



**UNIVERSIDAD DE CHILE  
FAC. DE CIENCIAS FÍSICAS Y MATEMÁTICAS  
Ingeniería Industrial**

# **IN75A Analysis of the Global Economy**

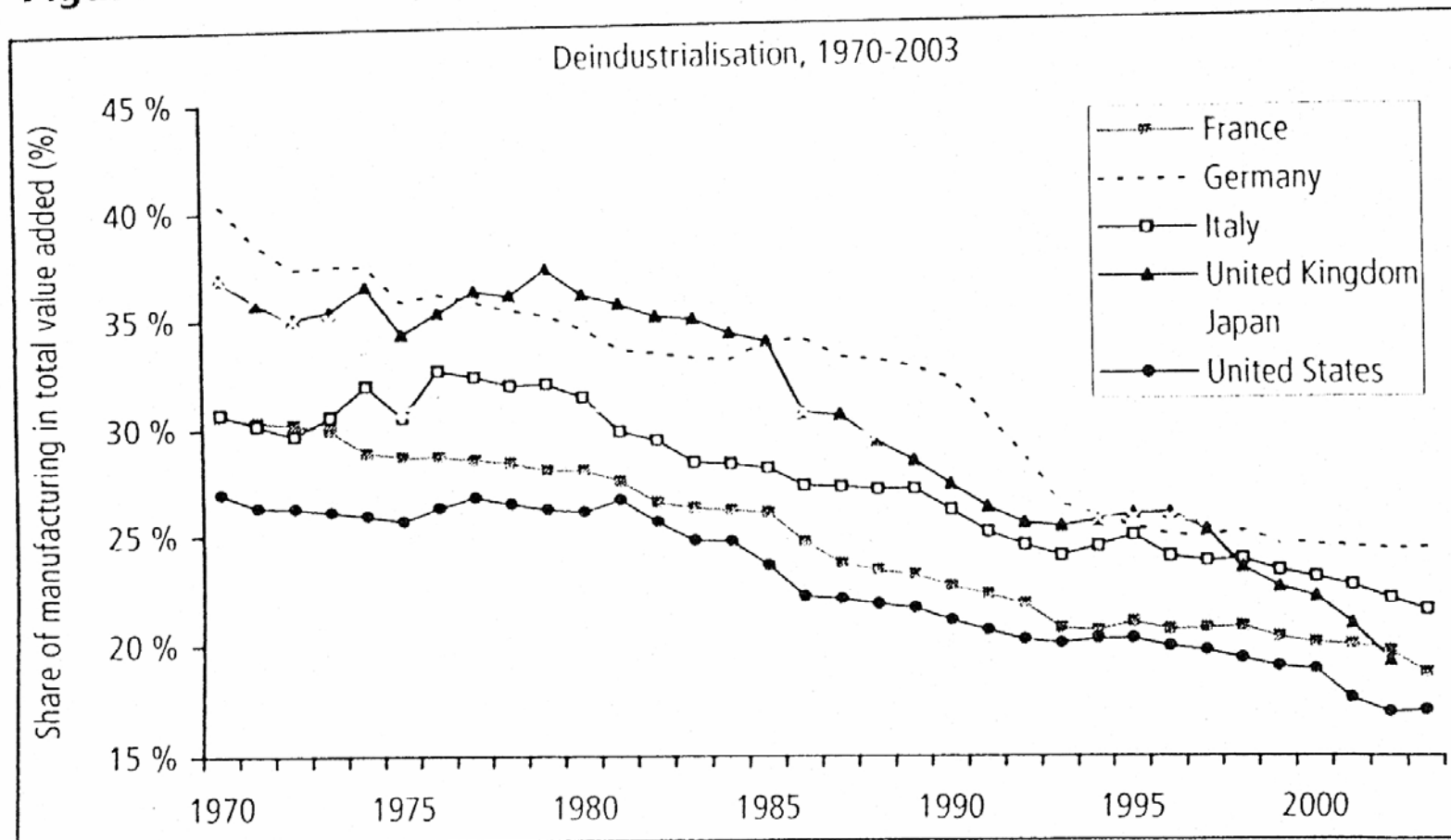
**Patricio Meller**

**Magíster en Gestión para la Globalización**

# ECONOMIC RATIONALE OF GLOBALIZATION

1. Pre – GL  $\Rightarrow$  Y close C: Geographic Clustering
2.  $\downarrow$  Cost moving goods/people/ideas: **GL1**  
 $\Rightarrow$  Separation production/consumption
3. g take-off & geographic clustering
  - learning spillovers are localized geographically
  - spatial clustering of industry processes:
    - innovation -  $\tau$  progress - g
4. 1<sup>st</sup> g take-off: Europe XIX – XX
5. 2<sup>nd</sup> g take-off: Japan – Asia XX  
generates de-industrialization in DC

