

### **Entrepreneurship in Pennsylvania**

A look back at Pennsylvania's performance, a look forward to Pennsylvania's economic recovery

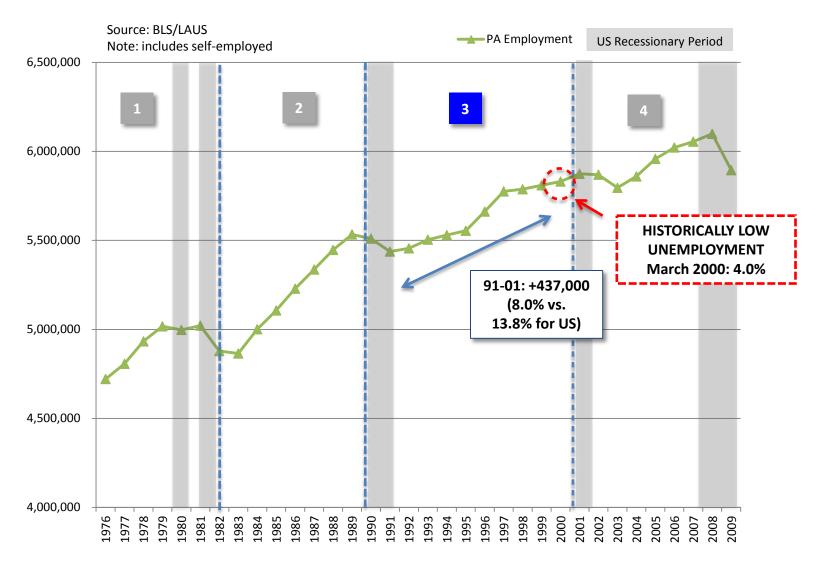
### **Presentation Overview**

- ♦ A look back at Pennsylvania's economic performance over past 30 years
- ♦ PA in the new entrepreneurial economy
  - Entrepreneurship metrics
  - 10 state comparison
- ♦ A look forward to PA's economic recovery

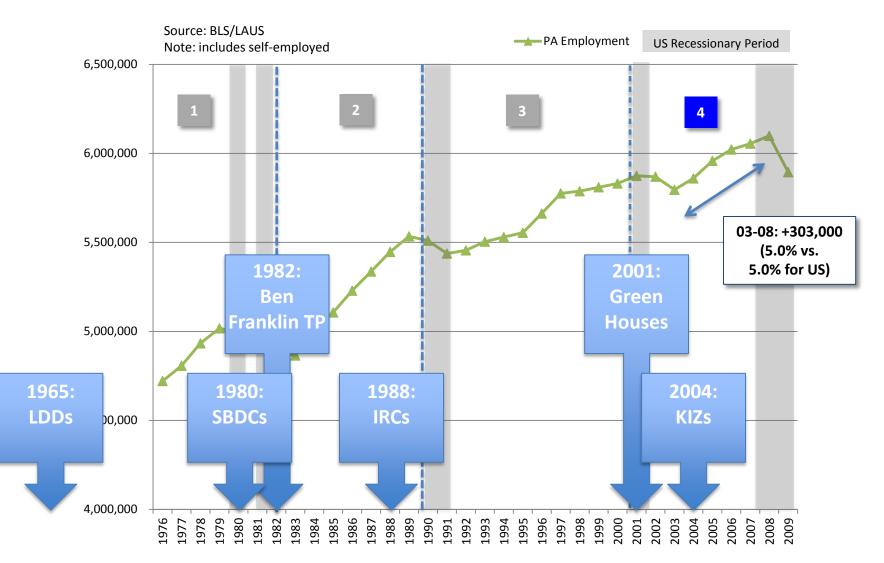
#### COMPARISON STATES (10)

Mid-Atlantic neighbors	VA, MD, NJ, NY
Top performers; up and comers	FL, NC, MA
Large, post- industrial states	IL, MI, OH

