

Net Operating Loss Provisions: State Treatment and the Economic Benefits

FISCAL
FACT
No. 786
Jan. 2022

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Key Findings

- Well-designed Net Operating Loss (NOL) provisions benefit the economy by smoothing business income, which mitigates entrepreneurial risk and helps firms survive economic downturns.
- Forgoing tax revenue in the short term affords businesses the opportunity to prioritize human and physical capital investment.
- Start-ups and industries with profits highly correlated to the business cycle are often harmed by weak NOL provisions.
- NOL provisions promote tax neutrality by reducing additional tax burdens on businesses with highly cyclical income streams or higher exposure to economic downturns.
- The federal government allows NOL provisions to be carried forward indefinitely, and to reduce tax liability by up to 80 percent in any given year. Many states either conform to this provision or provide uncapped 20-year carryforwards, but some are far stingier than the federal government. These states should improve their treatment of NOLs to match or exceed federal allowances.

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Introduction

From the family automobile to the department store, much of the productivity and accessibility known to today's producers and consumers materialized because entrepreneurs like Henry Ford and James Cash Penney took risks. Although more than a century may have passed since Henry Ford premiered his Model T, our lives and our society are still transformed by private sector innovation, and, ideally, the tax code should not stand in the way of that.

For almost every business, large or small, new or old, success (and profits) is realized in fits and starts. It is common for nascent firms not to earn profits in the early years of their existence. That's true of manufacturers—whether creating the first mass market car or pioneering commercial space flight—as well as today's technology start-ups, and most companies in between. Companies whose successes are highly correlated with the business cycle can see significant profits during good years, offset by considerable losses during economic contractions (e.g., hotels, restaurants, resorts). Even well-established firms can fall on hard times as they struggle to compete and innovate.

Unprofitability in the short run is no guarantee a business will fail in the long term, just as profitability in the short term is no guarantee of long-term success. Some innovators require more runway than others, but that should not in itself be reason for grounding. Determining viability is best left to the marketplace where investors, businesses, and consumers efficiently allocate resources.

This is where net operating loss (NOL) provisions come in. By allowing businesses to use losses in one year to offset taxable income in another year, they address the tax treatment of a business' losses, ensuring that taxes are on long-term profitability and reducing the tax code's adverse impact on economic growth. When lawmakers consider the principles of sound taxation—simplicity, stability, neutrality, and transparency—they can provide better conditions for economic efficiency and job creation.

Of all the forces that impact a company's operations and decision-making processes, the tax code should be the least disruptive—something best achieved through a neutral tax code. Well-designed NOL provisions increase the tax code's neutrality by ensuring that entrepreneurs are not unnecessarily punished for taking risks and provide the latitude for innovation. Unfortunately, while many states offer NOL provisions meeting or exceeding those offered by the federal government, a minority of states are remarkably stingy, punishing companies with fluctuating profitability.¹

This paper explains how NOL provisions work by addressing the role they play in promoting economic growth and how they contribute to equity in taxation. The paper concludes by highlighting each state's approaches to NOL provisions and what changes they could make, if any, to improve in that regard.

¹ Those states are Alabama, Arkansas, California, Illinois, Michigan, Minnesota, Montana, New Hampshire, North Carolina, Oregon, Rhode Island, Tennessee, and Vermont.

Overview of Net Operating Losses

When a C corporation determines its federal taxable income for income tax purposes, it starts by deducting business expenses (like supplies, wages, and rent), asset depreciation, and other costs from its gross revenue. If the difference between revenue and all applicable deductions is positive, the company earned a profit, and that corporate income is subject to tax. If the company has more deductions than revenue, the firm operated at a loss and has no income to tax.

The average American would likely be surprised to learn how many landmark companies failed to generate a profit even years after inception. FedEx, a company famous for becoming the world's first overnight shipping group, was founded in 1971. Despite initial enthusiasm surrounding its service, the company proceeded to lose millions of dollars during its first five years of operations due to unforeseen increases in fuel prices.²

Amazon became a publicly traded company in 1997,³ but lost \$2.8 billion over the next four years.⁴ Uber, like FedEx and Amazon, also revolutionized service in its industry. However, despite its popular appeal⁵ and massive revenues,⁶ Uber has not earned a profit since 2018.⁷ In fact, 2018 is the only year Uber has ever reported a profit.⁸

Other entrepreneurial endeavors share these start-up woes. Turner Broadcasting System (which founded CNN), ESPN, Tesla, Netflix, Airbnb, and Peloton all operated or are operating with significant losses several years after their founding.

