国外政治经济学
CONTEMPORARY THEORIES IN POLITICAL ECONOMY

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第1单元 政治经济学中的经验研究

- **Lecture 2** 政治经济学与新古典的交锋
- **Lecture 3** 非生产活动与国民经济核算
- **Lecture 4** 有关利润率的经验研究

Lecture 2 政治经济学与新古典的交锋

- 关注同一个现实问题，而且是重大问题

- 新古典提出了解释，但是解释错误、解释不充分或者政策不奏效

- 政治经济学在一定程度认可的基础上，提出不同观点：
- 1. 在理论上新古典忽视了的逻辑，而政治经济学没有忽视
- 2. 在现实中新古典忽视了的事实，而政治经济学没有忽视

一篇经典文章

- **Weisskopf, Thomas E., Samuel Bowles, and David M. Gordon. 1983. "Hearts and Minds: A Social Model of U.S. Productivity Growth." *Brookings Papers on Economic Activity* 1983 (2).**

美国的生产率增长：一个社会模型

- 现实问题：
- 60年代中期以来，美国总体生产率增长放缓，为什么？仍然未解

- 新古典的解释有什么问题
- 传统经济学分析(conventional economic analysis)忽略了生产者中人的因素和制度环境

- 政治经济学从什么角度分析?
- **Hearts and minds:** 人的问题
- **Hardware and capital:** 物的问题

此前对生产率增速放缓的主要解释

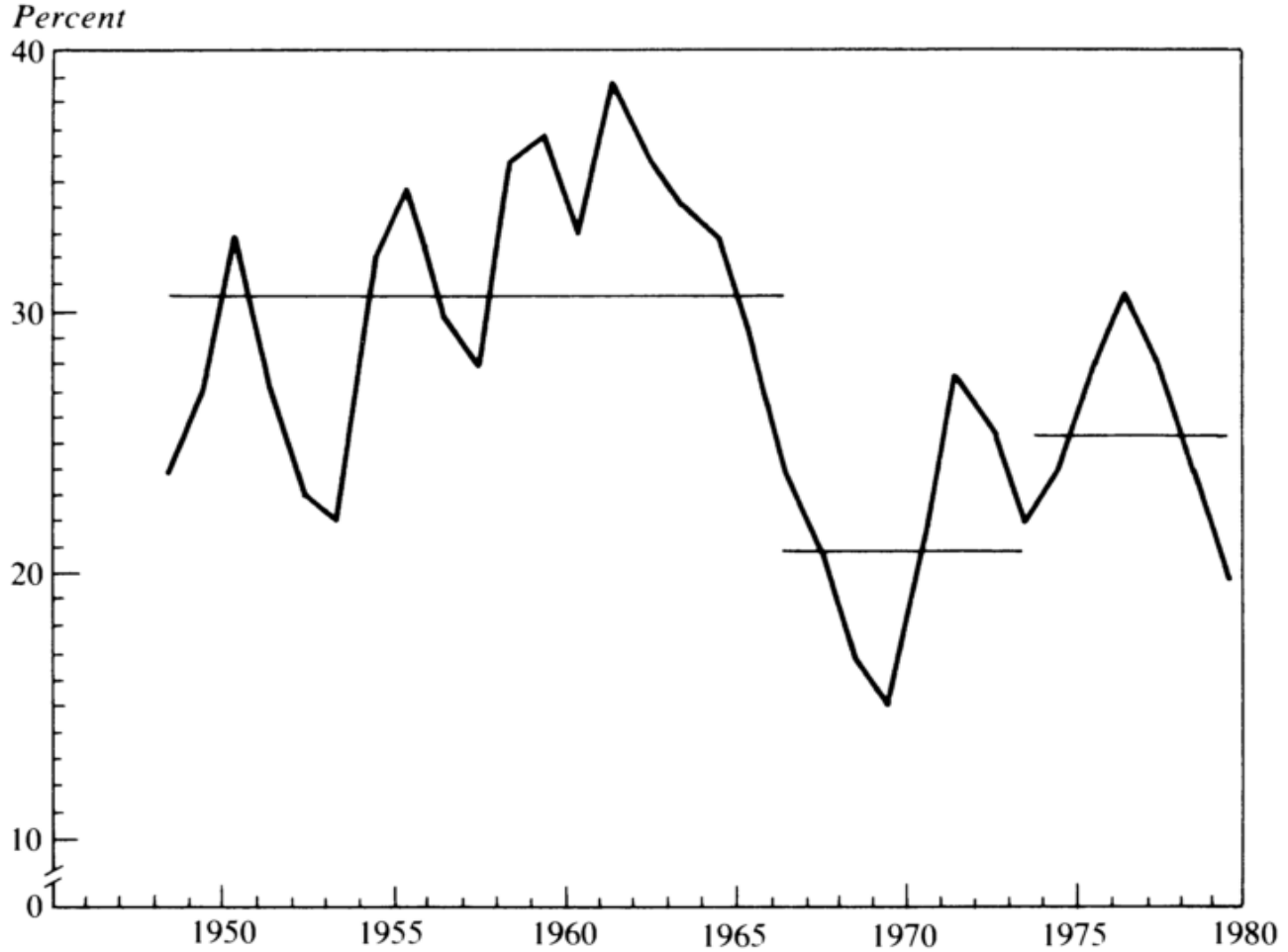
- 1. 石油价格冲击
- 2. 投资放缓
- 这些解释在时间上与生产率增速放缓不一致

