The State of High Growth Companies in Declining Northeast Ohio

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Rubber-worker statue downtown Akron, Ohio

Executive Summary

With a grant from Burton D. Morgan Foundation, a team of researchers at the Ohio State University and Hiram College investigated high growth firms in the seven-county region of Northeast Ohio: Columbiana, Mahoning, Trumbull, Portage, Summit, Stark, and Wayne. We defined high growth firms as those achieving doubling the revenue between 2016 and 2019, and the ending revenue was at least $1 million. We identified 657 high growth firms in the region and highlight our following findings:

1. High growth firms exist in every sector with distinct market niche and defined market areas, and some of them reach national and global markets

2. Many of the entrepreneurs were born and grew up in the area; About half of them are multi-generational family businesses, while others are newly started businesses

3. Entrepreneurs started their firms small with personal savings or line of credit, but were able to grow and continue to grow successfully

4. High growth firms recruit people with soft skills, such as high motivation, self-learning aptitude, ability to work in teams, and high interpersonal skills, not hard STEM skills

5. High growth firms have heavy engagement with local communities, such as sponsoring events, serving on board of nonprofits, and volunteering

6. The pandemic affected them, but they keep growing

Introduction

Northeast Ohio is generally known as part of the Industrial Rust Belt. At the height of the early to mid-20th Century, Akron was known as the Rubber Capital of the World, and Youngstown was similarly known as the industrial center of steel production. However, these two regions started to decline in the 1960s, and their populations continues to dwindle through the 2020 Census.

At the same time, a regional decline does not mean that every economic player is stagnant in the region. In contrast, there is a number of successful companies, but they tend to be rather invisible and may be unknown even to people or other companies in the region. The main purpose of this whitepaper is to shed light on those unnoticed yet successful companies and discuss implications for firm growth and economic development.

In this report, we examine high growth firms because these are the economic entities directly contributing to the economic growth of the region. Scholars have increasingly paid attention to high growth firms as a small portion of firms contribute disproportionately to net job growth (Acs and Muller 2008; Henrekson and Johansson 2010). In other words, we do not examine large companies here as examples of successful companies because they may be losing employment or revenue. Similarly, we do not associate firms in specific sectors as successful firms, such as information technology, pharmaceutical, or robotics, because being in such a sector does not necessarily mean that the firm or the industry has grown. In fact, empirical reality reveals that employment and productivity growth in the so-called high-tech sectors have been slower than the rest of the economy since 2000 (Kask and Sieber 2002; Hecker 2005). Instead, we define 1 high growth firms based on their economic achievement: firms that achieved revenue growth of 100 percent over the past three years, and the ending revenue of $1million or higher.

Table 1: Population and Changes in the Seven County Region

Population							
County	Columbiana	Mahoning	Trumbull	Portage	Summit	Stark	Wayne
Largest city	Columbiana	Youngstown	Warren	Kent	Akron	Canton	Wooster
1950	98,920	258,629	158,915	63,954	410,032	283,194	58,716
1960	107,004	300,480	208,526	91,789	513,569	340,345	75,497
1970	108,310	303,424	232,579	125,868	553,371	372,210	87,123
1980	113,572	289,487	241,863	135,856	524,472	378,823	97,408
1990	108,276	264,806	227,813	142,585	514,990	367,585	101,461
2000	112,075	257,555	225,116	152,061	542,899	378,098	111,564
2010	107,841	238,823	210,312	161,419	541,781	375,586	114,520
Population Change							
	Columbiana	Mahoning	Trumbull	Portage	Summit	Stark	Wayne
1960	8.2	16.2	31.2	43.5	25.3	20.2	28.6
1970	1.2	1.0	11.5	37.1	7.8	9.4	15.4
1980	4.9	-4.6	4.0	7.9	-5.2	1.8	11.8
1990	-4.7	-8.5	-5.8	5.0	-1.8	-3.0	4.2
2000	3.5	-2.7	-1.2	6.6	5.4	2.9	10.0
2010	-3.8	-7.3	-6.6	6.2	-0.2	-0.7	2.6

Overview of High Growth Firms

To identify high growth firms, we employ the Historical Business Database by Data Axel. This data provides information at the business establishment level, which allowed us to calculate the growth of a company over years. We used the data between 2016 and 2019 because we anticipated a highly abnormal pattern for 2020 because of the pandemic. After removing a) branch offices, b) self-employment or sole proprietors, c) duplicates, and d) nonprofits, we merge the two-year data based on the unique number and calculate the growth ratio between 2016 and 2019. In the end, we identified 657 high growth firms in the seven-county region being studied.