**Figure 1** Industry as share of GDP, large OECD nations, 1970–2003.



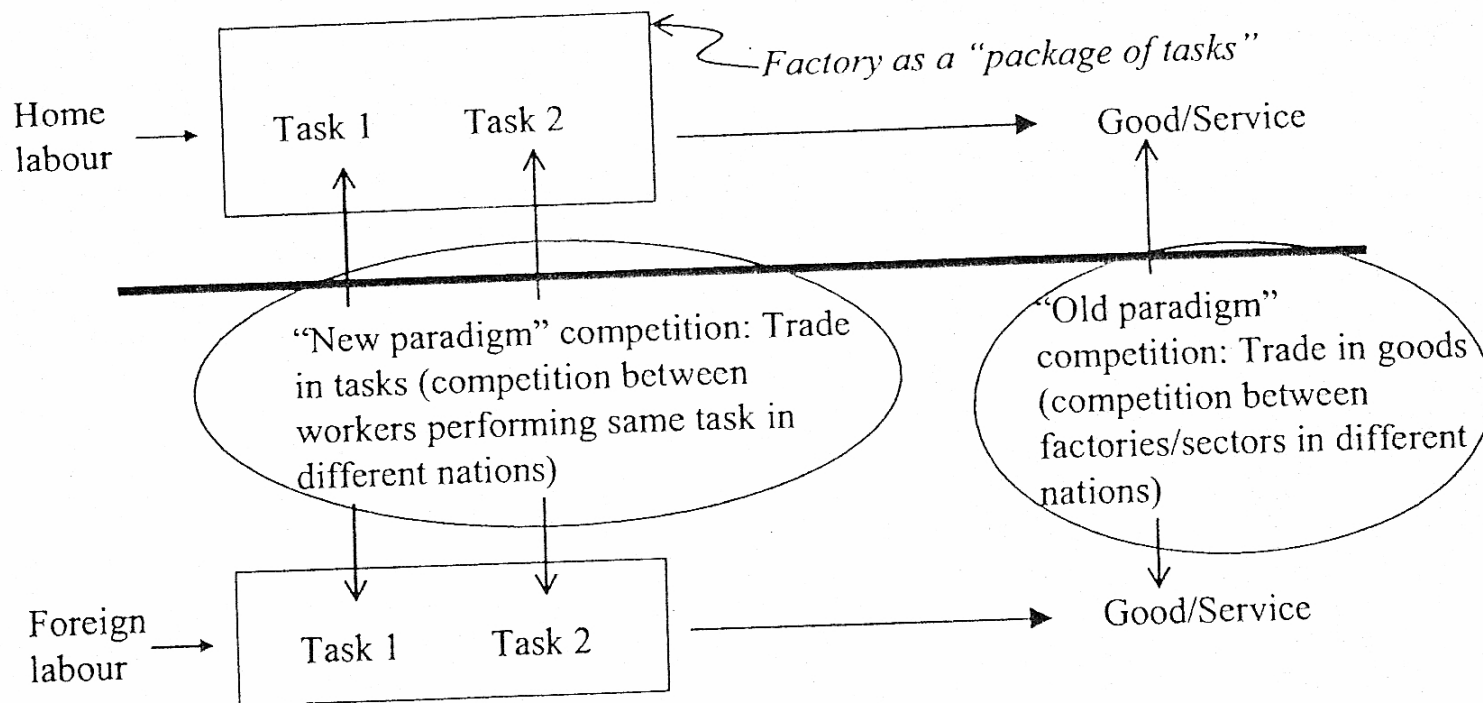
# CHARACTERISTICS OF GL1

1. GL works at level of firms/sectors
2. Production stages - spatially clustered in a single factory
3. Spatial bundling:  $L$ ,  $K$ ,  $\tau$   
Big factories (vertical integration)
4.  $GL \Rightarrow \uparrow \text{trade} \Rightarrow \uparrow \text{competition}$   
DC most competitive sectors: High  $\tau$ ,  $HK^+$ ,  $K^+$   
DC least competitive sectors: unskilled  $L$  intensive
5. Opposite situation for LDC
6. Policies for GL  $\Rightarrow$  - upgrading skills of workers  
-  $\uparrow HK$
7.  $GL \Rightarrow$  (DC) clear pictures  
losers: sectors ( $L^+$ )  
losers: workers ( $L^+$ )

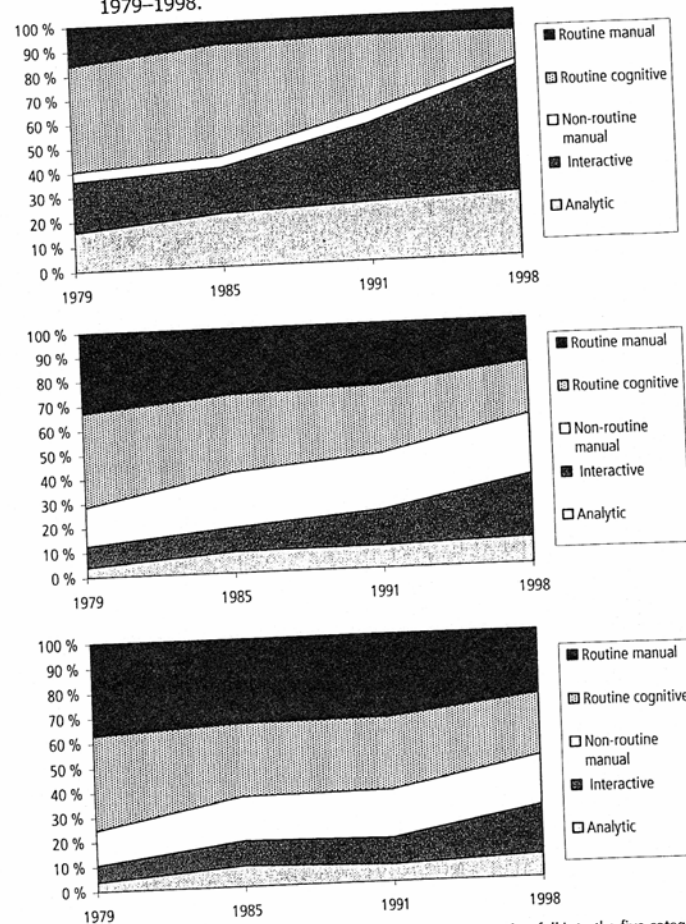
# CHARACTERISTICS OF GL2

1. Separation of production stages
2. Rationale for GL2: -  $\uparrow$  DC / LDC  $Y_n/w$  gap  
-  $\downarrow$  costs: TIC – air shipping  
Ex. Maquiladoras - U.S./Mexico; South-East Asia - Japan
3. Triangular Trade: Japan (Hi-tech, design)  
China (Production)  
U.S. (Consumption)
4. Task - previously considered non-tradable become traded –  
due to  $\downarrow$  TIC costs. Ex. USA call centers move to India
5. GL trade now affects one stage of a firm
6. Implication - winners / losers of GL are not related to:  
sector / firm / skill HK  $\Rightarrow \exists$  **unpredictability**
7. Policy Implication:  $\uparrow$ HK will not work  
Children: important to learn how to learn
8. Everything will become tradable?

**Figure 6** The first and second unbundling schematically.



**Figure 4** Share of tasks by type for high-skilled (top), medium-skilled (middle) and low-skilled (bottom) workers in West Germany 1979–1998.



Note: the numbers show the share of all the tasks an employee performs that fall into the five categories of tasks, so apart from rounding issues, each row sums to 100. The survey behind this did not ask employees about the amount of time they spent on each task.

Source: Spitz (2004). Table 6.

