

Iowa Innovation Fund Tax Credit

Tax Expenditure Committee – November 27, 2017

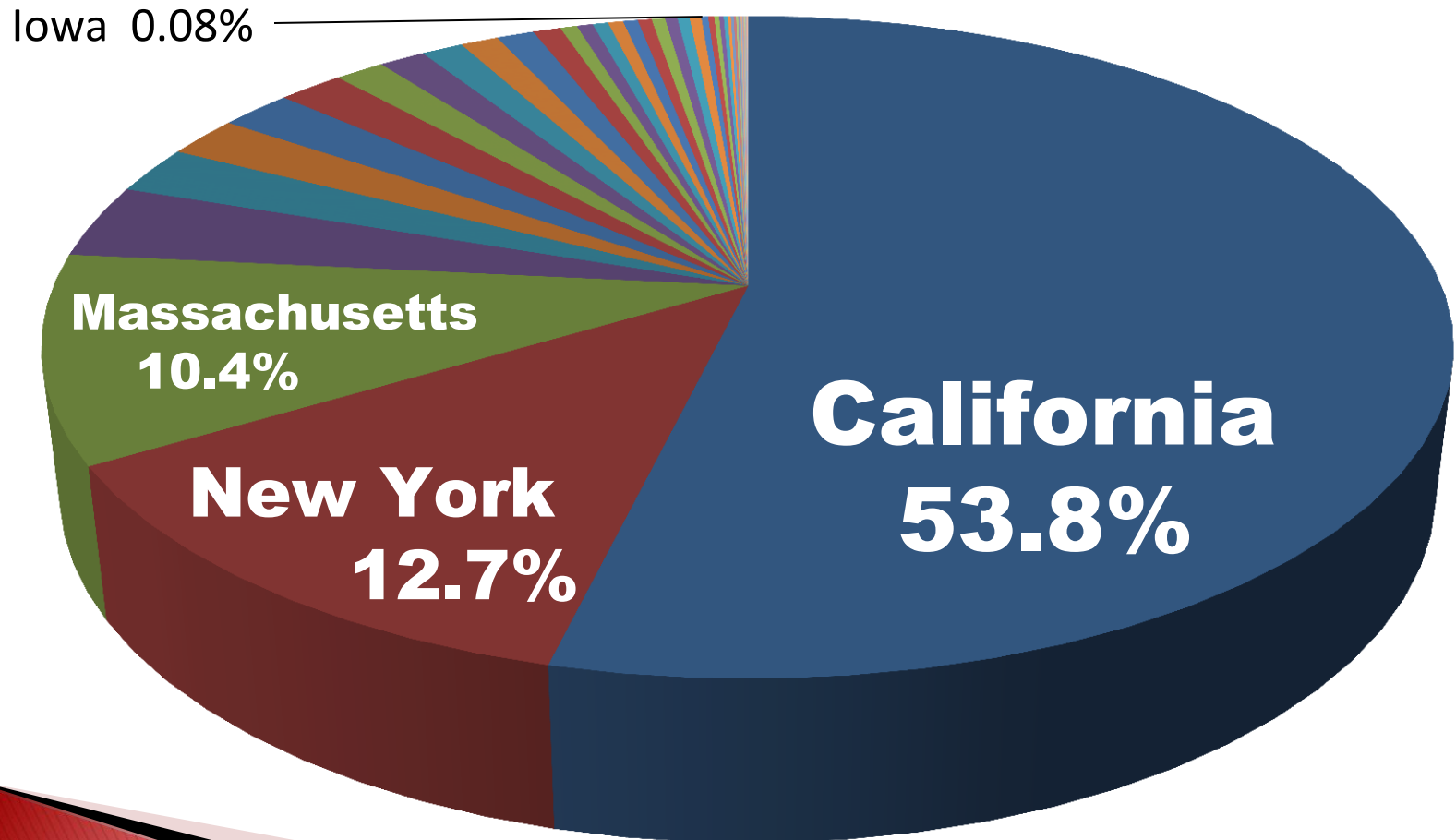
Aaron Barker
Tax Research and Program Analysis Section
Iowa Department of Revenue

Outline

- ▶ Venture Capital Landscape in the US
- ▶ Economic Theory behind Credit
- ▶ Similar Programs in Other States
- ▶ Innovation Fund Tax Credit Investments, Awards, Transfers, and Claims
- ▶ Economic Analysis of Investment Incentive Credits
- ▶ Discussion and Limitations

Venture Capital Landscape in the US

Share of US Venture Capital Investment Dollars by State, 2016



Economic Theory of Credit

- ▶ Most venture capital invested in coastal states
- ▶ Likely due to high-profile companies from coastal states (e.g. Facebook, Google, etc.)
- ▶ Creates two problems
 - Investors on coasts do not consider investing in Iowa companies
 - Investors in Iowa do not invest in Iowa startups
- ▶ Investment incentive credit like the Innovation Fund Tax Credit encourages all investors to consider Iowa companies

