

Appendix O: References

- Agrawal, Ajay, Carlos Rosell, and Timothy Simcoe. 2020. Tax credits and small firm R&D spending. *American Economic Journal: Economic Policy* 12, 2: 1-21.
- Akcigit, Ufuk, John Grigsby, Tom Nicholas, and Stefanie Stantcheva. 2021. Taxation and innovation in the 20th century. National Bureau of Economic Research. Working Paper 24982.
- Akcigit, Ufuk, Emin Dinlersoz, Jeremy Greenwood, and Veronika Penciakova. 2019. Synergizing ventures. National Bureau of Economic Research. Working Paper 26196.
- Alperovych, Yan, Georges Hüber, and Fabrice Lobet. 2015. How does governmental versus private venture capital backing affect a firm's efficiency? Evidence from Belgium. *Journal of Business Venturing* 30, 4: 508-525.
- Atanassov, Julian and Xiaoding Liu. 2020. Can corporate income tax cuts stimulate innovation? *Journal of Financial and Quantitative Analysis* 55, 5: 1415-1465.
- Atkinson, Robert D. and Caleb Foote. 2020. *The 2020 state new economy index: Benchmarking economic transformation in the states*. Information Technology & Innovation Foundation.
- Autry, Greg, Hhuang, Laura, and Jeff Foust, 2014. An Analysis of the Competitive Advantage of the United States of America in Commercial Human Orbital Spaceflight Markets. Futron Corporation.
- Barker, Aaron 2017. *Iowa's innovation fund tax credit: Tax credits program evaluation study*. Iowa Department of Revenue, Tax Research and Program Analysis Section.
- Barkley, David L, Ferdinand DiFurio, and John Leatherman. 2004. The role of a public venture capital program in state economic development: The case of Kansas Venture Capital, Inc. *Journal of Regional Analysis and Policy* 34, 2: 83-106.
- Bartik, Timothy J. 2005. Solving the problem of economic development incentives. *Growth and Change* 36, 2: 139-166.
- Bartik, Timothy J. and Kevin Hollenbeck. 2012. An analysis of the employment effects of the Washington high technology business and occupation (B&O) tax credit. Upjohn Institute Working Paper 12-187. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Bartik, Timothy J. 2019. *Making sense of incentives: Taming business incentives to promote prosperity*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Becker, Bettina. 2015. Public R&D policies and private R&D investment: A survey of the empirical evidence. *Journal of Economic Surveys* 29, 5: 917-942.
- Berk Consulting, Inc. 2018. *Washington state space economy*. Puget Sound Regional Council.
- Bertoni, Fabio and Tereza Týkiová. 2015. Does governmental venture capital spur invention and innovation: Evidence from young European biotech companies. *Research Policy* 44, 4: 925-935.
- Bloom, Nicholas, John Van Reenen, and Heidi Williams. 2019. A toolkit of policies to promote innovation. *Journal of Economic Perspectives* 33, 3: 163-184.