- 但是，另外两种解释在学术上没有得到充分认识
- 1. 生产场所中的摩擦，工人努力程度下降
- 2. 公司倾向于短期投资，提升效率的长期投资下降

工作场所中的摩擦，工人努力程度下降

- 观察事实：工会参与率、实际工资增长率、失业率、工作满意率
- 失业对工人所造成的损失越大，他们在工作场所中就越愿意合作，生产率就越高

Figure 1. The Cost of Job Loss, 1948–79[a]



Sources: Text equation 6 and the data cited in the appendix.

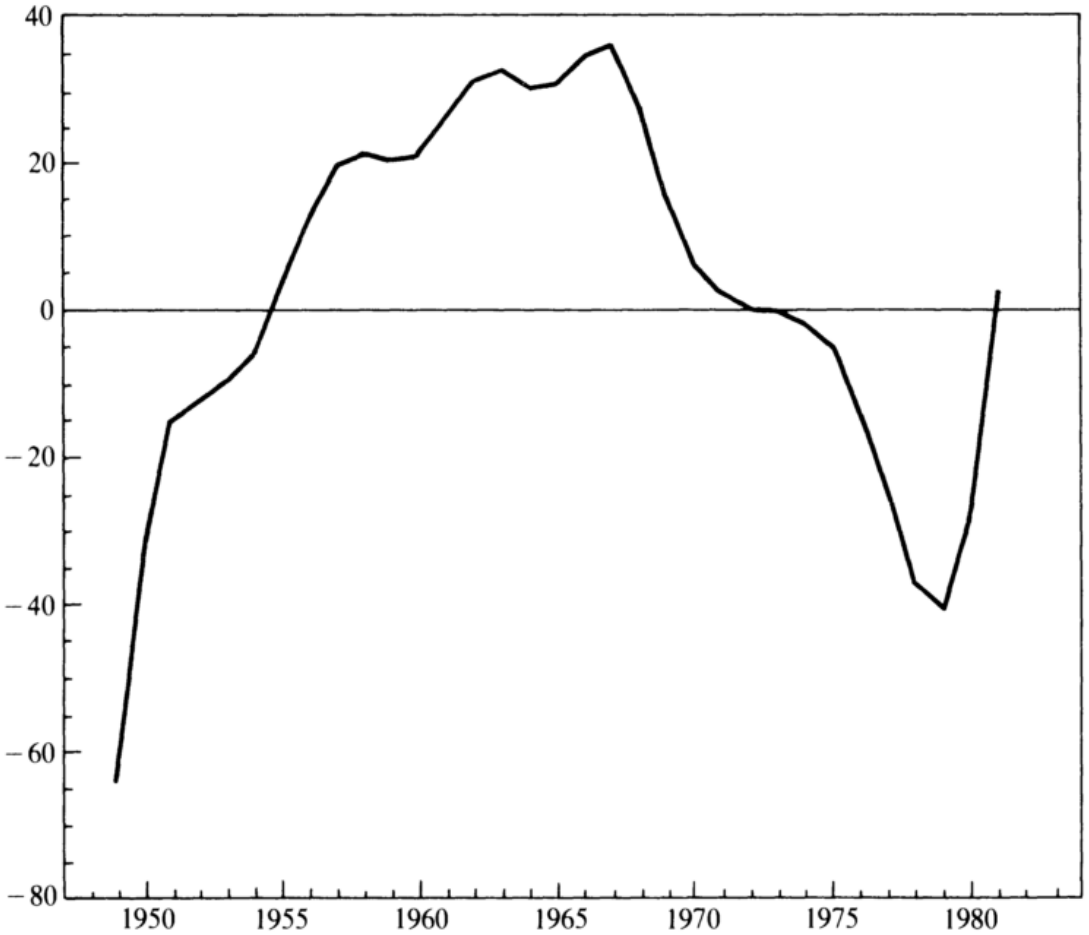
a. The variable is defined as the average annual percentage of an employee's living standard that a representative employee could expect to lose if that employee were dismissed from the job; the variable, expressed as a fraction, has a potential range from zero to 1.0. The horizontal lines in the figure represent averages of annual data for 1948–66, 1966–73, and 1973–79, respectively.