It is not just technology companies that record regular operating losses. Industries where revenues are highly dependent on fluctuations in the business cycle, like hotels, restaurants, and leisure, can close the year with losses despite making all the right decisions. The same is true for companies in research-intensive industries. Pharmaceutical companies, for instance, may spend years investing hundreds of millions of dollars developing and testing a new drug before completing a viable product approved for public use. Energy companies, likewise, spend significant sums exploring potential energy reserves and developing new extraction or storage technologies.

Firms focused on commodity industries are also prone to annual losses. Agribusinesses fall prey to droughts and disease. Mining explorations may not pan out. Oil and natural gas fields may turn up dry or prove too costly to extract at the market price.

2 Maggie Zhang, "The Founder Of FedEx Saved The Company From Bankruptcy With His Blackjack Winnings," *Business Insider*, July 16, 2014, <https://www.businessinsider.com/fedex-saved-from-bankruptcy-with-blackjack-winnings-2014-7>.

3 Saul Hansell, "TECHNOLOGY; A Surprise From Amazon: Its First Profit," *The New York Times*, Jan. 23, 2002, <https://www.nytimes.com/2002/01/23/business/technology-a-surprise-from-amazon-its-first-profit.html>.

4 Ibid.

5 In the second quarter (April-June) of 2021, Uber completed 1.5 billion trips. See Uber Investor, "Uber Announces Results for Second Quarter 2021," Aug. 4, 2021, <https://investor.uber.com/news-events/news/press-release-details/2021/Uber-Announces-Results-for-Second-Quarter-2021/>.

6 Uber's total revenue in 2019 was \$14.147 billion and \$11.139 billion in 2020. See Yahoo Finance, "Uber Technologies, Inc. (UBER), Income Statement," <https://finance.yahoo.com/quote/UBER/financials/>.

7 Ibid. Uber's net income was -\$8.506 billion in 2019 and -\$6.768 billion in 2020.

8 Uber.com, "2019 Annual Report," Uber.com. February 2020, https://s23.q4cdn.com/407969754/files/doc_financials/2019/ar/Uber-Technologies-Inc-2019-Annual-Report.pdf.

Federal Treatment of NOL Provisions

Under federal law, corporations are permitted to apply past or current losses to future tax liability (carryforwards) with the caveat that the loss may not decrease any future year's tax liability by more than 80 percent. Businesses previously were allowed to apply losses to tax liabilities from the two previous years (carrybacks) and receive a refund for the difference. The advantage of that arrangement was the liquidity it provided a business that operated at a loss. Essentially, the business was able to smooth its income across good years and bad years. Carrybacks were eliminated under the Tax Cuts and Jobs Act (TCJA) of 2017, and the 80 percent cap introduced, in exchange for eliminating the 20-year limit on number of years losses could be carried forward.⁹ While lifting the 20-year limit helps some businesses, overall, the change was intended as a revenue-raiser, paying for other provisions of the TCJA, including the corporate tax rate reduction.

State Treatment of NOL Provisions

NOL provisions have been part of the federal tax code in varying degrees since 1918.¹⁰ When states determine how to treat operating losses, they often use federal taxable income as the starting point. As of 2021, 19 states¹¹ and the District of Columbia conform to federal NOL provisions.¹² By conforming to the federal code, states mimic: 1) the annual loss deduction cap (losses carried forward may not reduce current tax liability by more than 80 percent); 2) the unlimited number of years to which losses can be carried forward; and 3) the prohibition against carrying losses back to offset previous years' tax liabilities.

Thirteen states do not conform to the federal provisions, because they limit carryforward years to 20 and impose no cap on loss deduction.¹³ In these states, businesses may use losses to offset up to 100 percent of the year's tax liability for 20 years provided they have enough losses to carry forward.

Twelve states, however, restrict carryforwards below the 20-year threshold, sometimes well below. Five states—Alabama, Minnesota, North Carolina, Oregon, and Tennessee—permit losses to be carried forward for up to 15 years. Illinois allows unlimited losses for 12 years; Michigan, Montana, New Hampshire, and Vermont 10 years; Arkansas for eight years; and Rhode Island for five years.