#### Entrepreneurship + Innovation = Recovery



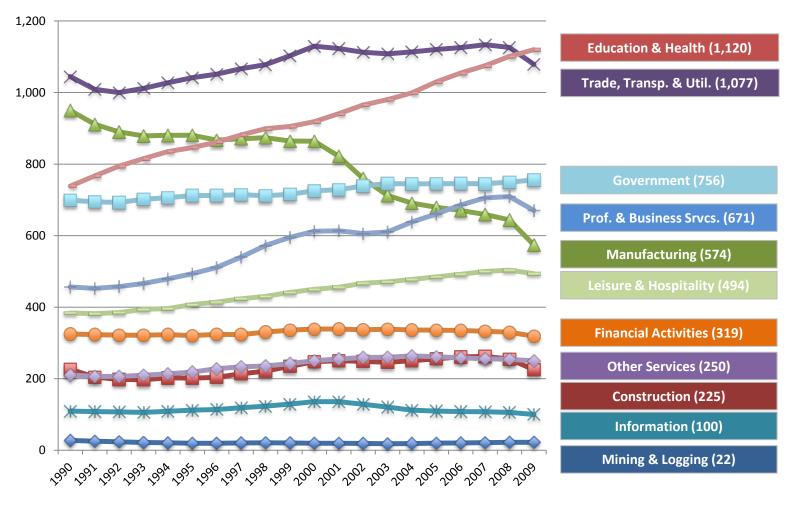
In the mid 90s, US economy began to take off – as did PA, though to a lesser extent. "Rise of the tech sector" and "era of the entrepreneur" (record VC investing, IPO activity, and the tech bubble). Universities were the "knowledge economy" and government was "reinventing" itself.



After 9/11 and 2001 recession, the US & PA economies took off again (housing market and financial services). The "rise of the internet" and new business models (social networking, open sourcing, etc.). Collapse of financial sector (fall 2007); recession 12/2007.

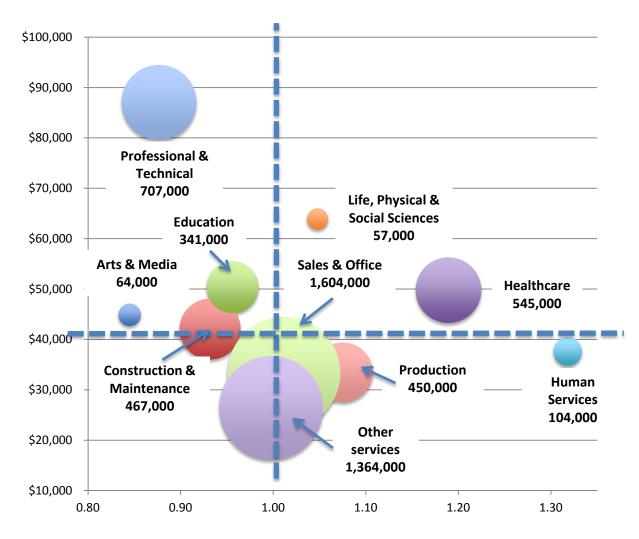
#### Pennsylvania industry employment

(in thousands)



Source: BLS/CES; note: does not include self-employed

#### PA occupations by employment concentration and annual mean wages, 2008



### The good news...

## Pennsylvania's economy has moved in a positive direction over past ~30 years (before onset of 12/2007 recession)

- More than 897,000 jobs were added (18.0%) between 1980 and 2009 (includes self-employed)
- This employment growth took place during a period when Pennsylvania's population essentially stayed the same (5.9%; 35.5% for US)
- Median household income (inflation-adjusted) grew modestly by ~\$3,900 (8.3%)
- ♦ The bottom didn't fall out a distinct turning point for PA in the early 80s, prompting relatively upward employment growth for the next 30 years

### The bad news...

Over the past 30 years, PA was generally outpaced by the nation overall and the 10 comparison states (averaged together)

	ΡΑ	10 states combined*	US
Employment growth (80-09)	18.0%	33.0%	44.1%
Jobs gained per 1,000 residents (80-09)	71	114	154
Median HH income (\$2008)	\$50,713	\$57,073	\$52,029
Median HH income growth (85-08)	8.3%	6.9%	10.1%

\*Comparison states: FL, IL, MD, MA, MI, NJ, NY, NC, OH, VA Source: BLS/LAUS (note: includes self-employed); Census Bureau

### The new "entrepreneurial" economy

"...while it is true that entrepreneurial growth, market dynamism, economic 'churning,' and competition have been features of the American economy since the colonial days, after the 1990s the center of gravity seemed to shift to entrepreneurial activity."

