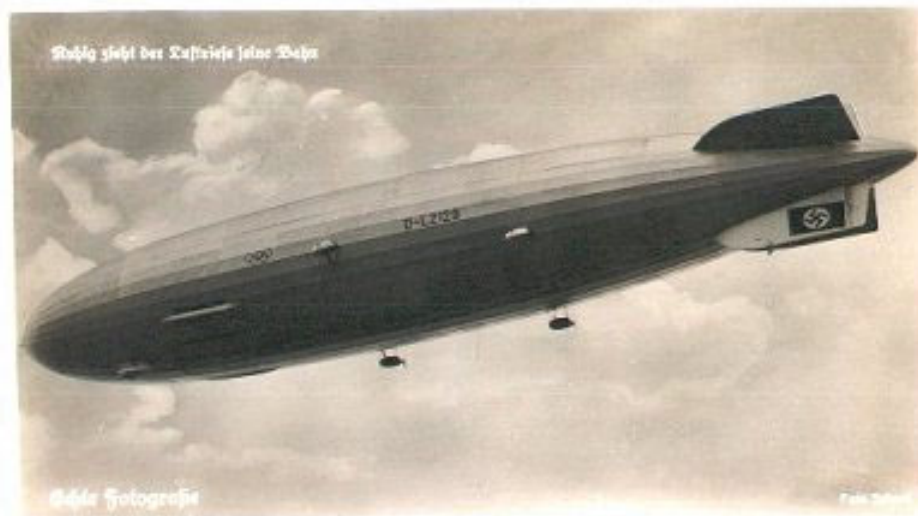


PART I:
THE SOCIALIST ECONOMY

1. OBJECTIVES AND INSTRUMENTS OF CENTRAL PLANNING.

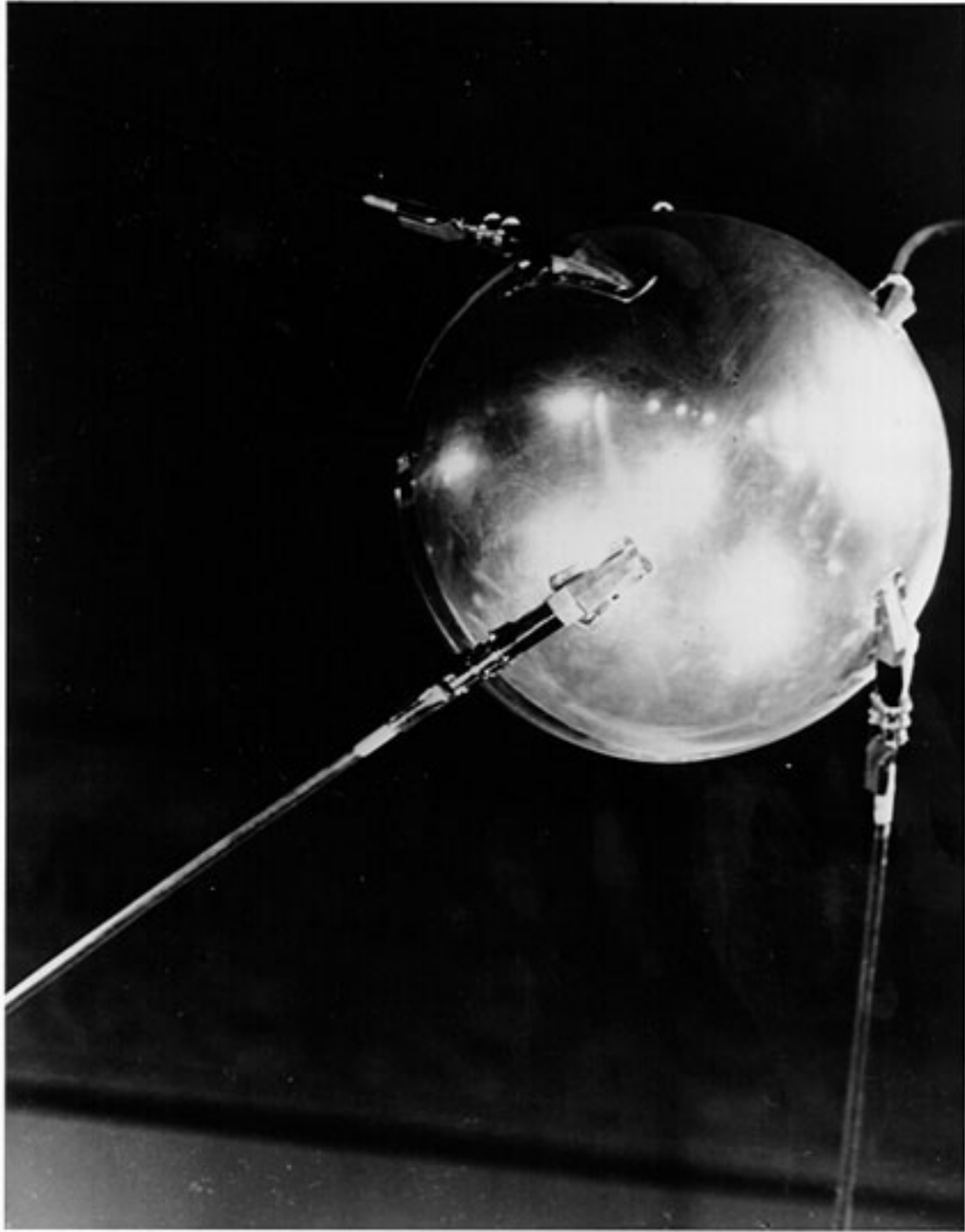
- Today, centrally planned economy perceived as old history, something like the “Zeppelin” of economics.