These companies represent 2.2 percent in terms of the number of business establishments, 4.8 percent of employment, and 3.4 percent of revenue among all firms in 2016 in the region. However, their growth expanded the presence to 8.7 percent in employment and 21.2 percent in revenue in 2019. In other words, these are not miniscule companies growing rapidly, but companies that have significant presence and contribution to the overall economy of the region.

The presence of 657 high growth firms is proportionate to the number in the whole state. Our calculation identifies 4,360 high growth firms in Ohio. By normalizing with population, the seven-county region has 38.23 high growth firms per 100,000 residents, while Ohio has 39.61 (see Table 2). This statistic reaffirms that, while this seven-county region suffers from a general decline in population, it can still host high growth firms just like the rest of the state.

This seven-county region varies from semi-rural counties with a small population of just over 100,000, such as Columbiana, Portage, and Wayne, to counties with mid-size cities, such as Stark County with Canton (370,000) and Summit County with Akron (541,000). It is important to note the presence of high growth firms in every one of the seven counties. While there are more high growth firms in larger urban areas just because there are more people and economic activities, these high growth firms are located in urban centers, suburban areas, and rural areas.

[1] Our definition sets the higher bar than OECD's (2003) definition of high growth firms: 20 percent% growth per year for three years, i.e. 72.4 percent%. We have two reasons for this higher standard. First, it is important to establish a threshold in size, or a very small company (for example, a revenue of $10,000 growing to $30,000) can be considered as a high growth firm, but its economic contribution is minimal. Second, we have noticed some abnormal patterns in employment and revenue with Data Axel, and their estimate may not be most precise. Raising the growth scale from 72.4 percent% of OECD to 100 percent% will buffer out those companies that may have fluctuations in database.

[2] We exclude the Cuyahoga County with Cleveland for two reasons. First, there are many economic reports about Cleveland, such as Cowell (2013), Bowen (2014), and Coppola (2019). Second, the Cuyahoga County with a population of 1.2 million is evidently an anomaly in the area and distorts our sampling and analysis.

Statehouse in Columbus, Ohio

To examine these high growth firms in depth, we conducted 22 semi-structured interviews with the top executives of the companies. We selected these firms based on geographic location, seeking at least one respondent in each of the seven counties, and availability. The interview protocol included questions about the company's history, recruitment practices, and community engagement activities. Each interview lasted between 40 and 70 minutes.

