

Starting a Custom Synthesis Company

Ron Bihovsky
Key Synthesis LLC



Education and Experience

- PhD, UC Berkeley, Organic Chemistry 1977
- Postdoctoral Fellow, UW Madison 1978 - 1980
- Assistant Professor, SUNY Stony Brook 1980 - 1987
- Berlex Laboratories (Schering AG; Bayer) 1987 - 1992
- Cephalon Inc. 1992 - 2001

Experienced Senior Scientist, Medicinal Chemist
Group Leader, Project Leader

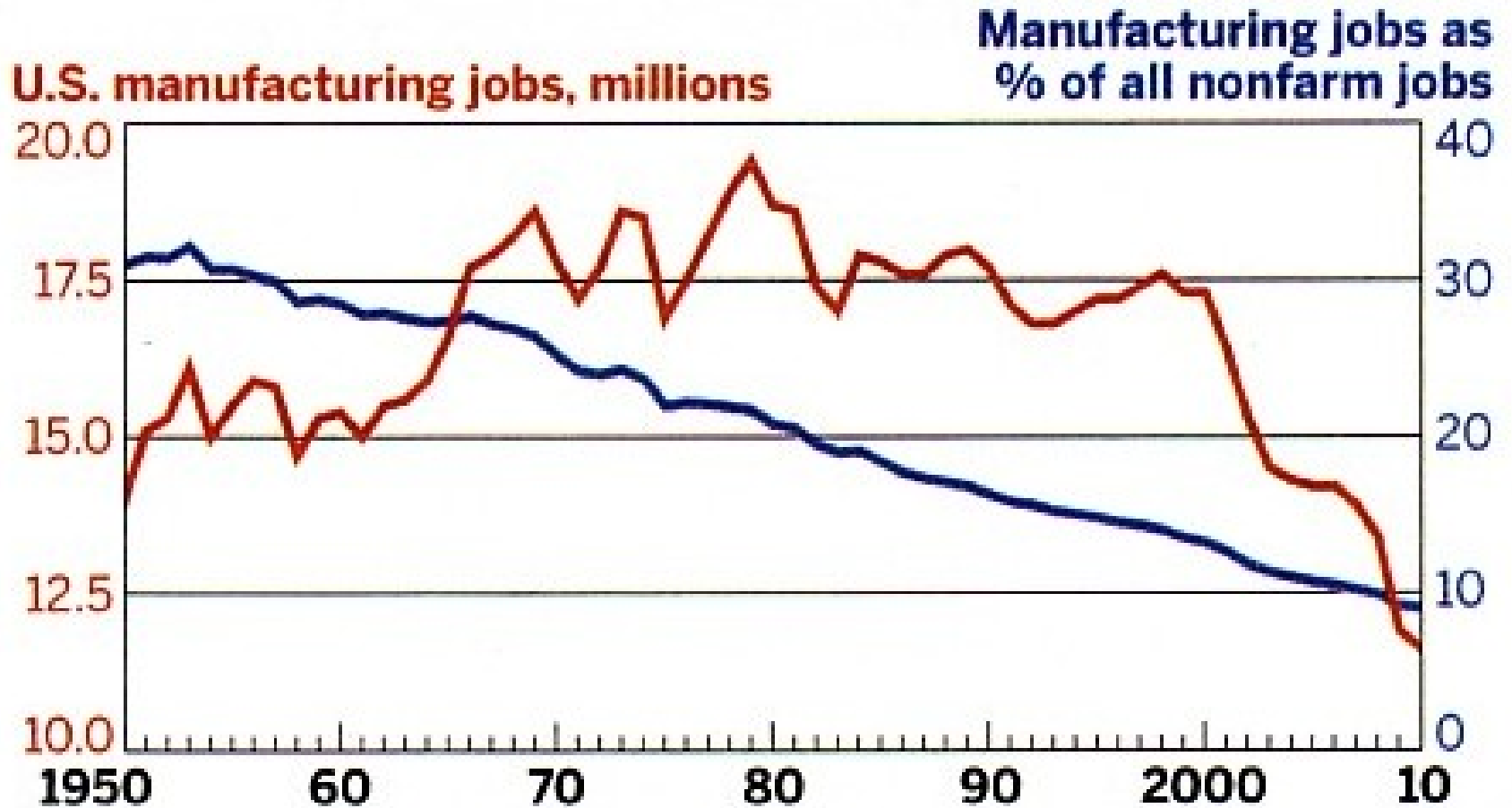
- 50 Publications
- 15 US Patents

Employment Options – 2001

- Relocation very undesirable!
- Local pharmaceutical companies???
- Start small drug discovery company??
- Consulting
 - Would anyone pay for my advice?
- Custom Synthesis Laboratory
 - Manufacture real products
 - Is there a market?

“When you work for yourself, you earn every penny you make”

US Manufacturing Jobs Declining



Source: Bureau of Labor Statistics

Starting a Custom Synthesis Laboratory

- Chose Name – Key Synthesis, LLC
