

The Importance of Disruptive Design in Job Creation

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Agenda

- ❑ National Outlook – *There is cause for some hope.*
- ❑ State Outlook – *Do we have to?*
- ❑ Product Cycle Theory of Economic and Business Development
- ❑ What Does Design Have to Do with It?
- ❑ Where to Look for Business Opportunities – *Building from your strengths*

Thoughts on Business Development

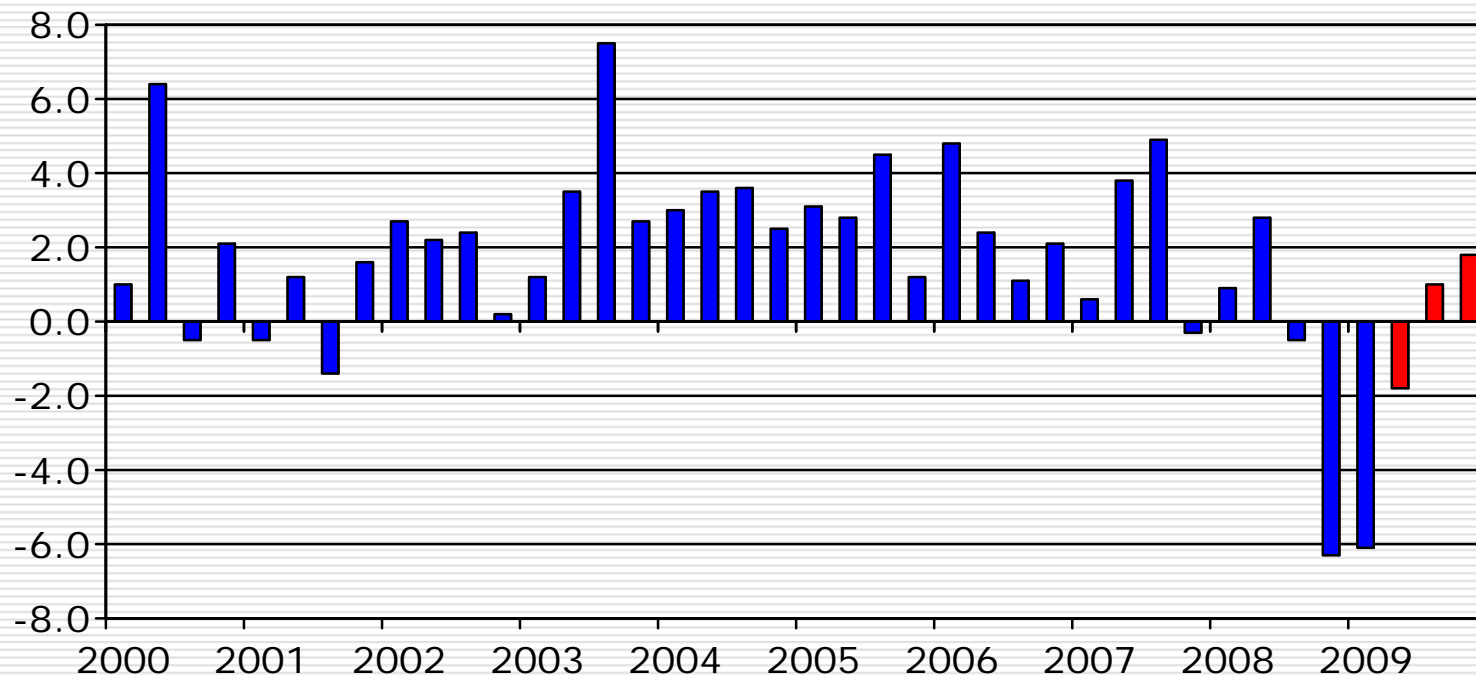
The very essence of long-run success in changing times is to recognize *how to make the transition* from doing what you know how to do to using your expertise to do what the market wants as demographics and technology change.

National outlook: Most of the nation's economic indicators are pointing south.

<input type="checkbox"/> Employment	RED
<input type="checkbox"/> Residential construction	RED
<input type="checkbox"/> Consumer confidence	YELLOW
<input type="checkbox"/> Consumer financial conditions	RED
<input type="checkbox"/> Credit markets	RED
<input type="checkbox"/> ISM Purchasing Mgrs. Index	RED
<input type="checkbox"/> Stock market	YELLOW
<input type="checkbox"/> Inflation	GREEN

Percent change in the nation's GDP—*Fell 6.1 percent during the first quarter.*

Annualized Percent Change in GDP



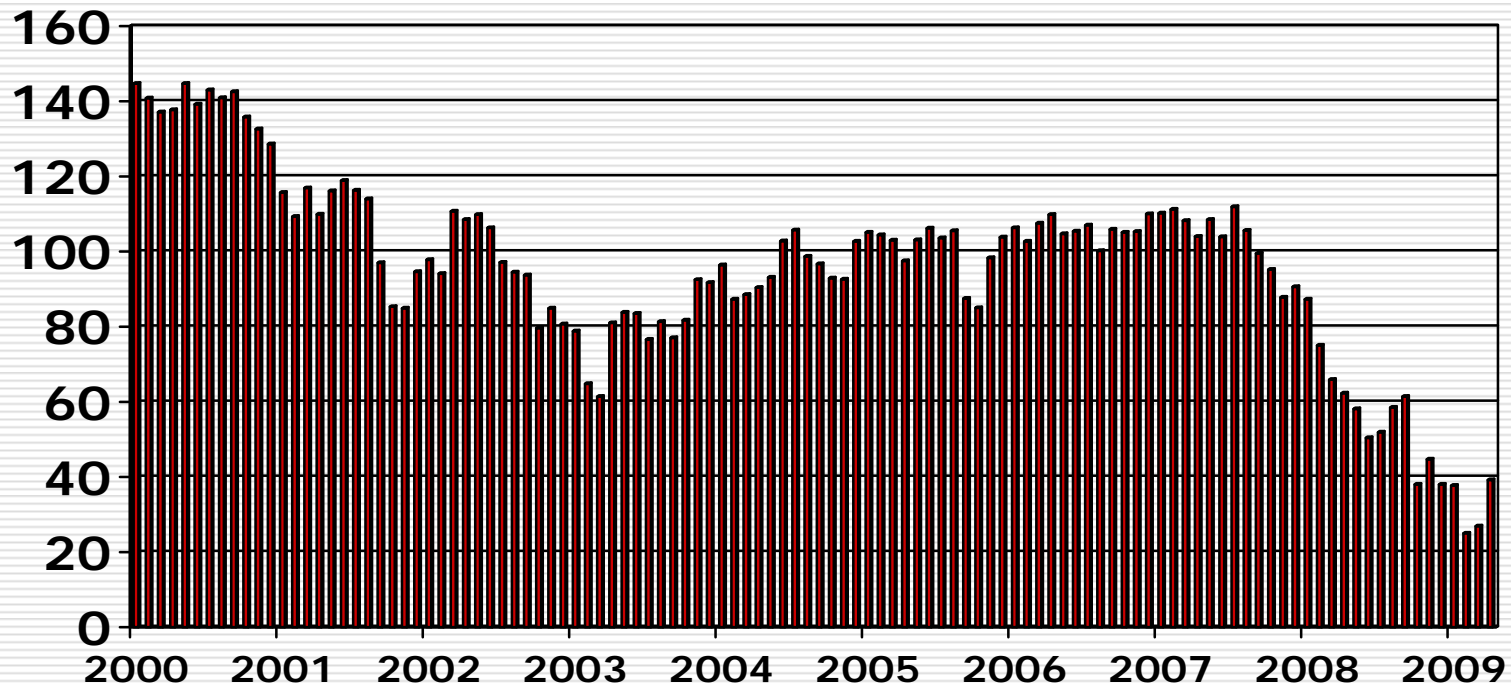
Source: BEA, Philadelphia Federal Reserve Survey of Professional Forecasters.

Consumers

- ❑ Confidence is low but improving.
- ❑ Real estate markets are inactive, and values continue to drop.
- ❑ Retirement savings remain in jeopardy.
- ❑ Job outlook is dim.

