How Expensing for Capital Investment Transforms Project Economics: A Case Study Approach

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Key Findings

- Capital investment can be split into three major categories: equipment, structures, and intellectual property (primarily research and development)
- Allowing capital investment to be immediately deducted eliminates the tax penalty created by delayed deductions, making more capital projects across the economy worth pursuing.
- We assembled 15 hypothetical capital projects across several industries and compared their projected returns under different tax treatments for each category of investment.
- Moving from no expensing for any asset class to full expensing for all asset classes raised most projects' internal rates of return (IRR) by 1 to 2 percentage points, with the largest gains seen among projects with a large share of long-lived assets like structures.
- Moving from no expensing for all asset classes to full expensing for all asset classes moved the average IRR across the 15 case studies by 1.57 percentage points.
- We can also see the effects of the One Big Beautiful Bill Act's (OBBBA) policy changes: post-OBBBA cost recovery policy raises average IRR by 0.88 percentage points.
- These results illustrate both the improvements the OBBBA made and the potential for further improvements.

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Introduction

Encouraging investment in the United States has been a goal of the past several presidential administrations. The Obama administration's stimulus plan (the American Recovery and Reinvestment Act); the House GOP's A Better Way tax reform proposal, which was the initial framework for the Tax Cuts and Jobs Act of 2017; the Biden administration's suite of major legislation (the Infrastructure Investment and Jobs Act of 2021, the CHIPS and Science Act of 2022, and the Inflation Reduction Act of 2022); and both President Trump's tariffs and the One Big Beautiful Bill Act of 2025 have all been justified as ways to encourage reinvestment in the US, especially in the manufacturing sector. One policy that has featured frequently in such proposals is faster cost recovery, permitting companies to immediately deduct a greater share of their investment expenses on their tax returns.

At Tax Foundation, we have used our macroeconomic model to analyze the effects of changes to cost recovery policy.[1] We have consistently found that improvements to cost recovery are the most powerful pro-growth policy options available, as measured by change in long-run GDP relative to revenue lost.[2] The most powerful policy we consider is full expensing, which would allow businesses to deduct all investment immediately.

Our model estimates long-run change in several variables, such as GDP, GNP, the capital stock, wages, and jobs. These variables stand for important concepts—important for the country and important for its people. But these changes can be hard to understand or interpret.

The material impact of a 1.5 percent increase in long-run GDP across the whole US economy is not intuitive. However, at a local level, growth *is* more intuitive: new offices, new factories, new houses, better jobs, higher wages. A change in US GDP represents the sum of all those improvements (or declines) across all communities in the country.

Those changes visible at the community level—in a neighborhood, a town, a metro area—are also aggregations. They are the sum of the actions of millions of individuals and businesses. A broad, economy-wide policy like full expensing provides a slight change to the decision-making structure of those individuals and businesses, making the returns to the new project they are considering just slightly more attractive.

In this paper, we dive to that level. We look at 15 case studies of the kinds of marginal investments, large and small, that a change in cost recovery policy could shift from unviable to viable.

Specifically, we examine how a key measure, the internal rate of return (IRR), changes across five different cost recovery policy scenarios. The results illustrate that cost recovery is an important policy lever that can change marginal investment decisions: quicker cost recovery will increase the number of viable capital investment projects throughout the economy, leading to more investment and more opportunities for workers and business owners alike.

1 Huaqun Li, Garrett Watson, and Erica York, "Overview of the Tax Foundation's General Equilibrium Model," Tax Foundation, Mar. 5, 2025, https://taxfoundation.org/wp-content/uploads/2025/03/ModelMeth25.pdf.

2 See, for instance, Erica York, "Which Provisions of the Tax Cuts and Jobs Act Should Be Made Permanent," Tax Foundation, Jan. 9, 2024, https://taxfoundation.org/blog/tax-cuts-and-jobs-act-permanent/.

Before presenting the case studies, we explain the policy background with a discussion on the importance of investment for economic growth, how taxes affect investment, and the different types of investment and their tax treatment. We then introduce the case studies and our methodology, review the top-line results, and discuss policy implications.

Policy Background

Why Investment Matters

Encouraging investment is a worthy policy goal because it is a long-run driver of economic growth. At the most basic level, economic growth is driven by three inputs: labor (in short, hours worked), capital (physical and intangible tools), and total factor productivity, which includes how output may increase even without additional hours worked or tools. Total factor productivity is sometimes equated with technological change or innovation.

New investment raises worker productivity by increasing the amount of capital per worker, in a process known as capital deepening. For example, a farmer can till more land with a larger tractor, steelworkers can produce more steel with a more powerful furnace, and a statistician can make more sophisticated analysis with more computing power. We care about worker productivity because it drives wages and rising living standards.

The effects of investment on total factor productivity are a more controversial subject. In Tax Foundation's model, we hold total factor productivity constant. The economics literature contains extensive debates over whether policy decisions can materially and measurably change total factor productivity.[3] Some evidence suggests investment can appreciably alter total factor productivity. At the very least, even if investment does not shape technological change, it can shape technological adoption. In other words, while it might not shape the pace of new inventions, it may shape the speed at which they are put into use.[4]

Types of Investment

Investment generally falls into one of three categories. The first is **equipment**: physical machines directly involved in the production process. A classic example of equipment would be a machine tool or lathe used to shape metal at a manufacturing firm. But the definition is far more expansive, including laptop computers, leaf blowers, and even basic fixtures, like chairs or lights.

The second category is **structures**: longer-lived assets also involved in the production process. Office buildings where accountants work, factories that house machine tool operators, warehouses used to store a factory's raw inputs, and storefronts in which final products are sold to final users are all structures.

3 See, for instance, Paul Romer, "The Origins of Endogenous Growth," *Journal of Economic Perspectives* 8:1 (Winter 1994), https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.8.1.3.

4 J. Bradford De Long and Lawrence Summers, "Equipment Investment and Economic Growth: How Strong is the Nexus?," *Brookings Papers on Economic Activity* 2 (1992), https://www.brookings.edu/wp-content/uploads/1992/06/1992b_bpea_delong_summers_abel.pdf; see also Giuseppe Fiori, Colleen Lipa, and William Wu, "Investment as a Source of Productivity Growth," FEDS Notes (2025), https://www.federalreserve.gov/econres/notes/feds-notes/investment-as-a-source-of-productivity-growth-20251015.html.

The third category of investment is **intellectual property products**, which includes research and development (R&D), software development and purchases of software programs used for at least a year, and the production of artistic and entertainment originals (such as books and film and television production). **Research and development** is the largest component of this category, and the one we will focus on in this paper.

How Taxes Affect Investment Decisions

At the most basic level, companies invest when the net present value of an investment is positive. In other words, if the future benefits of a project are greater than its upfront costs, companies will pursue it.

Companies (and individuals) value a dollar today more than they value a dollar a year from now, because with a dollar today, they can invest it (in say a stock or a bond) and expect to have more than one dollar a year from now.

A project's **internal rate of return** is the discount rate at which the present value of its future cash flows equals its upfront cost, or in other terms, the rate needed for a project to break even. If the IRR is higher than a company's hurdle rate (the minimum return it requires before committing capital), the investment is worthwhile.

Taxes can affect investment decisions by changing the IRR. If companies can deduct costs immediately, they realize the full benefit of the tax deduction. But if costs must be spread over time, the future deductions are worth less.[5]

Consider an investment in a new computer system, worth $1,000.

In scenario 1, the company must deduct the computer system over five years. For simplicity, assume straight-line depreciation, where deductions are constant, so the company deducts $200 each year.

Under a 21 percent tax rate, the deductions reduce the company's tax liability by $42 each year, translating to total tax savings of $210 after five years. However, $42 in tax savings in year 2 is worth less than $42 in tax savings in year 1, because the tax savings in year 1 can be reinvested. Assuming a 7 percent annual discount rate, the company realizes only $184.26 in tax savings in present value terms—translating to a $25.74 penalty on the original investment.

5 Robert Hall and Dale Jorgenson, "Tax Policy and Investment Behavior," *American Economic Review* 57:3 (June 1967), https://www.jstor.org/stable/1812110.

Table 1. New Computer System Investment Under Straight-Line Depreciation

Scenario 1	1	2	3	4	5	Total
Deduction	$200.00	$200.00	$200.00	$200.00	$200.00	$1,000.00
Tax Savings (Nominal)	$42.00	$42.00	$42.00	$42.00	$42.00	$210.00
Tax Savings (Discounted)	$42.00	$39.25	$36.68	$34.28	$32.04	$184.26
Tax Penalty						$25.74

Alternatively, consider a scenario with full expensing. In this case, the company would be able to take the $1,000 deduction immediately, thus realizing the $210 in tax savings immediately. In this circumstance, the nominal tax savings equal the discounted tax savings, and there is no tax penalty.

Table 2. New Computer System Investment Under Full Expensing

Under Full Expensing	1	2	3	4	5	Total
Deduction	$1,000.00	$ -	$ -	$ -	$ -	$1,000.00
Tax Savings (Nominal)	$210.00	$ -	$ -	$ -	$ -	$210.00
Tax Savings (Discounted)	$210.00	$ -	$ -	$ -	$ -	$210.00
Tax Penalty						$0.00

Taking investment cost deductions sooner means realizing tax savings faster, which eliminates the tax penalty and raises the IRR. Depending on the project, that change might push the IRR from below the firm's hurdle rate to above it, turning a project that didn't clear the hurdle rate under slower cost recovery into one worth pursuing. Importantly, while allowing immediate expensing eliminates a tax penalty, it does not create a tax subsidy or purely tax-motivated investment.