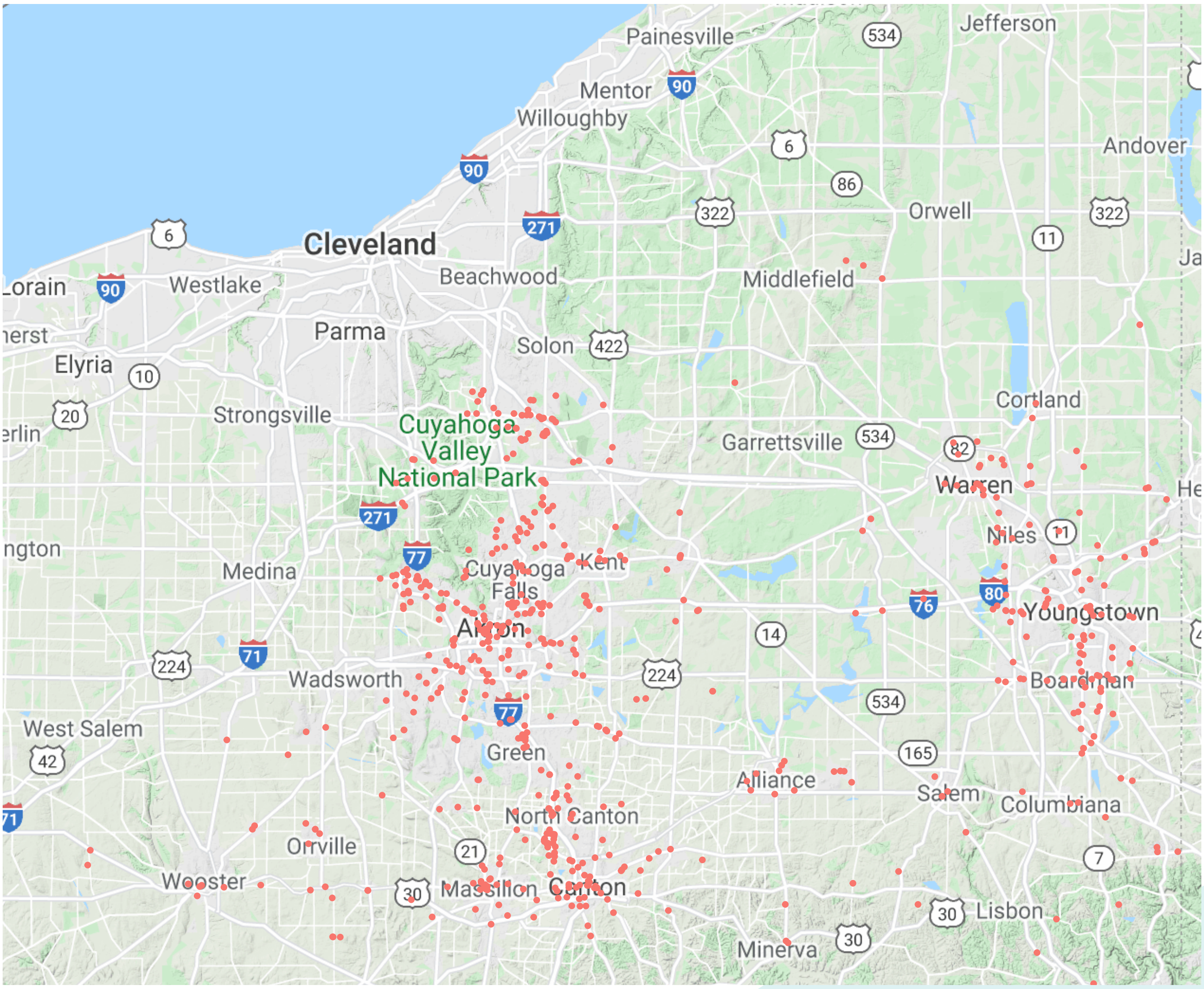

Figure 1: Map of high growth firms in the seven-county region

Finding 1a: High Growth Firms in Every Sector with Distinct Niche

We have to start with the most fundamental finding of this white paper: High growth firms exist in almost every industrial sector. The highest concentration is in the wholesale (161 firms), health care (121 firms), and retail sectors (96 firms). In contrast, there are few firms in the information sector (4 firms or 0.6 percent), such as e-commerce and software firms. The location quotient (LQ) in Table 2 demonstrates the relative share compared to Ohio, and higher shares are observed in health care (1.86) and professional services (1.60).

Table 2: High Growth Firms by Sectors in the 7-County Region and Ohio

		7 County			Ohio	
NAICS	Sector	#	%	LQ	#	%
11	Agriculture	0	0.0%	-	24	0.5%
22	Utilities	1	0.2%	0.503	14	0.3%
23	Construction	36	5.5%	0.821	309	6.7%
31-33	Manufacturing	46	7.0%	1.070	303	6.5%
42	Wholesale trade	161	24.5%	1.155	982	21.2%
44-45	Retail trade	96	14.6%	0.794	852	18.4%
48-49	Transportation	23	3.5%	0.733	221	4.8%
51	Information	4	0.6%	0.259	109	2.4%
52	Finance and insurance	33	5.0%	0.775	300	6.5%
53	Real estate	8	1.2%	0.427	132	2.9%
54	Professional services	79	12.0%	1.609	346	7.5%
55	Management of companies	0	0.0%	-	6	0.1%
56	Administrative support	10	1.5%	0.641	110	2.4%
61	Educational services	0	0.0%	-	6	0.1%
62	Health care & social assistance	127	19.3%	1.865	480	10.4%
71	Arts & recreation	6	0.9%	0.304	139	3.0%
72	Accommodation & food	11	1.7%	0.488	159	3.4%
81	Other services	13	2.0%	0.664	138	3.0%
	Other	3	0.5%	-		0.0%