Investment Tax Credits Among the States

- ▶ 24 states have an active investment credit
- ▶ Rates range from 10% to 50%
 - 14 states have a higher rate than Iowa
 - 9 states have an equal or lower rate
 - Most common rate is 25%
- ▶ Great variance in annual award caps
 - Utah – \$150,000 per year among all awardees
 - Massachusetts and New Jersey – \$25 million
 - North Dakota and Wisconsin have no cap

Programs Most Similar to IFTC

- Kentucky – Investment Fund Tax Credit
 - Enacted in 1998
 - 40 percent credit for investment in approved fund
 - Capped at \$3 million in awards per calendar year
 - Cap is shared with Angel Investment Tax Credit
 - Nonrefundable, transferable for nonprofits, and 15 year carry forward
- North Dakota – Angel Investor Tax Credit
 - Enacted in 2017
 - Different rates for investments in funds that invest in out-of-state companies (25%) vs. in-state companies (35%)
 - Awardees are limited to \$45,000 in awards per year, lifetime cap of \$500,000
 - Each fund is limited to \$5 million in credits through program
 - Nonrefundable, nontransferable, and five year carry forward

Midwest Programs

- ▶ Iowa – Angel Investor Tax Credit (Qualifying Business Investment Tax Credit)
 - 25% credit to investors that invest in qualifying businesses
 - Limits = \$100,000 in credit per calendar year for a household and \$500,000 among investors in any one business
 - Limited to \$2 million per fiscal year among all awardees
 - Refundable to investors filing individual income tax
 - Nonrefundable to investors filing corporation income, franchise, insurance premium, or moneys and credits

- ▶ Illinois – Angel Investment Tax Credit
 - 25% credit to investors that invest in a qualified new business
 - Nonrefundable
 - \$10 million aggregate cap per year – maximum credit per investor is \$500,000 per business

Midwest Programs

- ▶ Wisconsin – Early-Stage Business Investment Program
 - 25% credit to investors, investor networks, and venture funds that invest in early-stage companies
 - Limits = \$2 million in aggregate credits per invested business
 - Nonrefundable but transferrable
- ▶ Nebraska – Angel Investment Tax Credit
 - 35%/40% credit to investors or fund in a qualified small business – higher credit for economically-distressed areas
 - Limited to \$4 million per fiscal year among all awardees
 - Refundable
- ▶ Minnesota – Angel Tax Credit (defunded July 1, 2017)
 - 25% credit to investors or investment funds that invest in startups
 - Max credit = \$125,000 per individual per year
 - Limited to \$10 million per tax year among all awardees
 - Refundable

Iowa's Innovation Fund Tax Credit – Investments, Awards, Transfers, and Claims

Innovation Fund Tax Credit Investment Details

▶ Investment Made

- Since enactment through the end of FY 2017, \$19.4 million has been invested by Next Level Ventures among seven companies

▶ Employment

- Between the time of investment and the end of May 2017, the seven companies added a net total of 94 Iowa employees
- Among the seven, one company reduced Iowa employment
- \$64,372 in tax credits were authorized for each employee hired through the end of FY 2017

▶ Age of Companies

- Four companies were founded five or fewer years before receiving initial investment
- Three companies were founded ten or more years before receiving initial investment

Innovation Fund Tax Credit Awards by Fiscal Year of Award

Fiscal Year of Award	Number of Awards	Sum of Awards	Average Award	Sum of Associated Investment
2014	47	\$890,590	\$18,949	\$3,562,360
2015	64	\$2,440,582	\$38,134	\$9,762,328
2016	92	\$1,652,922	\$17,967	\$6,611,688
2017	77	\$1,066,888	\$13,856	\$4,267,552
2018*	68	\$900,288	\$13,240	\$3,601,152
Total	348	\$6,951,270	\$19,975	\$27,805,080

*FY 2018 is incomplete

Innovation Fund Tax Credit Transfers by Fiscal Year of Award

Fiscal Year of Award	Number of Awards	Number of Awards Transferred	Sum of Awards	Sum of Awards Transferred	Share of Awards Transferred
2014	47	7	\$890,590	\$75,021	8%
2015	64	22	\$2,440,582	\$580,642	24%
2016	92	29	\$1,652,922	\$485,598	29%
2017	77	19	\$1,066,888	\$259,603	24%
2018*	68	0	\$900,288	\$0	0%
Total	348	77	\$6,951,270	\$1,400,864	20%

*FY 2018 is incomplete

Innovation Fund Tax Credit Claims by Tax Type

Tax Type of Claim	Number of Claims	Sum of Claims	Share of Claims Amount	Average Claim
Corporation Income Tax	15	\$450,896	9.2%	\$30,060
Fiduciary Income Tax	61	\$40,050	0.8%	\$657
Individual Income Tax	331	\$2,770,299	56.5%	\$8,369
Insurance Premium Tax	13	\$802,501	16.4%	\$61,731
Moneys and Credits Tax	19	\$839,675	17.1%	\$44,193
Total	439	\$4,903,421	100.0%	\$11,170

