

China under Central Planning (1949-78)

- 1949-52: Economic recovery to the 1937 level
- 1953-57: Copy of the Soviet model
- 1958-59: Mao's model: Great Leap Forward
- 1960-62: Worst famine in human history
- 1962-65: Economic recovery
- 1966-76: Mao's model again: Cultural Revolution
- 1977-78: Transitional period
- Less than 10 years of normal socialist development

Basic Development Strategy

- Socialist heavy industry priority development Big Push strategy like in Soviet Union
 - High investment rate (investment/GDP): $> 30\%$
 - Most in heavy industry (producer goods): $> 80\%$
 - Rapid industrial growth rate: $> 10\%$ per year
- Result: Rapid structural change (% of GDP)

	1952	1978
Agriculture	51%	28%
Industry+construction	18%+2%	44%+4%
Services	29%	24%

Problems

- Slow individual consumption growth
 - Per capita growth by 2.3% per year
 - Urban faster (3%) and rural slower (1.8%)
 - Between 1952 and 1978, rural per capita consumption increased only 58%.
 - Shortage of consumer goods
 - Ration coupons for basic goods such as grain and cotton cloth
 - Caution: “Social consumption” not included, such as school education and medical service

Problems

- Slow employment creation
 - Heavy industry capital intensive, not labor intensive
 - Labor force growth much slower than output (5.4% vs. 11%) in industry sector
 - Employment in non-agriculture sectors grew from 34 million in 1952 to 105 million in 1978 (net increase of 71 million)
 - But: total labor force grew from 207 million to 398 million (net increase of 191 million)
 - Bottom line: employment creation only absorbed 37% of the increase in labor force
 - Agriculture labor force 70% larger in 1978 than in 1952, while cultivated land remained constant

Comparisons with Taiwan and Hong Kong

Heavy industry priority

Light industry priority

Strategy Key
industries

Upstream industries

Consumer goods

Demand

Domestic industries

Domestic/export markets

Investment Government

Private and government

Savings

Government

Private and government

Household Income growth slowly

Income growth moderate

Coordination

Plan

Market

Debates on Development Strategy

- “Balanced development theory”
 - All sectors should be developed simultaneously
 - Rosenstein-Rodan (1943), Nurske (1953), Scitovsky (1954)
- “Leading sector development theory”
 - Limited resources in a few key leading sectors first, to pull up other sectors later
 - Hirschman (1958), *The Strategy of Economic Development*
- “Import substitution” vs. “export promotion”

Nature of the Socialist System

- Three fundamental features
 - Communist Party in power, enshrined in the Constitution
 - Dominant public ownership
 - Central planning as the main mechanism of resource allocation
- The three features are common in all centrally planned economies
 - Eastern Europe, the Soviet Union, China, Vietnam, North Korea, Cuba, etc.

1. The Party-State

- Monopoly of power
 - Controls every aspect of society
 - Controls everyone in society
- The Party's jurisdictions
 - Personnel (appointment, promotion, dismissal)
 - Ideology and propaganda (all media)
 - Mass organizations (union, students, women, etc.)
 - Major decisions of the government (five year plan, etc.)
- The Government's jurisdictions
 - Formulating plans
 - Implementing plans
 - Control over property, finance, prices, etc.

2. Public Ownership

- Property Rights
 - Rights to the income generated by the use of property
 - Rights of use of the property
 - Rights of transfer of the property
- Distinction between two types of property
 - Means of production: for producing products or services
 - Personal property: for personal use
- Distinction between two types of ownership
 - Public vs. private
 - State vs. non-state

2. Public Ownership

- State ownership
 - Highest form of public ownership
 - Nominally, ownership belongs to the “whole people”
 - The government exercises all the rights
 - Incomes go to the state budget
 - Government bureaucrats decide how to use property
 - Government bureaucrats decide how to transfer property
- Collective and cooperative ownership
 - Lower form of public ownership
 - Nominally ownership belongs to a group of people
 - In reality, local government control and intervention