# Unpredictability – High Risk Society

## A. Black Perceptions

1. Economic insecurity - fact of life for:
  - every worker
  - every firm
2. Government – abandoning its traditional role  
as ultimate guarantor of security: firms / workers
3. No one can assume that today's job will still  $\exists$  five years from now
4. Few parents can guarantee their children's future

## B. Why is the present world $\neq$ from the past?

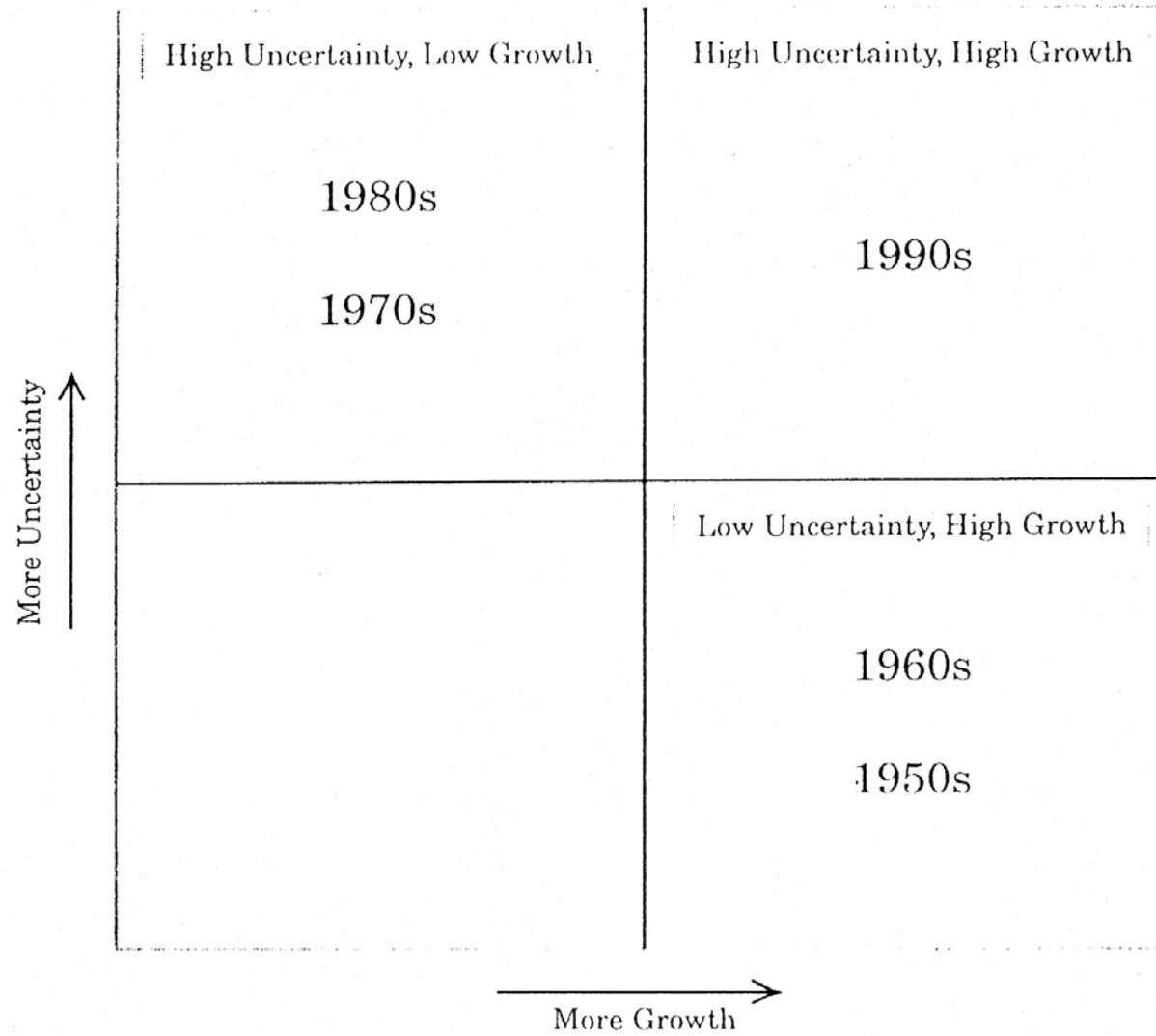
1. High uncertainty & unrestricted competition  $\Rightarrow \downarrow \neq$  real economy & MK  
Rules governing Wall St. - now will apply to entire economy
2. Implication - Taking chances is now essential  
Low risk strategy  $\Rightarrow$  mediocrity & stagnation
3. Factors generating high risk in GL:  
Trade,  $\tau$ , corporate restructuring, deregulation
4. These four factors generate destructive creation  
& generate the high risk society.