公司倾向于短期投资，有利于创新的长期投资下降

- 观察事实：专利申请量、研发投入、对金融资产的投资
- 公司的创新压力越大，创新就越多，生产率提高就越快

Figure 2. Adjusted Measure of Business Failures, 1949–81[a]

Cyclically adjusted deviations around the mean
(failures per 10,000 enterprises)



Sources: Authors' estimates based on data from sources cited in the appendix.

a. The original measure of the business failure rate is expressed as the frequency per 10,000 listed enterprises. We then regressed this measure on an index of capacity with annual observations from 1949 to 1979 (the period over which our subsequent econometric work was carried out). We next took a three-year (and end-of-period) moving average of the residuals from the regression, both to control for the short-term business cycle and to smooth the cyclical fluctuations in the underlying measure. The values for 1949, 1950, 1980, and 1981 were based on predicted rather than actual observed residuals from the regression equation.

什么决定劳动强度

- 劳动强度：**The Marx Effect**
- 人类的劳动强度可以变化

- 劳动强度**L***: 有效劳动投入/雇佣小时数
- 决定劳动强度的一个重要因素就是劳动控制的有效性

三个因素决定劳动控制的有效性

- **1.** 预期的失业损失
- **2.** 被管理者发现工人付出的劳动少于管理者预期的可能性
- **3.** 被管理者发现后，被解雇的可能性

$$E = J \cdot S \cdot D(U, R), \quad (1)$$

$$E_J, E_S, E_D, E_{JS}, E_{JD}, E_{SD} > 0, \quad D_U < 0, D_R > 0,$$

- **E:** 劳动控制的有效性
- **- J:** 预期的失业损失
- **- S:** 监督劳动与生产性劳动之比
- **- D:** 被管理者发现后，被解雇的可能性
- **-- U:** 工会参与率
- **-- R:** 衡量替代解雇工人难易程度的指标

劳动动机

- 第二个决定劳动强度的因素就是劳动动机
- 两个因素决定劳动动机

- **1.** 工资因素
- **2.** 工作条件因素

$$M = M(W!, B, M^*), \quad M_{W!}, M_B, M_{M^*} > 0, \tag{2}$$

- **M:** 劳动动机指标
- **- W!:** 工资中能提升劳动动机的因素的指标
- **- B:** 工作条件指标
- **- M*:** 其他外生因素