Innovation Fund Tax Credit Claims by Fiscal Year of Claim

Fiscal Year of Claim	Sum of Claims	Share of Claims Amount	Average Claim	Sum of Carry- Forward
2015	\$1,073,386	21.9%	\$14,124	\$126,688
2016	\$2,196,202	44.8%	\$14,544	\$683,176
2017	\$1,129,021	23.0%	\$7,056	\$508,526
2018*	\$504,812	10.3%	\$9,708	\$129,162**
Total	\$4,903,421	100.0%	\$11,170	

*FY 2018 is incomplete

**\$2.0 million has been awarded but not yet claimed

Economic Analysis of Investment Incentive Credits Across the United States

Iowa Analysis Difficulties

- ▶ Desired Question
 - Does IFTC increase the amount of venture capital going to early-stage companies in Iowa?
- ▶ Barriers to Answering this Question
 - Short time frame (first IFTC awards given in FY 2015)
 - Lack of data on Iowa investments outside of the IFTC program (i.e. no control companies)
 - Only one operating innovation fund with seven invested companies
- ▶ Alternative Analysis
 - State-by-state analysis of investment incentive credits to estimate impact on total investment deals and startup growth

Investment Data by State

- ▶ Collected by PricewaterhouseCoopers
- ▶ Quarterly data from 1995 to 2017
- ▶ Data Includes count and total value of deals
- ▶ Selected contiguous 48 states from 2010 to 2016
- ▶ Lagged implementation specifications used:
 - Start observation when credit enacted (i.e. not lagged)
 - Start observation one year after credit enacted (i.e. lagged)
- ▶ Various location controls used:
 - Within state analysis (i.e. fixed effects)
 - Four Census regions (e.g. Midwest, Northeast)
 - Nine Census divisions (e.g. Pacific, South Atlantic, New England)

Investment Statistics by State

Dollar Amount of Investment Deals (\$ mil, CY 2016)			
Source	PricewaterhouseCoopers		
	Mean	Median	Total
All States (plus DC)	\$1,194.2	\$99.3	\$60,903.7
Contiguous 48 States	\$1,263.4	\$107.0	\$60,644.4
Midwest States	\$196.9	\$98.2	\$2,362.8
	Actual		
Iowa	\$19.4		

Investment Analysis

▶ Question

- Does having an investment incentive credit increase the number or average size of venture capital investment deals in a state?

▶ Result

- Impact of credit on deal variables was insignificant
- Insufficient evidence to conclude that having a credit significantly increased the number or average size of venture capital deals in a state

Startup Growth Data by State

- ▶ Calculated and presented by the Kauffman Foundation
- ▶ Annual data from 1982 to 2016
- ▶ Three variables
 - Startup Growth Rate over Five Years
 - Small Business Scale-up Rate
 - High Growth Company Density
- ▶ Selected 48 contiguous states from 2010 to 2016
- ▶ Various controlled for differences among states, Census regions, and Census divisions (location controls)

Startup Growth Statistics

Source	Average Startup Growth Rate over Five Years in each State (CY 2016)		Number of High Growth Firms per 100,000 Employer Firms in each State (CY 2016)	
	Kauffman Foundation		Kauffman Foundation	
	Mean	Median	Mean	Median
All States (excl. DC)	57.4%	56.6%	59	55
Contiguous 48 States	57.3%	56.6%	61	56
Midwest States	50.4%	51.1%	51	51
	Actual		Actual	
Iowa	44.9%		33	

- ▶ The mean and median percent of small businesses that scale-up round to the same number across all states (1.4%)

Startup Growth over Five Years

▶ Question

- Does having an investment incentive credit increase the growth rate of small business or startups in the preceding five years?

▶ Result: Startup Growth Rate over Five Years

- Impact of credit on startup growth rate was insignificant
- Location control variables did not impact significance
- Lagged or non-lagged implementation date did not impact significance

Small Businesses Scaling-Up

► Question

- Does having an investment incentive credit increase the percent of small businesses that scale-up operations and become mid-sized businesses?

► Result

- Inconclusive results
- Specification 1: having a credit **decreases** share of businesses scaling-up operations by 0.6%
- Specification 2: having a credit **increases** share of businesses scaling-up operations by 0.1%
- Both robust to changes in location control variables and lagged implementation date

High Growth Company Density

▶ Question

- Does having an investment incentive credit increase the concentration of high growth companies?

▶ Result

- Yes, but not in the Midwest
- Among model specifications, states with a credit tend to have between 8 and 30 more high growth companies per 100,000 in the state
- Specification including only Midwest states found no significant impact of the credit
- Lagged implementation date slightly reduced significance of results
- Location controls did not affect significance

Discussion and Limitations

- ▶ Mixed results
 - Impact on deals was not significant
 - Impact on some growth metrics was significant
- ▶ Cannot imply causation
 - Investment incentive credits may increase startup growth
 - However, states that are likely to enact a credit may be more likely to observe startup growth even without a credit
- ▶ Difficult analysis
 - Time frame (2010 to 2016) was short
 - Implementation of credit is often delayed
 - Taxes are only one factor in an investment decision