Youngstown Ohio's Lanterman's Mill:

Finding 1a continued...

However, this typology of sectors does not necessarily highlight the nature of businesses of the high growth firms. Each company has a distinct market niche and strategic positioning in a respective industry or multiple industries. Let us give you examples. First, Company A is a manufacturer that specializes in researching and developing polymer and lubricant additives (e.g., petroleum products). Their customers include global oil companies, such as Shell and Total, as well as domestic fracking companies. Depending on each company's needs, they develop lubricants of high- or low-temperature durability, or some other specific conditions, and their products help the customers save six to seven digits of operation costs.

Company B provides designs and services for energy saving. Traditionally, the lighting market was dominated by large manufacturers who provided low-cost lighting equipment. However, Company B works among architects, engineers, electric contractors and distributors who design buildings for corporations, schools, hospitals, and government, identifies the lighting needs to proposes the best lighting solutions that could save energy cost of the final customers from a holistic perspective.

Company E manufactures and provides organic and natural lubricants for use in machinery and equipment. This family-run business has decades of experience and produces a range of oil lubricants that are food-safe for food companies as well as fuel alternatives for equipment and farming transportation. The products are environmentally friendly and help to create a sustainable alternative to fossil fuels.

Company U is a century-old anchor in its community, yet the business has had to pivot for competitiveness and self- preservation. Originally a farming support business, early generations provided food seeds, plants, and farming equipment. Over time as industrial and corporate farming took over, the business became more of a lifestyle company focusing on flower and basic gardening seeds, ornamental plants, specialty holiday fulfillment, and home hobbyist gardening and landscape supplies.

Finding 1b:
Geographic Area of Markets

As you see different forms of market niche, each high growth firm has a distinct geographic area of market based on its core business strategy. To summarize our findings at a high level, 10 firms operate regionally, 5 firms nationally, and 7 firms globally. A declining area does not mean that the markets are declining for those high growth firms, but they find new customers locally, expand into new areas, or go beyond the existing areas of operation. For instance, Company F provides diagnosis and treatment for 100 kinds of different sleep apnea, as well as trains primary physicians who need to understand these complex conditions and treatment methods. They work closely with hospitals and doctors offices in Ohio.

Company T is an independent, third-party administration firm that provides retirement plans by mediating between retirement plan operators, such as Edward Jones and Fidelity, and companies that offer retirement plans to employees. They diagnose various aspects of retirement plans, such as the tax status, company growth trajectories, and larger economic scenarios, and provide consultation for different forms of retirement plans. Their market ranges from a number of small firms in the Midwest and East Coast.

Company J specializes in manufacturing, packaging, and distributing heavy duty industrial bags in which other industrial companies use for waste. It started to sell products to the local steel industry, but, when the Great Recession hit in 2008, it expanded to new kinds of customers in chemical, food, and agriculture sectors which are located globally.

Finding 2a:
Locally Rooted Entrepreneurs

The overwhelming majority of entrepreneurs have local roots, and only two were from outside the region: one from Kansas and another from nearby Pittsburgh. Thus, most of the owners were born and grew up in the area. This pattern was also reflected in their college education: Most entrepreneurs studied at nearby universities, such as Youngstown State or the University of Akron, while others studied at the University of Toledo, Cincinnati, or The Ohio State University. Interestingly, there was a reverse migration pattern in which two founders studied at Northwestern University (Chicago, IL) or Yale University (New Haven, CT), but came back to Northeast Ohio after college or business experience of several years. Family ties or a good place to raise children were typical reasons cited for their return. This geographically rooted mobility pattern has important implications for the recruitment of employees and business attraction strategies, which we will discuss later.

