

A photograph of a surfer riding a large, curling blue wave. The surfer is wearing a blue shirt and shorts, and is positioned in the center of the wave's barrel. The water is a deep blue, and the sky is a lighter blue. The overall scene is dynamic and energetic.

Always Looking for the “New” New Thing: Silicon Valley Again*

Martin Kenney

UC Davis

&

**Berkeley Roundtable on the
International Economy**

&

**ETLA (Research Institute on the
Finnish Economy)**

Outline of Talk

- **California today**
- **The ecosystem**
- **The history of Silicon Valley**
- **Policy issues**
- **Considerations for the Nordic nations**
- **Conclusions**

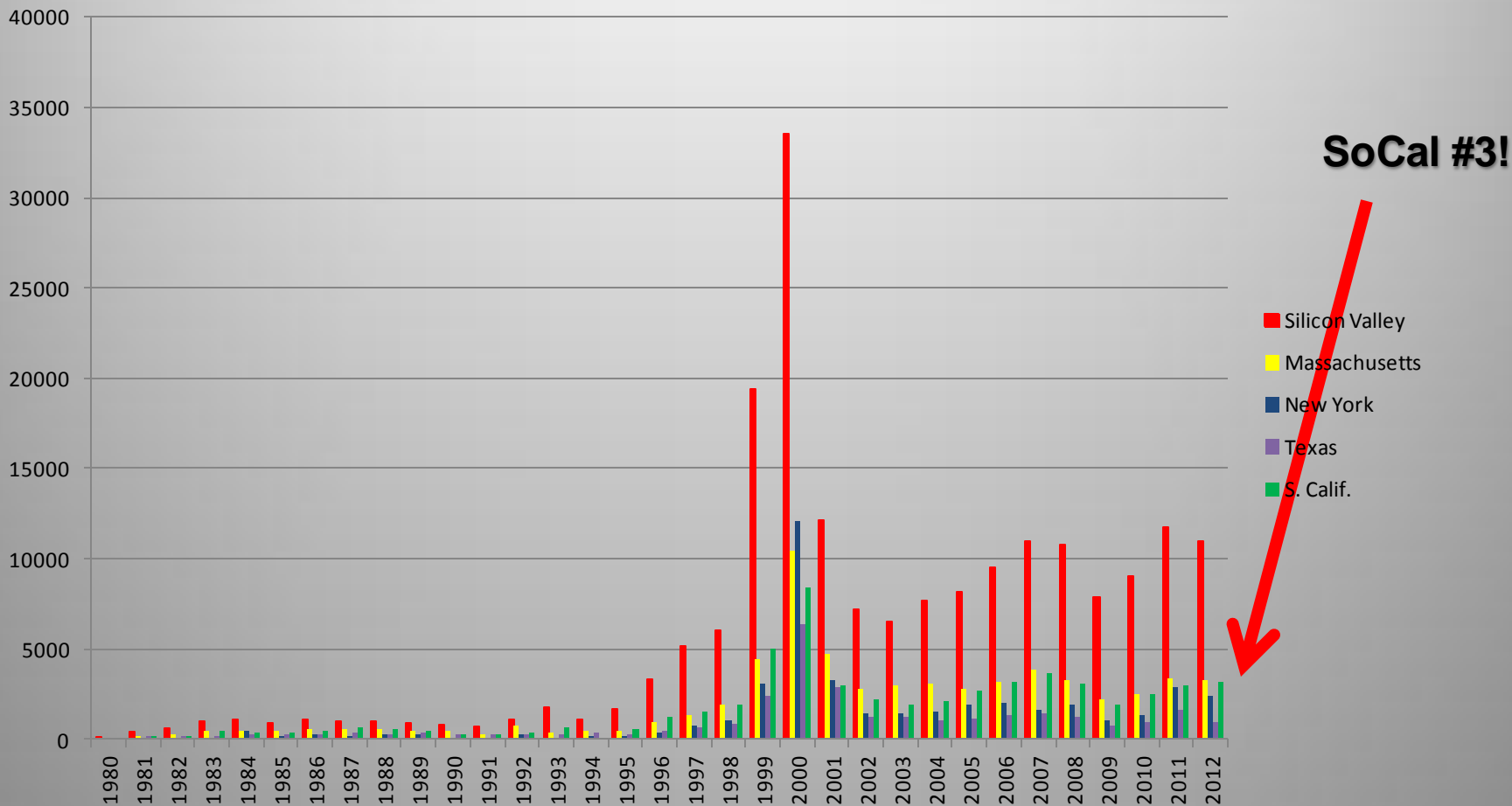
California Today

Global Top 50 Universities*

- CA: **Stanford, UCB**, CalTech, UCLA, UCSD, **UCSF**, UCSB, UCI, USC, UCD (10 total)
- UK (5 total)
- New York (4 total)