3. Central Planning

- Government control over investment
 - Five year plan and annual plan determine investment priorities
 - Also decide on specific investment projects (large investment projects approved by Politburo)
 - All the necessary resources are allocated to the “key projects” such as funds, labor, foreign exchange, etc.
 - A politicized process, not just for economic objectives
 - “resource mobilization economy,” like “war economy”

3. Central Planning

- Price determination
 - Prices set by government, not to equate supply and demand
 - Basic principle: prices reflect the social necessary costs (excluding land and capital) and prices should be stable
 - Price policy serves the purposes of
 - channeling funds to the government
 - income redistribution
- Price distortion patterns
 - Low prices for consumer basic need (food, rent, health care etc.) and raw materials
 - High prices for manufactured goods and luxury goods
 - Low factor prices (wages, interest rates, exchange rates)

3. Central Planning

- Production plan: material balances
 - An output target for each producer
 - A supply plan that transfers resources between producers
 - A schedule of usage coefficients linking inputs and outputs
- The input-output problem
 - How to disaggregate the plan
 - The problem of information
 - A huge number of bureaucrats involved
 - Feasible plan is possible, but not efficient plan

Material balance

Supply 1

Supply 2

.....

Supply n

SUM OF SUPPLIES

Demand 1

Demand 2

.....

Demand n

SUM OF DEMANDS

3. Central Planning

- Incentives of managers under central planning
 - If plan target is “the total number of nails,” tiny nails will be produced to maximize the number
 - If plan target is “the total weight of nails,” one huge nail will be produced to maximize the weight
 - Managers also bargain with the planner to lower output quotas and to raise input supplies
- Similarity and differences between managers under central planning and in public corporations
 - They all have “incentive problems”: conflict of interests
 - Incentives are different, however.

China's Difference with Soviet planning

- Different initial conditions
 - A huge number of peasants
 - Scarce land, labor intensive agriculture technology
 - Resource poor
 - Lower stage of development
- Mao's different ideas
 - Won the war on a strategy against Soviet advice
 - Hated Soviet model of planning—too bureaucratic
 - Had no understanding of modern economy (plan or market)
 - Believed in political mobilization

Initial Income Level

- China: low income level
 - 1978: low-income level at \$600 (in 2002 dollar, PPP)
 - 2002: lower-middle income level at \$4,580 (in 2002 dollar, PPP)
 - China currently considered upper middle income, but soon upper income country
- Central and Eastern Europe: upper-middle income level
 - 1989: \$7,000-\$8,000 and above (in 2002 dollar, PPP)

China's Difference

- Three major differences
 - Regional decentralization
 - Large urban-rural divide
 - Political dominance and instability

Regional Decentralization

Mao's criticism of the Soviet model:

“Our territory is so vast, our population is so large and the conditions are so complex that it is far better to have the initiatives come from both the central and the local authorities than from one source alone. We must not follow the example of the Soviet Union in concentrating everything in the hands of the central authorities, shackling the local authorities and denying them the right to independent action” (Mao, 1956).

Regional Decentralization

- 1958 decentralization
 - Delegation of SOEs to local governments
 - The central government controlled enterprises: 9,300 in 1957 and 1,200 in 1958
 - Planning (material balancing) at local level
 - Investment decisions by local governments
 - Local government budgets
 - Rural Commune
- Followed by economic disasters
- Recentralization in 1962-65

Regional Decentralization

- 1970 decentralization
 - Perceived danger of Soviet invasion: moved industry to inland (Third Front)
 - Rely on provincial government to set up independent industrial bases to diversify risks from war
 - Most SOEs delegated to local governments
 - Investment decisions by local governments: more than 50% of investment in steel and iron made by local governments
 - Rural small industry to support “agricultural mechanization”
- Recentralization in 1975, but not complete

Regional Decentralization

Distribution of State-Owned Industrial Enterprises by Administrative Levels (1985)

	County	Central	Provincial/City
Number	3,825	31,254	35,263
Output Share		20%	45%
			9%

Planning targets

- Comparison between Soviet Union and China in the number of centrally planned commodities
 - Soviet Union
 - 1928: 0
 - 1940: 500
 - 1951: 1,600
 - 1970: 60,000
 - China
 - 1953: 0
 - 1957: 500
 - 1978: 800