什么决定企业创新

- 企业创新压力：**The Schumpeter Effect**
- 熊彼特和马克思意义上的竞争都不是新古典意义上的完全竞争
- 创新者获得租金，竞争对手被迫模仿创新者，没有跟上创新浪潮的企业会被淘汰
- 创新压力越大，生产率增长越快

$$\lambda = \lambda^* + \mu C, \quad \mu > 0, \tag{3}$$

- **Lambda:** 技术水平的增长率
- **- Lambda*:** 外生的技术水平增长率
- **- C:** 提升技术效率的竞争压力指标

技术因素

- 除了工作强度和企业创新压力之外，技术因素也影响生产率增长

- 1. 产能利用率
- (1) 在经济下滑时，企业可能会保留非生产性工人
- (2) 在经济下滑时，固定资本的使用会减少
- (3) 产能利用率低到一定程度，技术效率就会下降
- (4) 在经济下滑时，企业可能会保留生产性工人
- (5) 相反的效果：在经济下滑时，企业会淘汰最无效率的固定资本

- 2. 资本密集度(不包括闲置的资本)

- 3. 中间投入品的价格

生产率的社会模型

$$(4) \qquad Q = AG^{\alpha_1}(1 + G')^{\alpha_2} K^{*\beta} L^{*\gamma} P_x^{\delta} e^{(\lambda^* + \mu C)t},$$

with

$$\alpha_1, \alpha_2, \beta, \gamma, \lambda^*, \mu > 0, \quad \delta < 0,$$

where

- Q = total output per unit of purchased production labor inputs
- A = positive constant
- G = level of aggregate capacity utilization
- G' = index of rate of change of that utilization
- K^* = utilized, nonobsolescent capital inputs per hour of purchased production labor inputs
- L^* = amount of effective labor inputs per hour of purchased labor inputs
- P_x = index of the relative price of external inputs
- C = index of the level of innovative pressure on firms to improve productive efficiency.

社会模型与新古典的生产函数模型有什么不同

- **新古典C-D模型**

$$Y = BK^{\alpha}L^{\beta}$$

$$Y/L = Ae^{\lambda^* t}\left(\frac{K}{L}\right)^{\alpha}$$

$$Q = Ae^{\lambda^* t}(K^*)^{\alpha}$$

- **社会模型**

$$(4) \qquad Q = AG^{\alpha_1}(1 + G')^{\alpha_2} K^{*\beta} L^{*\gamma} P_x^{\delta} e^{(\lambda^* + \mu C)t},$$

转化为增长率形式

$$(5) \qquad q = \lambda^* + \alpha_1 g + \alpha_2 \Delta g + \beta k^* + \gamma_1 e[J \cdot S \cdot D(U, R)] + \gamma_2 m(W!, B, M^*) + \delta p_x + \mu C,$$

with

$$\lambda^*, \alpha_1, \alpha_2, \beta, \gamma_1, \gamma_2, \mu > 0, \quad \delta < 0.$$

- 变量：以下皆为变量的增长率
- **1. q: hourly output, production workers**
- **2. g: capacity utilization**
- **3. k*: capital intensity**
- **4. e: work intensity, determined by J*S*D(U,R)**
- **5. w!: real spendable hourly earnings**
- **6. b: working conditions, 1/industrial accident rates**
- **7. p: price of fuels**
- **8. C: rate of business failures**

基本回归结果

Table 1. A Social Model of Aggregate Productivity Growth in U.S. Nonfarm Private Business, 1948–79[a]