Consumers are not confident about current economic conditions.

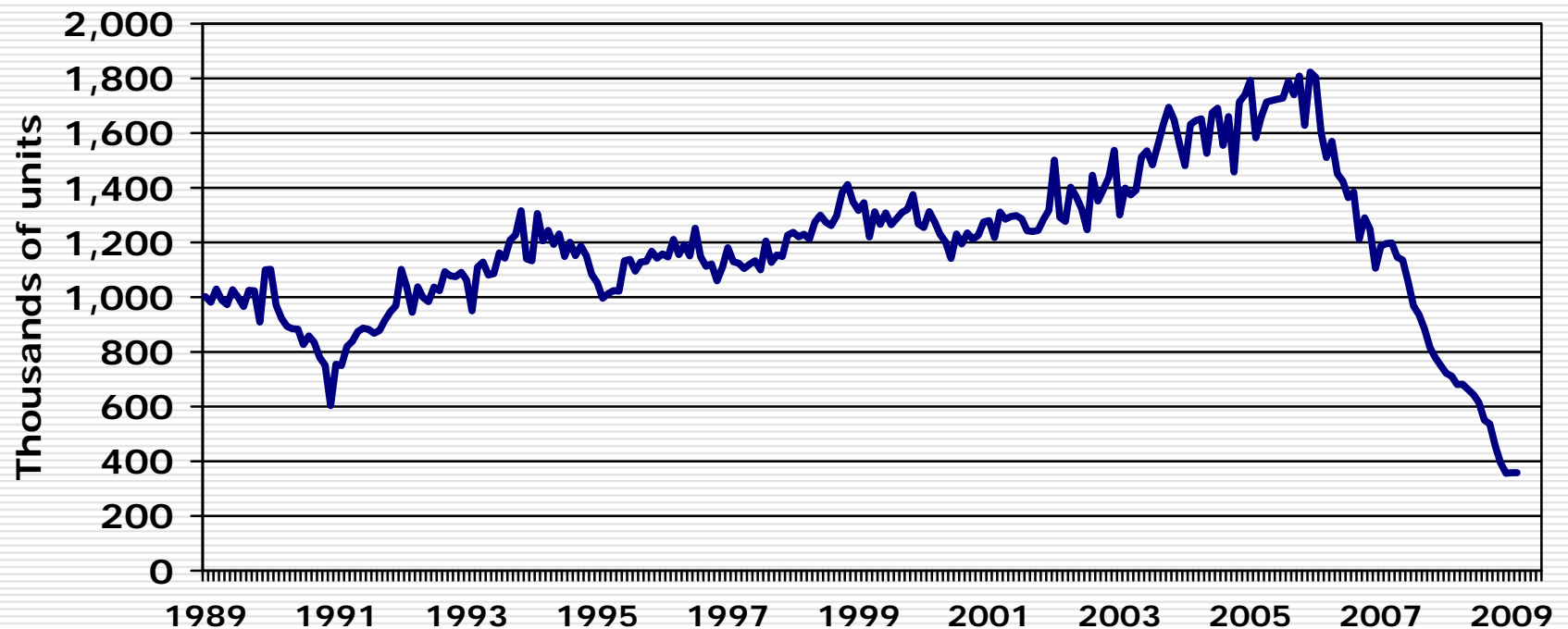
Consumer Confidence (1995=100)



Source: Conference Board

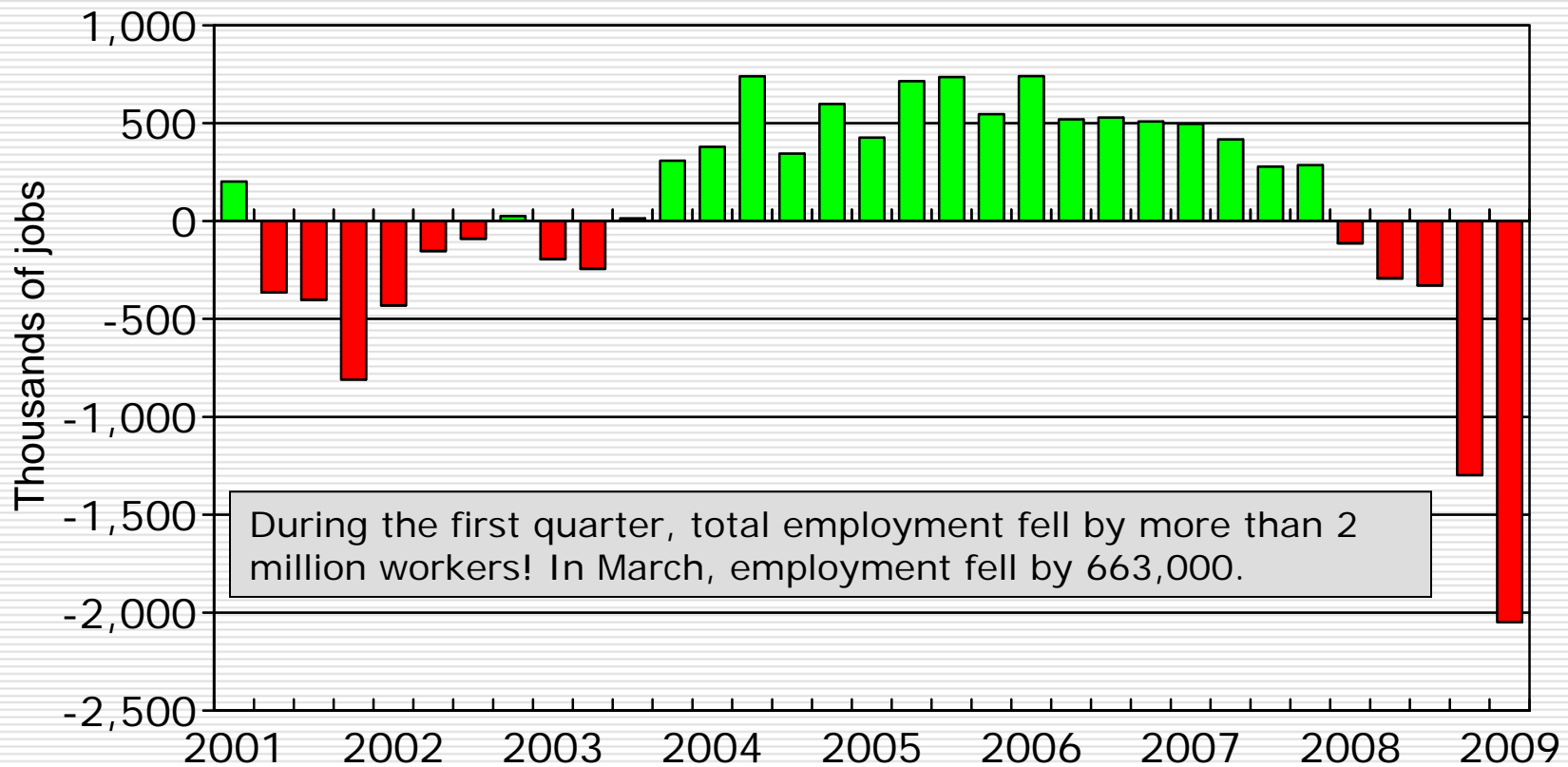
Single-Family Housing Starts—*Have not yet found bottom.*

Seasonally Adjusted Annual Rates



U.S. Census

Nationwide, employers are cutting way back.