Finding 2b: Long-Run Family Business or New Business

There are two trajectories related to the roots of businesses: one trajectory consists of an entrepreneur starting his own business (12 out of 22 firms), and the other is that a family-run business for generations (10 firms). One of those family firms (Company C) has recently celebrated its centennial anniversary, while another firm (Company D) started as early as in 1875. Having said that, those family businesses are not running the same kind of business for decades, but faced major challenges or new opportunities and transformed their business models over time. For instance, Company D started as a horse and buggy shop, expanded into a distribution business, and now functions as a manufacturer and distributor of dry ice to 7,000 regional restaurants and hospitals. Company C originally started as a plumbing company, and expanded into hardware and appliances for industries. However, as Northeast Ohio and their businesses declined over time, this company diversified into two other areas: custom-designing kitchens and bathrooms for consumers, and selling and maintaining vending machines—, as well as managing all sales data and providing repackaging weekly replenishment. Creative thinking and continuous effort to improve or transform is clearly key for growing businesses

The other type of business trajectory consists of a company which was founded and managed by an entrepreneur (Companies A, B, F, H, I, J, M, N, O, R, S). They often had relevant professional experience and decided to start on their own. The reasons varied from dissatisfaction with the previous employer or seeing a new opportunity that no other company is pursuing, to marrying a spouse and moving to a new location. In most cases, the entrepreneurs whose businesses followed this trajectory are not necessarily running startup companies, but have been managing their business for five to fifteen years. Thus, the pattern of growth that resulted in their inclusion in our study is not one of a small startup company growing rapidly, but that of a solid and established business that kept growing.

Finding 3: Start Small, Grow Big

What is considered as the mainstream practice of high growth firms is to 1) formulate a business plan, 2) assemble the core team, 3) pitch to investors such as venture capitalists or angels, and 4) launch the business big with millions of dollars in investment. However, we did not find such pattern at all for our high growth firms in Northeast Ohio. Instead, the model of growth we find is to start small and grow big. In other words, many entrepreneurs of these companies used their personal savings, one or more lines of credit or business loans from banks to start modestly with only five to six digits of initial capital. Bootstrapping, growing business as you get customers and revenues, was the most common method to grow the business. Perhaps one exception was Company E which develops and manufactures eco-friendly lubricants, and they worked with a public university to receive grants from U.S. Department of Defense and Department of Agriculture. Thus, no firm received investment from venture capitals, and this presents an alternative model of business growth that a company can successfully grow without following the mainstream practice.

Ohio’s Cuyahoga Valley Bridge

Finding 4: Need Soft Skills, Not Hard STEM Skills

Workforce is considered arguably “the most important resource in any businesses” and their growth (Company F). However, the majority of the high growth firms in the region indicated constant struggles with recruiting and retaining employees. The challenges are present despite the fact that all except a few (Companies F, H, and I) do not require certain degrees/certificates or prior industry experience. In fact, most firms are looking for someone with soft skills, including a desire to work/learn (Companies B, C, E, F, K, O, Q, R), integrity and work ethic (Companies C, E, F, L, N, O), independence (Company J, P), and collaborative personality (Companies B, K, M). This reflects their strategy in which their employees develop skills that the company needs rather than recruiting people with established skills. Company G summarized: “We can train the [job] skills, but we can’t train the behavior, charac-ter, good work ethics, honesty, and integrity.”

The most popular method of recruitment (about 70 percent of firms) is word- of- mouth, and two firms use word- of- mouth while offering some referral bonus (Companies N and O). Several firms mentioned online ad-vertisement (via Indeed, LinkedIin, Facebook, and Craig’s list); however, companies have mixed evaluations of online ad effectiveness in recruitment or retention. Also, several firms work with temp agencies (Companies B, C, S, and T), but the referred workers often failed to pass the drug tests (Company C)[3] or did not lead to long-term employment (Company T).