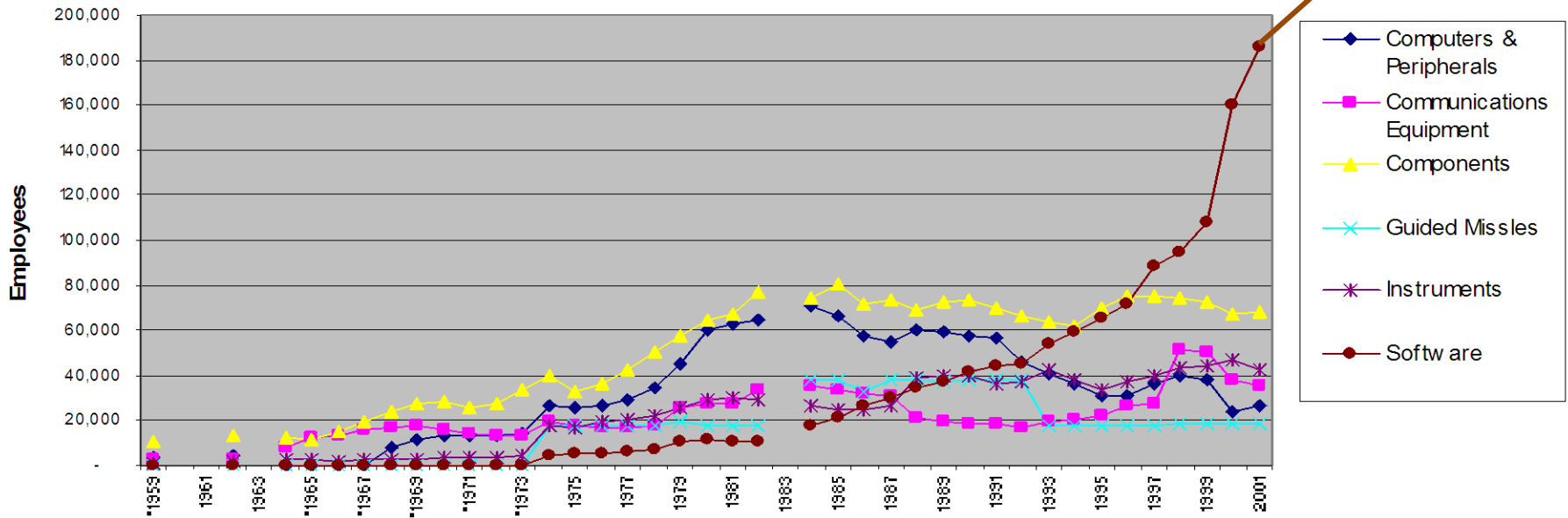
* Shanghai Jiaotong University AWRU 2012

Venture Capital Disbursements by Region, 1980 - 2012



Employment in Four Bay Area Counties, 1959-2001

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Note: Data before 1998 was collected by SIC code. For 1998-present, data is not available in SIC codes. Therefore, data was collected by grouping NAICS codes that approximate former SIC codes.