In practice, corporate hurdle rates vary substantially, both between firms and across time. Individual firms may even have different hurdle rates for different types of projects depending on their risk.[6]

Tax Treatment of Asset Types

The three categories of investment types have faced varying tax treatment over time, including significant changes in recent legislative packages.[7]

Equipment has a long history of bonus depreciation: larger upfront deductions, with remaining costs depreciated over time under Modified Accelerated Cost Recovery System (MACRS) rules, which assign equipment asset lives ranging from 3 to 20 years. Congress first enacted bonus depreciation at 30 percent in 2002 and has repeatedly expanded, lapsed, and revived it in the two decades since, as Figure 1

6 Ibid; see also Niels Joachim Gormsen and Kilian Huber, "Corporate Discount Rates," *American Economic Review* 115:6 (June 2025), https://kilianhuber.github.io/website/GormsenHuberCDR.pdf.

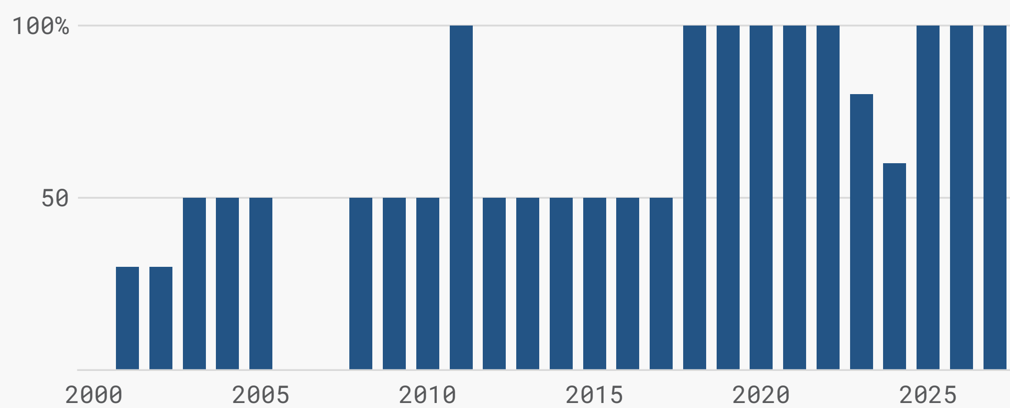
7 It may not always be the case that asset categories for tax purposes align with economic definitions. The most common issue pertains to structures versus equipment: the line between a structural component of a building and a piece of necessary production equipment is often fuzzy.

shows. The Tax Cuts and Jobs Act (TCJA) increased it to 100 percent from late 2017 through 2022, after which the eligible share phased down each year until the One Big Beautiful Bill Act of 2025 (OBBBA) restored 100 percent bonus depreciation permanently.

Figure 1.

100 Percent Bonus Depreciation Is Not New, but Permanence for It Is

Bonus Depreciation Percentage by Year, 2000-2027



Note: some policy changes took place midyear; the graph shows the policy status for investment undertaken July 1.
Source: H.R. 1, One Big Beautiful Bill Act; Erica York, Huaqun Li, Daniel Bunn, Garrett Watson, and Cody Kallen, "The Economic, Revenue, and Distributional Effects of Permanent 100 Percent Bonus Depreciation," Tax Foundation, Aug. 30, 2022.

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After substantial changes in the 1980s, the tax treatment of structures has been stable, with the last major change coming in 1993 when the asset life of commercial structures increased from 31.5 years to 39 years.[8] The 2016 House GOP blueprint for tax reform centered around full expensing for all capital investment, including structures. Expensing for structures was dropped relatively early in the legislative process, and the TCJA ultimately passed with minimal changes to the tax treatment of structures.

The OBBBA introduced full expensing for a narrow subcategory of structures that are designated as qualified production property.[9] This provision, referred to as manufacturing structures expensing, provides a substantial improvement in tax treatment. Determining exactly what qualifies as qualified production property has proven to be an administrative challenge, and the provision is temporary: to be eligible, facilities must both begin construction between January 19, 2025, and January 1, 2029, and enter service between July 4, 2025, and January 1, 2031. The short time frame may undercut what would otherwise be a large improvement in cost recovery treatment.

8 Alex Muresianu, "1980s Tax Reform, Cost Recovery, and the Real Estate Industry: Lessons for Today," Tax Foundation, Jul. 23, 2020, https://taxfoundation.org/research/all/federal/1980s-tax-reform-cost-recovery-and-the-real-estate-industry-lessons-for-today/.
9 Alex Muresianu and Garrett Watson, "What to Expect from the New OBBBA Expensing for Manufacturing Structures," Tax Foundation, Oct. 27, 2025,

R&D was fully expensed for several decades. However, the TCJA introduced R&D amortization starting in 2022, under which domestic R&D investment costs had to be spread over 5 years, and foreign R&D investment costs had to be spread over 15 years. The OBBBA reintroduced full expensing for domestic R&D, but retained 15-year amortization for foreign R&D.

Table 3. Tax Treatment of Assets Under Current Law

	R&D	Equipment	Residential Structures	Nonresidential Structures
Tax Treatment	Domestic R&D is fully expensed when it occurs.	Equipment is eligible for 100 percent bonus depreciation when placed in service.	Residential structures must be deducted over 27.5 years when placed in service.	Nonresidential structures must be deducted over 39 years when placed in service.
Notes or Exceptions	Foreign R&D must be amortized over 15 years.	Some equipment is ineligible.	Applies to rental housing.	Structures involved in manufacturing may be expensed, provided construction begins between Jan. 19, 2025, and Jan. 1, 2029, and enters service before Jan. 1, 2031.

Source: Tax Foundation research.

Introducing the Case Studies

We present 15 case studies that examine how the IRR changes across five different cost recovery policy scenarios. The results illustrate that cost recovery is an important policy lever that can change marginal investment decisions: quicker cost recovery will increase the number of viable capital investment projects throughout the economy, leading to capital deepening and more opportunities for workers and business owners alike.

The 15 case studies span four industry groups:

- Group 1: Energy and Supply Chain Infrastructure (Utility-Scale Natural Gas Plant, Natural Gas Pipeline, Package Sorting Facility, Solar Farm)
- Group 2: Manufacturing (Aerospace Parts Factory Expansion, New Gas Turbine Factory, Steel Minimill)
- Group 3: Technology (Data Center, Semiconductor Fab, Warehouse Robotics R&D, New Drug Development)
- Group 4: Services (Quick-Service Restaurant, Supermarket, Apartment Building, Limited-Service Hotel)

For each project, we calculate the IRR under five policy scenarios to illustrate how changes to cost recovery policy impact the project's returns, moving from a baseline scenario of depreciation deductions for all types of investment and incrementally adding expensing for each category until all types of investment are expensed.

Table 4. Tax Treatment for Different Assets Under Different Scenarios

Scenario	R&D	Equipment	Structures
1	5-year amortization	MACRS	MACRS
2	Full expensing	MACRS	MACRS
3	Full expensing	Full expensing when placed in service	MACRS
4	Full expensing	Full expensing when placed in service	Full expensing when placed in service
5	Full expensing	Full expensing when investment occurs	Full expensing when investment occurs

Note: We assume all R&D is domestic.

The fifth case is somewhat experimental. Generally, IRS capital cost recovery rules are based on when an asset enters revenue-earning service, not when it is acquired. For big construction projects, costs might be incurred in one year and not deducted until several years later when the structure eventually enters service, which reduces the value of the investment deduction even under expensing.

Each case study includes additional details that contextualize both the underlying economics of the project and how tax policy might shape it.

Table 5. Key Terms for Each Case Study

Term	Definition
Upfront Capital Cost	All depreciable costs associated with bringing the facility into operation. All examples exclude land. Presented in real (Year 1) dollars.
Cost Segregation	How costs would be depreciated under MACRS rules and, if relevant, R&D amortization. Presented in real (Year 1) dollars.
Reinvestment	The timing and magnitude of new physical capital and R&D investment needed during a facility's operating life, alongside the cost segregation for it. Presented in real (Year 1) dollars.
Operations	When a facility enters revenue-generating service, roughly how capital costs are distributed before it enters revenue-generating service, and the kinds of revenues and operating costs it generates. Revenues and operating costs are presented in real (Year 1) dollars.
Operating Costs	Includes direct cost of goods sold (materials and labor) and overhead (sales, general, and administrative [SG&A] costs); excludes depreciation and amortization.
Time Frame	The years in which the project is active, along with the residual value of the project. The residual value may be subject to recapture. Residual value is presented in real (Year 1) dollars.
Internal Rate of Return	The discount rate at which the present value of a project's future cash flows equals its upfront cost. The IRR is nominal, so it includes the impact of inflation.

Methodology

When putting these case studies together, we faced a core trade-off. On one hand, we wanted them to be as technically specific and accurate as possible. That is the core motivation for the project, after all: to provide real, rather than illustrative, examples of how capital cost recovery changes might lead a company to actually move forward with new investments.