Independent variable	*Equation* 1-1	1-2	1-3	1-4	1-5	1-6	1-7
Trend growth rate, λ^*	0.015	0.016	0.016	0.004	0.015	0.017	0.017
	(7.98)	(6.35)	(7.97)	(1.02)	(6.92)	(8.07)	(8.39)
Capacity utilization							
g	0.485	0.519	0.449	0.419	0.408	0.442	0.415
	(4.80)	(4.43)	(4.68)	(4.58)	(3.47)	(4.48)	(4.41)
Δg	0.074	0.049	0.082	0.094	0.091	0.125	0.103
	(1.33)	(0.78)	(1.48)	(1.74)	(1.50)	(2.29)	(1.96)
Utilized capital-labor ratio, k_u	0.401	0.385	0.411	0.419	0.472	0.373	0.373
	(4.64)	(4.26)	(4.74)	(4.99)	(5.29)	(4.17)	(4.26)
Effectiveness of employers' control, e	0.035	. . .	. . .	. . .	. . .	. . .	. . .
	(3.74)						
Real spendable earnings, $\Delta w!$	0.075	0.073	0.072	0.069	0.121	0.292[b]	. . .
	(1.68)	(1.57)	(1.60)	(1.57)	(2.71)	(1.37)	
Accident rate, z	−0.083	−0.088	−0.086	−0.087	−0.100	−0.081	. . .
	(−3.50)	(−3.38)	(−3.60)	(−3.74)	(−3.29)	(−3.23)	
Relative external input prices, p_x	−0.040	−0.042	−0.041	−0.037	−0.013[b]	−0.048	−0.055
	(−2.13)	(−2.13)	(−2.14)	(−1.95)	(−0.52)	(−2.62)	(−3.27)
Business failure measure, C^*	0.011	0.011	0.011	0.020[b]	0.012	0.010	0.008
	(2.81)	(2.72)	(2.75)	(2.98)	(2.43)	(2.50)	(2.20)
Cost of job loss, j	. . .	0.036	0.034	0.031	0.027	0.027	0.034
		(3.72)	(3.60)	(3.41)	(2.74)	(2.48)	(3.58)
Supervision intensity, s	. . .	0.001	. . .	. . .	. . .	. . .	. . .
		(0.01)					
Probability of dismissal, d	. . .	0.100	. . .	. . .	. . .	. . .	. . .
		(1.20)					
Predicted job satisfaction, $m!$	. . .	. . .	. . .	. . .	. . .	. . .	0.450
							(3.74)
Summary statistic							
$\bar{R}^2$	0.913	0.908	0.910	0.914	0.893	0.906	0.909
Standard error of estimate	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Durbin-Watson	2.095	1.891	2.092	2.200	2.184	2.214	2.096

Source: Authors' estimates based on data cited in the appendix.

a. The dependent variable is the rate of change in output per production-worker hours, measured as change in logs. The independent variables are all growth rates measured as change in logs, with the exception of C^*, which is a level variable, and Δg and $\Delta w!$, which are first differences of changes in logs. Given first differences, the actual observations are for 1949–79. The numbers in parentheses are t-statistics.

b. The values for C^* (equation 1-4), p_x (equation 1-5), and $\Delta w!$ (equation 1-6) are for the alternative variables described in the text.

稳健性：更换被解释变量

Table 2. Alternative Dependent Variables in the Social Model of Productivity Growth in U.S. Nonfarm Private Business, 1948–79[a]

Independent variable	*Equation*		
	2-1	*2-2*	*2-3*
λ^*	0.014	0.026	0.016
	(7.78)	(4.97)	(8.09)
g	0.481	0.799	. . .
	(4.84)	(4.09)	
Δg	0.091	0.056	0.120
	(1.61)	(1.05)	(4.31)
k_u	0.417[b]	0.143[b]	0.427
	(4.69)	(0.92)	(5.11)
j	0.033	0.024	0.028
	(3.52)	(2.38)	(4.77)
$\Delta w!$	0.080	0.089	0.064
	(1.74)	(2.06)	(1.47)
z	−0.079	−0.068	−0.083
	(−3.25)	(−2.81)	(−3.55)
p_x	−0.037	−0.022	−0.040
	(−1.91)	(−1.10)	(−2.12)
C^*	0.011	0.012	0.010
	(2.64)	(3.17)	(2.67)
l_p	. . .	0.619	. . .
		(3.28)	
Summary statistic			
$\bar{R}^2$	0.917	0.983	0.899
Standard error of estimate	0.005	0.004	0.005
Durbin-Watson	2.254	2.402	2.142