© Source: Martin Kenney compilation from Census of Industry

IPOs per State, N = 1,700

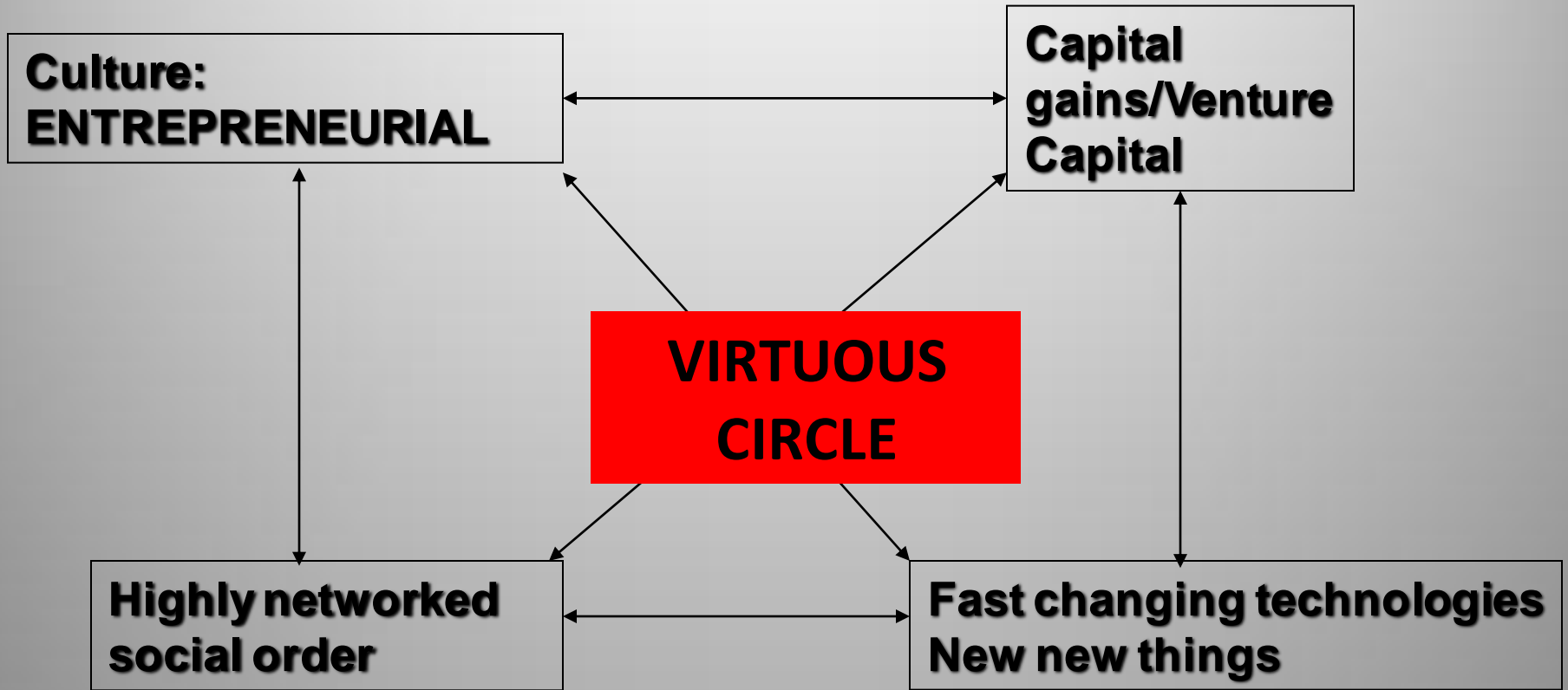
Table 8. Headquarters Locations of Venture Capital and Non-Venture Capital-Financed Emerging Growth Company IPOs, 1996–2010

Region	VC-Backed	Percent of All VC-Backed	Non-VC-Backed	Percent of All Non-VC-Backed	Percent of All IPOs
California	452	46.4	141	19.4	34.9
San Francisco Bay Area*	348	35.7	50	6.9	23.4
Mountain View	30	3.1	4	0.6	2.0
San Francisco	34	3.5	5	0.7	2.3
San Jose	31	3.2	14	1.9	2.6
Sunnyvale	47	4.8	4	0.6	3.0
San Diego County	47	4.8	14	1.9	3.6
Los Angeles County	24	2.5	35	4.8	3.5
Orange County	15	1.5	26	3.6	2.4
Massachusetts	106	10.9	34	4.7	8.2
New York	45	4.6	82	11.3	7.5
New York City	33	3.4	50	6.9	4.9
Texas	39	4.0	74	10.2	6.6
Florida	24	2.5	60	8.3	4.9
All Others	309	31.7	334	46.1	37.8
Total	975	100.0	725	100.0	100.0