On the other hand, we wanted to make the case studies as simple as possible. Corporate financial statements and tax returns are dense, and it would be unreasonable to include that level of detail for the 15 different business units in this report. Additionally, the inclusion of *too much* detail in each case study might obscure the effects of the variable (cost recovery policy) we are assessing.

Relatedly, while we consulted with industry experts on background, we did not access precise company data on specific projects or intend to match our cases to existing or potential facilities. We did not rely on any company's internal projections of any existing projects to produce our case studies; instead, we combined the scale and approximate ratios of key inputs for types of projects from a variety of sources to design representative hypotheticals.[10]

We built each case study on simplified discounted cash flow models. In actual cases, firms would weigh different scenarios, such as different trends in electricity prices, labor costs, or other idiosyncratic factors, to put together a set of several possible IRRs and then weigh those scenarios by probability to come up with a point estimate. For simplicity's sake, we've boiled that down to a single point estimate. The pharmaceutical R&D case, where most outcomes involve failure, uses a probability-weighted model instead.

The deductibility of interest expense is a tax policy issue relevant for companies making the decision to invest, but it is not considered in this report. Project IRR only looks at the underlying characteristics of a project, with the matter of financing coming secondarily.

To make the case studies easily comparable, we made the policies only change one thing: the cost recovery of capital investments. We capture the effects of the policy changes holding things like revenue and operating costs constant. However, in the real economy, all kinds of changes happen at once.

In economist speak, this is the difference between partial equilibrium and general equilibrium. Incorporating general equilibrium effects, not just partial equilibrium effects, might strengthen (or weaken) the IRRs for different case studies under different scenarios.

One example would be rent. We would expect introducing expensing for commercial structures to reduce commercial rents at the margin (at least relative to a counterfactual). That would hold across categories—from retail to office to short-term rentals. Lower rent costs might slightly dull the effects of expensing for structures on the IRR for Case Study 15, the limited-service hotel. On the other hand, it might slightly boost the IRR for Case Study 11, the new pharmaceutical R&D project. That case has no standalone structures investment of its own, but reducing rents for commercial space, including laboratories, might reduce the costs associated with it.

10 A few case studies build from publicly available cost segregation studies from KBKG.

These sorts of dynamics are why we usually rely on a general equilibrium model, not case studies, for policy analysis. Second- or third-order effects could shape project returns, and it would be impractical to try to account for all potential effects for the purposes of this project.

One possible exception is cases where facilities produce capital equipment or building materials. Expensing lowers the after-tax price of purchasing that equipment, so it is a relatively simple calculation to see how expensing might change the demand for a particular product and accordingly cash flow and IRR.

To incorporate this dynamic, we include an appendix entry that incorporates demand feedback into the analysis for four of the projects covered in the report: the aerospace parts factory expansion, the new gas turbine factory, the steel minimill, and the semiconductor fab.

Core Assumptions

Full financial details for each case study are available in the appendix, but here we explain assumptions that apply across all case studies.

We assume each project is being undertaken by a company that has significant taxable income and tax liability elsewhere in the business, so even when a specific project has negative income in a given year, it still produces proportional tax savings for the company.

For instance, in Case Study 15, the limited-service hotel has an upfront capital cost of $25 million. Full expensing with placed-in-service rules would permit the hotel to deduct all $25 million immediately, but if the hotel did not have enough revenue to fully absorb the deduction, it would simply lead to a loss that has to be carried forward over time. Instead, we assume in all cases that companies have enough profits from other operations to fully absorb immediate deductions, generating immediate tax savings. Otherwise, without enough profits, the companies would not be able to immediately realize tax savings.[11]

We assume any residual income from selling the project is treated as taxable corporate income under existing depreciation recapture rules. We do not consider how the use of like-kind exchanges might be used to limit those liabilities. We also do not consider the potential effects of the book minimum tax, also known as the corporate alternative minimum tax (CAMT), nor industry-specific or activity-specific tax credits (in the case of the latter, the exclusion is to avoid obscuring the impact of cost recovery changes).

Under all scenarios involving MACRS, we assume companies would utilize the half-year convention. We are able to capture the differences in cost recovery timing at the year level, but not at the sub-year level.

11 In practice, companies do not always have other taxable income to offset. If a company starts a large capital project, it might end up in a loss position and have negative taxable income, which would not generate a parallel tax rebate. Companies in this position have a few options. Companies could enter some kind of tax equity deal, where another party with taxable income to spare partners with the investing company and benefits from the tax deductions. That option comes with transaction costs.
Companies could also take advantage of loss carryforwards, carrying their unused deduction forward to offset up to 80 percent of taxable income in any future year. Carryforwards create a similar issue to taking depreciation deductions over time, in that pushing tax savings into further years reduces the present value and undermines the economic benefits of full expensing over economic depreciation. The issue of firms in loss positions is serious and explains a large share of non-uptake of 100 percent bonus depreciation. See John Kitchen and Matthew Knittel, "Business Use of Section 179 and Bonus Depreciation, 2002-2014," Office of Tax Analysis Working Paper 110 (October 2016), https://home.treasury.gov/system/files/131/wp-110.pdf.

We assume a constant 2 percent annual rate of inflation. The IRRs presented as results are nominal. However, in each case study description, we put the other key terms into real dollars to provide a constant picture of a facility's operations and investment. For example, in nominal terms, we project the aerospace factory parts expansion produces revenues of $70.04 million in Year 4 and $117.21 million in Year 30. But that increase over time is reflective of general inflation, not real growth. Accordingly, we describe the facility as producing $66 million of revenue (in real, Year 1 dollars) annually in the case study entry.

Sensitivity Analysis: Operating Cash Flow Margin

Because looking at a single point estimate can potentially create a skewed perspective, we include a sensitivity analysis for each project. A project might have very thin margins, where a small fluctuation in labor costs moves the IRR by several percentage points. Tax policy changes might look significant on paper, but in practice, swings in other variables could swamp them.

To illustrate, we included one alternate scenario for each case study: operating costs high enough to reduce the operating cash flow margin by half a percentage point. If a shift that small wipes out the impact of major tax policy changes, tax policy probably isn't the deciding factor for that kind of project, even if the IRR moves substantially.

A word of caution: one should not extrapolate the size of the IRR effects of expensing on a particular project to the effects of expensing on that industry in aggregate. Just because one kind of marginal investment becomes much more attractive does not necessarily mean many marginal investments fit that description across the industry or the economy.

Results

Across all 15 cases, moving from the baseline scenario of MACRS depreciation plus R&D amortization to full cash flow-based expensing for all assets raised the IRR by 1.57 percentage points on average.

That incremental change is consistent with how expensing affects the broader economy. Expensing is not intended to make a handful of investments that are wildly uneconomical under MACRS rules suddenly attractive. Instead, it makes many investments across the economy marginally more worth pursuing, tipping more projects from "pass" to "build."

Table 6. IRRs by Case Study and Scenario

	MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
Solar Farm	11.31%	11.31%	12.32%	12.38%	12.54%
Utility-Scale Natural Gas Plant	11.93%	11.93%	13.13%	13.35%	13.68%
Natural Gas Pipeline	12.63%	12.63%	13.95%	14.00%	14.29%
Package Sorting Facility	11.71%	11.71%	12.23%	13.16%	13.43%
Aerospace Parts Factory Expansion	13.95%	14.53%	15.35%	15.70%	15.76%
New Gas Turbine Factory	14.43%	14.49%	15.53%	16.39%	16.53%
Steel Minimill	10.04%	10.04%	10.54%	11.27%	11.56%
Data Center	9.77%	9.77%	10.56%	11.24%	11.37%
Semiconductor Fab	12.46%	12.64%	13.35%	13.53%	13.73%
Warehouse Robotics R&D	14.90%	15.47%	15.62%	15.62%	15.63%
New Drug Development	14.98%	15.44%	15.44%	15.44%	15.44%
Quick-Service Restaurant	9.11%	9.11%	9.48%	11.04%	11.04%
Supermarket	9.86%	9.86%	10.32%	12.24%	12.24%
Apartment Building	9.51%	9.51%	9.75%	11.08%	11.21%
Limited-Service Hotel	9.45%	9.45%	9.55%	11.01%	11.13%
Average	11.74%	11.86%	12.47%	13.16%	13.31%

Expensing improves IRRs across most of the case studies by between 1 and 2 percentage points. The largest changes come when longer-lived assets make up a larger share of the upfront costs, which aligns with how 39-year assets face a larger penalty than shorter-lived assets under the MACRS baseline.

Comparing case studies within sectoral categories is also illustrative. The aerospace parts factory expansion is an incremental expansion to capacity at an existing facility, meaning it requires a lot of equipment and relatively less 39-year property. On the other hand, the new gas turbine factory involves a new building, even though it is tied to an existing larger facility. Accordingly, more of the gas turbine case study costs are 39-year property, and the impact of expensing relative to MACRS is more pronounced. This difference explains why the new gas turbine factory's IRR increases by 2.11 percentage points, while the aerospace parts factory expansions' IRR increases by 1.81 percentage points.

Across the 15 case studies, we can also examine how the OBBBA's changes affect project IRRs.

