the structure of current policies should be approached with skepticism. While the intent of a new tax credit or other provision may be positive, the provision may not work as intended.

33 Jose Trejos, "If Retained, R&D Tax Credit Should Be Reformed," Tax Foundation, July 20, 2017, <https://taxfoundation.org/rd-tax-credit-reform/>.

34 Erica York, "Evaluating Education Tax Provisions."

Lawmakers should avoid using the tax code to encourage or discourage certain behaviors, as it is rarely an efficient tool for doing so. Instead, lawmakers should focus on making the tax code neutral, as mentioned above, so tax-induced distortions do not lead to an inefficient allocation of resources.

Conclusion

Human capital accumulation, the result of investments in worker training and education, is a key driver of economic growth in the long run. Tax treatment is one factor that influences decisions to invest in worker training and education. Currently, the tax code allows certain categories of human capital investment to be deducted, while credits are available for others. However, deductibility is rather limited, and provisions available to individuals are underutilized, complex, and inefficient.

When considering policies which would change the tax treatment of human capital investment, it's important for lawmakers to properly account for externalities, neutrality, and interactions with the broader swath of education and training policies already in place. Rather than approaching the tax treatment of worker training in a piecemeal fashion, lawmakers should consider the entire scope of federal policies which relate to human capital investment, including tax rates, credits, deductions, savings plans, and non-fiscal-related policies. Consolidation of overlapping provisions would improve simplicity and administrability. The existing tax treatment of human capital is nonneutral, and reform efforts should work to resolve this. Ideally, all forms of investments should be immediately deductible, while arguments for subsidies should be further examined.