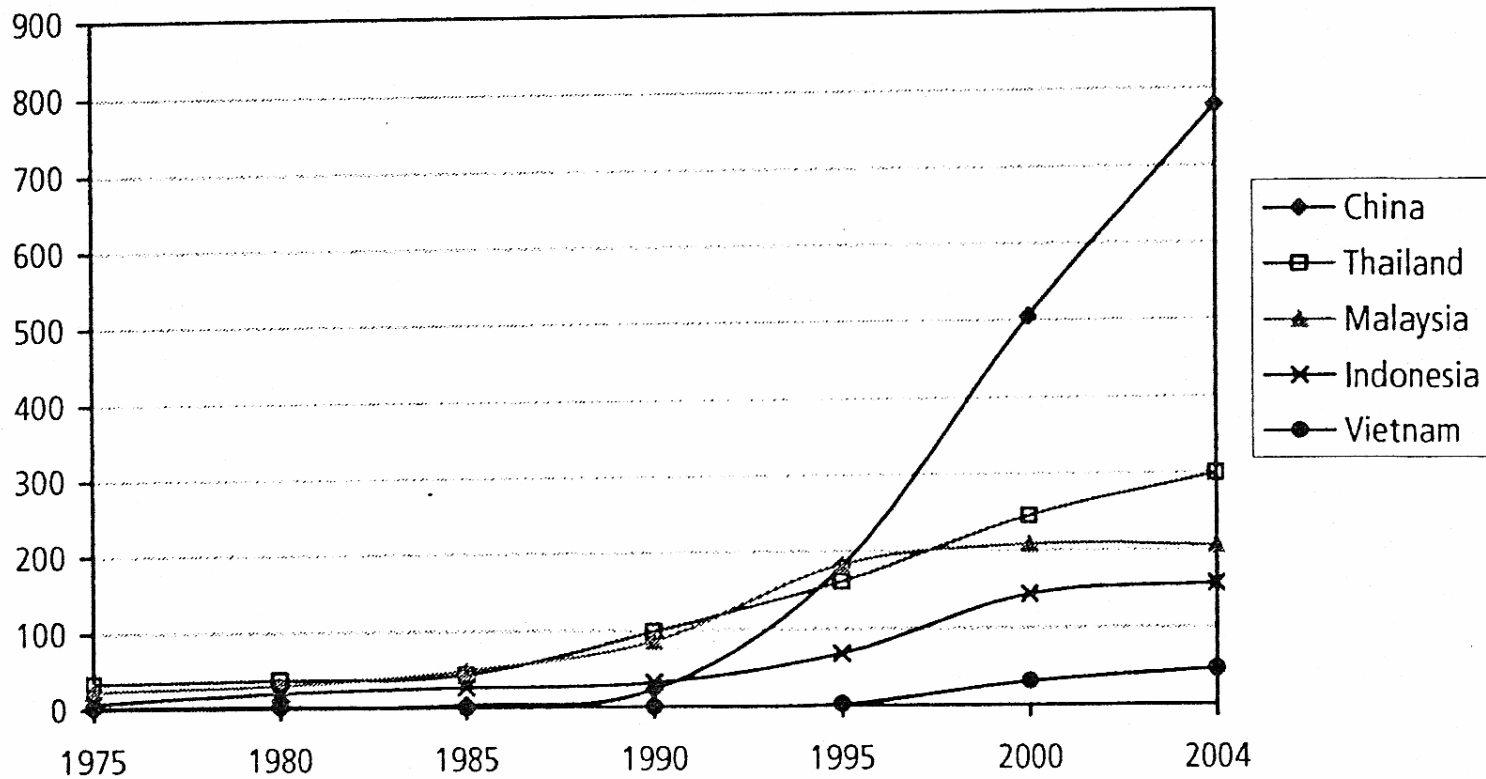
# Historical Perspective

1. Old View: High  $g \Rightarrow$  goods news for all  $T_j$   
Low  $g \Rightarrow$  bad news & more uncertainty
2. In the past - when insecurity / uncertainty were present **solution was:  $g$**
3. Now - GL2 - same factors generating  $g$  generate uncertainty  
High  $g$  & high uncertainty come together
4. In the high risk society:  
No product, no skill, no innovation is unique  
Ex. Indian Software producing engineers  
DC have affiliates in LDC