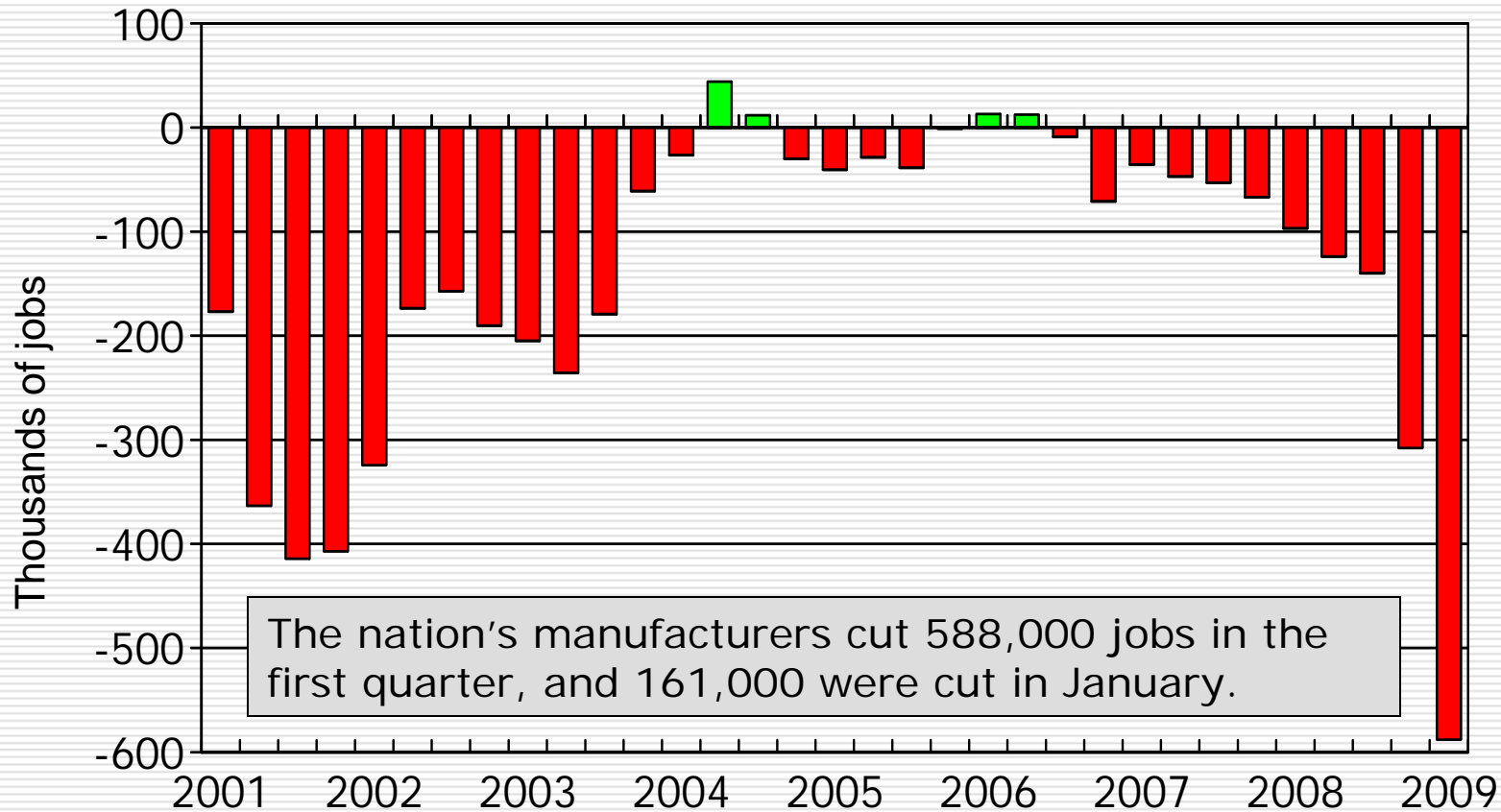


Source: BLS.

Bottom line

- ❑ There is a large gap in demand for goods and services from the private sector—domestic and abroad.
- ❑ The nation's nearly frozen financial system is still a major part of the problem.
- ❑ Currently, the only short-run source of demand appears to be government spending.

The nation's manufacturing sector is in trouble.



Source: BLS.

Manufacturing matters.

- ❑ Without production, we also can lose invention, innovation, design, and our seat at the global table for many industries.
- ❑ Without production, many of our business services providers are also in trouble.
- ❑ Controlling for education achievement, manufacturing pays better wages than any other industry.

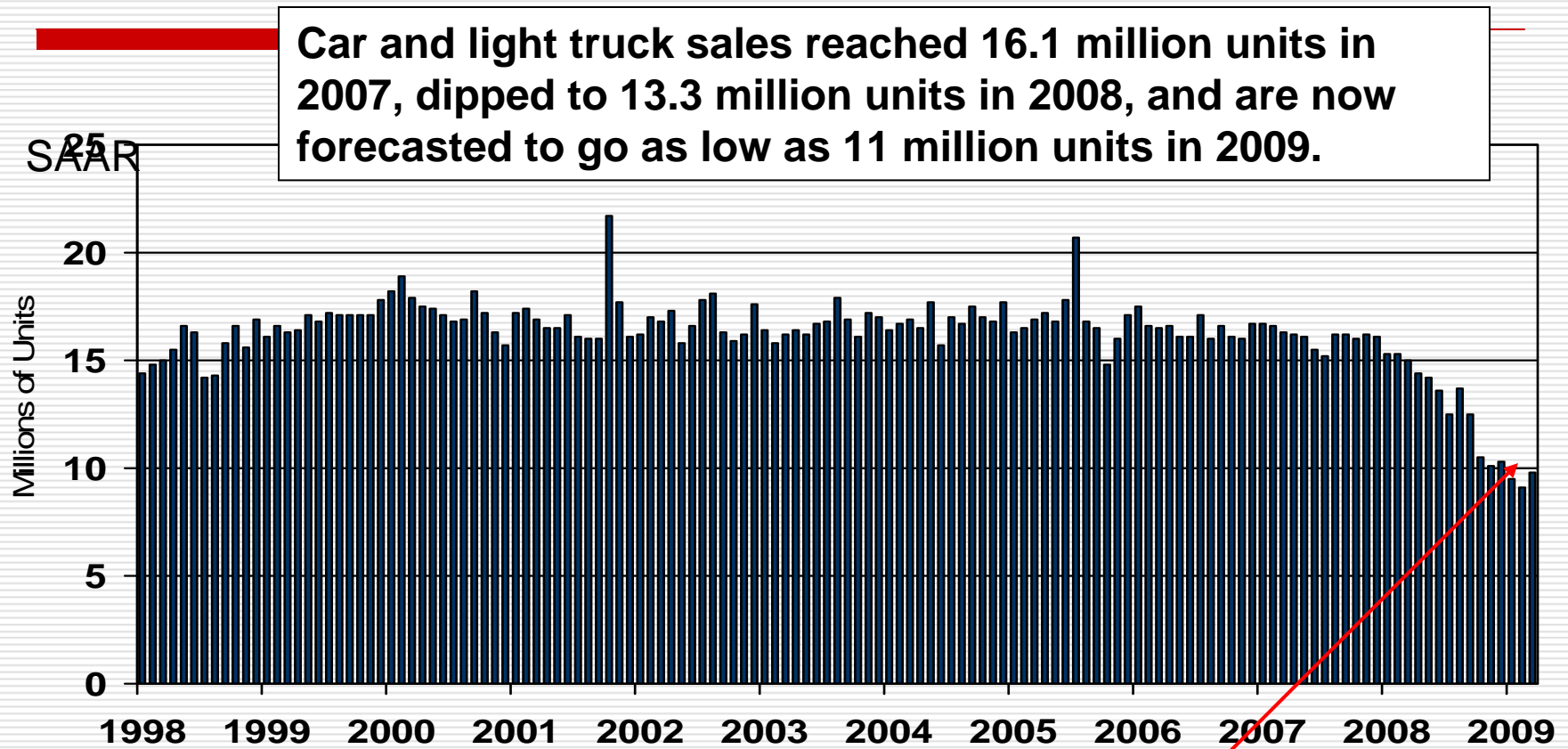
What should be the focus of economic development policy?

- Regional economic development policy should be focused on providing employment opportunities to the region's residents.

Of course, any discussion of manufacturing must address autos

- ❑ The industry is in a deep depression which is changing the very shape of the industry.
- ❑ In addition, environmental pressures are forcing change in type of vehicle and its power source.
- ❑ And the industry is moving south. Remember the 500 mile rule.