Additionally, two states set limits to the amount of loss a company can carry forward. Pennsylvania limits a firm's total carryforward amount to 40 percent of the given loss, deductible over a maximum of 20 years. New Hampshire limits the carryforward amount to \$10 million, deductible over a maximum of 10 years. All told, this makes 13 states with NOL provisions substantially inferior to those offered by the federal government.

⁹ Prior to the Tax Cuts and Jobs Act, losses were allowed to be carried forward for up to 20 years.

¹⁰ Mark P Keightley, "The Tax Treatment and Economics of Net Operating Losses," Congressional Research Service, updated Oct. 19, 2020, <https://crsreports.congress.gov/product/pdf/R/R46377>.

¹¹ These states are Alaska, Colorado, Delaware, Florida, Georgia, Hawaii, Kansas, Kentucky, Maine, Maryland, New Mexico, North Dakota, Oklahoma, South Carolina, South Dakota, Utah, Virginia, West Virginia, and Wyoming.

¹² Jared Walczak and Janelle Cammenga, "2021 State Business Tax Climate Index," Tax Foundation, October 21, 2020, <https://www.taxfoundation.org/2021-state-business-tax-climate-index/#Corporate/>.

¹³ These states are Arizona, Connecticut, Idaho, Indiana, Iowa, Louisiana, Massachusetts, Mississippi, Missouri, Nebraska, New Jersey, New York, and Wisconsin.

TABLE 1.
State NOL Provisions
As of July 1, 2021

	Federal Conformity	State Defined Carryforward Years	State Defined Carryforward Caps
Alabama		15	
Alaska	Yes		
Arizona		20	
Arkansas		8	
California		0	\$0
Colorado	Yes		
Connecticut		20	
Delaware	Yes		
Florida	Yes		
Georgia	Yes		
Hawaii	Yes		
Idaho		20	
Illinois		12	
Indiana		20	
Iowa		20	
Kansas	Yes		
Kentucky	Yes		
Louisiana		20	
Maine	Yes		
Maryland	Yes		
Massachusetts		20	
Michigan		10	
Minnesota		15	
Mississippi		20	
Missouri		20	
Montana		10	
Nebraska		20	
New Hampshire		10	\$10,000,000
New Jersey		20	
New Mexico	Yes		
New York		20	
North Carolina		15	
North Dakota	Yes		
Oklahoma	Yes		
Oregon		15	
Pennsylvania		20	40%
Rhode Island		5	
South Carolina	Yes		
South Dakota	Yes		
Tennessee		15	
Utah	Yes		
Vermont		10	
Virginia	Yes		
West Virginia	Yes		
Wisconsin		20	
Wyoming	Yes		
District of Columbia	Yes		

Source: Bloomberg Tax; state tax statutes and instructions.

Five states, to their credit, continue to allow carrybacks, despite the removal of that component from the federal code. Idaho permits up to \$100,000 of losses to be carried back up to two years. Mississippi and Missouri allow unlimited losses to offset up to two previous years of tax liability. New York also allows unlimited losses to be carried back but extends the application to any tax liability in the previous three years. Montana also uses a three-year carryback rule, but it only allows \$500,000 of losses to be applied over that time.

At present, California has suspended its carryforward provisions for three years, a response to fears of revenue losses due to the COVID-19 pandemic. While the state has instead posted extraordinary surpluses, the NOL suspension has yet to be lifted. Additionally, because profitability is not a factor in gross receipts taxation, NOL provisions do not exist in states which impose a gross receipts tax in lieu of a corporate income tax (Nevada, Ohio, Texas, and Washington).

Why NOL Provisions Are Pro-Growth Policy

Smoothing business income over time is a better reflection of a company's profitability. Imagine a company (Business A) that loses \$1.5 million this tax year but makes \$1 million next year. Without NOL provisions, Business A would not be taxed this year, but would have \$1 million in taxable income next year even though the company is still down \$500,000 over a two-year period.

Structuring the tax code to focus on long-term average income is pro-growth policy, because it affords businesses the opportunity to forgo taxation in the short term in order to promote longevity and facilitate future growth. Shifting the focus to long-term net income gives businesses the benefit of the doubt, permits productive risk-taking, and removes government from the equation of businesses' success.

