13. The Soviet Union

Socialism and Russia

- late 19th century – ______ Russia
  - abolition of serfdom
  - rapid industrialization
  - but still grim living conditions → revolutionary movements

- 1900-1917
  - Russian Social Democratic Party
    - _______ – favored moderation
    - _______ – a more revolutionary wing of the party - led by Lenin
    - Russo-Japanese war and WW I
      → the czar abdicated in 1917

- ______ Revolution in 1917
  - Bolsheviks came to power
  - dictatorship of the _______ → became known as Marxism-Leninism (Soviet doctrine after 1917)
  - end of Russia’s involvement in WW I
  - civil war

- War _______
  - the economic system established in 1917
  - entirely command: rationing, no money
  - dire conditions throughout the Soviet Russia
Socialism and Russia

- Lenin realized the system (war communism) is not working – needed to **stabilize** the economy
- **market** the economy: small firms privatized, firms determine prices, output levels, production techniques, peasants given control of food production, ...
- **controlled by the state**
- a digression from socialism; more like a market economy (market socialism)
- gave considerable power to the agricultural sector
- abandoned in mid 1920s: **Scissors Crisis** → industrialization debate

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Socialism and Russia

- Command economy
  - Joseph ______ (1878-1953)
    - cult of personality
  1. command planning over the entire economy
    - shaping individual preferences instead of paying attention to satisfying existing personal preferences
    - five-year plans
  2. collectivization of agriculture
    - prosecution of kulaks (rich peasants)

The Rise of Planning

- detailed production and financial plans
- Gosplan (planning agency) → centralized price determination
- emphasis on heavy industry (growth)
- input-output analysis

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Socialism and Russia

- after WW II
  - adoption of Soviet type planning throughout region
  - Council for **Mutual Economic Assistance**

- Nikita Khrushchev (1894-1971)
  - decentralization – regional planning
  - incentive systems for managers
  - state farms (sovkhozy)

- Leonid Brezhnev
  - came to power in 1964 – Khrushchev too liberal
  - drawback on Khrushchev’s reforms – fear of wage disparity and productivity increase (?)
Socialism and Russia

- Mikhail Gorbachev
- _______ and _______
- incentives for managers
- self-management and self-finance
- wage reform
- acute shortages and a drastic fall in output
- reforms not large enough to change the system but large enough to disrupt the current system
- CMEA problems → USSR as a subsidizer
- the end of the Soviet Union in ______

Institutions

1. decision-making (structure)
   - the Communist Party of the Soviet Union (CPSU)
     - the principal organ of decision making, control, and supervision
   - state and party structure on top → ministries and regional authorities in the middle → basic production units (enterprises and farms) on the bottom

2. coordinating mechanism
   - some market elements in the labor market and in the underground economy

3. property rights (control and income)
   - the state controlled all aspect of property utilization
     - income generated from land and capital accrued to the state
     - workers were paid in wages
   - farms were not under full state ownership

4. incentives

5. public choice and objectives
Planning
1. CPSU – designed directives
2. Gosplan – the State Planning Commission
   • collected info on previous year’s performance
     (focus on the production side of the economy)
3. Draft plan – by Gosplan
   • creation of ___________________
   • help by using ___________________
   • sent to ministries and to individual firms to be
     checked for ___________ → sought comments
     and inputs

Planning
4. Negotiations
   • plans based on past performance had strong
     implications
   • managers carefully balance how much to
     produce → unreliable information
5. Draft plan passed back to Gosplan
   • material balances had to be achieved
6. CPSU makes the plan into law
   • ___________________ → technical-industrial-
     financial plans
   • failing to meet a planned target is a punishable
     offense

Plan in practice
• much less strict than the theory would suggest
  • resources allocated by resource managers
  • plan was seen more as a “vision of the future”
• creation of ______________ at the lower level
  • exchanges of resources among firms and
    ministries
  • were illegal, but tolerated by the central authority
• managers were given bonuses for exceeding
  planned targets
• ___________________
  • controlling outputs by controlling financial flows
  • Gosbank – “a clearing house”
**Principal-Agent problem**

- central planners envisioned that firm managers would strictly follow the plan and rules
- in practice, managers had substantial freedom
- numerous objectives
  - gross value of output ➔
  - asymmetric information ➔ opportunistic behavior

**Prices**

- set by the bureaucracy
- __________ changed
- did not reflect resource cost or demand
  - based on _____ costs rather than on ______ costs

1. wholesale industrial prices – average costs across an industry: labor, raw materials, and depreciation (no cost of capital (interest) or land (rent)
  - slightly adjusted for productivity improvements and small profit

2. agricultural prices – completely determined by the central planners
  - usually depressed to limit the purchasing power (consumer goods) of peasants

3. retail prices – reflected wholesale industrial and agricultural prices, but were augmented by a __________ tax
Administrative Prices & Turnover Tax

Wages

- demand for labor determined by the central plan → technical coefficients
- households free to make occupational choices
- markup system to equilibrate supply and demand of workers (wage differentials)
  - wage = basic wage + markup
  - markups: location, unpleasant working conditions, the degree of physical effort, etc.
  - markups were used to manipulate labor supply
- nonmarket devices to alter the labor supply

Macroeconomic equilibrium

\[ D = WL - R \]
\[ S = P_1Q_1 \]

where
\[ D = \text{aggregate demand} \]
\[ S = \text{aggregate supply} \]
\[ W = \text{average annual wage} \]
\[ L = \text{number of worker-years used} \]
\[ R = \text{income not spent on goods} \]
\[ Q_1 = \text{consumer goods produced} \]
\[ P_1 = \text{price of consumer goods} \]
Macroeconomic disequilibrium

\[ D = WL - R \]
\[ S = P, Q_1 \]

- to increase the labor supply, wages were increased \( \rightarrow W + L \rightarrow D \) for \( Q_1 \).
- since the supply of consumer goods did not increase sharply, need to \( \_ P \), and/or \( \_ R \).
- Prices were not allowed to \( \_ \) fast enough to absorb the demand \( \rightarrow \).

at the prevailing repressed prices, \( S \_ D \rightarrow \) \_ economy and long queues

Agriculture

- even in the mid-1980s, 20-25% of GDP came from agriculture + employed a significant share of the labor force
- collective farms (kolkhozy) and state farms (sovkhzoys)
- arbitrary payments \( \rightarrow \) initially very low
  - recall the \( \_ \) model

Summary of Incentives

- workers
  - part coercive, part pecuniary
  - nowhere to spend income –
- managers
  - strong material incentive to exceed goals
  - coercive negative incentives
  - both created chronic inefficiencies (suboptimal decisions)
1. inefficient use of factor of production
  - \( w \neq \) marginal product
Summary of Incentives

2. minimal product and process innovation
   • ______-term incentives
   • ______-looking product planning

3. poor quality control
   •

4. unreliable information
   • understatement of production capabilities and overstatement of input requirements
   • bureaucracy
   • no motivation to improve the incentives

→ overall:

The puzzle of the Soviet economy

Here are several conundrums of the Soviet economy:

• There was no unemployment; however, nobody worked.
• Nobody worked; however, the plan was always fulfilled.
• The plan was always fulfilled; however, there were always shortages.
• There were always shortages; however, the country was creating the land of plenty.
• The country was creating the land of plenty; however, there were always lines.
• Everybody knew how to avoid queuing; however, everybody was unhappy.
• Everybody was unhappy; however, political decisions were approved of unanimously.