Das neue deutsche Zeppelin-Luftschiff L. Z. 129
Das größte Luftschiff der Welt.
Länge 248 m. Höhe 46,7 m, größter Durchmesser 41,2 m.
Vortriebsmaschinen: 4 Mercedes-Benz Dieselmotore von je 1900 PS Geschwindigkeit von etwa 130 Meilen.

The Zeppelin was seen as a competitor to airplanes until the crash of the Hindenburg and other accidents.

- Twenty years ago, the Soviet economic system did not appear threatening because of its many inefficiencies but its capacity of military buildup was perceived as strong.
- Forty years ago, the Soviet economic system appeared as a real threat to capitalism.



The sputnik shock.

- The challenge of the socialist system to “overtake” capitalism was perceived very seriously in the fifties.

Growth versus choice.

- In the forties, central planning and public ownership seemed the future of the world, even to intellectuals who were hostile.
 - Example: Joseph Schumpeter, *Capitalism, Socialism and Democracy*.
 - Planning offices set up nearly everywhere in the world.
 - Large programs of nationalization in UK, France, Germany, all over Europe.

Economic growth (average annual rate in %)

	USA		USSR
1879-1908	3.7	1885-1913	3.3
1929-50	2.5	1928-40	5.4
1950-60	3.3	1950-60	6.0
1970-84	3.0	1970-80	3.7
		1980-84	2.0

Gregory and Stuart (2001)

Backgrounds of central planning:

Intellectually, marxist economics.

- Market coordination is anarchic.
- Improve on market by planning as in large enterprises but at the level of the economy. (Lenin: manage economy like one huge post office)



Reality:

- Great depression in contrast to Soviet industrialization.
- Emergence of large corporations seen as major dynamic factor in the economy. (Chandler, 1962).
- WWII. Success of military planning.

- Development of theory of mathematical planning (Kantorovich, Nobel prize 1975 , Danzig and Wolfe, ...)
- Economics of planning attracted major economists until the late sixties (Arrow, Hurwicz, Malinvaud, Kornai, Weitzman, Koopmans, ...).
- Two major theorems of welfare economics (1) general equilibrium is Pareto optimal, 2) a Pareto optimum can be decentralized by the price system) were interpreted as “equivalence” between market and plan.

The idea of central planning was to replace the “tâtonnement” of the market by planned coordination of supplies and demands at the level of the economy, to “maximize the fulfilment of needs of population” and to grow until abundance is reached.

These ideas had popular appeal until the 1970s at least (renewed appeal with antiglobalization movement?)

Hayek (Nobel prize 1974) saw very early on that information was Achilles' heel of central planning
(*"The Use of Knowledge in Society"* (1945)).

Central Planning debate in twentieth century:

- Central planning challenged to be inefficient by Barone (1908) and von Mises (1920) because of absence of price system to evaluate scarcity of goods and capital.
- Rebuttal by Lange (1938): shadow prices can be imputed in absence of market. Basis for economics of planning ... but also for scientific understanding of market (general equilibrium theory) as developed in the fifties with Arrow and Debreu.

- Hayek disputed practical (not theoretical) feasibility of central planning. In market economy, huge knowledge on economy is decentralized via the price system (Adam Smith's butcher) but it is too difficult to centralize all the knowledge in the economy via a planning system.

At the time of the collapse of the Soviet system, the computation of an annual plan with 12 million different goods would have taken (with the best then available computers)...

... over 300 billion years.

This leads to a puzzle: how come the Soviet economy was not totally chaotic given the infeasibility of detailed central planning and the absence of markets (except very marginally in the shadow economy)?