The base case of R&D amortization plus MACRS rules for equipment and structures reflects what tax policy would have looked like in 2027 if the OBBBA had not passed and bonus depreciation had fully phased out after 2026. Instead, in 2027, businesses will be able to fully deduct domestic R&D and equipment investment. Additionally, some structures will be eligible for full expensing if they meet the definition of qualified production property.

Table 7. Tax Treatment of Assets in 2027: Pre- vs. Post-OBBBA

	R&D	Equipment	Structures
Pre-OBBBA	5-year amortization for domestic R&D; 15-year amortization for foreign R&D	MACRS rules	Nonresidential structures must be deducted over 39 years; residential structures must be deducted over 27.5 years
Post-OBBBA	Expensing for domestic R&D; 15-year amortization for foreign R&D	100 percent bonus depreciation is available	Same as pre-OBBBA, but with temporary expensing available for manufacturing structures

Ultimately, the average difference between the IRRs of projects under the assumptions of MACRS depreciation and R&D amortization and the OBBBA policy mix of expensing for domestic R&D, 100 percent bonus depreciation for equipment, and (temporary) expensing for manufacturing structures is around 0.88 percentage points. That is slightly over half of the difference between the all depreciation and amortization scenario and the full expensing for all assets scenario. That shows that the OBBBA made significant progress towards full expensing, and that there is plenty more work to be done.

Table 8. How OBBBA Cost Recovery Changes Influenced the Economics of Sample Capital Projects

	Before OBBBA	After OBBBA
Utility-Scale Natural Gas Plant	11.93%	13.13%
Natural Gas Pipeline	12.63%	14.00%
Package Sorting Facility	11.71%	12.23%
Solar Farm*	11.31%	12.32%
Aerospace Parts Factory Expansion	13.95%	15.70%
New Gas Turbine Factory	14.43%	16.39%
Steel Minimill	10.04%	11.27%
Data Center	9.77%	10.56%
Semiconductor Fab	12.46%	13.53%
Warehouse Robotics R&D	14.90%	15.62%
New Drug Development	14.98%	15.44%
Quick-Service Restaurant	9.11%	9.48%
Supermarket	9.86%	10.32%
Apartment Building	9.51%	9.75%
Limited-Service Hotel	9.45%	9.55%
Averages	11.74%	12.62%

*Note: Does not consider the effects of OBBBA changes to the clean electricity investment tax credit or clean electricity production tax credit.

Policy Recommendations

The case studies show that the OBBBA's improvements to cost recovery—that is, permanent 100 percent bonus depreciation, domestic R&D expensing, and temporary expensing for manufacturing structures—captured roughly half of the potential IRR gains from full expensing for all assets across the case studies we examined.

Policymakers could capture the remaining improvements in two ways. The first is extending full expensing to the assets currently excluded: make manufacturing structures expensing permanent, extend full cost recovery to all structures, and restore expensing for foreign-sited R&D. The second is removing the barriers that keep firms from realizing the full benefit of expensing they qualify for on paper but not in practice: the loss-position problem, which transferability or safe harbor leasing would address, and placed-in-service timing rules, which a cash flow standard would address.

Permanence for Manufacturing Structures Expensing

To qualify for manufacturing structures expensing, construction must start before January 1, 2029, and must enter service before January 1, 2031. For certain projects with long and complex construction processes, like a semiconductor fab, the relatively short window of eligibility may make the incentive inaccessible. Making the provision permanent would create a stable incentive for investment in manufacturing structures.

Extend Full Cost Recovery to All Structures

The new manufacturing structures deduction only covers a small fraction of nonresidential structures. Buildings like offices, retail shops, hospitals, data centers, and more are not eligible for the new policy. Expanding expensing to all commercial structures would eliminate tax penalties for those industries as well.

Rental residential structures (namely apartment buildings) also face tax penalties under current law. The large impact of expensing for residential structures on the IRR for Case Study 14, the apartment building, is consistent with historical economic evidence of the effects of better cost recovery for residential structures on housing construction. As lawmakers consider options for expanding the housing stock and reducing rents, residential structures expensing is a powerful option.

One political hurdle for introducing expensing for structures is the upfront revenue cost. By bringing forward deductions originally spread across several decades, immediate expensing for all structures would have a very large transitional revenue cost, even though over time the revenue cost would smooth out.

The alternative is to introduce neutral cost recovery for structures. Under neutral cost recovery, firms still must spread the cost of investment out across the prescribed recovery period, but they adjust the deductions each year for inflation and some interest rate meant to approximate the time value of money. In practice, this policy is nearly economically equivalent to full expensing.

Foreign R&D

The OBBBA reintroduced full expensing for domestic R&D, but it retained 15-year amortization for foreign R&D.

Expensing for foreign R&D might seem tangential to US investment, but it would help US companies in multiple ways. For one, foreign R&D and domestic R&D are often complementary goods. Large multinational companies have teams spread across the world, sometimes specializing in different things. A major project may require investments in both a team in the US focused on one task and a team in (say) Germany focused on another. A tax penalty on investing in the German team would reduce the viability of the overall project.

It also matters for US ownership of foreign assets. Tax penalties for foreign R&D do not necessarily increase domestic R&D investment but instead result in foreign companies funding those foreign R&D ventures. US workers benefit from the international operations of American companies thanks to market access afforded.

Safe Harbor Leasing or Transferability

Even if on paper assets are eligible for full expensing, firms in a loss position cannot take advantage of immediate expensing because they have no in-year taxable income from which to take the deduction. The US has experimented with two similar policies that could overcome this issue.

The most recent policy is transferability, which was applied to tax credits for renewable energy in the Inflation Reduction Act of 2022. The problem of firms in or close to loss positions not being able to access incentives is even more salient for large tax credits than it is for investment deductions.

Before the Inflation Reduction Act, potential beneficiaries of the credits had to enter complex tax equity partnerships with another firm with tax liability to utilize the credits. These partnerships came with significant costs and sapped about 20 percent of the credits. Transferability allows firms to effectively sell their credits to other firms, substantially reducing transaction costs and enhancing the incentive effects of the credits. The same principle could be applied to deductions for capital investments.[12]

The other experiment in this category is safe harbor leasing, which was introduced in 1981. The Economic Recovery Tax Act of 1981 (ERTA) dramatically shortened asset lives and allowed faster cost recovery within those asset lives.[13] Along with those changes, ERTA included safe harbor leasing, which allowed companies with little or no tax liability to "lease" equipment from other firms that could absorb the deductions while still retaining ownership. Safe harbor leasing was curtailed substantially in 1982, but it remains a potent policy for expanding the incentive effects of full deductions for capital investment.[14]

12 Advait Arun and Yakov Feygin, "Leveling the Playing Field," Center for Public Enterprise, Aug. 11, 2025, https://publicenterprise.org/leveling-the-playing-field/.
13 David W. Brazell, Lowell Dworin, and Michael Walsh, "A History of Federal Tax Depreciation Policy," Office of Tax Analysis Paper 64, May 1989, https://home.treasury.gov/system/files/131/WP-64.pdf.
14 Margaret Riley, "Safe Harbor Leasing, 1981 and 1982," Internal Revenue Service Foreign Special Projects Section, https://www.irs.gov/pub/irs-soi/81-82sahale.pdf.

One advantage of neutral cost recovery over expensing, particularly in the case of structures, is that it largely solves the loss position problem by still spreading deductions over time but compensating firms for waiting, without the need for transferability. Similarly, allowing firms to adjust net operating losses generated by a 100 percent depreciation deduction for inflation and a real rate of return could preserve the value of the deductions over time.

Full Cash Flow Base

The final step of improvement would be replacing placed-in-service rules with cash flow-based rules to avoid delays between when firms spend money on investments and when those investments are actually placed in service.

Conclusion

Improvements to cost recovery make a wide array of investments across the economy more viable. The case studies demonstrate those dynamics. The One Big Beautiful Bill Act made substantial improvements to cost recovery, but more opportunities remain for policymakers looking to improve the investment climate in the US.

Case Studies

Group 1: Energy and Supply Chain Infrastructure

These four case studies are all part of the backbone of the US economy: infrastructure. While one might associate infrastructure with the public sector, much of American infrastructure broadly defined is privately owned and operated. The solar farm and the utility-scale natural gas plant generate electricity, while the package sorting facility and the natural gas pipeline help transport goods.

Case Study 1: Utility-Scale Natural Gas Plant

Natural gas is the largest electricity source in the US today, contributing 40 percent of electricity generation in 2025. An independent power producer considers building a new combined-cycle natural gas power plant with a capacity of 627 megawatts.