Figure 2-1



**Figure 5** Placement of Japanese automobile and electronics plants in East Asia, 1975–2004.



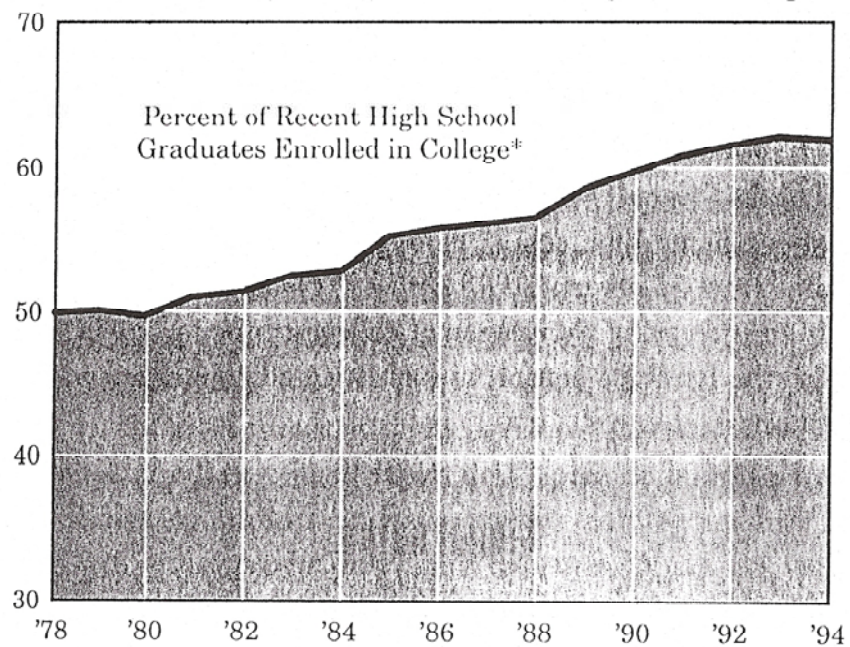
Source: Baldwin (2006), Figure 2.

# Behavior in a High Risk Society ( $M_K$ )

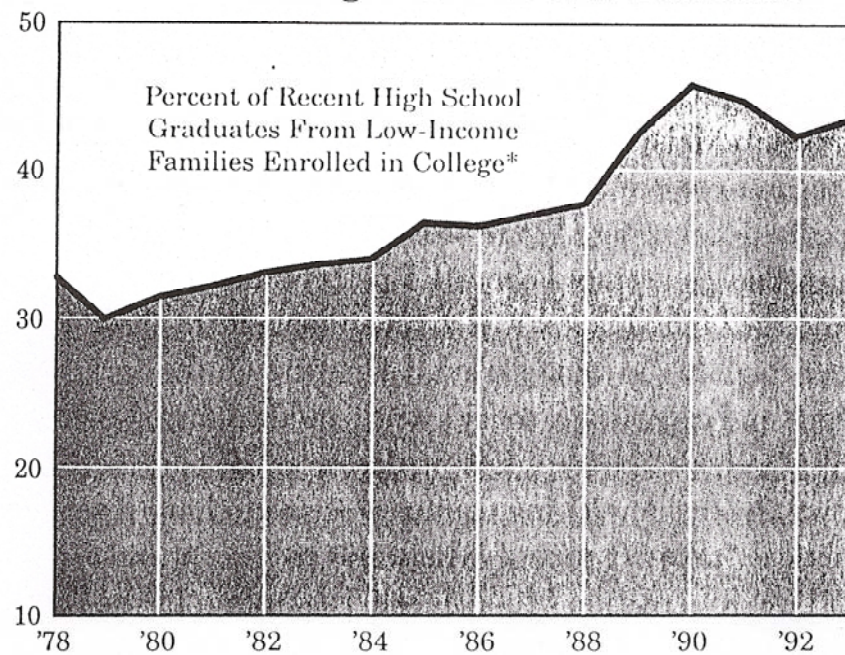
1. Rapid reaction to profit opportunities
  - IF is the key input - Use new IF quick
  - $\exists$  rapid imitation of new products
  - good ideas, new products are copied quicker than before
2.  $\exists$  risk - return trade-off
  - In  $M_K$  - risk associated with  $I$  - it is as important as  $r$
  - High (low) risk  $I \Leftrightarrow$  High (low)  $r$
3.  $\exists$  risk- $r$  trade off  $\Rightarrow$  you know what you can (cannot) control
4. Payment of high  $r$  - for high risk: Not possible to pick winners/losers
  - No one knows in  $t_0$  – winner in  $t_1$
5. Perfect  $M_K$  are unpredictable – not due to lack IF
  - $M_K$  are unpredictable because everyone has same IF
  - No one has lasting competitive advantage
  - Value of new IF quickly disappears