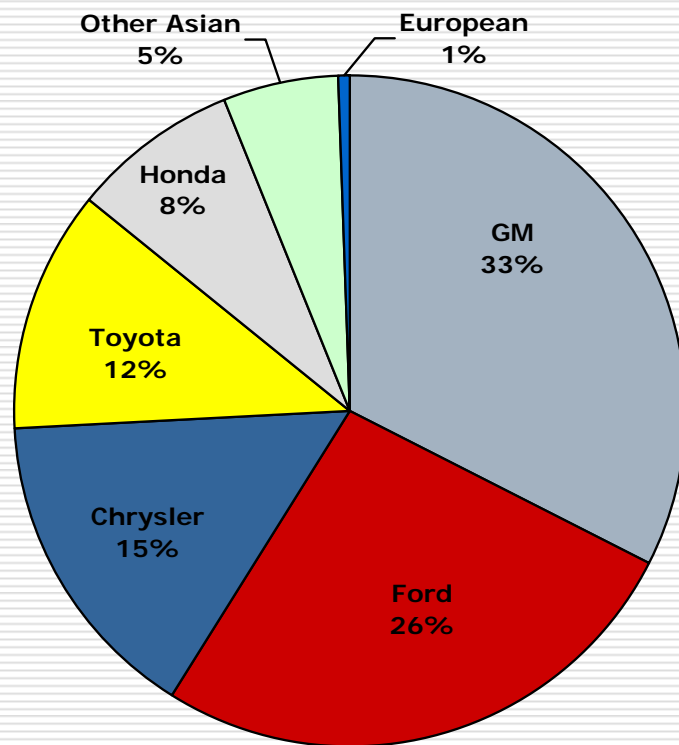
Consumers are simply postponing purchases that can be postponed.



Source: BEA.

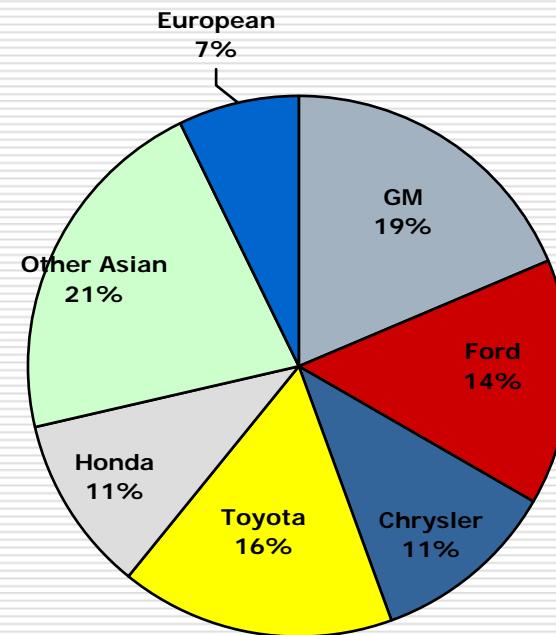
A 9.8 million unit rate in March after a poor 9.1 million unit rate in February.

Loss of market share: In 2001, the Detroit Three controlled 74%; it fell to 44% in the first quarter of 2009.



Source: *Wards AutoWorld*.

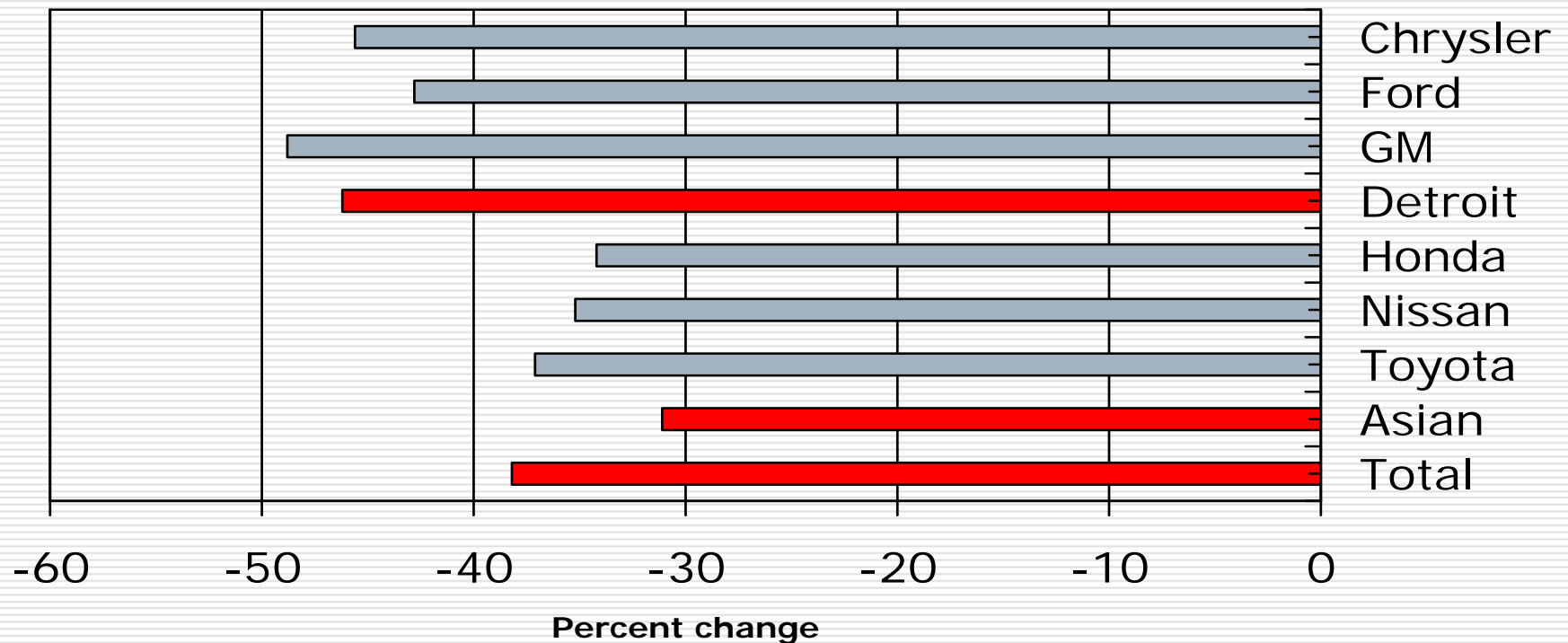
2001



1st Q 2009

Production levels have plunged. Jan-Mar 2008 to Jan-Mar 2009

North American Car Production



Source: Ward's AutoInfoBank <http://wardsauto.com/keydata/NAProductionSummary0902/>

How the suppliers rank the top six automakers:

- 1. Toyota
- 2. Honda
- 3. Nissan
- 4. Ford
- 5. General Motors
- 6. Chrysler

Source: Industry Week, Oct 2008. Planning Perspectives Inc 2008 Working Relations Study

O.K. So now what?

- ❑ Back to basics what are the drivers of change in a regional economy?

Transformation depends on identifying interaction of three key drivers of regional economies:

Global Factors

Demographic
change

Environmental

Political/Social

Technological Change

Applications

Feasibility

Survivability

Regional Structure

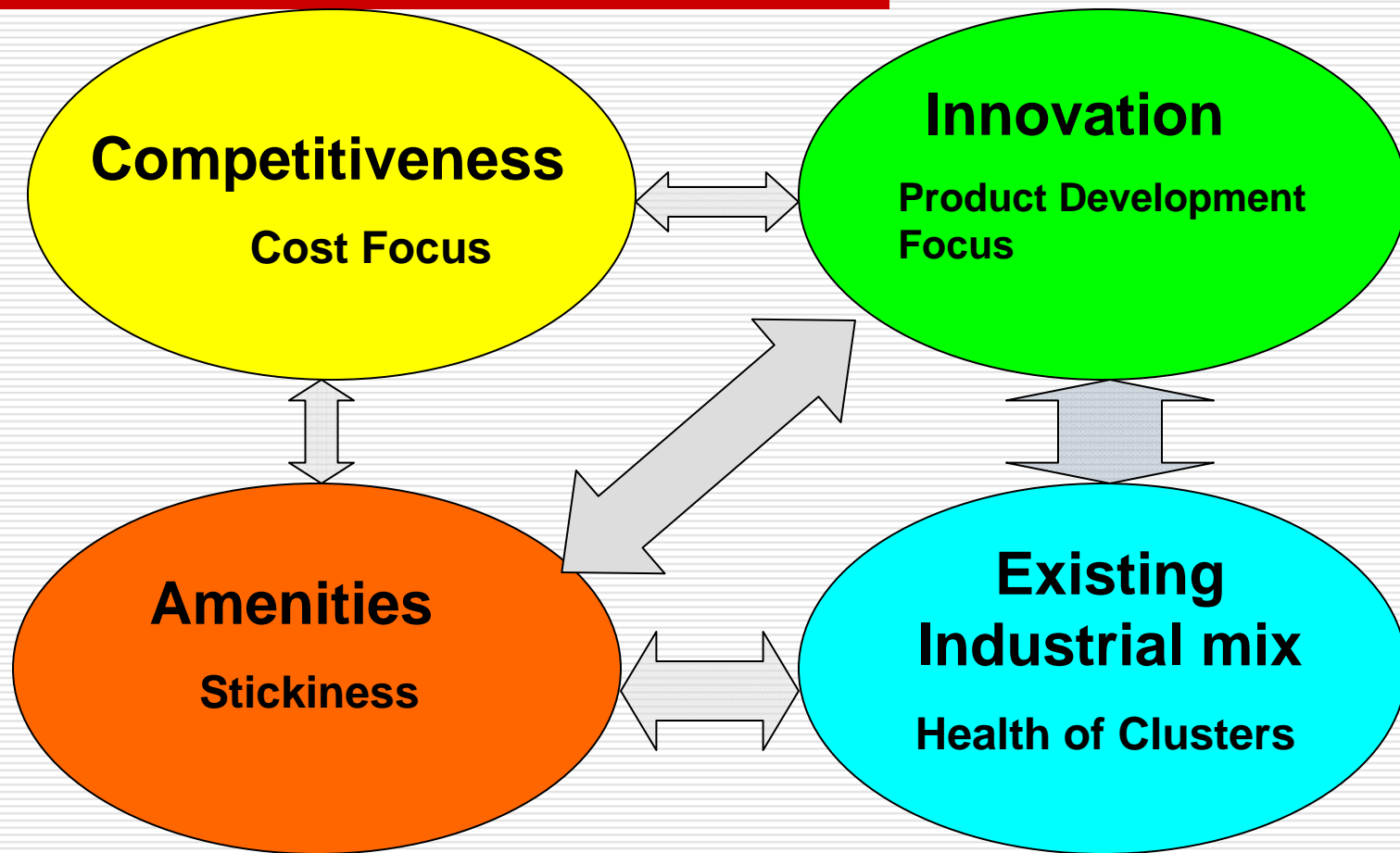
Competitiveness

Innovation

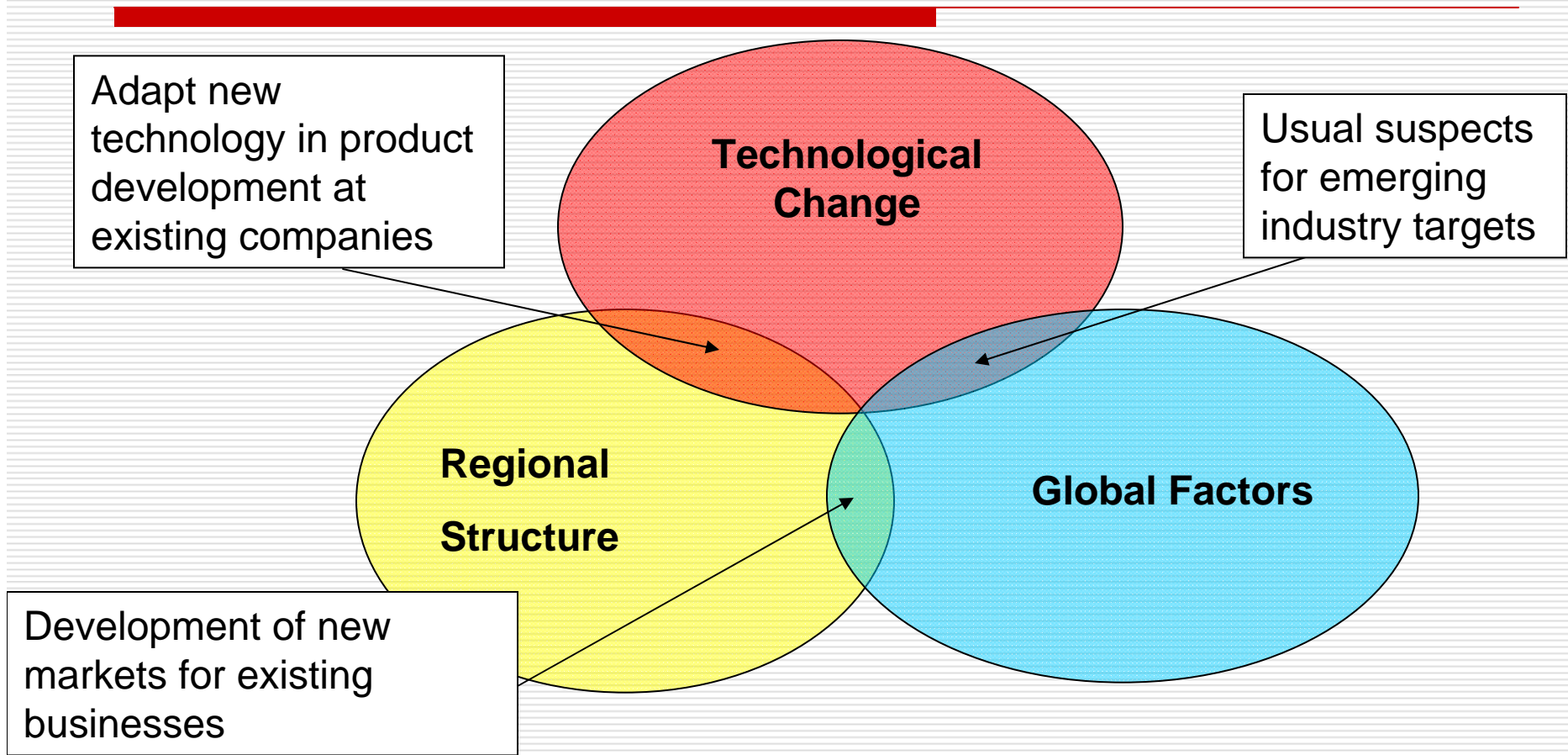
Amenities

Existing industries

Interaction Between Regional Factors



Emerging Industry Opportunities

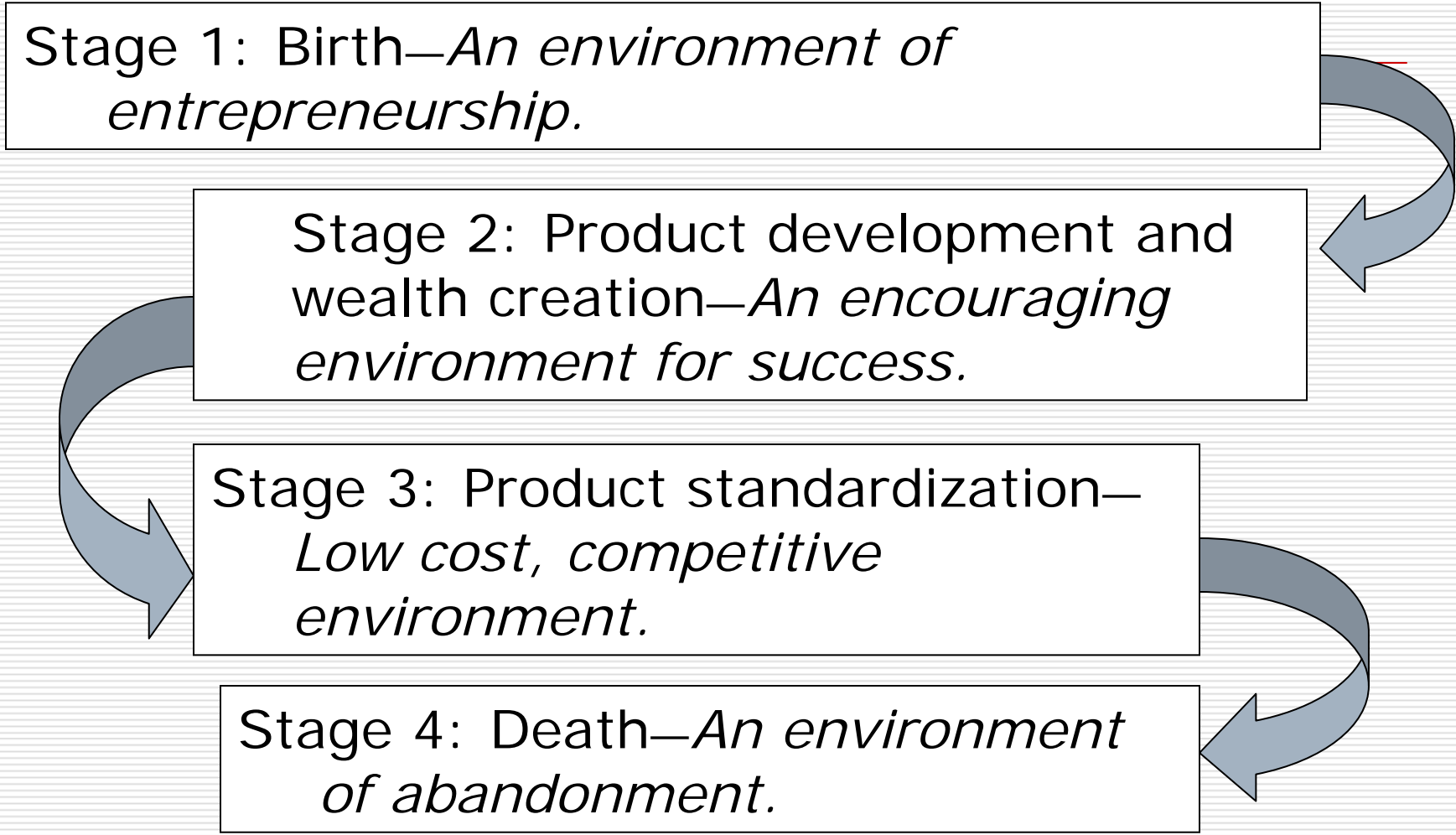


Think “in the box” with a design eye.

We should question emerging industry thinking.

- Industry clusters matter as do R & D resources and, simply, luck.
- Great technologies can be eclipsed by better technologies.
- Instead, can see “change the box.”
- Product Cycle Theory

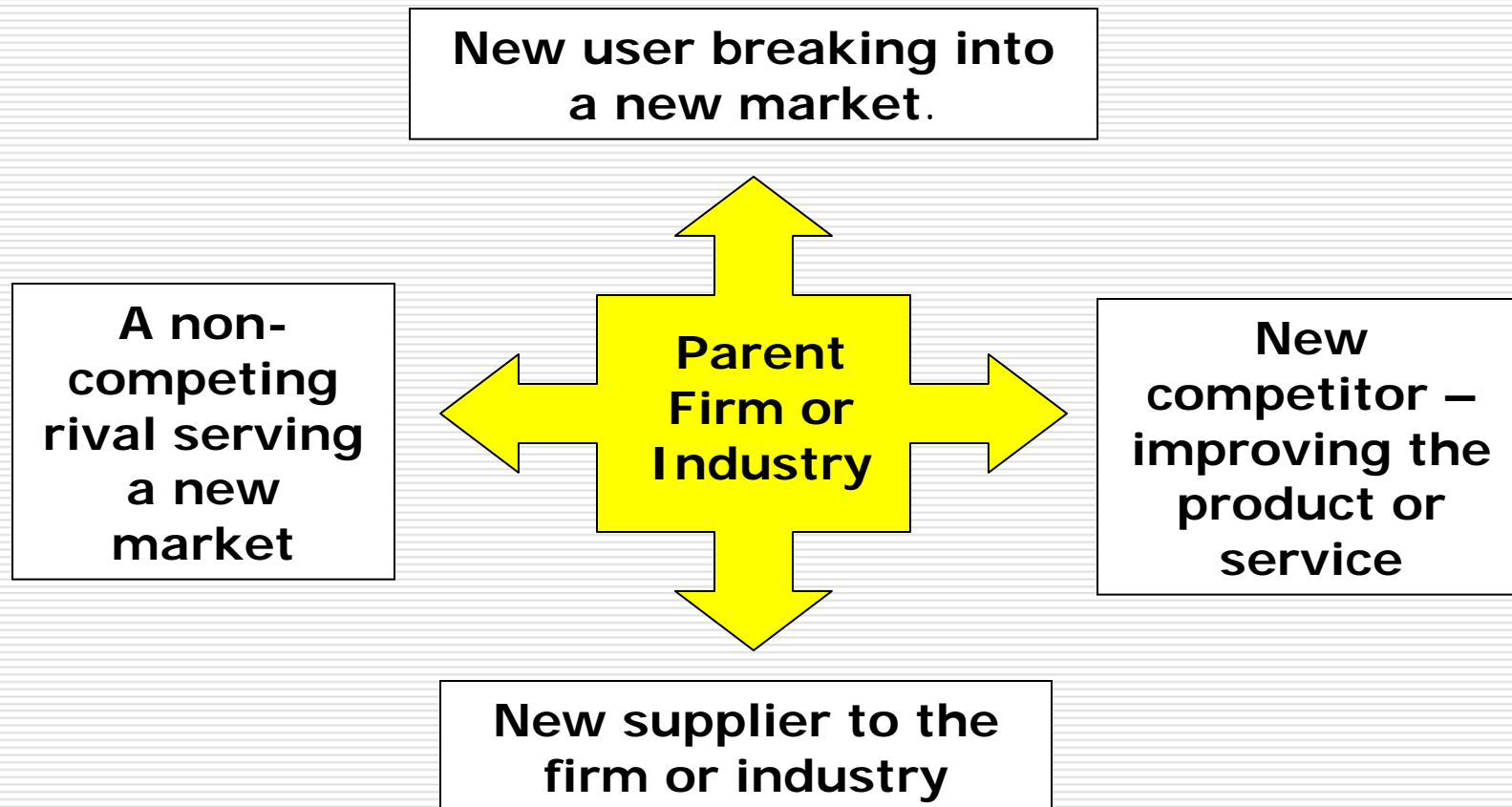
Regional Aspects of a Product Life Cycle



Stage 1: Birth—*An environment of entrepreneurship.*

- For knowledge-based industries a metro environment is more conducive.
 - Universities
 - Strong industrial clusters
 - “Face-to-face” contacts
 - The importance of the internet and telecommunications are overrated at this stage.

Stage 1: Birth—*An environment of entrepreneurship (cont'd)*



Stage 2: Product development and wealth creation—*An encouraging environment for success.*

- Again, for knowledge-based industries a metro environment is more conducive. However, in this stage the following are important for all firms.
 - Financing including venture capital linkages
 - Strong business and professional services
 - “Face-to-face” contacts
 - A creative workforce
 - Quality of life

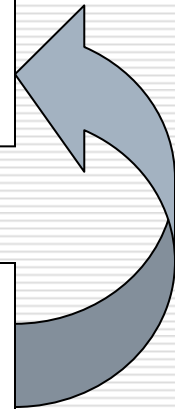
Stage 3: Product standardization— *Low cost, competitive environment.*

- As a rule, only now, have rural areas become attractive.
 - Low costs
 - Good work ethics
 - Low unionization rates
- Major barrier
 - Little research and development activities, meaning that there is little chance for new product development.

“In the box thinking” could allow a firm to “reverse” the life cycle of its products or services.

Stage 2: Product development and wealth creation—*An encouraging environment for success.*

Stage 3: Product standardization
Low cost, competitive environment.



The key is that this approach starts with what the company knows and then moves forward.