**It is no exaggeration to say
it is the Bay Area, Boston
& San Diego, and the Rest**

The Ecosystem

Dialectic and Coevolution of Culture, Economics, Technology and Social Networks



Culture, social structure, and economics are aligned

Building a Silicon Valley Startup – Finding the Ingredients – need many and fast

Capital

People

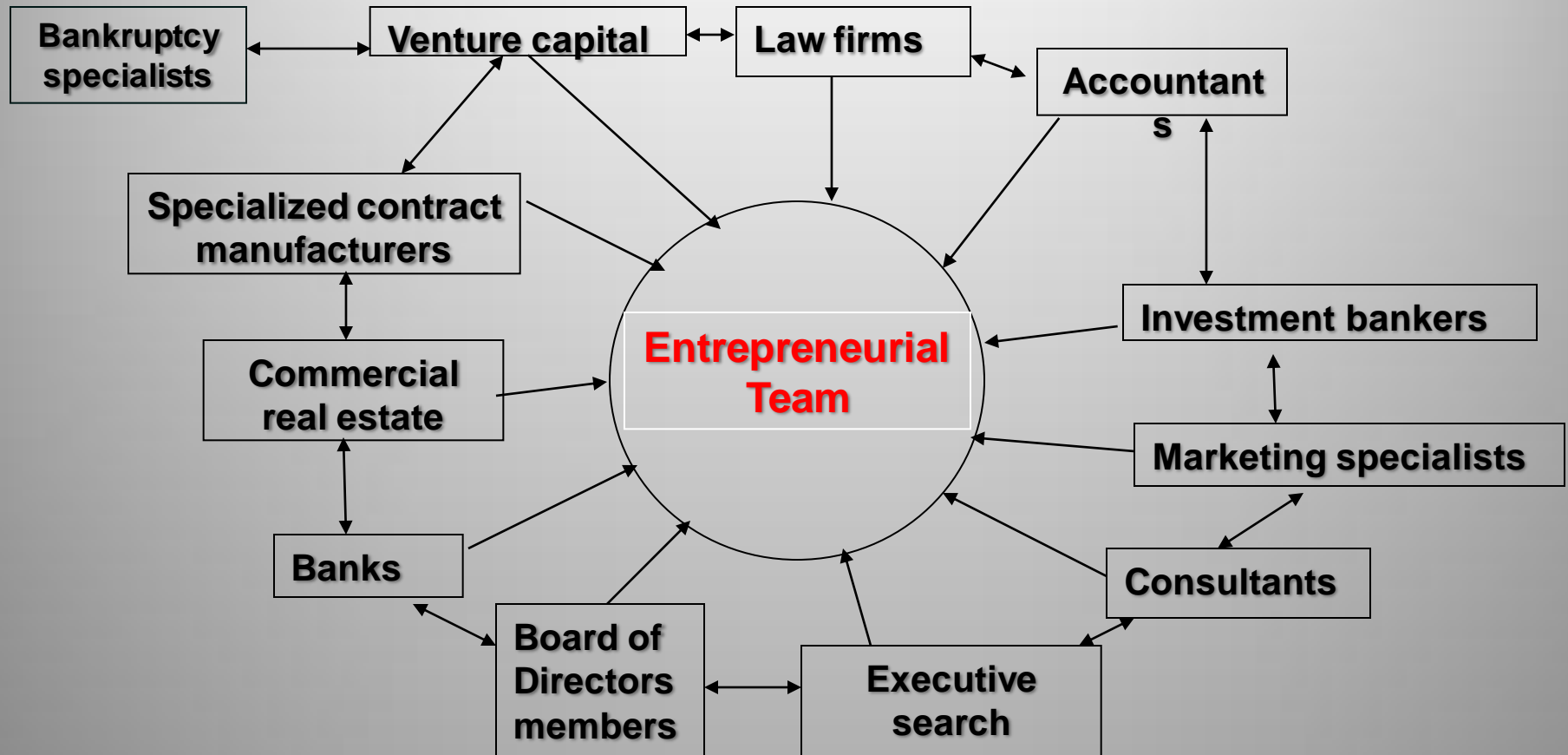
Managers

**Technical
Talent**



**Entrepreneurial
Team**

An Ecosystem Specialized in Assisting Startups



Lower entry barriers, speed the firm creation process, facilitate rapid growth, allow concentration on product development.