Industrial Structure

- A smaller number of industrial firms with very large size in the Soviet Union
 - Total of 40,000 state-run factories in 1970
 - Factories over 1,000 workers accounted for $\frac{3}{4}$ of total industrial output
- A larger number of industrial firms with smaller size in China
 - Total of 83,000 state-run factories in 1978, plus 100,000 urban collectives and 700,000 rural collectives
 - Factories over 500 workers accounted for 40% of industrial output

Industrial Structure

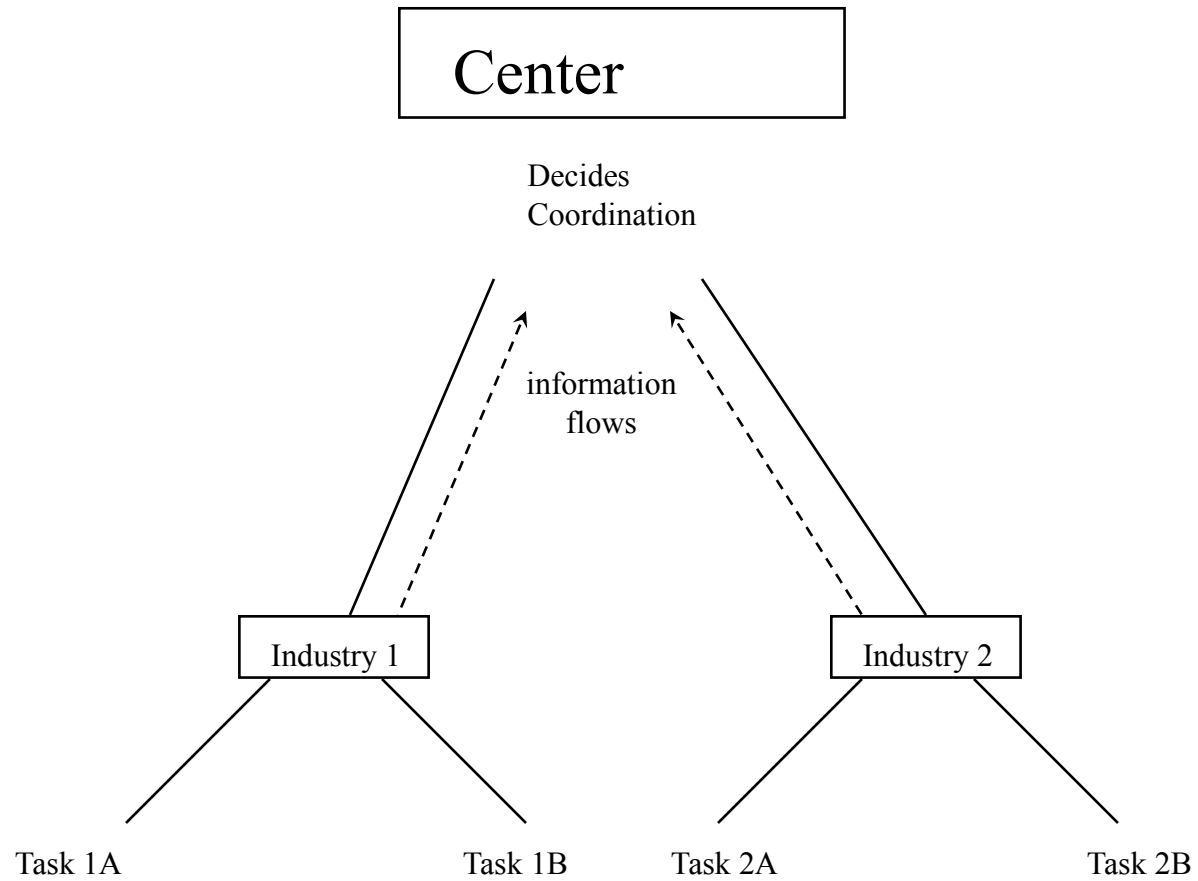
Comparison of Size of Enterprises (1988) (Employment/Enterprise)