[3] Company C is located in Trumbull County which reports the 4th highest drug overdose deaths (61.4 deaths per 100,000) among 88 counties in Ohio between 2015-2020 (Ohio Department of Health, 2022). This rate is more than two times of the national average, 28.3 per 100,000 (Centers for Disease Control and Prevention, 2022).

Finding 5:
Engage with Local Communities

The community engagement activities of the high growth firms' fall under three broad categories: 1) monetary contributions, 2) long-term in-kind contributions of various sorts, and 3) workforce policies. For almost all firms, these activities focus on the local or regional geography where the organization is located, although a handful of firms report engaging in community-oriented activities at the national and international scale as well in addition to local and regional activities.

Most firms (70 percent) report making direct monetary contributions to a broad variety of organizations, ranging from high schools to the Salvation Army, and from cancer-related charities to United Way. The particular beneficiaries of these contributions are often connected to personal experiences and priorities among the leadership in each respective high growth firm.

The second form of community engagement that many high growth firms participate in (70 percent) consists of in-kind contributions to, and often long-standing relationships with, local and sometimes regional or national organizations, primarily by serving on boards of non-profit organizations. Other types of in-kind contributions to community organizations or initiatives can consist of numerous activities, from building housing for recent immigrants to teaching music at the local school on a voluntary basis. Here too, the specific organizations and communities that benefit from these in-kind contributions are typically connected to the leadership and staff of the high growth firm through personal experience, priorities and beliefs.

The third form of engagement involves a sustained commitment to use the workforce of the high growth firm to pursue community goals. For example, one firm reports a standing policy that allows all employees to commit a specific number of hours per month to a community service activity of their choice. While this form of engagement might be difficult to distinguish from the in-kind contributions mentioned above, the policy-embedded nature of this type of engagement is significant. Of the firms studied here, approximately 10 percent report this form of engagement.

The William McKinley National Memorial - Canton, Ohio

Finding 6: The Pandemic Affected Them, but They Keep Growing

Without exception, the global pandemic affected all the high- growth firms in one way or another. As these high growth firms operate in different sectors, some of them were essential businesses and kept operating, while others were non-essential businesses and had to shut down for a while. Company A noted that the experience was “brutal” and “caused a feeling of apprehension”. However, as their business was resuming while the rest of the economy was getting into a recession; they observed a new window of opportunity for recruitment because they got a larger pool of people: “the best time to hire people is during recession”.

Company J was affected in terms of its supply chain. The lead time of components from Mexico used to be 4-6 weeks, but it was extended to 12 weeks. However, their sales resumed quickly and in fact increased more than the pre-pandemic time. As a result, they hired a few employees since 2020. Company P cures wood and produces for Amish and other furniture making. As the pandemic induced more work and living time at home, the demand for furniture surged, and they have been operating in their full capacity since mid-2020. Similarly, companies supplying garden supplies (Company L) and pet supplies (Company U) experienced substantial revenue growth during and post the lock down period.

However, we have to note here the possibility of selection bias on this finding. In other words, these high growth firms responded to our interview inquiries because they were able to overcome the pandemic and subsequent recession. We may be missing other firms which struggled in this period and did not want to respond to our inquiry.

Implications:

It is important to highlight several key features of the high growth firms. These firms exist in every sector with a distinct market niche. They are locally- rooted companies as the majority of founders and employees are from the area and engage with their home communities. They start small, but grow big incrementally with bootstrapping or internal finance (i.e. no external equity financing). They hire people with soft skills, such as high interpersonal, independent, self-learning, and problem-solving skills, not specific programming or general STEM skills. Lastly, these are highly resilient companies overcoming major economic downturns in the region, as well as the most recent pandemic.

This picture of the high growth firms sharply contrasts with the conventional economic development policies and practice in which economic development agencies pursue either the attraction of large firms into your area to generate more jobs or the support of high-tech firms as the driver of the economy in the 21st Century. Both of these conventional economic development strategies require a substantial amount of financial support: Ohio spent more than $602 million between 2011 and 2020 to attract large firms, such as Amazon, General Electric, Marathon Petroleum, and Sherwin-Williams (Good Jobs First 2022).