Upfront Capital Cost: $571.8 million

Cost Segregation (does not sum due to rounding):
- R&D: $0 million
- 5-year: $67.4 million
- 7-year: $17.2 million
- 15-year: $354.0 million
- 20-year: $86.5 million
- 39-year: $46.8 million

Reinvestment:
- $20 million in Year 10 on major maintenance of property
  - 15-year: $20 million
- $60 million in Year 20 to replace major generation equipment
  - 15-year: $60 million

Operations:
- Enters service halfway through Year 4
  - Upfront capital costs concentrated in Year 4
- The plant collects $178.5 million in annual revenue in its first full year of operation (Year 5)
- Operating costs (labor, materials, etc.) are $99 million in Year 5
- Utilization declines over the plant's life as it becomes used less often for baseload power and more often to serve peak demand
- Initially, the plant generates operating cash flow of $79.5 million, but cash flow declines in real terms as utilization declines
- Operating cash flow margins also decline slightly, from 44.5 percent to 43.2 percent, throughout the plant's life

Time Frame:

- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $60 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
11.93%	11.93%	13.13%	13.35%	13.68%

A natural gas-fired power plant includes no R&D, so R&D expensing makes no difference. Equipment expensing has a powerful effect, raising the IRR by over 1 percentage point, taking the project from unviable at 12 percent to viable even at 13 percent. Expensing for structures does not provide a massive lift, but thanks to the facility's long construction timeline, moving to a cash flow-based system improves IRR.

Sensitivity Analysis: Operating Margin Reduced from Range of 44.5%-43.2% to 44.0%-42.7%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
11.79%	11.79%	12.97%	13.19%	13.52%

While lower operating margins throughout the facility's operations do reduce the IRRs, the overall trajectory of the IRRs changes little. However, the change in margins is sufficient to make the project unviable at 13 percent under the expensing for R&D and equipment scenario.

Policy Notes:
This facility would not be eligible for the new expensing for manufacturing structures provision. We assume this facility is built by an independent power producer, not a regulated public utility, and therefore retains eligibility for bonus depreciation.

Case Study 2: Natural Gas Pipeline

An energy infrastructure company is considering opening an intrastate pipeline connecting natural gas deposits to a major distribution hub. From the distribution hub, natural gas may be transported to domestic industrial users, natural gas-fired power plants, or liquefaction facilities to prepare it for export.

Upfront Capital Cost: $3 billion

Cost Segregation:
- R&D: $0 million
- 5-year: $240 million
- 7-year: $150 million
- 15-year: $2,550 million
- 39-year: $60 million

Reinvestment:
- $540 million in Year 12, Year 21, and Year 30 on major pipe maintenance and replacement of compressors and other equipment
- 5-year: $240 million
- 7-year: $150 million
- 15-year: $150 million

Operations:
- Enters service halfway through Year 4
  - Upfront capital costs weighted toward Year 3 and Year 4
- The pipeline brings in an additional $510 million in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $100 million annually
- Generates $410 million in operating cash flow per year

Time Frame:
- 40 years
- Residual value of the facility's physical assets at the end of 40 years: $300 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
12.63%	12.63%	13.95%	14.00%	14.29%

While R&D expensing does not move the needle for a pipeline, adding equipment expensing makes a huge difference, raising the IRR by over 1 percentage point. Expensing structures has a tiny impact on the IRR, but it is sufficient to make the project viable under a 14 percent hurdle rate. It is notable that moving to a strict cash flow basis provides a more substantial boost to the pipeline's viability than introducing expensing for structures does. This gap is driven by significant improvements expenditures coming for several years before the pipeline enters service.

Sensitivity Analysis: Operating Margin Reduced from 80.4% to 79.9%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
12.55%	12.55%	13.86%	13.91%	14.20%

The reduced operating margins only reduce IRRs by a couple of basis points. However, this slight change in margins would make the pipeline no longer viable at a 14 percent hurdle rate under the scenario with full expensing for all and placed-in-service rules.

Policy Notes:

Some aspects of the natural gas pipeline may be eligible for the manufacturing structures provision.

Case Study 3: Package Sorting Facility

A major logistics company considers building a new package sorting facility to expand its network. This new location will serve two purposes: providing better service locally to bring in new local customers and driving savings in the rest of the firm's distribution network.

Upfront Capital Cost: $325 million

Cost Segregation:
- R&D: $0 million
- 5-year: $162.5 million
- 7-year: $8.1 million
- 15-year: $24.4 million
- 39-year: $130 million

Reinvestment:
- $153 million in Year 12 and Year 21 on replacing major sorting equipment and other machinery
  - 5-year: $130 million
  - 7-year: $8 million
  - 15-year: $15 million

Operations:
- Enters service halfway through Year 3
  - Upfront capital costs concentrated in Year 3
- The facility brings in an additional $134.9 million in incremental cash flow, including both increased local sales and savings across the network
- Operating costs (labor, materials, electricity, etc.) are $88 million
- Generates $47 million in operating cash flow per year

Time Frame:
- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $160 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
11.71%	11.71%	12.23%	13.16%	13.43%

The project includes no R&D, so introducing R&D expensing makes no difference in project IRR. Expensing for equipment is enough to raise the IRR over 12 percent. Expensing for structures provides a larger boost, which is unsurprising given that 39-year property makes up a significant share of the overall cost, making the project viable at 13 percent.

Sensitivity Analysis: Operating Margin Reduced from 34.8% to 34.3%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
11.51%	11.51%	12.01%	12.93%	13.18%

The thinner operating margins incrementally reduce IRRs, enough to make the project unviable at 13 percent under the scenario with expensing for all assets and placed-in-service rules.

Policy Notes:
This facility would not be eligible for the new expensing for manufacturing structures provision.

Case Study 4: Solar Farm

Solar is the largest source of new electricity generation capacity added in the US. An independent power producer is considering building a new solar farm with 150 megawatts of capacity. We assume this facility is in an area with good solar resources and relatively high electricity prices.

Upfront Capital Cost: $225.3 million

Cost Segregation (does not sum due to rounding):
- R&D: $0 million
- 5-year: $85.3 million
- 15-year: $124.9 million
- 20-year: $8.7 million
- 39-year: $6.5 million

Reinvestment:
- $13 million in Year 16 replacing the inverter
  - 15-year: $13 million

Operations:

- Enters service halfway through Year 3
    - Upfront capital costs spread over first three years, but concentrated in Year 3
- Brings in an additional $27.76 million in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $3.035 million
- Generates $24.72 million in operating cash flow per year

Time Frame:

- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $50 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
11.31%	11.31%	12.32%	12.38%	12.54%

Adding R&D expensing has no direct effect on a facility with no associated R&D expenses. Adding equipment expensing moves the solar farm from unviable to viable at 12 percent. Expensing for structures has a minimal effect on this project, as a solar farm is predominantly outdoors and involves minimal "shell" construction—only small maintenance buildings. Adding cash flow-based expensing provides a little boost, as significant siting investment comes in years before the project enters service.

Sensitivity Analysis: Operating Margin Reduced from 89.1% to 88.6%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
11.25%	11.25%	12.25%	12.31%	12.46%

Reduced operating margins due to slightly higher costs shift the economics of the facility slightly, but not enough to change headline takeaways. Solar farms operate with high margins as they require minimal operational costs. Unlike fossil fuel plants, which require fuel as well as some ongoing activity to turn that fuel into electricity, solar farms are close to "set it and forget it," only requiring some ongoing maintenance.

Policy Notes

We assume this facility is built by an independent power producer, not a regulated public utility, and therefore retains eligibility for bonus depreciation. The structures portion of the facility's costs would not be eligible for the new expensing for manufacturing structures provision.

We do not consider specific green energy tax credits. For one, we eschew industry-specific tax provisions in this report generally. More importantly, this facility would not be eligible for the investment tax credit and production tax credit unless it entered construction before July 4, 2026, and entered service by December 31, 2027, which is unlikely.

The OBBBA also repealed a specific, longstanding provision that classified all solar energy property as 5-year property under MACRS. Provided a firm is eligible for bonus depreciation, that policy change does not make much of a difference: as long as the property is classified as equipment, it should be deductible immediately. However, given that solar has been classified as 5-year property for so long, it's not immediately clear how costs would be segregated under regular MACRS depreciation rules. Based on existing rules, we split equipment between 5-year and 15-year property.

Group 2: Manufacturing

These three case studies all fall in the manufacturing sector, but they provide useful contrasts with each other. The aerospace parts factory expansion and the new gas turbine factory are more high-tech and involve R&D investment, while the steel minimill produces a primary metal and does not involve R&D. The new gas turbine factory and the steel minimill involve large new buildings, while the aerospace parts factory expansion is mostly redevelopment and retooling.

Case Study 5: Aerospace Parts Factory Expansion

An aerospace company considers expanding production capacity for a particular specialized engine part and ensuring the part can be made compatible with future engine generations. The company would need to expand an existing factory and conduct sustaining R&D during the facility's operation to maintain flexibility.

Upfront Capital Cost: $100 million

Cost Segregation:
- R&D: $25 million
- 5-year: $21 million
- 7-year: $27 million
- 15-year: $15 million
- 39-year: $12 million

Reinvestment:
- $30 million in Year 10 and Year 20 to replace some computer systems and specialized machine tools
  - 5-year: $15 million
  - 7-year: $15 million
- $5 million per year in R&D from Year 4 to Year 25

Operations:
- Enters service halfway through Year 3
  - Upfront physical capital costs concentrated in Year 3
  - R&D concentrated in Years 1 and 2
- The facility brings in an additional $66 million in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $46 million
- Generates $20 million in operating cash flow per year

Time Frame:
- 30 years
- Residual value of the facility's assets at the end of 30 years: $25 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
13.95%	14.53%	15.35%	15.70%	15.76%

Aerospace is an R&D-intensive business, and introducing R&D expensing is enough to shift this factory expansion from unviable to viable at 14 percent. Expensing for equipment pushes the IRR higher, making the factory expansion pencil even at 15 percent. Structures expensing makes some difference as well, even though it does not move the IRR to a new whole number.