- Find Location – Real Estate, zoning, space required
- Found lab space – No turning back!
- Identify initial products – Any market?
- Encouragement of CCN consultants

Business Aspects

- LLC
- No business plan!
- Self funded – Not beholden to investors
- Size – One person
 - Chief cook and bottle washer
 - I'm the president, and I take out the garbage

Common Mistakes when Setting up a Small Business

- Underestimating monthly expenses (32%)
- Hiring the wrong people (20%)
- Not knowing how to market and sell your product (18%)
- Not securing enough financing (18%)

First Investments



Used glassware
Used equipment

Product & Service Niche

"In the beginning, we did anything to bring in a nickel"

William Hewlett, cofounder of Hewlett-Packard

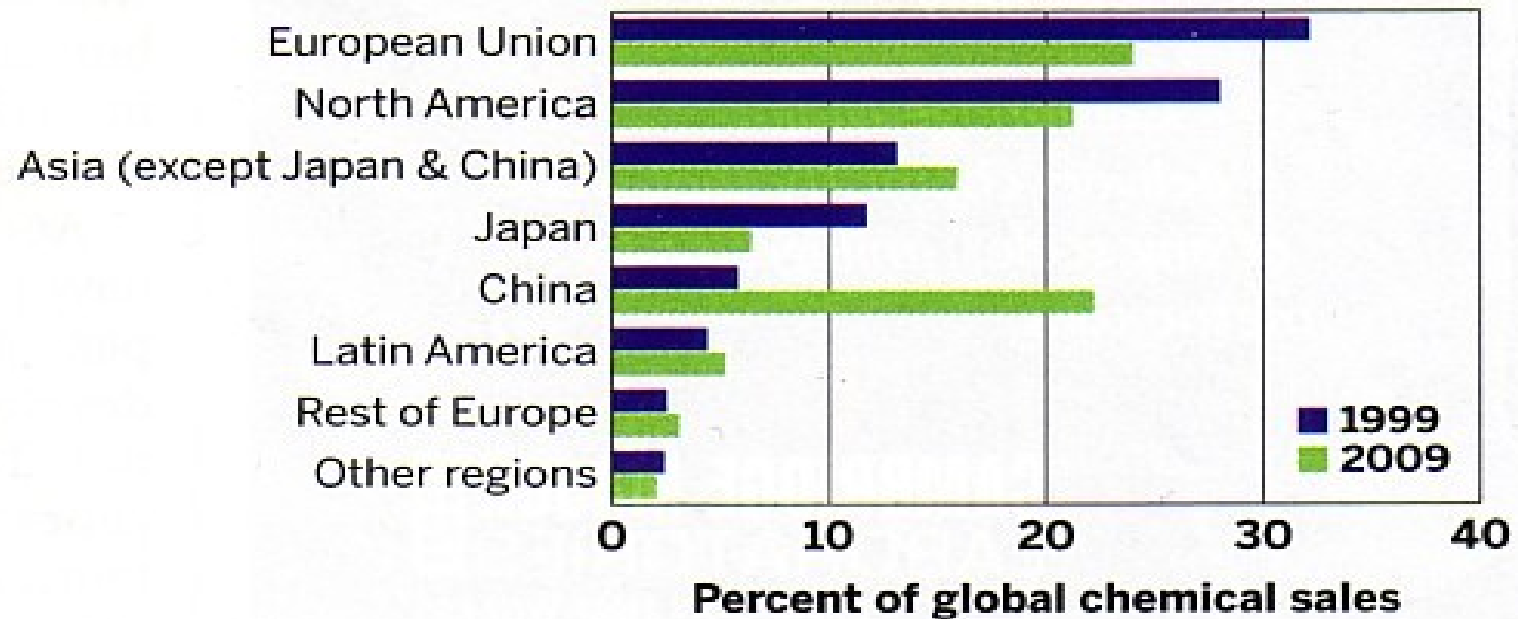
- Custom synthesis of biologically active compounds:
 - Wholesale or retail? Both
- Chemistry Consulting
- Patent Litigation Support
 - Pharmaceutical patents

