

# 4.2 – Socialist Calculation Debate

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# Outline



Socialist Writings About Socialism

The Economics of Central Planning

Mises' Critique of Socialism

Neoclassical Market Socialism

Hayek & The Social Functions of Market Prices

The Socialist Calculation Debate: In Retrospect



# Socialist Writings About Socialism

# Socialism: How to Achieve? I



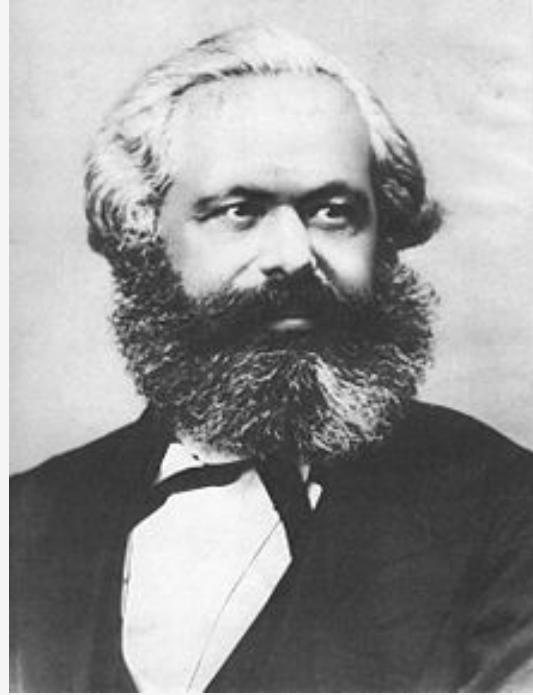
Karl Marx (1818-1883)

Friedrich Engels (1820-1895)

1. Abolition of property in land and application of all rents to public purposes
2. A heavy progressive or graduated income tax
3. Abolition of all rights of inheritance
4. Confiscation of the property of all emigrants and rebels
5. Centralisation of credit in the hands of the state, by means of a national bank with State capital and an exclusive monopoly
6. Centralisation of the means of communication and transport in the hands of the State
7. Extension of factories and instruments of production owned by the State; the bringing into cultivation of waste-lands, and the improvement of the soil generally in accordance with a common plan
8. Equal liability of all to work. Establishment of industrial armies, especially for agriculture
9. Combination of agriculture with manufacturing industries; gradual abolition of the distinction between town and country by a more equitable distribution of the populace over the country
10. Free education for all children in public schools. Abolition of children's factory labour in its present form. Combination of education with industrial production, etc. etc.

Marx, Karl and Friedrich Engels, 1848, *Manifesto of the Communist Party*

# Socialism: How to Achieve? II



Karl Marx

(1818-1883)

"My own contribution was (1) to show that the existence of classes is merely bound up with certain historical phases in the development of production; (2) that the class struggle necessarily leads to the **dictatorship of the proletariat**; [and] (3) that this dictatorship, itself, constitutes no more than a transition to the abolition of all classes and to a classless society," (pp.62-65).

# Socialism: How to Achieve? III



Vladimir Lenin  
(1870-1924)

"The dictatorship of the proletariat, i.e. the organization of the vanguard of the oppressed as the ruling class for the purpose of suppressing the oppressors, cannot result merely in an expansion of democracy. Simultaneously, with an immense expansion of democracy, which, for the first time, becomes democracy for the poor, democracy for the people, and not democracy for the money-bags, the dictatorship of the proletariat imposes a series of restrictions on the freedom of the oppressors, the exploiters, the capitalists. We must suppress them in order to free humanity from wage slavery, their resistance must be crushed by force; it is clear that there is no freedom and no democracy where there is suppression and where there is violence," (pp.62-65).

# Socialism: How to Achieve? IV



Vladimir Lenin  
(1870-1924)

"When a big enterprise assumes gigantic proportions, and, on the basis of an exact computation of mass data, organizes according to plan the supply of primary raw materials to the extent of two-thirds, or three-fourths, of all that is necessary for tens of millions of people; when the raw materials are transported in a systematic and organized manner to the most suitable places of production, sometimes situated hundreds or thousands of miles from each other; when a single centre directs all the consecutive stages of processing the material right up to the manufacture of numerous varieties of finished articles; when these products are distributed according to a single plan among tens and hundreds of millions of consumers...then it becomes evident that we have socialisation of production..." (pp.302-303).