- Blout, P. J. 2009. If you legislate it, they will come: Using incentive-based legislation to attract the commercial space industry. *The Air & Space Lawyer* 22, 3: 19-22.
- Boll, Nathan, Michael Sloan, and Erika Solem. 2017. Past and future: An analysis of the FAA commercial space transportation forecasts.
- Botelho, Traisan L, Daniel Fehder, and Yael Hochberg. 2021. Innovation-driven entrepreneurship. National Bureau of Economic Research. Working Paper 28990.
- Bradley, Samantha R., Christopher S. Hayter, and Albert N. Link. 2013. Proof of concept centers in the United States: an exploratory look. *Journal of Technology Transfer* 38, 4: 349-381.
- Brander, James A., Qianqian Du, and Thomas Hellmann. 2015. The effects of government-sponsored venture capital: International evidence. *Review of Finance* 19, 2: 571-618.
- Browder, Becca and Dava Newman. 2020. Economic viability of commercial spaceports: A case study of the Mid-Atlantic regional spaceport. ASCEND 2020, November.
- Butow, Steven J., Eric Felt, Thomas Cooley, and Joel B. Mozer. 2020. *State of the space industrial base 2020: A time for action to sustain US economic & military leadership in space*. Air Force Research Laboratory.
- Cable, Abraham J. 2010. Fending for themselves: Why securities regulations should encourage angel groups. *University of Pennsylvania Journal of Business Law* 13, 1: 107-172.
- Canis, Bill. 2016. *Commercial space industry launches a new phase*. Congressional Research Service. R44708.
- Carpentier, Cécile and Jean-Marc Suret. 2007. On the usefulness of tax incentives for informal investors. *Venture Capital* 9, 1: 1-22.
- Castellacci, Fulvio and Christine Mee Lie. 2015. Do the effects of R&D tax credits vary across industries? A meta-regression analysis. *Research Policy* 44, 4: 819-832.
- Center for Regional Economic Competitiveness (CREC) and Cromwell Schmisser. 2016. *Program evaluation of the U.S. Department of Treasury State Small Business Credit Initiative*. October.
- Chang, Andrew C. 2018. Tax policy endogeneity: evidence from R&D tax credits. *Economics of Innovation and New Technology* 27, 8: 809-833.
- Chen, Henry, Paul Gompers, Anna Kovner, and Josh Lerner. 2009. Buy local? The geography of successful and unsuccessful venture capital expansion. National Bureau of Economic Research. Working Paper 15102.
- Commonwealth of Pennsylvania Independent Fiscal Office. 2020. *Pennsylvania Research and Development Tax Credit*.
- Cromwell Schmisser LLC. 2013. *Information and observations on state venture capital programs*. Report for the U.S. Department of the Treasury and Interested Parties in the State Small Business Credit Initiative (SSBCI)
- Denes, Matthew R., Sabrina T. Howell, Filippo Mezzanotti, Xinxin Wang, and Ting Xu. 2020. Investor tax credits and entrepreneurship: Evidence from U.S. states. National Bureau of Economic Research. Working Paper 27751.

- The Economist*. 2021. The bright new age of venture capital. November 27th.
- Fazio, Catherine, Jorge Guzman, and Scott Stern. 2020. The impact of state-level research and development tax credits on the quantity and quality of entrepreneurship. *Economic Development Quarterly* 34, 2: 188-208.
- Federal Aviation Administration (FAA). 2009. *State support for commercial space activities*.
- Federal Aviation Administration (FAA). 2018. *The annual compendium of commercial space transportation: 2018*.
- Federal Aviation Administration (FAA). 2021. *FAA aerospace forecast: Fiscal years 2021-2041*.
- Finley, Andrew R., Stephen J. Lusch, and Kirsten A. Cook. 2015. The effectiveness of the R&D tax credit: Evidence from the alternative simplified credit. *Journal of the American Tax Association* 37, 1: 157-181.
- Fisher, Peter S. 1988. State venture capital funds as an economic development strategy. *Journal of the American Planning Association*. 54, 2: 166-177.
- Florida Office of Economic and Demographic Research (EDR). 2018. *Analysis of Florida's defense incentives, including a review of the defense and space Industries*. December 28th.
- Girardi, Anthony G. 2016. *Research activities tax credit: tax credits program evaluation study*. Iowa Department of Revenue, Tax Research and Program Analysis Section.
- Global Spaceport Alliance. 2020. *National spaceport network development plan*. Prepared for the Office of Spaceports, Office of Commercial Space Transportation, Federal Aviation Administration.
- Gompers, Paul A. and Josh Lerner. 1998. What drives venture capital fundraising? *Brookings Papers on Economic Activity: Microeconomics* 29: 149-204
- Gompers, Paul, William Gornall, Steven N. Kaplan, and Ilya A. Strebulaev. 2016. How do venture capitalists make decisions? National Bureau of Economic Research. Working Paper 22587.
- Goodman, Josh. 2020. How states can design effective tax incentive evaluation plans: Best practices for policymakers. Pew States. <https://www.pewtrusts.org/en/research-and-analysis/articles/2020/04/30/how-states-can-design-effective-tax-incentive-evaluation-plans>
- Gornall, Will and Ilya A. Strebulaev. 2021. The economic impact of venture capital: Evidence from public companies. Stanford University Graduate School of Business. Working Paper No. 3362.
- Government Accountability Office (GAO). 2020. *Commercial space transportation: FAA should examine a range of options to support U.S. launch infrastructure*. GAO-21-154.
- Gravagna, Nicole and Peter K. Adams. 2013. *Venture capital for dummies*. Hoboken, NJ: John Wiley & Sons.
- Guenther, David A. and Michael Willenborg. 1999. Capital gain tax rates and the cost of capital for small business: Evidence from the IPO market. *Journal of Financial Economics* 53, 3: 385-408.
- Guenther, Gary. 2021. *Small business tax benefits: Current law*. Congressional Research Service. RL32254.