The Stabilizing Effect of NOL Provisions

A system plagued by uncertainty complicates decision-making and sidelines investment. As employers and shareholders hedge against cost increases and other changes that could harm profitability and market demand, employment opportunities wane and wages plateau. The opposite is also true: stability encourages spending and investment by setting conditions for predictable employment. People are more likely to circulate money through the economy if they believe their employment situation is stable. The greater the uncertainty, the more likely individuals are to save their money—as we have seen during the pandemic.¹⁴ Minimizing uncertainty through stable policies is also an important prerequisite to maximizing meaningful employment.¹⁵ In short, stability in tax policy is one of the more important ways a government can promote better economic expansion.

In practice, stability looks like a predictable tax code that allows businesses to make long-term investment and achieve hiring goals by leveraging well-structured NOL provisions. Governments can promote stability in the marketplace and in the tax base by delaying receipt of corporate tax revenue

¹⁴ Rick Babson, "Study shows surge in savings during the pandemic," Federal Reserve Bank of Kansas City, Apr. 29, 2021, <https://www.kansascityfed.org/ten/2021-spring-ten-magazine/study-shows-surge-in-savings-during-the-pandemic/>.

¹⁵ This is also known as full employment. If an economy has reached full employment, output (gross domestic product, GDP) is maximized as a result of the unemployment rate reaching the lowest level it can achieve without prompting inflation related to widespread wage spikes and labor competition. This is also known as the non-accelerating inflation rate of unemployment (NAIRU).

from firms that operate at a loss in a particular year. By doing this, businesses are given the leeway to succeed or fail on their merits. Likewise, employees are not forced out of work prematurely because an employer is forced to make a trade-off between payroll and tax compliance.

For employers, retention is preferable to layoffs, risking employees turning to competitors, or hiring untrained workers. Employees prefer retention for purposes of income and insurance stability, skill to job match, and self-worth. Taking a long-term approach to net income promotes economic stability and is beneficial for all parties involved.

The Smoothing Effect of NOL Provisions

In addition to mitigating elements of risk, well-structured NOL provisions can help businesses bridge economic downturns. Hospitality and other industries whose profits depend on disposable income or business travelers often do best during periods of economic growth. However, when the economy contracts and people have fewer dollars to spend on discretionary items and travel, these industries' profits also recede. Without NOL provisions (both carryforwards and carrybacks), many more businesses in the hospitality space may have had to shut down last year.

Long-term predictability is important for businesses whose profitability is positively correlated with the business cycle. Decision-makers who do not know when the next recession will occur or how long it will last are helped by knowing that heavier tax burdens during booms can be averaged out during busts.

Long-term stability helps business owners, but it helps employees even more. By factoring NOL provisions into long-term hiring and investment plans, businesses are able to retain workers for a longer period. The smoothing effect of NOL provisions can make the difference between a business laying off workers or keeping them on the payroll. This is good for families, neighborhoods, and communities. It is also better for government to smooth tax receipts over the long run than to watch the tax base erode due to bankruptcies or layoffs.

When a business fails during recession, it often takes significant time for another to replace it. It takes even longer for employment levels to return to normal. Consider the last two recessions: the COVID-19 recession and the Great Recession—the two largest since the Great Depression. According to the Bureau of Labor Statistics, it took approximately six months for private sector establishments to return to their pre-COVID-19 pandemic level.¹⁶ Private sector employment levels lagged much further behind. As of October 2021, the United States economy was still 1.7 million jobs below its pre-pandemic high in February 2020.¹⁷ Similarly, replacement of all private sector establishments lost during the Great Recession, which officially ended June 2009,¹⁸ did not occur until the final months

¹⁶ Second Quarter 2020 saw net loss of 276,000 private business establishments. Net gains were recorded in Third and Fourth Quarter 2020 with 170,000 and 115,000 establishments added, respectively. An additional 146,000 private establishments were added in First Quarter 2021. See Bureau of Labor Statistics, "Number of private sector establishments by direction of employment change, seasonally adjusted," last updated Oct. 27, 2021, https://www.bls.gov/web/cewbd/table5_1.txt.

¹⁷ Bureau of Labor Statistics, "Employment Situation Summary," last updated Nov. 5, 2021, https://www.bls.gov/news.release/archives/empsit_11052021.htm.