	Manufacturing			Food Products
	Apparel			
Czechoslovakia	2,930	1,609		6,600
The Soviet Union	806	290		402
Hungary	460	925		307
Yugoslavia	311	243		402
<i>China</i>	<i>145</i>	<i>75</i>		<i>80</i>
Italy	96	71		71
United Kingdom	35	67		25

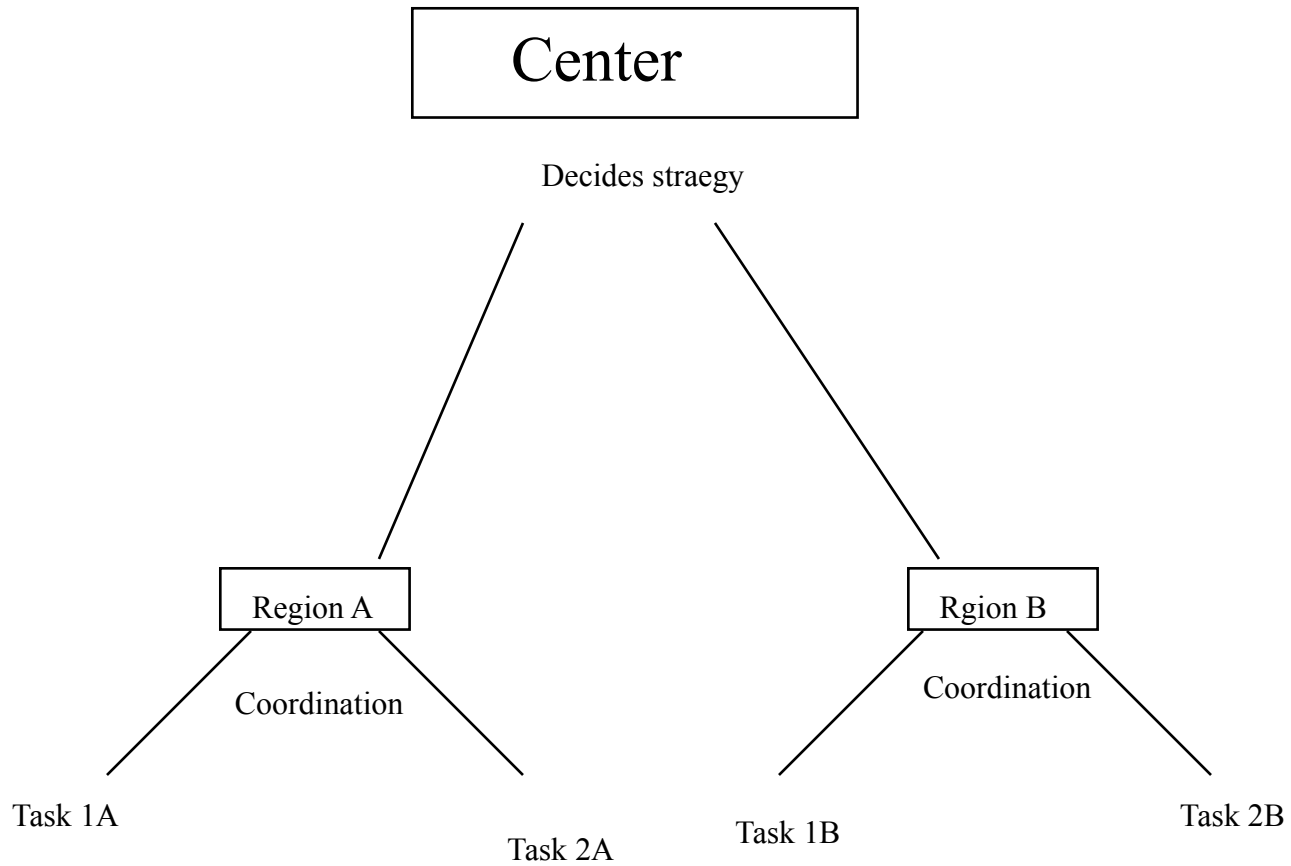
Comparisons with the Soviet model

- China's central planning had special features differing from the standard Soviet model
- These peculiarities could not be attributed solely to China's state of economic underdevelopment. It was the decentralization that produced the systematic difference
- Decentralization within the Chinese state sector took the form of regional governments having some recognized decision rights
- None of them existed in the Eastern European model. Sectoral planning instead of territorial planning. (U-form versus M-form organization).