Methods to Determine Pricing

- Understand added value to client
- Compare custom synthesis competition
- Compare catalog prices
- Quote and see what happens
 - Non-chemists don't understand difficulty of organic synthesis
- CCN advice

Foreign Competition

SHIFTING FORTUNES The European Union's share of global chemical sales has declined while China's has increased



Foreign Competition

Q: How can you compete with India and China?

A: Better quality and service

Sales

- Identify new customers
- Keep old customers happy
- First orders
- Reorders are rare
- Innovate or die
- Negotiations
- Feast or Famine
 - Learn to appreciate income or free time

A Sign of Success



Income Adjustments

- Pay self-employment tax
15.3 % vs. 7.65% Social Security & Medicare
- Deduct 50% of Social Security & Medicare
- No employer contribution to 401k plan
- Deduct contributions to self-employed retirement plan
- Pay for health insurance (\$\$\$)
- Deduct cost of health insurance
- Deduct business expenses, mileage, home office, etc.

Marketing

- Meetings
- Networking
- Mailings
- Cold calls
- CCN site
- Key Synthesis Website:
www.KeySynthesis.com



Key Synthesis LLC

www.KeySynthesis.com

<i>Compound Name</i>	<i>CAS Number</i>
A2E	N.D.
AB-MECA	152918-26-8
6,7-ADTN - HBr	73304-33-3
ALE-0540	N.D.
AM580	102121-60-8
NG-Amino-L-arginine HCl	57444-72-1
Amthamine – 2HBr	142437-67-0
(S)-5-(4-Benzoyloxyphenyl)-4-(7-phenylheptanoylamino)pentanoic acid	N.D.
Bexarotene	250386-15-3
Binodenson	144348-08-3
3-Bromo-5-hydroxypyridine	74115-13-2
CGP 53353	145915-60-2
2-Chloro-N-(4-iodophenyl)acetamide	2563-00-3
2-Chloro-N-(4-methylphenyl)acetamide	16634-82-5
Cilostamide	68550-75-4
Ciproxifan	184025-18-1
Darbufelone mesylate; CI-1004; DO3652	139340-56-0
3'-Deoxythymidine	3416-05-5
N-Desmethylclozapine	6104-71-8
20,25-Diazacholesterol	313-05-3
5,7-Dichlorokynurenic acid	131123-76-7
3,4-Dicyanoimidazole	1122-28-7
5-Difluoromethoxy-2-((4-methoxy-5-methyl-2-pyridyl)methylthio)-1H-benzimidazole	N.D.

Pros and Cons

Pros

- Can't be fired or forced to retire
- Control your own destiny
- No staff meetings
- No performance appraisals
- Flexible schedule

Cons

- No benefits or retirement plan
- Not solving world's problems
- No Staff
- Boss is demanding
- No paid vacation or sick days
- 60+ hour work week