Design and the Product Cycle

- ❑ Design can make an existing product and firm young again.
- ❑ Design can allow an existing firm to enter new markets.
- ❑ However, many mature firms in stable or declining markets may not be open to new design but instead become stuck on the low-road of production which will end sooner or later in an offshore solution.

What evidence is there that design pays?

- Evidence from the UK
- Evidence from Italy

From the UK

- ❑ Rapidly growing businesses are nearly six times more likely as static ones to see design as integral.
- ❑ Shares in design-led businesses outperform key stock market indices by 200%.
- ❑ Design firms are less likely to compete on price, but more on quality.
- ❑ Businesses that add value through design see a greater impact on business performance than the rest.

Source: Design Council, *The Value of Design*, 2007.

Returns to design for the Lombardy Italy's Design Center

Company	10-yr Growth (94-03)	Revenues (2003 U.S \$mill)
Alessi (home furnishing)	81%	104
Artemide (lighting)	59%	110
B&B Italia (furniture)	54%	165
Cappelini (furniture)	117%	29

Source: Verganti, *Innovating Through Design Harvard Business Review*, December 2006.

(Cont'd)

Company	10-year Growth (94-03)	Revenues (2003 U.S \$mill)
Cassina (furniture)	60%	163
Flos (lighting)	106%	75
Kartell (furniture)	211%	70
Design Cluster Total	75%	
European Union	11%	

Source: Verganti, Innovating Through Design *Harvard Business Review*, December 2006.

The factors that make Lombardy the envy of the other localities are imagination and motivation, which are within the capacities of any group of businesses.

Design is tied to the firm's product's life cycle.

Stage 1: Birth—*An environment of entrepreneurship – Disruptive Design*

Stage 2: Product development and wealth creation—*An environment for success—Application Design*

Stage 3: Product standardization—*Low cost, competitive environment—Inactive Design*

Stage 4: Death—*An environment of abandonment—Loss of Design*

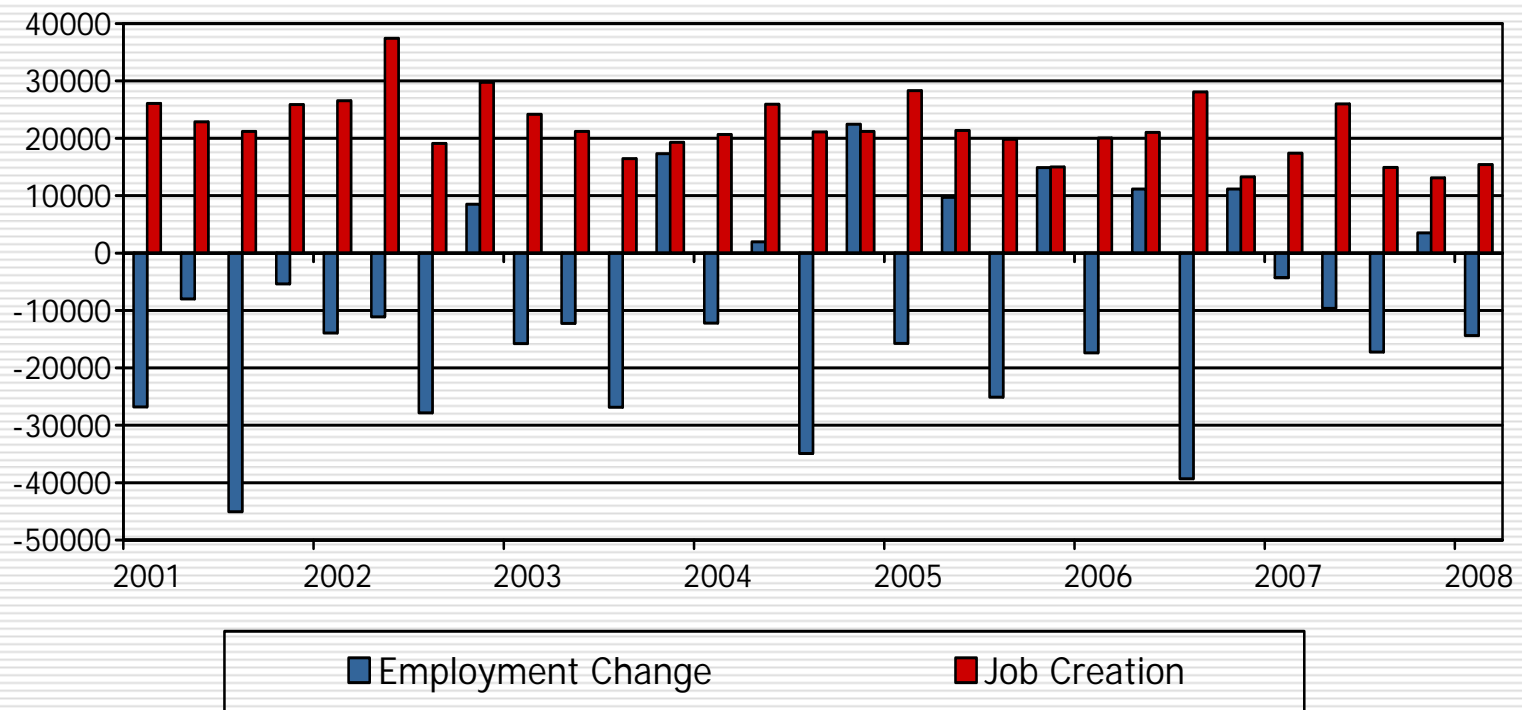
How have Michigan companies been doing?

Unfortunately, the strongest evidence has been hidden in the net employment statistics

- Jobs are created due to
 - Business Churn—new stores replacing tired outlets
 - Attraction/recruiting
 - Existing companies introducing new products and services
 - Start-ups

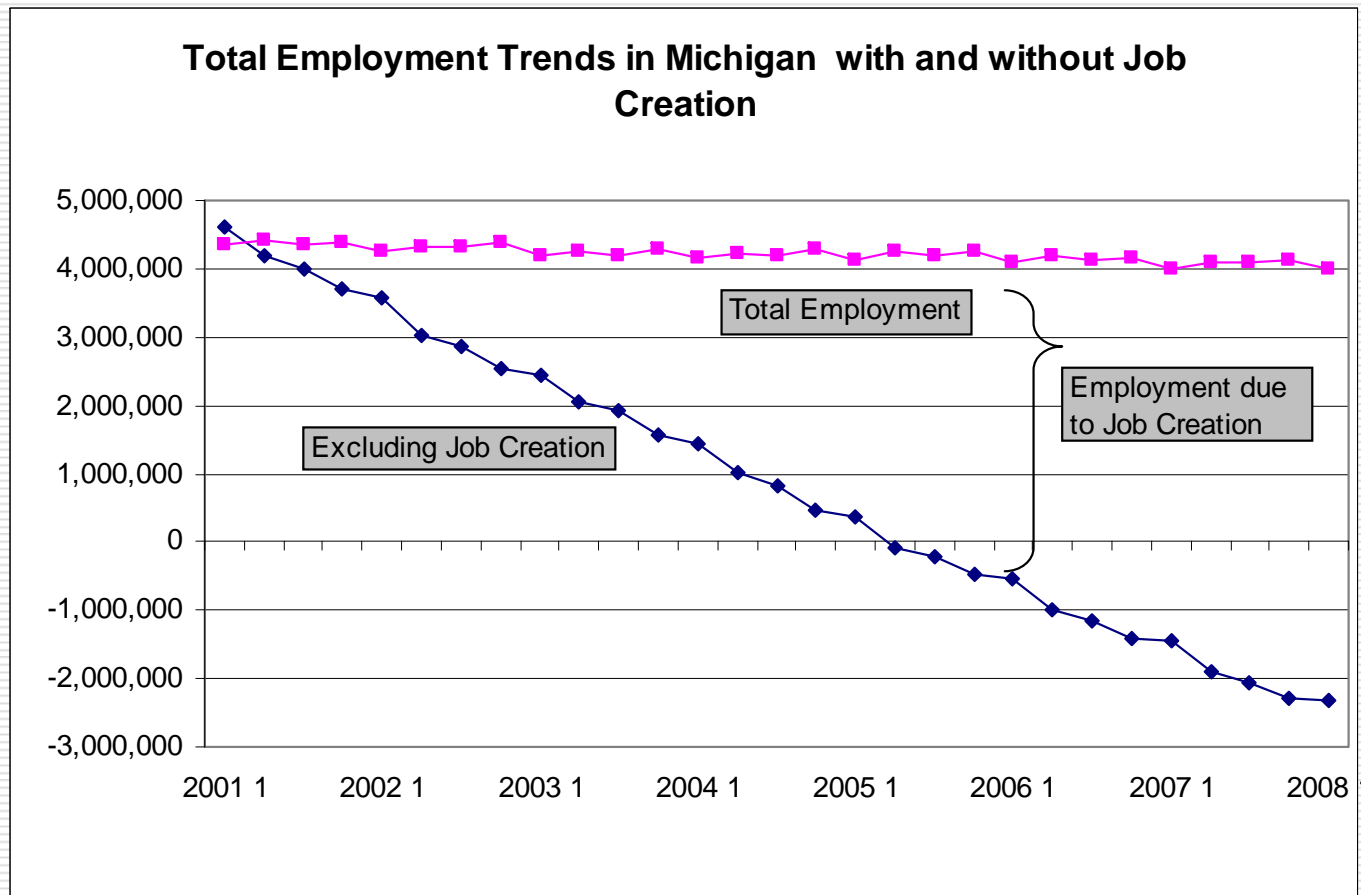
Job Creation in Michigan's Manufacturing Sector