Source: Authors' estimates based on data cited in the appendix.

a. The dependent variable in 2-1 is the rate of change of output per total-employee hour; in 2-2, the rate of change of output; and in 2-3, the rate of change of production-worker hourly output residualized on the rate of change of capacity utilization. The variable l_p is rate of change in production-worker hours. Given first differences, actual years of observation are 1949–79. The numbers in parentheses are t-statistics.

b. Adjusted to correspond with the redefinition of the dependent variable, as described in the text.

稳健性：
消除变量的
周期性

Table 3. Alternative Models of Aggregate Productivity Growth in U.S. Nonfarm Private Business, 1948–79[a]

Independent variable	*Equation*			
	3-1	*3-2*	*3-3*	*3-4*
λ^*	0.016	0.009	0.011	0.015
	(8.09)	(2.12)	(2.50)	(7.09)
Δg	0.120	0.048	0.066	0.114
	(4.31)	(0.91)	(1.25)	(3.74)
k_u	0.427	0.758	0.771	0.469
	(5.11)	(4.57)	(4.50)	(5.39)
j	0.028	. . .	. . .	0.028
	(4.77)			(4.72)
$\Delta w!$	0.064	. . .	. . .	0.075
	(1.47)			(1.67)
z	−0.083	. . .	. . .	−0.076
	(−3.55)			(−2.73)
p_x	−0.040	. . .	. . .	−0.039
	(−2.12)			(−2.04)
C^*	0.010	. . .	. . .	0.011
	(2.67)			(2.49)
p_f	. . .	−0.037	0.028	. . .
		(−1.06)	(0.48)	
$Dummy_{1967-73}$	. . .	. . .	−0.009	−0.002
			(−1.82)	(−1.04)
$Dummy_{1974-79}$	. . .	. . .	−0.011	0.001
			(−1.21)	(0.25)
Summary statistic				
$\bar{R}^2$	0.899	0.485	0.512	0.899
Standard error of estimate	0.005	0.010	0.010	0.005
Durbin-Watson	2.142	1.517	1.767	2.257

Source: Authors' estimates based on sources cited in the appendix.

a. The dependent variable is the logarithmic rate of change in output per production-worker hour residualized on the logarithmic rate of change in capacity utilization. The variable p_f denotes the rate of change in relative fuel prices. Given first differences, the actual years of observation are 1949–79. The numbers in parentheses are *t*-statistics.

解释变量的贡献

Table 4. Accounting for the Productivity Slowdown, Selected Periods, 1948–79[a]

Variable	*Attribution of decline in productivity growth*			
	1948–66 to 1966–73		*1948–66 to 1973–79*	
	Percentage points of decline in q	*Share of the decline (percent)*	*Percentage points of decline in q*	*Share of the decline (percent)*
g, Δg	0.13	23	0.34	16
k_u	−0.12	−21	0.53	25
e, z, $\Delta w!$	0.57	98	0.60	28
p_x	0.07	12	0.35	16
C^*	−0.07	−12	0.32	15
Total predicted decline	0.58	100.0	2.14	100.0
Actual decline	0.68	. . .	2.02	. . .

Source: Authors' calculations.

a. Percentage points of predicted decline in productivity growth, q, are calculated by multiplying the regression coefficients from the basic model of equation 8 by the decline in the average values for the respective independent variables for two periods being compared in the two parts of the table. The comparison of the decline from 1948–66 to 1973–79 is based on the coefficients reported in equation 1-3. The comparison between 1948–66 and 1966–73 is based on the comparable coefficients estimated for the period from 1948 to 1973.