ITIF and The Kauffman Foundation, The 2008 State New Economy Index A transformed economy, driven by entrepreneurs:
♦ Knowledge dependent
♦ Global in scope
♦ Rooted in IT
♦ Driven by innovation

### **Entrepreneurship metrics**

METRIC	WHAT IT REPRESENTS
Start-up formation (% adults starting a business)	The propensity of individuals in a state to conceive a company and the state economy's capacity to support new ideas and ventures.
Small firm employment Firms with < 500 employees	Major source of employment (and wealth) for the state. Plus, most entrepreneurial firms start off as small businesses.
Young firm employment Firms 3 years or younger	Major source of net new jobs – vital for economic recovery. Small subset of rapid growers will become future large state employers.
Gazelles % of jobs in fast-growing companies	Most "dynamic and adaptive" companies in an innovation economy; strongly correlated with overall robust job growth.
<b>High profile, fast-growing cos.</b> Inc. 500 + Deloitte Technology Fast 500	PR-seeking gazelles (self-submitted and self-reported), and often a state's future iconic employers.
SBIR + STTR awards % of SBIR + STTR dollars awarded	Highly competitive federal grant program for small businesses engaged in R&D with commercialization potential.
Business Churn % of openings + closings	"Dynamic equilibrium" – replacing less efficient and innovative companies with new ones – a reality of the New Economy and associated with job growth.

Drawn from ITF/Kauffman's State New Economy Index and MTC's Index of the Massachusetts Innovation Economy

#### Pennsylvania "entrepreneurship" rankings (among 11 comparison states)

Entrepreneurship Metric	Base Year	End Year
Start-up formation	<b>11</b> of 11 (1996-1998)	<b>11</b> of 11 (2007-2009)
Small firm employment	<b>9</b> of 11 (1980)	<b>5</b> of 11 (2005)
Young firm employment	<b>10</b> of 11 (1980)	<b>8</b> of 11 (2005)
Gazelles	<b>7</b> of 11 (1999)	<b>5</b> of 11 (2008)
High-profile, fast-growing cos.	<b>7</b> of 11 (96-00)	<b>7</b> of 11 (01-09)
SBIR + STTR awards	5 of 11 (1983-1990)	<b>5</b> of 11 (2001-2009)
Business churn	8 of 11 (1994)	<b>10</b> of 11 (2009)

### Start-up formation

Adjusted number of new businesses as a percentage of state's population

- ◇ PA dead last in new business formation (then & now), way below the US average (then & now)
- ♦ (In Kauffman's yearly 50-state IEA study, PA consistently ranks among bottom 2)

	1996-1998	2007-2009
1. FL	0.34% (1)	0.39%
2. NY	0.28% (2)	0.36%
3. NJ	0.21% (10)	0.29%
4. MA	0.20% (5)	0.28%
4. MD	0.25% (9)	0.28%
4. MI	0.25% (5)	0.28%
7. NC	0.28% (2)	0.27%
8. IL	0.25% (5)	0.25%
9. VA	0.26% (4)	0.23%
10. OH	0.25% (5)	0.22%
11. PA	0.17% (11)	0.16%
US	0.29%	0.32%

Source: Kauffman Foundation, *Index of Entrepreneurial Activity (1996-2009)* Notes: percent of individuals (ages twenty to sixty-four) who do not own a business in the first survey month that start a business in the following month with fifteen or more hours worked per week.

### Young firm employment

Percentage of private sector employment in firms with paid employees 3 years or younger

- PA moved up in rankings between 1980 and 2005, but actual percentage dropped (for all states & US)
- ♦ PA consistently belowUS average

		1980	2005
1.	FL	21.5% (1)	13.0%
2.	MI	12.3% (5)	10.3%
3.	MD	15.2% (2)	9.9%
4.	NY	12.2% (6)	9.8%
5.	NC	12.1% (7)	9.7%
6.	NJ	11.7% (8)	9.5%
7.	VA	13.9% <sub>(3)</sub>	9.0%
8.	PA	10.7% (10)	8.6%
9.	IL	11.4% (9)	8.4%
10.	OH	10.7% (11)	8.1%
11.	MA	12.4% (4)	7.5%
US		14.5%	10.2%

Source: US Census, Business Dynamics Statistics Notes: includes nearly all non-farm private establishments with paid employees as well as some public sector activities

#### Gazelles

Jobs in "gazelle" companies (firms with annual sales revenue that has grown 20 percent or more for four straight years) as a share of total employment

- ♦ All states (except NY) & US tumbled between 99 & 08
- ◇ PA jumped to 5<sup>th</sup>
   (and 11<sup>th</sup> among
   50 states); now
   above US average

		1999	2008
1.	NY	12.5% (9)	12.3%
2.	NJ	13.1% (8)	11.0%
3.	MD	12.4% (10)	9.6%
4.	NC	13.9% (4)	8.5%
5.	PA	13.4% (7)	8.5%
6.	FL	15.8% (1)	8.5%
7.	MA	15.5% (2)	7.9%
8.	VA	13.5% (6)	7.7%
9.	IL	14.4% (3)	7.2%
10.	OH	13.6% (5)	6.4%
11.	MI	12.4% (10)	6.3%
US		14.3%	8.0%