- Gullickson, Angela. 2014. *Iowa's Venture Capital Tax Credits tax credits program evaluation study*. Iowa Department of Revenue, Tax Research and Program Analysis Section.
- Gupta, Sanjay, Yuhchang Hwang, and Andrew P. Schmidt. 2011. Structural change in the research and experimentation tax credit: Success or failure. *National Tax Journal* 64, 2, Part 1: 285-322.
- Guzman, Marco. 2020. State taxation of capital gains: The folly of tax cuts & case for proactive reforms. Institute on Taxation and Economic Policy. Policy Brief. September.
- Hackler, Darrene and Ellen Harpel. 2021. *Incentives for entrepreneurial firms*. Smart Incentives.
- Hall, Bronwyn H. 1995. Effectiveness of research and experimentation tax credits: Critical literature review and research design. Report prepared for the Office of Technology Assessment, Congress of the United States.
- Hall, Bronwyn H. and John Van Reenen. 2000. How effective are fiscal incentives for R&D? A review of the evidence. *Research Policy* 29, 4-5: 449-469.
- Hall, Bronwyn, Jacques Mairesse, and Pierre Mohnen. 2009. Measuring the returns to R&D. National Bureau of Economic Research. Working Paper 15622.
- Hall, Bronwyn H. 2019. Tax policy for innovation. National Bureau of Economic Research. Working Paper 25773.
- Handberg, Roger and Joan Johnson-Freese. 1997. State spaceport initiatives: Economic and political innovation in an intergovernmental context. *The Journal of Federalism* 28, 1: 91-110.
- Handberg, Roger. 2020. Chicken or egg: space launch and state spaceports. *The Space Review*. January 6, 2020.
- Hardin, John, Lauren Lanahan, and Lukas C. Brun. 2015. Assessing state-level science and technology policies: North Carolina's Experience with SBIR state matching grants. In *The Oxford Handbook of Local Competitiveness*. Edited by David B. Audretsch, Albert N. Link, and Mary Walshok. pp. 385-400.
- Hausman, Naomi, Daniel C. Fehder, and Yael V. Hochberg. 2020. The virtuous cycle of innovation and capital flows.
- Healy, John C., Michael S. Schadewald, and Bruce M. Nelson. 2021. *Multistate tax guide*. Wolters Kluwer.
- Hellmann, Thomas, Paul Schure, and Dan H. Vo. 2021. Angels and venture capitalists: Substitutes or complements? *Journal of Financial Economics* 141, 2: 454-478.
- Herber, Donna L., Joelle Mendez-Hinds, Jack Miner, Marc C. Sedam, Kevin Wozniak, Valeria Landrío McDevitt, and Paul R. Sanberg. 2017. University seed capital programs: Benefits beyond the loan. *Technology and Innovation* 18, 4: 305-314.
- Highfill, Tina, Annabel Jouard, and Connor Franks. 2022. *Updated and revised estimates of the U.S. space economy, 2012-2019*. Bureau of Economic Analysis
- Howell, Sabrina. 2017. Financing innovation: Evidence from R&D grants. *American Economic Review* 107, 4: 1136-1164.