Implications continued...

This pattern may be accelerating in the 2020s with Google and Ford Motor, and the most recent case of Intel with more than $2 billion of public support. Prominent support organizations in the seven-county region, such as the Bounce Innovation Hub in Akron or the Youngstown Business Incubators, provide space, funding, and training for technology oriented businesses. While we do not intend to evaluate the effectiveness of these conventional economic development support policies, which is a different subject, our findings in this paper demonstrate the third and alternative driver of an economy, namely locally grown high growth firms. Based on our findings and this contrasting picture, we provide a few implications for policies and the region.

First, we should recognize and celebrate these high growth firms that make a significant contribution to the regional economy. To reiterate, these 657 high growth firms account for 2.2 percent of firms in the seven counties, but their contribution is enlarged to 8.7 percent in employment and 21.2 percent in revenue in 2019. They added about 10,000 jobs and $9 billion revenue between 2016 and 2019. There are bright stars in a region that is frequently characterized as suffering from a general decline.

Second, we could gear the policies and resources toward these high growth firms or 'gonna-be' high growth firms. A piece of potential good news is that these high growth firms do not usually need public money for their growth as they have shown to be able to grow organically. Thus, money is not a solution for these companies, unlike attracting large firms or supporting high-tech startups. However, the growth of high growth businesses can be still tightly linked to other policy instruments. For instance, as these firms are rapidly growing, they hire more employees and need new space. They may add more business space to their existing location or they may move to a different location locally. Then, zoning and environmental permits will be issues for those high growth firms. We do not necessarily advocate for deregulation or loosening of zoning or permitting requirements. However, the key is the speed of the process and transparency. A slow response from the public sector will only restrain the growth of those high growth businesses as they could do nothing but wait, while the market and customers are constantly changing.

Third, we need to revisit existing strategies to train the workforce. The current model of workforce development is to produce more STEM graduates based on a belief that STEM skills are the most essential, particularly for technology based companies, whether in engineering or bio health based skills or in computer programming skills. Alternatively, business schools in higher education provide courses about how to write a business plan. However, this kind of training does not match with the reality of the demand by high growth firms. They need high interpersonal or problem solving skills, or people with high motivation and a self-learning orientation. A culmination of these personal skills is now considered CORE—Competence in Organizational and Relational Effectiveness, formerly called 'soft skills' (Parlamis and Monnot 2019). These skills or attributes do not necessarily match with the current disciplines in higher education, such as physics, engineering, or math. At a minimum, higher education and workforce development agencies need to restructure their programs to incorporate training for those skills.

Implications continued...

Fourth, we find one different pattern of growth by these firms in Northeast Ohio. In other places that members of our team have researched before, such as Kansas City, St. Louis, Indianapolis, Chattanooga, and Montana, we found that entrepreneurs of high growth firms benefited from mentoring by more experienced entrepreneurs, and there are some selective mentorship networks for growth oriented entrepreneurs (Motoyama et al. 2013; Desai and Motoyama 2015; Motoyama and Knowlton 2017; Motoyama et al. 2022; Motoyama and Henderson 2022). This kind of mentorship network appears to be absent in Northeast Ohio. While there is clearly a high level of independent capability to achieve high growth by these firms in Northeast Ohio[4], there may be opportunities to establish networks and training programs between entrepreneurs of high growth firms and entrepreneurs of the next generation. Thus, these high growth and their high achieving entrepreneurs can serve as the knowledge source for the economic driver of the region. Since there are 657 high growth firms in the seven counties, there is no void of qualified mentors in the region. At the same time, this orchestration would require a careful vetting process as these entrepreneurs are extremely busy individuals and highly selective of mentees. It should not be an online database of mentors in which anyone can contact any mentors, but one that connects and develops a one-on-one and trusted relationship between a mentor and a mentee for multiple years.

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[4] Some conventional organizations were mentioned in a few interviews, such as the chamber of commerce, Entrepreneurs' Organization, and Young Professional Organization (Companies A, B, C, T); however, they were mentioned in the context of being ineffective or not having a positive experience.

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