Source: ITIF/Kauffman Foundation, 2008 State New Economy Index (based on data from 2007); Progressive Policy Institute, 1999 State New Economy Index

### High profile, fast-growing companies

Percent of companies on Inc. 500 and Deloitte Technology Fast 500 lists

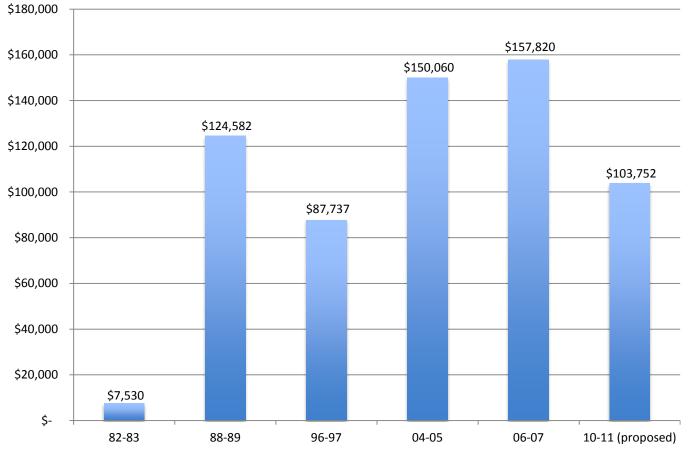
- PA share of Inc.
   500/Deloitte TF 500
   companies and ranking
   stayed the same over
   past 2 growth periods
- Re-shuffling of top comparison states; bottom half remained the same

		1996-2000	2001-2009
1.	VA	6.8% (2)	6.1%
2.	MA	7.7% (1)	6.1%
3.	NY	4.3% (5)	5.3%
4.	NJ	4.3% (6)	4.7%
5.	FL	5.0% (3)	4.1%
6.	MD	4.6% (4)	3.7%
7.	PA	3.5% (7)	3.5%
8.	IL	3.0% (8)	2.7%
9.	NC	2.5% (9)	1.8%
10.	OH	1.9% (10)	1.8%
11.	MI	1.3% (11)	1.3%

Source: Inc. Magazine, Deloitte

# Funding history of PA's entrepreneurial development suite

(Total inflation-adjusted dollars spent per 10,000 members of labor force)



Source: Governor's Executive Budget (82-83, 88-89, 96-97, 04-05, 06-07, 10-11)

### Looking forward: A new set of Choices for Pennsylvanians

Do what we are already doing

♦ Persistent undertow dragging PA economy down

Do something different

♦Few "new ideas" not already created or adopted in PA

Do what we are already doing, only better

♦We have right set of programs already in place -- the "suite" – but we need to organize and support those initiatives better

### Looking forward: Investment Guidelines

View entrepreneurship as a human capital issue

- ♦ Cross-agency investments needed K-12, post-secondary, workforce (re-)training
- ♦ Address cultural issues

#### Focus like a laser beam on start-ups

Further research needed into start-up rate – why so much lower than other states & US average?

#### Invest and deliver regionally

- Brookings: Macro (tax policies, laws/regulations) vs. micro (company grants, technical assistance) vs. the "missing middle" (regionally-based programs and policies)
- $\diamond$  PA suite programs all regionally or locally based

#### Capitalize on growing trends (Kauffman)

- "Older" workers: coming "boom" of entrepreneurship by population ages 55-64 (most active age cohort in terms of entrepreneurial activity)
- ♦ Non-natives: significantly higher rate of entrepreneurial activity than natives

#### Avoid snakes in the grass

- ♦ Be wary of contracting "programitis"
- Further research needed into state spending on entrepreneurial development how does this compare to other economic development investments (e.g., tax credits, company attraction)

#### Looking forward: Writing the next chapter of the story...

## For many, entrepreneurship is (will be) an "economic necessity:"

- ♦ US unemployment expected to remain above 9.0 percent well into 2011
- ♦ Fear of "chronic joblessness" nearly half the unemployed have been out of work longer than six months, more than at any time since the Labor Department began keeping track in 1948 (WSJ, 6/2010)
- ♦ Productivity at an all-time high companies slashing labor costs (not producing more); full-time jobs being replaced by part-time, temporary and/or off-shored jobs the "new normal"

For state, investing in entrepreneurial development has potential short-term cost-savings (♥ unemployment costs) and longer-term prospects (↑ economic well-being of residents and state)