Sensitivity Analysis: Operating Margin Reduced from 30.3% to 29.8%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
13.62%	14.19%	14.98%	15.33%	15.38%

The thinner operating margins incrementally reduce IRRs, enough to cause the project to not pencil at 15 percent under the expensing for equipment and R&D scenario.

Policy Notes:
This facility would be eligible for the expensing for manufacturing structures provision.

Case Study 6: New Gas Turbine Factory

The price of a gas turbine has increased by almost 200 percent in recent years, according to Wood Mackenzie.[15] News coverage has focused on the wait times for the largest gas turbines used by natural gas-fired electric power plants, but prices of smaller-scale gas turbines used in industrial operations and to provide local backup power have surged as well. A manufacturer of industrial gas turbines considers whether to respond to these high prices in the short term by building a new production line.

Upfront Capital Cost: $250 million

Cost Segregation:

- R&D: $15 million
- 5-year: $65 million
- 7-year: $71 million
- 15-year: $40 million
- 39-year: $59 million

15 Wood Mackenzie, "Gas Turbine Prices Soar 195 Percent as Market Faces Supply-Demand Crisis," Apr. 1, 2026, https://www.woodmac.com/press-releases/gas-turbine-prices-soar-195-as-market-faces-supply-demand-crisis/.

Reinvestment:

- $120 million in Year 10 and Year 20 providing replacements and major maintenance on key manufacturing equipment
  - 5-year: $55 million
  - 7-year: $65 million
- $3 million in annual R&D until Year 24

Operations:

- Enters service halfway through Year 3
  - Upfront capital costs concentrated in Year 3
- The factory expansion brings in an additional $144 million in annual revenue, initially driven by equipment sales but later supported by aftermarket services
- Operating costs (labor, materials, electricity, etc.) are $97.9 million
- Generates $46.1 million in operating cash flow per year

Time Frame:

- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $50 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
14.43%	14.49%	15.53%	16.39%	16.53%

R&D expensing only has an incremental effect on IRR, as R&D investment is a small portion of the upfront costs. Equipment expensing has a substantial effect, making the project viable at a 15 percent hurdle rate. Structures expensing also has a large impact, moving the IRR by almost 1 percentage point and making the project viable even at a 16 percent hurdle rate. Introducing cash flow-based expensing provides an incremental boost thanks to the long construction timeline.

Sensitivity Analysis: Operating Margin Reduced from 32% to 31.5%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
14.12%	14.19%	15.20%	16.04%	16.18%

The thinner operating margins incrementally reduce project IRR across policy scenarios, but not enough to change viability around any whole-number hurdle rates.

Policy Notes:
This project would be eligible for the new manufacturing structures provision. While it does not have any relevant industry-specific provisions, the R&D tax credit may be relevant for this project, depending on the firm's baseline level of R&D investment.

Case Study 7: Steel Minimill

Rebar steel is primarily used to reinforce concrete and is accordingly used in a variety of construction applications. Unlike higher-grade steel, rebar is usually manufactured by recycling scrap steel in an electric arc furnace. A steel company looks to build a new factory to produce rebar steel, with the capacity to produce 450,000 tons per year, although it will operate at around 80 percent capacity.

Upfront Capital Cost: $420 million

Cost Segregation:
- 5-year: $42 million
- 7-year: $168 million
- 15-year: $63 million
- 39-year: $147 million

Reinvestment:
- $42 million in Year 10 refreshing basic machinery
  - 5-year: $42 million
- $16.8 million in Year 11 for midlife refit of core furnace equipment
  - 7-year: $16.8 million

Operations:
- Enters service halfway through Year 3
  - Upfront capital costs concentrated in Year 3
- Factory brings in an additional $195 million in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $144.3 million
- Generates $50.7 million in operating cash flow per year

Time Frame:
- 20 years
- Residual value of the facility's physical assets at the end of 20 years: $127 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
10.04%	10.04%	10.54%	11.27%	11.56%

This marginal steel minimill includes no R&D investment, so introducing expensing for R&D makes no difference for IRR. While expensing for equipment helps, the larger boost comes when structures expensing is introduced, which pushes the project to be viable at 11 percent. While introducing cash flow-based expensing does not make the project pencil at a higher whole number IRR, it does provide a boost.

Sensitivity Analysis: Operating Margin Reduced from 26% to 25.5%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.81%	9.81%	10.30%	11.02%	11.29%

The thinner operating margins incrementally reduce project IRR across policy scenarios, enough to cause the project to no longer pencil at 10 percent in the base case.

Policy Notes:
This facility would be eligible for the expensing for manufacturing structures provision. This facility also provides a useful illustration of some of its quirks.

One of the key edge cases the IRS highlighted in its interim guidance relates to warehouse property. According to interim guidance, warehouse property on-premises used for storing raw material inputs for qualified production activity qualifies for expensing, while warehouse property used for storing final goods does not.[16] The former is particularly relevant for a rebar mill, which requires some significant storage space for scrap steel.

16 Internal Revenue Service, "Interim Guidance on Special Depreciation Allowance for Qualified Production Property," IRS Notice 2026-16, Feb. 20, 2026, https://www.irs.gov/pub/irs-drop/n-26-16.pdf.

Group 3: Technology

These four case studies are linked together because they are related to highlighted areas of technological innovation. The data center and the semiconductor fab are both tied up in the artificial intelligence boom (the latter could also be categorized as a manufacturer). The pharmaceutical industry is one of the most R&D-intensive industries in the US economy, and it is represented by the new drug development case. Meanwhile, physical automation across applications has a lot of potential: our case is for warehouse robotics R&D, but it could just as easily apply to manufacturing.

Case Study 8: Data Center

Data center construction related to AI development has been a major story, but data centers serve all kinds of purposes in the modern economy. In this example, a large cloud computing provider is considering building a new data center to provide storage and compute services to enterprise customers.

Upfront Capital Cost: $1 billion

Cost Segregation:

- R&D: $0 million
- 5-year: $650 million
- 15-year: $80 million
- 39-year: $270 million

Reinvestment:

- $580 million in Year 8 replacing servers and chips
  - 5-year: $580 million
- $642 million in Year 13, replacing servers and chips as well as batteries
  - 5-year: $642 million

Operations:

- Enters service halfway through Year 3
  - Upfront capital costs concentrated in Year 3
- The data center brings in an additional $220 million in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $40 million
- Generates $180 million in operating cash flow per year

Time Frame:

- 20 years
- Residual value of the facility’s physical assets at the end of 20 years: $250 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.77%	9.77%	10.56%	11.24%	11.37%

An individual data center does not have direct R&D expenses. Adding expensing for equipment investment makes the facility viable at 10 percent, while adding expensing for structures tips the data center into viability at 11 percent. While most of the data center's costs are the chips and the servers, both classified as 5-year property, the structure costs are still significant.

Sensitivity Analysis: Operating Margin Reduced from 81.8% to 81.3%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.64%	9.64%	10.42%	11.10%	11.22%

The thinner operating margins incrementally reduce project IRR across policy scenarios, but not enough to change viability around any whole-number hurdle rates.

Policy Notes:
This facility would not be eligible for the new manufacturing structures expensing provision.

Case Study 9: Semiconductor Fab

Semiconductor fabs are among the largest, most complex manufacturing operations in the modern economy. A multinational semiconductor maker is considering opening a new, advanced memory chip factory that should produce 120,000 wafers per month at a price of slightly over $4,000 per wafer. However, memory chip prices are famously volatile, so the price would likely vary significantly throughout the facility's life. The firm invests significantly in R&D for this project and must continue to conduct sustaining R&D throughout the project's life.

Upfront Capital Cost: $26 billion

Cost Segregation:
- R&D: $6 billion
- 5-year: $14 billion
- 7-year: $1 billion
- 15-year: $3 billion
- 39-year: $2 billion

Reinvestment:

- $3 billion in new lithography equipment every 3 years, from Year 7 to Year 25
  - 5-year: $3 billion
- $1 billion in Year 15 in general refurbishments
  - 7-year: $500 million
  - 15-year: $500 million
- $100 million in annual R&D every year from Year 5 to Year 24

Operations:
- Enters service halfway through Year 4
  - Upfront capital costs spread but concentrated in Year 3 and Year 4
  - R&D spread across pre-operational time frame
- The fab brings in an additional $6 billion in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $1.8 billion
- Generates $4.2 billion in operating cash flow per year

Time Frame:
- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $2 billion

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
12.46%	12.64%	13.35%	13.53%	13.73%

The semiconductor fab involves significant R&D upfront, so R&D expensing improves project viability. Equipment expensing provides a bigger boost, turning the project from unviable to viable at a 13 percent IRR. While 39-year property does not account for a large share of the overall investment given the equipment and improvements intensity of semiconductor manufacturing, introducing expensing for structures still improves IRR. Cash flow-based accounting provides a boost as well, as the long construction timeline means significant structures and equipment investment is made in years before entering operational service.

Sensitivity Analysis: Operating Margin Reduced from 70.0% to 69.5%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
12.35%	12.52%	13.23%	13.41%	13.61%

The thinner operating margins incrementally reduce project IRR across policy scenarios, but not enough to change viability around any whole-number hurdle rates.