U-form organization



A M-form Organisation



Urban-Rural Divide

- Urban residence privileges
 - Food, cotton cloth, edible oil coupons, and entitlement to other scarce goods (e.g., bikes, watches)
 - Primary and secondary education
 - Guaranteed job
- Additional benefits for those working in the urban sector (state or collective sector)
 - Health care
 - Retirement benefits
 - Work unit-supplied housing at very lost cost

Urban-Rural Divide

- The institution of *Danwei* (“work unit”)
 - *Danwei* is more than a work unit (e.g., production in enterprises or education in universities)
 - *Danwei* is a microcosm of urban society, into which individuals were born, lived, worked, and died
 - *Danwei* provides most welfare benefits
 - *Danwei* exercises political control
 - *Danwei* is the hub of social networks
- *Danwei* keeps one's personnel file
 - *Danwei* ownership over labor
 - Barrier to labor mobility

Urban-Rural Divide

- Rural residents
 - *Danwei* is the residing village within a Commune
 - Absence of all the privileges and benefits listed above
 - Rely on village support
 - Very limited way to convert from a rural to urban residence permit
 - Obtain a job in urban sector
 - Marry an urban person
 - Much like a foreigner getting a green card in the U.S.
 - A real economic barrier to move to the urban area was the lack of food coupons

Political Instability

- Politics overweighs economics. Some popular slogans:
 - “Politics should take priority”
 - “We prefer socialist weeds to capitalist crop seedlings”
 - “We should be on guard against ‘satellite going to sky but red flags falling down’”
- Mao’s political targets
 - 1957: rightists
 - 1959: rightist factions within the Party
 - 1966: bureaucratic establishment within the Party
 - 1971: his own successor (Lin Biao)
 - 1975: the Premier (Zhou Enlai) and Confucius