- Howell, Sabrina and Filippo Mezzanotti 2019. Financing entrepreneurship through the tax code: Angel investor tax credits. National Bureau of Economic Research. Working Paper 26486.
- Howell, Sabrina T. and J. David Brown. 2020 Do cash windfalls affect wages? Evidence from R&D grants to small firms. National Bureau of Economic Research. Working Paper 20717.
- Hungerford, Thomas L. 2010. *The economic effects of capital gains taxation*. Congressional Research Service. R40411.
- IBISWorld. 2021. Research and development expenditures. Business Environment Report 1402.
- Jacobson, Robert C. 2020. *Space is open for business: the industry that can transform humanity*. Los Angeles, CA.
- Joint Legislative Audit and Review Commission (JLARC). 2018. *Workforce and small business incentives*. JLARC Report 506. July 9th.
- Joint Legislative Audit and Review Commission (JLARC). 2020. *Infrastructure and regional incentives*. JLARC Report 536. September 14th.
- Joint Legislative Audit and Review Commission (JLARC). 2021a. *Trade and transportation incentives*. JLARC Report 550. June 7th.
- Joint Legislative Audit and Review Commission (JLARC). 2021b. *Economic development incentives 2021: Spending and performance*. JLARC Report 557. November 8th.
- Joint Subcommittee to Evaluate Tax Preferences. 2015. *Executive summary: Tangible property used in research and development (sales tax)*. <http://dls.virginia.gov/commissions/tax/files/R&D%20Sales%20exemption.pdf>
- Kao, Wei-Chuan. 2018. Innovation quality of firms with the research and development tax credit. *Review of Quantitative Financing and Accounting* 51, 1: 43-78.
- Kerr, William R., Josh Lerner, and Antoinette Schoar. 2014. The consequences of entrepreneurial finance: Evidence from angel financing. *Review of Financial Studies* 27, 1: 20-55.
- Kim, Moon J. 2018. The potential speculative bubble in the U.S. commercial space launch industry and the implications to the United States. *New Space* 6, 2: 156-183.
- Klowden, Kevin, Aaron Melaas, Charlotte Kesteven, and Sam Hanigan. 2020. *State technology and science index*. Milken Institute.
- KPMG. 2011. Virginia Commercial Space Flight Authority: Governance, organization and competitive landscape review.
- Lach, Saul. 2002. Do R&D subsidies stimulate or displace private R&D Evidence from Israel. *The Journal of Industrial Economics* 1, 4: 369-390.
- Lanahan, Lauren. 2016. Multilevel public funding for small business innovation: A review of U.S. state SBIR match programs. *Journal of Technology Transfer* 41, 2: 220-249.
- Lanahan, Lauren and Maryann P. Feldman. 2015. Multilevel innovation policy mix: A closer look at state policies that augment the federal SBIR program. *Research Policy* 44, 7: 1387-1402.

- Lanahan, Lauren and Maryann P. Feldman. 2018. Approximating exogenous variation in R&D: Evidence from the Kentucky and North Carolina SBIR state match programs. *The Review of Economics and Statistics* 100, 4: 740-752.
- Lanahan, Lauren, Arnol M. Joshi, and Evan Johnson. 2021. Do public R&D subsidies produce jobs? Evidence from the SBIR/STTR program. *Research Policy* 50, 7: 104286.
- Laplante, Stacie K., Hollis A. Skaife, Laura A. Swenson, and Daniel D. Wangerin. 2019. Limits of tax regulation: Evidence from strategic R&D classification and the R&D tax credit. *Journal of Accounting and Public Policy* 38, 2: 89-105.
- Leicht, Kevin T. and J. Craig Jenkins. 2017. State investments in high-technology job growth. *Social Science Research* 65: 30-48.
- Lerner, Josh and Ramana Nanda. 2020. Venture capital's role in financing innovation: What we know and how much we still need to learn. *Journal of Economic Perspectives* 34, 3: 237-261.
- Link, Albert N. and John T. Scott. 2012. Employment growth from public support of innovation in small firms. *Economics of Innovation and New Technology* 21: 7-655-678.
- McNichol, Elizabeth. 2021. State taxes on capital gains. Washington, DC: Center on Budget and Policy Priorities.
- Minnesota House Research Department. 2010. Tax incentives and venture capital financing. Minnesota House of Representatives. <https://www.leg.mn.gov/docs/2010/other/100190.pdf>
- Moretti, Enrico and Daniel J. Wilson. 2014. State incentives for innovation, star scientists and jobs: Evidence form biotech. *Journal of Urban Economics* 79, C: 20-38.
- Motoyama, Yasuyuki and Jason Wiens. 2015. *Guidelines for local and state governments to promote entrepreneurship*. Ewing Marion Kauffman Foundation.
- National Venture Capital Association (NVCA). 2021. *2021 yearbook*. Washington, DC.
- Paff, Lolita A. 2005. State-level R&D tax credits: A firm-level analysis. *Topics in Economic Analysis & Policy* 5, 1: 1-25.
- PFM Group Consulting LLC. 2019a. *State of Oklahoma incentive evaluation commission: Draft spaceport tax exemptions evaluation*.
- PFM Group Consulting LLC 2019b. *State of Oklahoma incentive evaluation commission: Draft seed capital fund evaluation*. September 30th.
- Quilty Analytics. 2020. *Leveraging the emerging space economy to meet critical government needs*.
- Rao, Nirupama. 2018. Do tax credits stimulate R&D spending? The effect of the R&D tax credit in its first decade. *Journal of Public Economics* 140: 1-12.
- Rashkin, Michael D. 2007. *Practical guide to research and development tax incentives: Federal, state and foreign*. 2nd. Edition. Chicago, IL: CCH.
- Regional Economic Models, Inc. 2012. *Predicted revenue & expenditure effects*.