¹⁸ National Bureau of Economic Research, "US Business Cycle Expansions and Contractions," last updated July 19, 2021, <https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions>.

of 2013.¹⁹ Additionally, 7.9 million net private sector jobs were lost during the Great Recession. Employment levels did not return to pre-recession levels until the second quarter of 2014.²⁰ Barriers to entry, including start-up costs, risk tolerance, and market volatility, are a few reasons for this. Of course, not every bankruptcy will lead to massive destabilization, but the examples illustrate how important a stable environment is for businesses and workers. When jobs and capital are lost, it can take an extraordinary amount of effort to bring them back.

NOL Provisions Encourage a Diverse Tax Base by Leveling the Playing Field

NOL provisions are also important to ensure fair tax codes and a diverse tax base. Consider the following example of three businesses: a convenience store, a jewelry store, and a hardware store. Each has a different business model, but all earn the same income over 10 years. All stores operate in the same city and in a state that taxes business income at 5 percent and, hypothetically, does not have a NOL provision in its tax code. For simplicity's sake, our three examples are likely pass-through businesses, which benefit from business loss provisions within the individual income tax.

Our example convenience store is well-established. Some people patronize the store for their daily essentials while many others take advantage of low-priced discretionary goods. Many of the store's goods have relatively inelastic demand, meaning that most customers will continue buying the same quantity of goods even as prices increase.²¹ The convenience store owner earns consistent, if somewhat small, profits throughout all periods of the business cycle. After 10 years, he has earned \$500,000 in profits, and his effective tax rate is 5 percent.

The jewelry store in this example is also well-established. It sells a variety of luxury goods with prices ranging from moderate to very expensive. As a result, the store's profits correlate directly with the business cycle. The owner earns large profits during periods of economic growth, but he struggles to break even during economic recessions. After 10 years, the owner has earned \$500,000 in profits, and his effective tax rate is 7 percent.

The hardware store in our example is a relatively young establishment. It carries a wide range of tools, equipment, and other home maintenance goods but can also supply lumber and other materials to builders. Initially, the owner struggled to compete against well-known peers with loyal clientele. The owner lost money her first two years in business but managed to break even the third year. Now that the store is familiar to consumers, it has its own loyal customer base. The store does best during periods of economic growth when new homes are being constructed. As home building slows during recessions, the store does most of its business with homeowners looking to renovate or maintain their existing home. Consequently, the store is still profitable during economic contractions, albeit

¹⁹ Approximately 204,000 establishments were lost during the Great Recession although additional losses occurred outside the official dates determined by the NBER. See Bureau of Labor Statistics, "Number of private sector establishments."

²⁰ See Bureau of Labor Statistics, "Private sector gross job gains and job losses, seasonally adjusted," last updated Oct 27, 2021, https://www.bls.gov/web/cewbd/table1_1.txt.

²¹ Price elasticity relates the percentage change in quantity demanded to the percentage change in price. Elasticity is a function of a consumer's willingness to pay for a good or service which can be affected by such things as need, preference, or substitutability. If a good is price inelastic a 10 percent increase in price would result in a less than 10 percent decrease in the quantity of goods purchased. A good is price elastic when a 10 percent increase in price results in a greater than 10 percent decrease in the quantity of goods purchased. A good is unit elastic if a 10 percent increase in price would be met with a 10 percent decrease in the quantity of goods purchased.

less so than during expansions. After 10 years, the owner has earned \$500,000 in profits and her effective tax rate is 8 percent.²²

TABLE 2.

Effective Tax Rates Without NOL Provisions

Convenience Store			Jewelry Store			Hardware Store		
Year	Profit	5% Tax	Year	Profit	5% Tax	Year	Profit	5% Tax
1	\$50,000	\$2,500	1	\$50,000	\$2,500	1	-\$200,000	\$0
2	\$50,000	\$2,500	2	-\$25,000	\$0	2	-\$100,000	\$0
3	\$50,000	\$2,500	3	\$100,000	\$5,000	3	\$0	\$0
4	\$50,000	\$2,500	4	\$150,000	\$7,500	4	\$150,000	\$7,500
5	\$50,000	\$2,500	5	\$150,000	\$7,500	5	\$150,000	\$7,500
6	\$50,000	\$2,500	6	\$100,000	\$5,000	6	\$150,000	\$7,500
7	\$50,000	\$2,500	7	-\$100,000	\$0	7	\$50,000	\$2,500
8	\$50,000	\$2,500	8	-\$75,000	\$0	8	\$50,000	\$2,500
9	\$50,000	\$2,500	9	\$50,000	\$2,500	9	\$100,000	\$5,000
10	\$50,000	\$2,500	10	\$100,000	\$5,000	10	\$150,000	\$7,500
Total	\$500,000	\$25,000	Total	\$500,000	\$35,000	Total	\$500,000	\$40,000
Effective Tax Rate	5%		Effective Tax Rate	7%		Effective Tax Rate	8%	

Source: Author calculations.