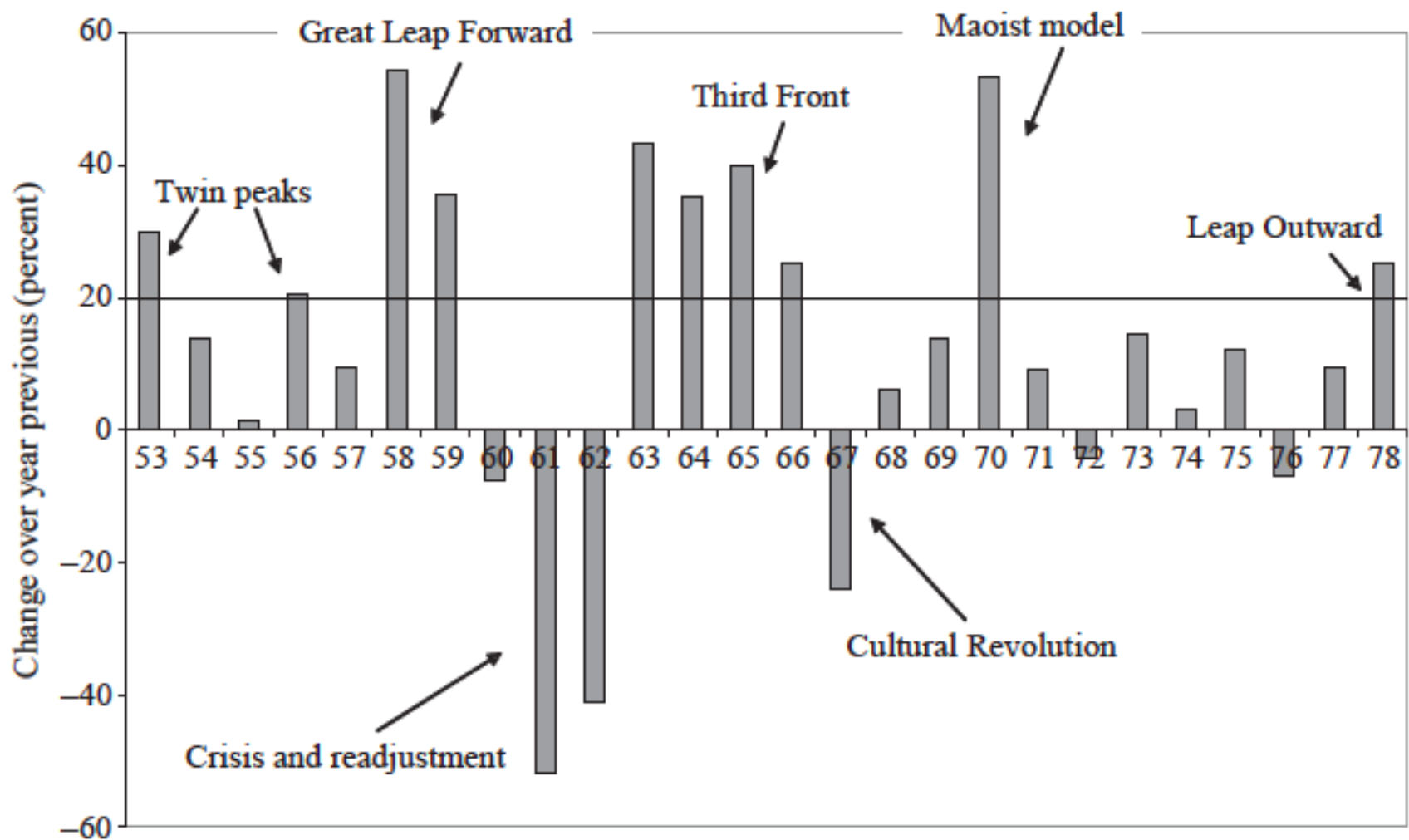


Figure 3.2
Growth of investment

1949-52

- Period of land reform where land was redistributed to the peasants, like early after the October Revolution in Russia.
- Economic recovery with industrial investment mostly in the Northeast.
- Japanese factories were expropriated.
- Period of Korean war (1950-53).

1953-56: First Five Year Plan

- Years of import of the Soviet planning system. Russian advisers everywhere, Russian technology imported.
- Strong investment push in 1953 led to inflationary pressure (shortages).
- 1955-56: collectivization in countryside, nationalization in urban areas. Peak investment of 1956.

“Hundred Flowers” of 1956-57.

- Correction relative to 1956 and move to partially reliberalize the economy and leave role to market and private sector.
- 1956 20th Congress in Soviet Union recognized “national paths” to socialism.
- “Hundred flowers” campaign encouraged freedom of expression in discussing China’s future.

Great Leap Forward, 1958-1960.

- Mao suddenly launched “anti-rightist” campaign against intellectuals. Nearly a million intellectuals who had expressed opinions during “Hundred Flowers” campaign were punished (job losses, labor camps, ...)
- Divergence from Soviet model and maoist economic plan.
- “Great Leap Forward” based on idea of fast leap towards communism (surpass Britain in 3 years).

Great Leap Forward, 1958-1960.

- Establishment of communes in countryside.
- Abolition of material incentives, elimination of markets in countryside.
- Economic decentralization and encouragement of local technologies (local furnaces)
- Growth reports were inflated to “please” Mao.
- Grain procurement was increased substantially.

Great Leap Forward, 1958-1960.

- Fanaticism within the CCP prevented correction. Brave criticism of Peng Dehuai was repressed and new anti-rightist campaign within CCP.
- Large rural famine in 1960. At least 30 million died. Largest famine of 20th century.
- Correction in 1961-63.