- Rephann, Terance. 2018. *Survey of Virginia economic development incentives*. Charlottesville, VA: University of Virginia, Weldon Cooper Center for Public Service.
- Schmidt, Cody J. 2021. Research activities tax credit: Tax credits program evaluation study. Iowa Department of Revenue, Research and Policy Division.
- Shove, Christopher. 2005. Emerging space commerce and state economic development strategies. *Economic Development Quarterly* 19, 2: 190-206.
- Stantcheva, Stefanie. 2021. The effects of taxes on innovation: Theory and empirical evidence. National Bureau of Economic Research. Working Paper 29359.
- TEconomy Partners, LLC. 2018. *Assessment of Virginia's research assets: Strategic directions to advance innovation-led growth and high-quality job creation across the Commonwealth*. Prepared for: State Council of Higher Education for Virginia on behalf of the Virginia Research Investment Committee.
- Tinico, Janet K., Chunyan Yu, Diane Howard, and Ruth Stilwell. 2020. *An introduction to the spaceport industry: Runways to space*. New York: Routledge.
- U.S. Department of Commerce, Bureau of Industry and Security. 2014. U.S. *space industry "deep dive" assessment: Employment in the U.S. space industrial base*. September.
- U.S. Department of the Treasury, State Small Business Credit Initiative. 2014. Best practices from participating states venture capital programs.
- U.S. Department of the Treasury, Office of Tax Analysis. 2016. Research and experimentation (R&E) credit.
- U.S. Small Business Administration. 2021. State funds for SBIR companies. https://www.sbir.gov/sites/default/files/2021_State-Funds-for-SBIR-companies_0826.pdf
- Valleys Innovation Council. 2019. Capital ecosystem landscape report. GO Virginia Region 2.
- Virginia Commercial Space Flight Authority (VCSFA). 1997. *Business plan: The Virginia Space Flight Center*.
- Virginia Commercial Space Flight Authority (VCSFA). 2016. *Strategic plan 2017-2022*. December 1st.
- Virginia Economic Development Partnership (VEDP). 2020. We go to space to improve life on earth: A conversation with Peter Beck. *Economic Review* 3rd quarter: 18-23.
- Virginia Department of Taxation. 1995. *1995-1999 Virginia sales and use tax expenditure study*, Volume 2, No. 2. December.
- Virginia Department of Taxation. 1997. Fiscal impact statement for HB1948--retail sales and use tax: Exempt space flight and space launch activities.
- Virginia Department of Taxation. 2004. Fiscal impact statement for HB1488--retail sales and use tax: Repeal of commercial and industrial exemptions.
- Viswanathan, Manoj. 2020 The qualified small business stock exclusion. *Columbia Law Review* 120, 1: 29-40.

Wilson, Daniel J. 2009. Beggar thy neighbor? The in-state, out-of-state and aggregate effects of R&D tax credits. *The Review of Economic and Statistics* 91, 2: 431-436.

Winters, Nathan. 2011. Enabling the commercial space transportation industry at the Mid-Atlantic Regional Spaceport. Master's Thesis. September 2011.

Wu, Yonghong. 2005. The effects of state R&D tax credits in stimulating private R&D expenditure: A cross-state empirical analysis. *Journal of Policy Analysis and Management* 24, 4: 785-802.

Wu, Yonghong. 2008. State R&D tax credits and high-technology establishments. *Economic Development Quarterly* 22, 2: 136-148.

Zhao, Bo and Rosemarie Ziedonis. 2020. State governments as financiers of technology startups: Evidence from Michigan's R&D loan program. *Research Policy* 49, 4: 103926