Job creation excludes recalls.

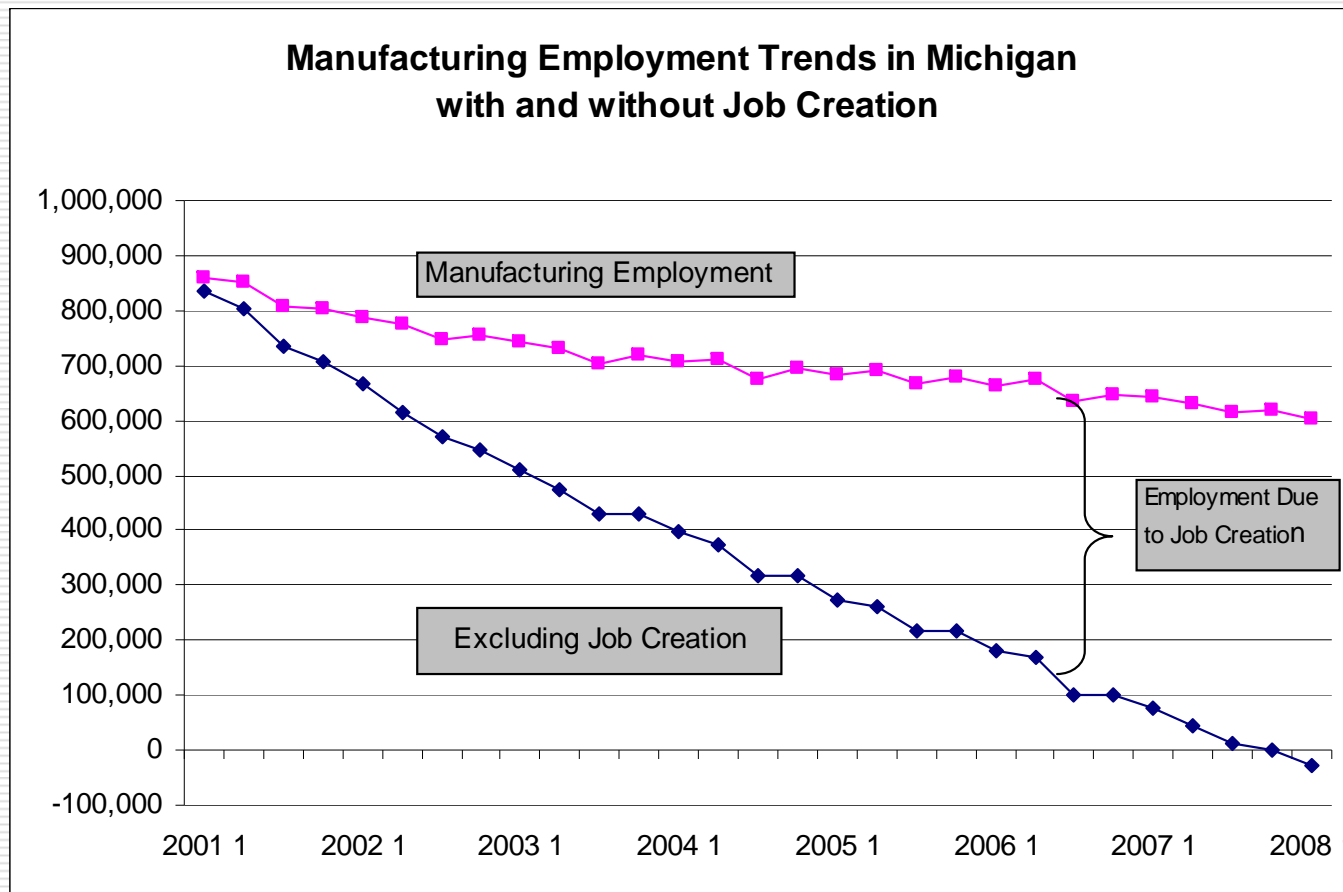


Source: BLS & U.S. Census.

What is the evidence of job creation in the state?



Even statewide, job creation in manufacturing makes a big difference.



Entrepreneurship is not limited to start-ups.

- Returning to “growing young again.”
 - Diversification based on assets and regional resources.
 - Building on strengths, not on trying to resolve weaknesses.
 - The growing importance of networks—regional and industrial.
- Many start-ups are not interested in growth or being a “game changer” which many existing firms are.

Five types of entrepreneurs

- ❑ Aspiring - High-risk beginners
 - ❑ Survival
 - ❑ Lifestyle
 - ❑ Growth
 - ❑ Serial
- Modest job growth potential
- Experienced entrepreneurs focused on wealth generation and design
- Career idea developers – sell before production.

Dabson et al. *Mapping Rural Entrepreneurship*, W.K. Kellogg Foundation, 2003.

Many entrepreneurs make modest incomes.

Establishments without payrolls in Michigan

Type of Business	Number of Establishments	Average Receipts per Establishment
Child Day Care Services	38,041	\$10,645
Other Personal Services	32,911	\$19,443
Hair, Nail, and Skin Care Services	30,762	\$18,323
Direct Selling Establishments	27,707	\$15,902
Offices of Real Estate Agents and Brokers	19,719	\$31,864
Professional, Scientific, and Technical Services	17,447	\$36,458
Independent Artists, Writers, and Performers	15,542	\$13,411
Janitorial Services	14,963	\$13,062
Activities Related to Real Estate	11,272	\$49,150
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	9,755	\$18,950

U.S. Census County Business Patterns

Closing Thoughts

- ❑ Today's and tomorrow's emerging industries will likely hatch from today's industrial bulwarks (many by acquisition).
- ❑ Existing firms can rebirth.
- ❑ The will and ability of the entrepreneur cannot be ignored.
- ❑ Nor can plain and simple luck.
- ❑ Still, many will fail.
- ❑ Emerging industries with "export" potential are what matters.

Closing Thoughts (cont'd)

- Avoid jumping on the bandwagon in trying to attract the next best thing.
 - Competition is fierce—most states are going after life sciences.
 - If industry clusters matter at all, then it is risky to go after industries that are currently not in the region.
 - Many of the usual suspects are top heavy with highly educated professionals, meaning that “job chains” that reach the underemployed and unemployed will not be created.

Closing Thoughts (cont'd)

- Think about a coaching model of small business development instead of the standard teaching model:
 - Venture Island – Northern California
 - League System Approach – Lichtenstein
 - Entrepreneur Advocacy – Sirolli
- Don't forget the changing needs of your customer—*A focus on design.*
- Don't forget the knowledge of your workers.

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