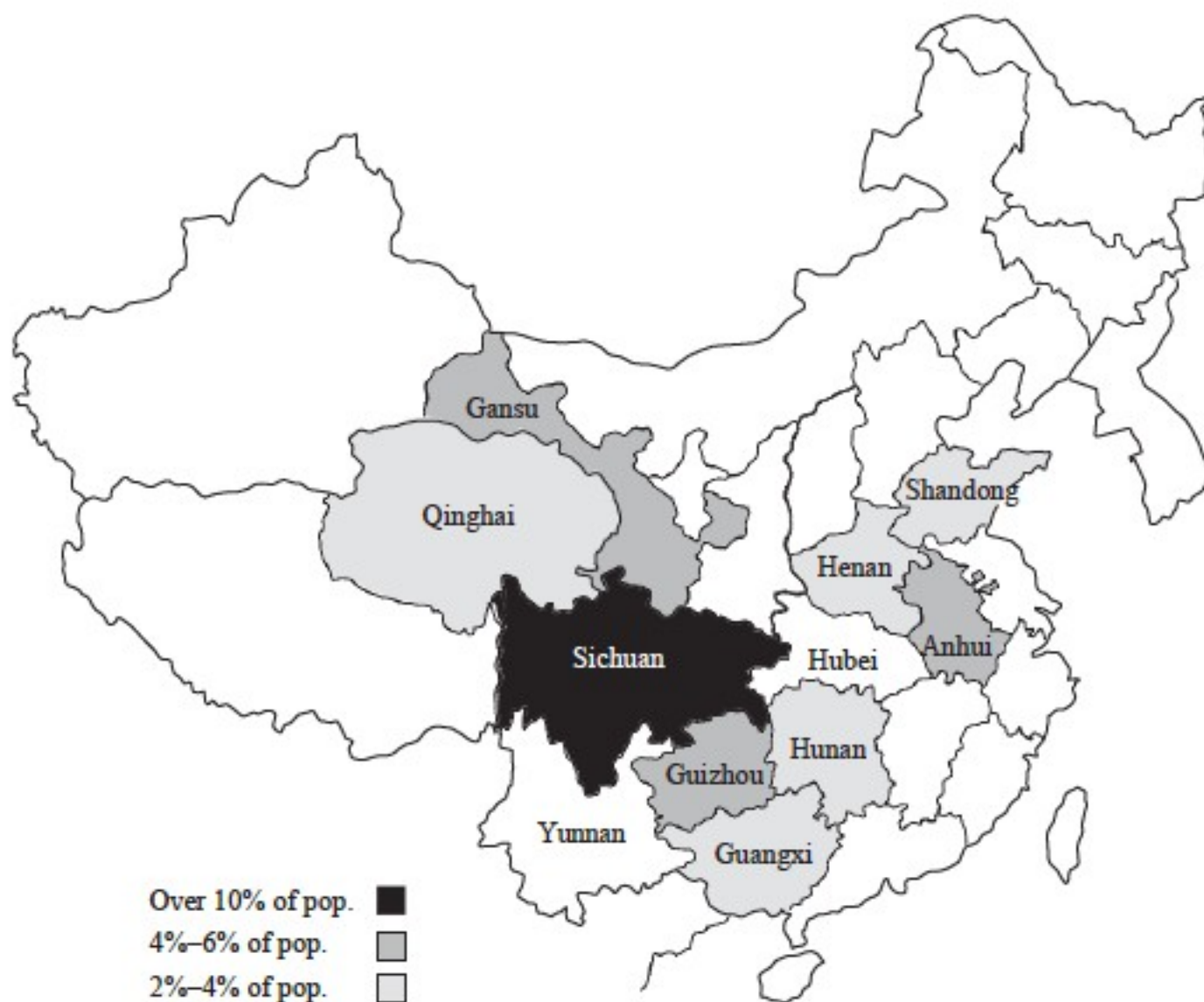


Figure 3.3
[The post-GLF famine]

The Cultural Revolution (1966-1976).

- Mao encouraged Red Guards to attack CCP and overthrow his rivals (Liu Shaoqi, Deng Xiaoping).
- Economically, militarization (PLA in economy), decentralization, autarky, no material incentives, universities closed, intellectuals and young people sent to the countryside.
- After Mao's death, Gang of Four arrested, interim by Hua Guofeng until serious reforms decided in 1978.