Figure 3-5

## A Flood of Human Capital: More Young People Are Going to College...



## ...Including From Poorer Families



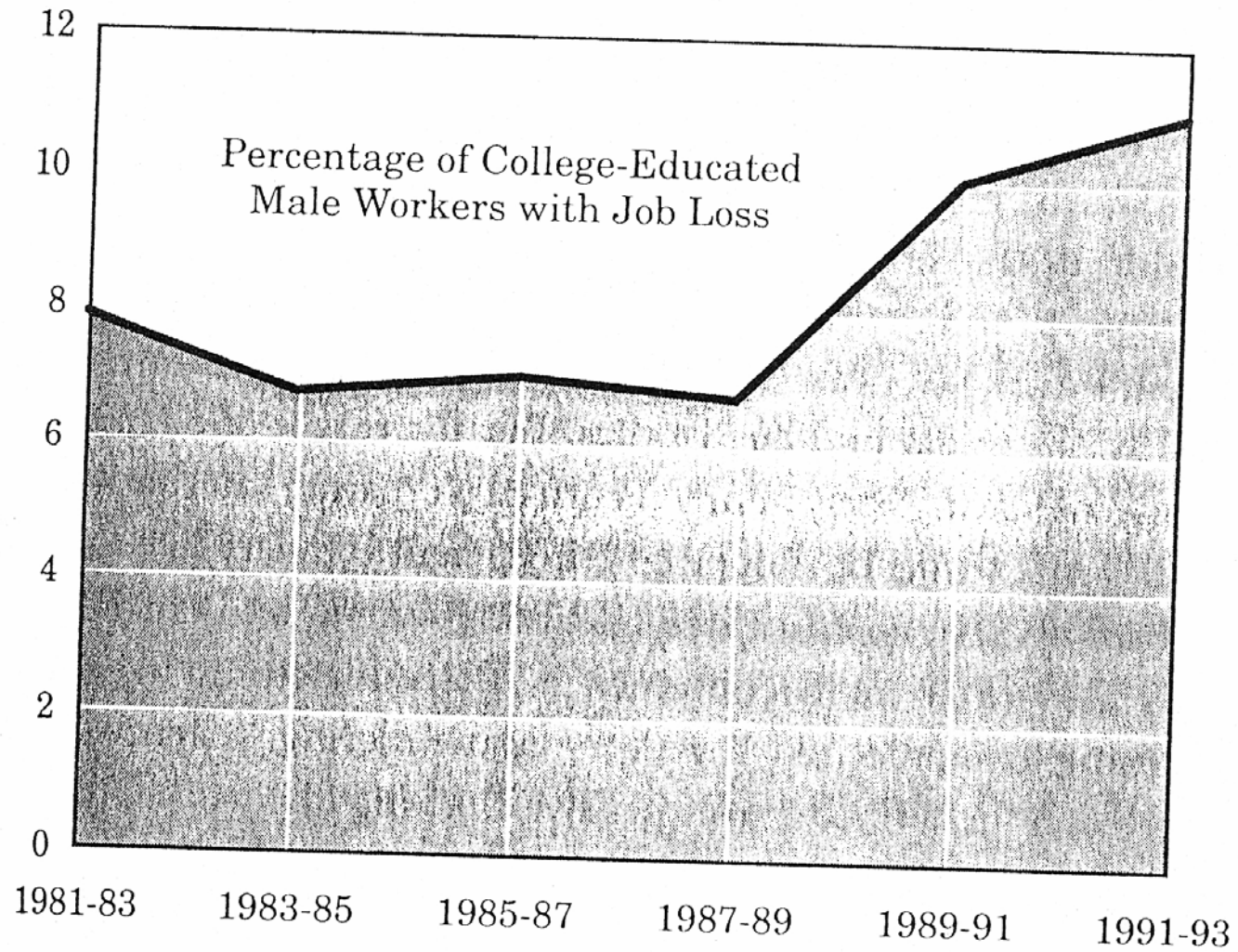
\*Three-year moving average

Data: Education Dept.; Bureau of Labor Statistics



Figure 3-1

## More Insecurity for the College-Educated



Data: Henry Farber, Princeton University; Bureau of Labor Statistics

6. In  $M_K$  – do not trust experts or historical patterns  
History repeat itself in  $M_K$ , but in an infinitely surprising variety of ways
7. IF is always useful  
Private IF - has value – but short advantage  
Public IF - built in into risk-r trade-off

# Uncertainty in GL Trade

1.  $\uparrow$  trade is  $>0$  for a country
2. However, costs of uncertainty could outweigh potentials gains from trade  
Ex.  $\exists$  50 people  
Each one gets US\$1.000  
Except for one - chosen at random - who will have to pay US\$20.000  
The class wins US\$29.000 - but one person loses US\$20.000  
If each person - agrees to give US\$408, the loser could be compensated  
Analogy to a country
3. USA ( $K^+$ ) - what would be more convenient for X:
  - a) - Consumer electronics -  $K_+$   
- Movies -  $L_+$
  - b) Moreover - Hollywood film production much more expensive than India/France
  - c) What are Hollywood advantages?



Table 5-1

## A Hierarchy of Trade Risks

GOODS-PRODUCING INDUSTRIES		
Manufacturing (except printing and publishing)	Wide open to trade	HIGH TRADE- RELATED RISKS HIGH TRADE- RELATED RETURNS
Agriculture		
Mining		
INFORMATION-ORIENTED INDUSTRIES		
Printing and publishing	Rising exposure to trade	
Communications		
Finance (except real estate)		
Business services		
Entertainment		
Legal services		
Consulting, architectural and engineering services		