Start-ups and industries with profits highly correlated to the business cycle are often harmed by the absence of NOL provisions. That is depicted in the example above. Despite earning the same profit over the course of 10 years, the jewelry and hardware store owners have effective tax rates that are 2 and 3 percentage points higher, respectively, than the convenience store owner. Moreover, the absence of NOL provisions risks stopping businesses in their tracks before they get a chance to be profitable. The hardware store has a tax liability of \$7,500 in year 4 when it is still \$150,000 from breaking even.

Entrepreneurs consider the tax code when they evaluate starting a business, and many of their decisions are made on the margin. Some people may start their company because they are particularly skilled in a given trade or they want to strike out on their own. Many others make decisions based on cost-benefit analyses. An entrepreneur may prefer to own a hardware store. Perhaps that's what his grandfather did, and it gives him a greater sense of satisfaction. But, if hardware store start-up costs are high and the business model generates higher effective tax rates, he may opt to invest his start-up funds in a convenience store with less overhead and lower effective tax rates. Alternatively, he may even decide the reward is too small to invest anything and instead remain employed by someone else. Moreover, innovators competing for start-up capital, or those who cannot secure outside venture capital, may find a tax code with inadequate NOL provisions particularly onerous.

22 A similar example was set up by Carol Portman, "Net Operating Losses in Illinois and Around the Country: Matching Taxes to the Business Cycle," Taxpayers' Federation of Illinois, October 2021, <https://www.illinoistax.org/index.php/net-operating-losses-in-illinois-and-around-the-country-matching-taxes-to-the-business-cycle-carol-portman/>.

Sidelining investment is suboptimal for two reasons. First, it limits the economy. If an entrepreneur decided to sit on her start-up funds instead of, say, investing them in a new hardware store, the broader community suffers. New jobs are forgone; contractors and homeowners miss out on a convenient supplier of building materials; and the owner's upward mobility is restrained.

The second reason sidelining investment is inefficient is because it narrows the tax base, which can result in a need to increase the tax rate. Absent new businesses, the objects or entities available for taxation are limited. This effectively concentrates the tax burden on fewer taxpayers.

A broad and diverse tax base is important, because invariably certain industries or businesses will fall on hard times. If governments become dependent on a few industries or commodities for funding, revenue streams and services run the risk of disruption when inevitable recessions occur or when goods and services become obsolete. As an example, several localities are struggling to replace funding from taxing cable companies as consumers increasingly are cutting the cord.²³ Diverse tax bases are more likely to weather economic storms and changes to consumer behavior without producing the kind of revenue volatility that could disrupt government services and public goods.

The final drawback to a narrow tax base is the risk of a high tax rate. Essential government services must be funded. To fund these services tax rates on the limited number of taxpayers are necessarily higher than they would be in a jurisdiction with a broad, diverse tax base.

A tax system with robust NOL provisions is a neutral, fairer tax system. Neutrality is one of the foremost principles of a sound tax code. Without NOL provisions, the tax code can intentionally or unintentionally favor one industry or class of business over another. Beyond the concerns of horizontal inequity, industry-biased tax codes are also not in the best interest of governments. Governments are best served by diverse, resilient tax bases facilitated through low barriers to entry and equal treatment.

NOL provisions encourage growth and stability by mitigating risk to vulnerable businesses and by contributing to similar businesses being treated equally by the tax code. In this way they adhere to the policy principle of neutrality. By maintaining a neutral tax code—choosing neither winners nor losers—governments also promote the efficient allocation of resources. The market allocates resources to areas of optimal use when entrepreneurs succeed or fail on their merits—rather than as a result of a non-neutral tax code.

Entrepreneurs are disincentivized from starting a business like the hardware or jewelry stores in the example above if they know they will have to pay more in taxes. While a government may earn more in the short term from limiting or excluding loss carryforwards, that short-run benefit comes with the trade-off of long-term instability.

23 Ulrik Boesen, "Cutting the Cord from Cable Has States Courting New Revenue Streams," Tax Foundation, July 19, 2021, <https://www.taxfoundation.org/streaming-services-tax/>.