Policy Notes:
This facility would be eligible for the new expensing for manufacturing structures provision. We do not consider the effects of the advanced manufacturing investment tax credit, which provides a 35 percent investment tax credit for investment in semiconductor manufacturing.

Case Study 10: Warehouse Robotics Research and Development

A large integrated retailer and distributor with an in-house robotics department considers developing a new generation of package picking and sorting machinery to reduce error rates, improve throughput, and lower labor costs. It will also be able to license out the patent for the new technology for an annual fee.

Upfront Capital Cost: $5.1 billion

Cost Segregation:
- R&D: $3.8 billion
- 5-year: $1.3 billion

Reinvestment:
- None

Operations:
- First machines enter service in year 4
    - R&D costs concentrated in first 3 years
    - Initial equipment investment comes in year 3, rollout of equipment continues until year 6
- By year 7, generates $400 million in patent licensing revenue and $818 million in operating cost savings annually
- The new machines have operating costs of $123 million
- Generates $1.095 billion in operating cash flow per year

Time Frame:
- 20 years
- Residual value of the project's assets at the end of 20 years: $0 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
14.90%	15.47%	15.62%	15.62%	15.63%

The most important move for this project is introducing expensing for R&D, which pushes the project to pencil even at a 15 percent hurdle rate. Expensing for equipment has a smaller, but still significant, effect. The project has no discrete structures costs, so expensing for structures does not move the needle. Moving to cash flow-based expensing has a slight improvement thanks to some equipment investment occurring a year before it is placed in service.

Sensitivity Analysis: Operating Margin Reduced from 89.9% to 89.4%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
14.83%	15.40%	15.55%	15.55%	15.56%

The thinner operating margins incrementally reduce project IRR across policy scenarios, but not enough to change viability around any whole-number hurdle rates.

Policy Notes:
This project has no structures costs directly allocated to it, so the new expensing for manufacturing structures provision would not shift the project's costs directly.

Case Study 11: New Drug Development

A pharmaceutical company considers developing a new therapeutic drug for cardiovascular disease, based on promising initial university research.

This case study requires more context. Pharmaceutical R&D, particularly for a novel drug, is very boom or bust. The odds of a drug making its way all the way through initial development and clinical trials to FDA approval are low; while it varies by drug type, the odds are often 20 percent or less. While other projects might come with risks that, say, operating margins are thinner than expected, a new pharmaceutical project comes with the risk—nay, the likelihood—that it will produce no cash flow at all.

Accordingly, this case study is probability weighted. At each stage, we assume a probability that the development process fails. We assume this company is a research firm that contracts product manufacturing out to a third party and utilizes existing office space and equipment.

Upfront Capital Cost (If Successful): $760 million

Phases of Investment:

- R&D: $760 million
    - Pre-Clinical: $100 million
        - 1 year

  - Odds of occurring: 100%
- Phase 1: $100 million
  - Spread over 2 years
  - Odds of occurring: 95.0%
- Phase 2: $150 million
  - Spread over 3 years
  - Odds of occurring: 49.2%
- Phase 3: $360 million
  - Spread over 2 years
  - Odds of occurring: 36.2%
- Pre-Approval Process: $50 million
  - 1 year
  - Odds of occurring: 30.6%
- Final Approval
- Odds of occurring: 25.8%

Operations:

- Starts earning revenue in Year 10, ramps up to maximum revenue by Year 14
- If the drug is ultimately approved, revenue expected to max out at $960 million per year
  - In probability-adjusted terms, $248.1 million
- Operating costs (the cost of contract manufacturing and distribution) are $307.2 million if successful
  - In probability-adjusted terms, $79.4 million
- Generates $168.7 million in operating cash flow per year in expectation
- Revenue begins phasing down by 2 percent per year starting in Year 22; operating cash flow margin stays fixed at 68 percent

Time Frame:

- 30 years
- Residual value of the facility’s physical assets at the end of 30 years: $0 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
14.98%	15.44%	15.44%	15.44%	15.44%

Since this hypothetical only includes R&D spending, the only policy change to have a direct effect on IRR is R&D expensing. R&D expensing shifts the project IRR up to make the drug development program viable at a 15 percent hurdle rate.

Sensitivity Analysis: Operating Margin Reduced from 68% to 67.5%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
14.92%	15.38%	15.38%	15.38%	15.38%

The thinner operating margins incrementally reduce project IRR across policy scenarios, but not enough to change viability around any whole-number hurdle rates.

Policy Notes:
Given the entire capital costs are focused on R&D, the new manufacturing structures provision would not be directly relevant for this project. The R&D tax credit may be relevant for this project depending on baseline firm levels of R&D investment.

Group 4: Services

While an apartment building, a limited-service hotel, a quick-service restaurant, and a supermarket might not be as splashy as a $25 billion semiconductor fab, investments in services are crucial, particularly in the context of current debates about affordability. For example, new apartment buildings expand the housing supply and lower rents, and a new supermarket can introduce price competition to a local market and reduce grocery costs.

Case Study 12: Quick-Service Restaurant

Restaurants are one of the most common business establishments in the United States. In this example, a fast food company is considering opening a new location with a drive-thru and limited seating. The company will rent the land but build and own the structure. It is in an area with a relatively low cost of living.

Upfront Capital Cost: $1.05 million

Cost Segregation:
- R&D: $0 million
- 5-year: $0.24 million
- 15-year: $0.12 million
- 39-year: $0.69 million

Reinvestment:
- $0.24 million in Year 6 and Year 11 to replace kitchen equipment and appliances
    - 5-year: $0.24 million

Operations:
- Enters service halfway through Year 1
    - All upfront capital costs occur in Year 1
- Revenue slowly ramps up, brings in $800,000 starting in Year 3
- Operating costs (labor, materials, electricity, land rent, etc.) are $637,000 starting in Year 3
- Generates $163,000 in operating cash flow per year

Time Frame:
- 15 years
- Residual value of the facility's physical assets at the end of 15 years: $0.35 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.11%	9.11%	9.48%	11.04%	11.04%

The restaurant only sees variation in three policy scenarios as it involves no R&D investment, and it builds the structure in under a year. Given the project's capital costs are weighed more toward structures and less toward equipment (and that structures face the largest tax penalty), introducing expensing for structures has a large impact, raising the IRR by over 1.5 percentage points and making the project viable at 11 percent.

Sensitivity Analysis: Operating Margin Reduced from 20.3% to 19.8%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
8.71%	8.71%	9.06%	10.56%	10.56%

The reduced operating margin drives the IRRs down significantly across the board— enough to cause the project to no longer pencil at 9 percent in the base case, and to no longer pencil at 11 percent even with expensing for structures in place.

Policy Note:
The structures in this facility would not be eligible for expensing under the new expensing for structures provision.

Case Study 13: Supermarket

According to the Food Industry Association, the United States has more than 45,000 grocery stores. A large grocery store chain is considering opening a new supermarket. It is a new development, and it will rent the land but build and own the new structure.

Upfront Capital Cost: $5 million

Cost Segregation:

- R&D: $0 million
- 5-year: $1.25 million
- 15-year: $0.5 million
- 39-year: $3.25 million

Reinvestment:

- $1.25 million in Year 6 and Year 11 replacing or refreshing major fixtures
  - 5-year: $1.25 million

Operations:

- Enters service halfway through Year 1
  - All capital costs occur in Year 1
- This location brings in $50 million in gross revenue per year while in service

- Operating costs (labor, materials, electricity, etc.) are $49.25 million
- Generates $750,000 in operating cash flow per year

Time Frame:

- 15 years
- Residual value of the facility's physical assets at the end of 15 years: $1.4 million.

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.86%	9.86%	10.32%	12.24%	12.24%

A new grocery store location requires no marginal R&D, so, unsurprisingly, R&D expensing does not move the IRR. Equipment expensing makes the project viable at a 10 percent hurdle rate, but the biggest effect comes with the introduction of expensing for structures, which even makes the project viable at a 12 percent hurdle rate. The relatively short construction timeline of under a year means the cash flow-based expensing makes no difference under our assumptions.

Sensitivity Analysis: Operating Margin Reduced from 1.5% to 1%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
3.65%	3.65%	3.83%	4.56%	4.56%

Reducing the grocery store's margins dramatically shifts the investment's viability, making it effectively unviable regardless of tax policy scenario. This illustrates that while tax changes might move the IRR significantly, other factors may dwarf tax policy in significance for projects like these.

Policy Notes:
This facility is not eligible for the new expensing for manufacturing structures provision.

Case Study 14: Apartment Building

A developer is considering building a new apartment building in a city with a medium cost of living. The building would have 50 units—a mix of studio, 1-bedroom, and 2-bedroom apartments—with the assumption that it would maintain an occupancy rate of 92 percent.