Technology or Opportunity

- **Not too expensive to enter**
 - Incumbents can't understand or react because of their bus model
- **Redefines markets or captures next step in evolving market**
 - 10x improvement or
 - Change the way things are done
 - “Google it,” the PC, Internet, local area networks, smart phone
 - Create new platforms or standards
- **Cannibalize old technologies**

The Culture

- **What is the “new new thing?”**
- **Go for it/change the world**
- **Gadget and engineering-oriented environment**
- **Open networks -- everyone knows someone**
- **Performance-based trust**
 - **Did and can you deliver?**
- **Fast paced, high turnover**

Capital Gains Drive Entire System

History of Silicon Valley

No Single Explanation

1. Technology (though my vote is here)
2. Universities
3. Venture capital
4. Defense Department spending
5. Culture
6. Social capital from networking


Co-evolution of individuals, firms, organizations, and institutions

Putting the Silicon in Silicon Valley



AMPEX

varian®



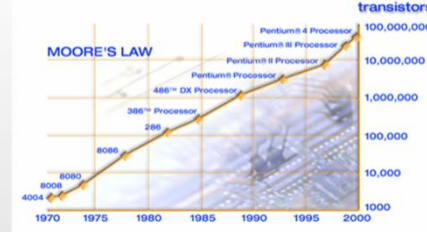
FAIRCHILD



SEMICONDUCTOR®

New New Thing

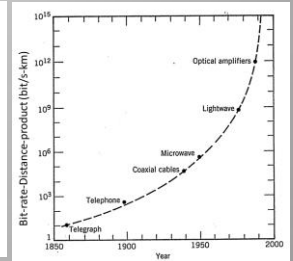
■ Chips



■ Computers etc.



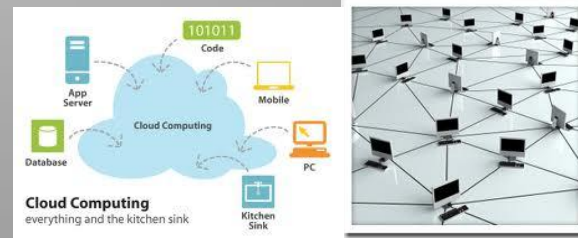
■ Networking



■ Software



■ Internet



New New Thing

■ And, of course



Google

■ Now getting old?

facebook
twitter 

■ Next?

Pinterest



And Don't Forget

Genentech

CHIRON

CETUS



TESLA MOTORS

Silicon Valley Leaders

- **World's leading device maker -- Apple**
- **World's leading search company – Google**
- **World's leading social media site – Facebook**
- **World's leading chip maker – Intel**
- **World's leading networking equipment maker – Cisco**
- **World's second largest software co. -- Oracle**

Policy Issues

Policy Issues

National Level:

- Early days massive DoD purchasing
- Early days difficult to enforce patent laws (now changed)
- Standard setting e.g., TCP/IP
- Massive and unremitting R&D expenditures (NIH, DoD, and NSF)
 - Merit-based evaluation
- Immigration (U.S. universities select the world's best)
- Liquid and fairly transparent equity markets
- Low capital gains tax & favorable stock option tax

Policy Issues



Fabulous Wealth, Grinding Poverty



San Jose City Worker Evicting Homeless



Facebook Sean Parker wedding
Big Sur \$3 million in damages



Silicon Valley Future

- **Enormous amounts of capital available**
 - **Venture capital and angels**
- **Great universities**
 - **Only rivaled by Boston**
- **More globally connected than ever**
- **Interesting new people keep coming**
- **Optimistic as digitization continues to offer new opportunities: mobile, social media, and cloud**

Learnings

- **Invest in university research**
 - **Can immigrants get educated, stay and get great jobs?**
- **Liberalize bankruptcy laws**
- **Eliminate non-compete clauses in labor contracts**
- **Concentrate on strengths**

Nice Growth Firms

- **Many industries, but share following characteristics**
 1. **Barriers to entry not too large**
 2. **Use skilled, quality-oriented people**
 3. **High value-added**
 4. **Often started by an entrepreneur or a small team often are experienced personnel from a similar industry**
 5. **Not likely to grow to enormous size or will scale in linear fashion**
 6. **Not likely to grow large enough to offer stock to the public**

Nice Growth Firm Benefits

- **Knowledge-based industries**
- **High value-added**
- **Employment effects often small individually but significant in aggregate**
- **Can employ skilled craftspersons**
- **Often built on high quality production**
 - **Producing quality products is a social good**
- **Can be clustered or diverse**

Conclusion

- **If you have the deals the money will come, e.g., China and Israel**
- **How to encourage socially beneficial entrepreneurship**
- **The goal is to encourage people to actualize their creativity**

Questions?

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