稳健性：
分阶段

Table 5. Structural Stability Tests, Selected Periods, 1948–79[a]

Independent variable	Social model 1948–79 3-1	Social model 1948–73 5-1	Social model 1948–66 5-2	Technical model 1948–79 3-2	Technical model 1948–73 5-3	Technical model 1948–66 5-4
λ^*	0.016	0.015	0.017	0.009	0.014	0.017
	(8.09)	(5.62)	(5.56)	(2.12)	(2.97)	(2.96)
Δg	0.120	0.114	0.038	0.048	0.022	0.009
	(4.31)	(2.90)	(0.69)	(0.91)	(0.39)	(0.14)
k_u	0.427	0.440	0.439	0.758	0.543	0.519
	(5.11)	(4.24)	(3.56)	(4.57)	(2.91)	(2.17)
j	0.028	0.027	0.039	. . .	. . .	. . .
	(4.77)	(4.15)	(5.63)			
$\Delta w!$	0.064	0.054	0.117	. . .	. . .	. . .
	(1.47)	(1.10)	(2.07)			
z	−0.083	−0.103	−0.033	. . .	. . .	. . .
	(−3.55)	(−2.73)	(−0.71)			
p_x	−0.040	−0.018	−0.018	. . .	. . .	. . .
	(−2.12)	(−0.47)	(−0.35)			
C^*	0.010	0.013	0.008	. . .	. . .	. . .
	(2.67)	(1.98)	(1.21)			
p_f	. . .	. . .	. . .	−0.037	−0.031	−0.003
				(−1.06)	(−0.51)	(−0.03)
Summary statistic						
$\bar{R}^2$	0.899	0.799	0.812	0.485	0.203	0.120
Standard error of estimate	0.005	0.005	0.005	0.010	0.010	0.010
Durbin-Watson	2.142	2.188	2.367	1.517	1.802	2.027

Source: Authors' estimates based on data cited in the appendix.

a. The social model and the technical model are estimated based on three successive periods reproducing the model structure from 3-1 and 3-2, respectively. The dependent variable is q^*, the decyclicized rate of growth of hourly output. The numbers in parentheses are t-statistics.

用预期对模型进行评价

	Average annual rate of productivity growth (percent)[63]	
	1973–79	*1966–79*
Actual q^*	1.036	1.669
Social model, $\hat{q}^*$	0.894	2.164
Technical model, $\hat{q}^*$	1.526	2.546

一些有意思的扩展

- 劳动力结构?
- 产业结构?

加入年龄
性别
受教育水平

Table 7. Productivity Growth and Labor Supply Characteristics, 1948–79[a]

Independent variable	*7-1*	*7-2*	*7-3*	*7-4*	*7-5*	*7-6*	*7-7*	*7-8*
λ*	0.004	0.013	0.009	0.013	0.016	0.016	0.007	0.013
	(0.92)	(4.94)	(2.09)	(2.91)	(7.89)	(7.41)	(1.32)	(4.00)
Δg	0.083	0.104	0.051	0.014	0.119	0.118	0.052	0.100
	(1.61)	(3.46)	(0.94)	(0.27)	(4.19)	(3.89)	(1.00)	(3.03)
k_u	0.753	0.450	0.762	0.844	0.427	0.434	0.817	0.465
	(4.88)	(5.34)	(4.51)	(5.18)	(5.00)	(4.60)	(5.29)	(4.79)
j	. . .	0.029	. . .	. . .	0.028	0.028	. . .	0.028
		(4.99)			(4.46)	(4.59)		(4.43)
$\Delta w!$	. . .	0.095	. . .	. . .	0.064	0.062	. . .	0.099
		(1.93)			(1.43)	(1.37)		(1.88)
z	. . .	−0.053	. . .	. . .	−0.083	;0.082	. . .	−0.050
		(−1.64)			(−3.28)	(−3.40)		(−1.48)
p_f or p_x	−0.003	−0.033	−0.035	−0.036	−0.40	−0.040	−0.002	−0.034
	(−0.09)	(−1.72)	(−0.97)	(−1.07)	(−2.05)	(−2.08)	(−0.44)	(−1.67)
C^*	. . .	0.010	. . .	. . .	0.010	0.010	. . .	0.008
		(2.92)			(2.13)	(2.32)		(1.45)
v	0.730	0.301	. . .	. . .	. . .	. . .	0.849	0.386
	(2.27)	(1.28)					(2.25)	(1.39)
l_y	. . .	. . .	−0.021	. . .	−0.001	. . .	0.051	0.029
			(−0.33)		(−0.02)		(0.76)	(0.65)
l_f	. . .	. . .	. . .	−0.526	. . .	−0.026	−0.447	−0.023
				(−2.01)		(−0.18)	(−1.78)	(−0.16)
Summary statistic								
$\bar{R}^2$	0.554	0.902	0.467	0.537	0.894	0.894	0.592	0.894
Standard error of estimate	0.010	0.005	0.011	0.010	0.005	0.005	0.009	0.005
Durbin-Watson	1.647	2.090	1.526	1.609	2.143	2.149	1.794	2.083