Upfront Capital Cost: $10 million

Cost Segregation:
- 5-year: $0.8 million
- 7-year: $0.5 million
- 15-year: $1.3 million
- 27.5-year: $7.4 million

Reinvestment:
- $1.3 million in Year 10 for basic replacement and refresh of fixtures and appliances
  - 5-year: $0.8 million
  - 7-year: $0.5 million
- $2.5 million in Year 20 for more thorough renovations
  - 5-year: $0.8 million
  - 7-year: $0.5 million
  - 15-year: $1 million
  - 27.5-year: $1.5 million

Operations:
- Enters service halfway through Year 2
  - Upfront capital costs spread fairly evenly between Years 1 and 2
- The apartment building brings in $1.67 million in annual revenue
- Operating costs (labor, materials, electricity, etc.) are $0.584 million
- Accordingly, generates $1.086 million in operating cash flow per year

Time Frame:
- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $3.5 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.51%	9.51%	9.75%	11.08%	11.21%

Given the apartment building includes no R&D investment, introducing R&D expensing does not move the IRR. Expensing for equipment only provides a minor boost to IRR, which is unsurprising given the low share of short-lived assets in the upfront investment. Expensing for structures provides the largest boost, shifting the property from unviable at 10 percent to viable even at 11 percent.

Sensitivity Analysis: Operating Margin Reduced from 65% to 64.5%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.43%	9.43%	9.67%	10.98%	11.11%

While this thinner operating margin only reduces IRR by around 10 basis points across scenarios, it is sufficient to make the project no longer pencil at 11 percent under the full expensing with placed-in-service rules scenario.

Policy Notes:
This facility would not be eligible for the new expensing for manufacturing structures provision.

Case Study 15: Limited-Service Hotel

A large hotel company is considering opening a new budget hotel in a lower-cost metropolitan area. Assume the hotel includes 150 rooms, an occupancy rate of just under 70 percent, and an average rate per occupied room of $120 per night.

Upfront Capital Cost: $25 million

Cost Segregation:
- 5-year property: $4.25 million
- 15-year property: $2.75 million
- 39-year property: $18 million

Reinvestment:
- $1.5 million in Year 7, Year 13, Year 19, and Year 25 on interior refresh and technological upgrades
    - 5-year property: $1.5 million
- $5 million in Year 15 on structural repairs and improvements
    - 15-year property: $2 million
    - 39-year property: $3 million

Operations:
- Enters service halfway through Year 2
    - Upfront capital costs concentrated in Year 2
- Once fully operational, this hotel would generate around $4.57 million in annual revenue
- Operating costs (labor, materials, electricity, land rent, etc.) total around $1.91 million annually
- Generates $2.66 million in operating cash flow per year

Time Frame:
- 30 years
- Residual value of the facility's physical assets at the end of 30 years: $15 million

IRR

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.45%	9.45%	9.55%	11.01%	11.13%

The facility involves no R&D investment, so introducing R&D expensing does not move the IRR. Introducing 100 percent bonus depreciation for equipment inches the IRR up slightly, but expensing for structures has a much larger effect, raising the IRR over 1 percentage point. The large effect of expensing for structures makes sense in a project where structures account for over 70 percent of the upfront capital costs.

Sensitivity Analysis: Operating Margin Reduced From 58.2% to 57.7%

MACRS and R&D Amortization	MACRS and R&D Expensing	MACRS for Structures; Equipment and R&D Expensing	Expensing for All (Placed in Service Rules)	Expensing for All (Cash Flow-Based)
9.37%	9.37%	9.46%	10.90%	11.03%

While this thinner operating margin only reduces IRR by around 10 basis points across scenarios, it is sufficient to make the project no longer pencil at 11 percent under the full expensing with placed-in-service rules scenario.

Policy Notes:
The structures in this facility would not be eligible for expensing under the new expensing for manufacturing structures provision.

Appendix I: The Demand Side

Four projects present clear examples of how changes to cost recovery might change IRR through the demand-side channel as well as the supply-side channel: the new gas turbine factory, the aerospace parts factory expansion, the steel minimill, and the semiconductor fab.

We need to sort out a few points to estimate the demand-side effect of cost recovery changes.

First, what share of a factory's customers benefits from bonus depreciation?
Governments, for instance, do not benefit from 100 percent bonus depreciation. Some regulated utilities are denied bonus depreciation. If some customers are international, they write off expenses according to their own country's capital cost recovery rules, not the United States's, so introducing bonus depreciation in the US won't reduce the tax price of equipment for them. And lastly, if the product goes to an end-consumer (even if it gets treated as inventory by an intermediary firm), better cost recovery for investment does not directly move the needle for those buyers.

Second, what cost recovery schedule is the product subject to?
The cost recovery schedule for the product matters a great deal for the size of the demand-side effect. Expensing for a 5-year asset provides a smaller boost than introducing expensing for a 15-year asset or a 39-year asset.

Third, what is the baseline discount rate and the tax rate?
To determine the change in after-tax price of the asset, we need to have a discount rate to estimate what percentage of the cost potential buyers would be able to recover under MACRS, along with a tax rate. We assume a 7 percent discount rate (comprised of 2 percent inflation and a 5 percent real rate of return) and the current 21 percent federal tax rate.[17]

Fourth, what is the elasticity of demand for the product?
Introducing expensing for an asset that was previously depreciated reduces the after-tax price of that asset. How that change in after-tax price translates into increased sales depends on the elasticity of demand. For the sake of simplicity, we assume an elasticity of demand of 1, so that a decline in the after-tax price of 1 percent increases quantity sold by 1 percent.

Fifth, what is the margin on additional sales?
In some cases, the cost of an additional unit may just be the materials used to produce it, meaning the company makes more money on each additional individual unit, as it can spread the same capital and overhead costs over more units. In other cases (if, for instance, a factory is already running at 100 percent capacity), additional units would require additional capital investment to grow capacity or additional overhead associated with sales or management tasks.

For the sake of simplicity, we assume operating cash flow margin remains the same for additional units, requiring no additional capital investment but keeping the same operating cash flow margin.

17 This is a fairly conservative assumption relative to average reported cost of capital—but we chose a conservative assumption here to offset the potential for overestimating the elasticity of demand.

In Practice

In the case of the steel minimill, rebar steel is used in construction to reinforce concrete. The primary consumer of rebar steel in the United States is public sector infrastructure, like roads and bridges, and expensing does not change investment incentives for those public projects. Some rebar steel is also used in owner-occupied housing, which does not benefit from structures expensing either.

A gas turbine factory has a mix of consumers. For the type of industrial turbine we are considering, a minority (but still a large share) should be foreign firms, with a small share going to public sector agencies.

In the case of the aerospace parts factory, we assume the parts are predominantly used by commercial airliners, not military planes. However, the aerospace industry is highly internationalized, so a share of the sales should go to international buyers.

In the case of a semiconductor fab, governments do not usually buy advanced chips in large volumes, but it is a global market, so a share of the sales should go abroad. Otherwise, we assume the main buyers are domestic data centers and AI firms.

Table 9. Estimating Demand Feedback for Four Case Studies

	Users	Share of Product Eligible for Expensing	Asset Life of Product Under MACRS	Tax Penalty for MACRS (Assuming 21% Tax Rate, 7% Discount Rate)	Total Change in Sales (Eligible Share * Tax Penalty * Elasticity of 1)
Steel Minimill	Governments Private builders Owner-occupied housing	25%	Mostly 39-year, some 27.5-year	13.22%	3.31%
New Gas Turbine Factory	Industrial firms Governments Some foreign businesses	60%	15-year	7.17%	4.30%
Aerospace Parts Factory Expansion	Commercial aviation Some military aviation Some foreign aviation	60%	7-year	3.24%	1.95%
Semiconductor Fab	Cloud and AI Computing Firms Data center developers Some foreign customers	80%	5-year	2.32%	1.85%

With that, we can see how IRRs improve when demand-side effects are factored in.

Steel Minimill

	MACRS and R&D amortization	MACRS and R&D expensing	MACRS for structures; equipment and R&D expensing	Expensing for all (placed in service rules)	Expensing for all (cash flow-based)
Supply Only	10.04%	10.04%	10.54%	11.27%	11.56%
Demand-Side Feedback	10.04%	10.54%	10.54%	11.71%	12.01%

New Gas Turbine Factory

	MACRS and R&D amortization	MACRS and R&D expensing	MACRS for structures; equipment and R&D expensing	Expensing for all (placed in service rules)	Expensing for all (cash flow-based)
Supply Only	14.43%	14.49%	15.53%	16.39%	16.53%
Demand-Side Feedback	14.43%	14.49%	16.45%	17.35%	17.51%

Aerospace Parts Factory Expansion

	MACRS and R&D amortization	MACRS and R&D expensing	MACRS for structures; equipment and R&D expensing	Expensing for all (placed in service rules)	Expensing for all (cash flow-based)
Supply Only	13.95%	14.53%	15.35%	15.70%	15.76%
Demand-Side Feedback	13.95%	14.53%	15.77%	16.14%	16.20%

Semiconductor Fab

	MACRS and R&D amortization	MACRS and R&D expensing	MACRS for structures; equipment and R&D expensing	Expensing for all (placed in service rules)	Expensing for all (cash flow-based)
Supply Only	12.46%	12.64%	13.35%	13.53%	13.73%
Demand-Side Feedback	12.46%	12.64%	13.66%	13.84%	14.05%

Appendix 2: Cash Flow Statements for Each Option (Excel Sheet)

Spreadsheets of the cash flows of each project under pure cash flow assumptions are available for download. Using that data and the description of the project timelines, it is relatively straightforward to reproduce the case studies.