Higher education		
Nonconventional retailing (catalog, home shopping, Internet)		
<hr/>		
SERVICE-ORIENTED INDUSTRIES		
Utilities and transportation (except communication)	Insulated from trade	LOW TRADE- RELATED RISKS, LOW TRADE- RELATED RETURNS
Retail and wholesale trade (except as listed above)		
Real estate		
Health care		
Elementary and secondary education		
Hotels		
Personal services (such as beauty parlors)		
Other services		
<hr/>		

Table 4-1

# Strategies for the High-Risk Society ✓✓

HIGH-RISK, HIGH-RETURN STRATEGIES	LOW-RISK, LOW-RETURN STRATEGIES
WORKERS	
Take a job exposed to the global marketplace	Take a job insulated from foreign competition
Take a job in a high-tech industry	Take a job in a low-tech industry
Earn advanced degree	Stop with a college education
Work as a consultant or a sub-contractor	Find salaried employment
Work for a reengineered company	Work for a stable company
Start a business with employees	Start a business without employees
Invest retirement funds in the stock market	Invest retirement funds in money market or bond funds
COMPANIES	
Expand into global markets	Focus on protected domestic markets
Be an early adopter of new technology	Wait until new technologies are well established
Reengineer to improve productivity and cut costs	Maintain organizational stability
Adopt workplace reforms	Keep traditional forms of workplace organization
Enter a deregulated industry	Stay away from the turmoil of deregulation
COUNTRIES	
Adopt a free-trade policy	Preserve protectionism
Open the door to immigration	Keep tight limits on immigration
Initiate deregulation and privatization	Continue the traditional regulation
Allow recessions to run their course	Use fiscal and monetary policy to smooth out the business cycle