Source: Authors' estimates based on data cited in the appendix.

a. The dependent variable is the decyclicized rate of change of hourly output, q^*. The variable v is rate of change in the educational attainment of the labor force; l_y, the rate of change in the labor force aged sixteen to twenty-four; and l_f, the rate of change in the female share of employment. Given first differences, actual years of observation are 1949–79. The numbers in parentheses are t-statistics. The input-price variable is entered as p_f in the technical model and p_x in the social model.

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Table 8. Sectoral Composition and Market Growth, 1948–79[a]

Independent variable	*8-1*	*8-2*	*8-3*	*8-4*	*8-5*	*8-6*
λ^*	0.019	0.016	0.030	0.019	0.025	0.017
	(6.25)	(7.46)	(5.23)	(4.54)	(3.46)	(4.46)
Δg	0.165	0.136	0.118	0.122	0.062	0.120
	(4.38)	(3.28)	(2.72)	(4.37)	(1.30)	(4.27)
k_u	0.404	0.414	0.426	0.395	0.812	0.442
	(3.44)	(4.70)	(2.89)	(4.36)	(5.35)	(4.77)
j	. . .	0.023	. . .	0.024	. . .	0.027
		(2.24)		(3.49)		(4.01)
$\Delta w!$	. . .	0.058	. . .	0.075	. . .	0.068
		(1.26)		(1.66)		(1.49)
z	. . .	−0.083	. . .	−0.075	. . .	−0.083
		(−3.52)		(−2.28)		(−3.49)
p_f or p_x	−0.072	−0.037	−0.034	−0.040	−0.037	−0.037
	(−3.19)	(−1.84)	(−1.26)	(−2.01)	(−1.16)	(−1.75)
C^*	. . .	0.010	. . .	0.009	. . .	0.011
		(2.63)		(2.35)		(2.64)
l_m	−0.217	−0.027	. . .	. . .	. . .	. . .
	(−6.51)	(−0.54)				
l_n	. . .	. . .	−0.553	−0.109	. . .	. . .
			(−4.46)	(−0.93)		
y_{tr}	. . .	. . .	. . .	. . .	−0.418	−0.040
					(−2.62)	(−0.40)
Summary statistic						
$\bar{R}^2$	0.797	0.896	0.843	0.898	0.577	0.895
Standard error of estimate	0.007	0.005	0.006	0.005	0.009	0.005
Durbin-Watson	1.903	2.179	1.976	2.270	1.663	2.275

Source: Authors' estimates based on data cited in the appendix.

a. The dependent variable is the decyclicized rate of change of hourly output, q^*. The variable l_m is the rate of change in the manufacturing share of unemployment; l_n, the rate of change in the nonproduction sector's share of unemployment; and y_{tr}, the trend rate of change in real manufacturing output. Given first differences, actual years of observation are 1949–79. The numbers in parentheses are t-statistics. The input-price variable is entered as p_f in the technical model and p_x in the social model.

一些思考

- **REPLICATION MATTERS!**
- 找到不涉及理论争论的经验分析方法
- 尊重主流的成果，做对话而不是做批判