Contrast the impact of a NOL provision on the same three businesses from the previous example.

TABLE 3.
Effective Tax Rates with NOL Provisions

Convenience Store

Year	Profit or Loss	Available NOLs	Taxable Income	NOL Carryforward	5% Tax
1	\$50,000	\$0	\$0	\$0	\$2,500
2	\$50,000	\$0	\$0	\$0	\$2,500
3	\$50,000	\$0	\$0	\$0	\$2,500
4	\$50,000	\$0	\$0	\$0	\$2,500
5	\$50,000	\$0	\$0	\$0	\$2,500
6	\$50,000	\$0	\$0	\$0	\$2,500
7	\$50,000	\$0	\$0	\$0	\$2,500
8	\$50,000	\$0	\$0	\$0	\$2,500
9	\$50,000	\$0	\$0	\$0	\$2,500
10	\$50,000	\$0	\$0	\$0	\$2,500
Total	\$500,000				\$25,000
Effective Tax Rate					
					5%

Jewelry Store

Year	Profit or Loss	Available NOLs	Taxable Income	NOL Carryforward	Tax (5%)
1	\$50,000	\$0	\$50,000	\$0	\$2,500
2	-\$25,000	\$0	-\$25,000	-\$25,000	\$0
3	\$100,000	-\$25,000	\$75,000	\$0	\$3,750
4	\$150,000	\$0	\$150,000	\$0	\$7,500
5	\$150,000	\$0	\$150,000	\$0	\$7,500
6	\$100,000	\$0	\$100,000	\$0	\$5,000
7	-\$100,000	-\$100,000	-\$100,000	-\$100,000	\$0
8	-\$75,000	-\$175,000	-\$175,000	-\$175,000	\$0
9	\$50,000	-\$175,000	-\$125,000	-\$125,000	\$0
10	\$100,000	-\$125,000	-\$25,000	-\$25,000	\$0
Total	\$500,000				\$26,250
Effective Tax Rate					
					5.25%

Hardware Store

Year	Profit or Loss	Available NOLs	Taxable Income	NOL Carryforward	Tax (5%)
1	-\$200,000	\$0	-\$200,000	-\$200,000	\$0
2	-\$100,000	-\$200,000	-\$300,000	-\$300,000	\$0
3	\$0	-\$300,000	-\$300,000	-\$300,000	\$0
4	\$150,000	-\$300,000	-\$150,000	-\$150,000	\$0
5	\$150,000	-\$150,000	\$0	\$0	\$0
6	\$150,000	\$0	\$150,000	\$0	\$7,500
7	\$50,000	\$0	\$50,000	\$0	\$2,500
8	\$50,000	\$0	\$50,000	\$0	\$2,500
9	\$100,000	\$0	\$100,000	\$0	\$5,000
10	\$150,000	\$0	\$150,000	\$0	\$7,500
Total	\$500,000				\$25,000
Effective Tax Rate					
					5%

Source: Author calculations.

Conclusion

To encourage responsible entrepreneurial risk-taking and set conditions for economic growth and innovation, states should consider broadening their NOL provisions. California should immediately reinstate its NOL provisions. Additionally, states that limit NOL provisions should, at a minimum, conform to the federal system, which has the added advantage of simplicity through its reliance on federal definitions and calculations.

Alternatively, states which choose not to conform to federal provisions should use the legacy federal limit of 20 years of uncapped carryforwards. An indefinite carryforward period is ideal, because it provides maximum flexibility to businesses. The best NOL policy would also permit unlimited losses to be carried forward. Even relatively limited tax liability (as would result from an 80 percent cap on loss carryforwards) unnecessarily constrains firms' investment decisions after emerging from what could be years of losses.

Loss carrybacks, while not presently part of the federal code, can be helpful provisions for smoothing income and should be considered at the state level. Some may argue that these allowances are a form of corporate welfare, but that critique is misplaced. Loss carrybacks are not a handout. The benefit of a carryback is unique to each individual firm and is limited to the interaction between a business' tax liability and its previous losses.

History is replete with examples of how people are better off—throughout the world—when marketplaces rather than governments are allowed to allocate resources and drive human flourishing. A long-term view of income facilitated by NOL provisions help make that process efficient, and they just might provide the spark that ignites the next century of innovation and growth.