# Socialism: How to Achieve? V



"[We must have] the strictest and country-wide accounting and control of production and distribution of goods [under] the nodal points of public accounting under socialism [to organize] the population into a single cooperative society under proletariat management.

"It must be said that large-scale machine industry — which is precisely the material source, the productive source, the foundation of socialism — calls for absolute and strict unity of will...The technical, economic and historical necessity of this is obvious and all those who have thought about socialism have always regarded it as one of the conditions of socialism...How can such strict unity of will be guaranteed? By thousands subordinating their will to the will of one," ("The Immediate Tasks of the Soviet Government", pp.268-269)

Lenin, Vladimir, 1977, *Collected Works*, Vol. 27

Vladimir Lenin

(1870-1924)

# Socialism: How to Achieve? VI



"Socialist organization of production begins with the liquidation of the market...Production shall be geared to society's needs by means of a **unified economic plan.**"

quoted in Smolinsky, Leon, 1967, "Planning without Theory 1917--1967," *Survey* 64: 113

Leon Trotsky

(1879-1940)

# Socialism: How to Achieve? VII



Nikolai Bukharin

(1888-1938)

"No longer will one enterprise compete with another, the factories, workshops, and other productive institutions will all be subdivisions, as it were, of one vast people's workshop, which will embrace the entire national economy of production. It is obvious that so comprehensive an organization presupposes **a general plan of production**...it is obvious that everything must be precisely calculated. We must **know in advance** how much labour to assign to the various branches of industry; what products are required and how much of each it is necessary to produce; how and where machines must be provided. These and similar details must be thought out beforehand, with approximate accuracy at least; and the work must be guided in conformity with our calculations. This is how the organization of communist production will be effected," (p.70).

Bukharin, Nikolai and Yevgeni Preobrazhensky, 1966 [1919], *The ABC of Communism*

# Socialism: How to Achieve? VIII



Vladimir Lenin

(1870-1924)

"[H]ave councils of workers and servants been formed in the difference sections of the city; have the workers been armed; have the bourgeoisie been disarmed...have the capitalist factories and wealth in Munich and the capitalist farms in its environs been confiscated; have mortgage and rent payments by small peasants been canceled; have the wages of farm labourers and unskilled workers been doubled or trebled; have all paper stocks and all printing-presses been confiscated so as to enable popular leaflets and newspapers to be printed for the masses; has the six-hour working day with two or three-hour instruction in state administration been introduced; have the bourgeoisie in Munich been made to give up surplus housing so that workers may be immediately moved into comfortable flats; have you taken over all the banks; have you taken hostages from the ranks of the bourgeoisie...have all the workers been mobilised for defence and for ideological propaganda in the neighboring villages?"

Lenin, Vladimir, 1977, "[Message of Greetings to the Bavarian Soviet Republic](#)", *Collected Works*, Vol. 4

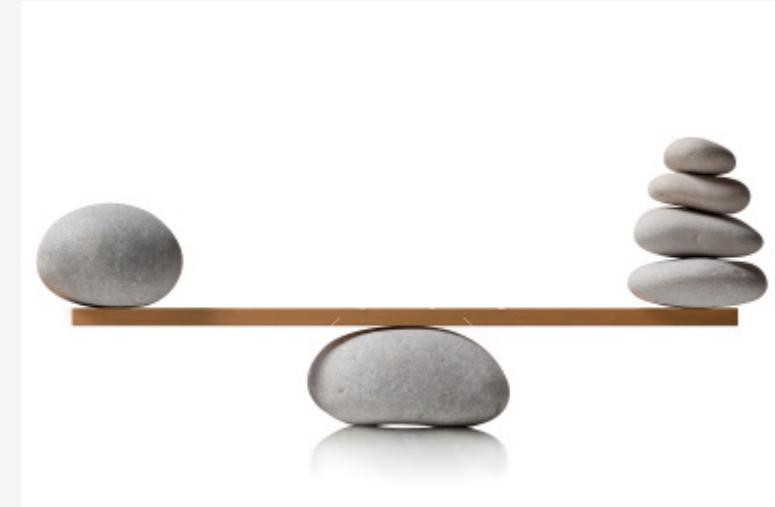


# The Economics of Central Planning

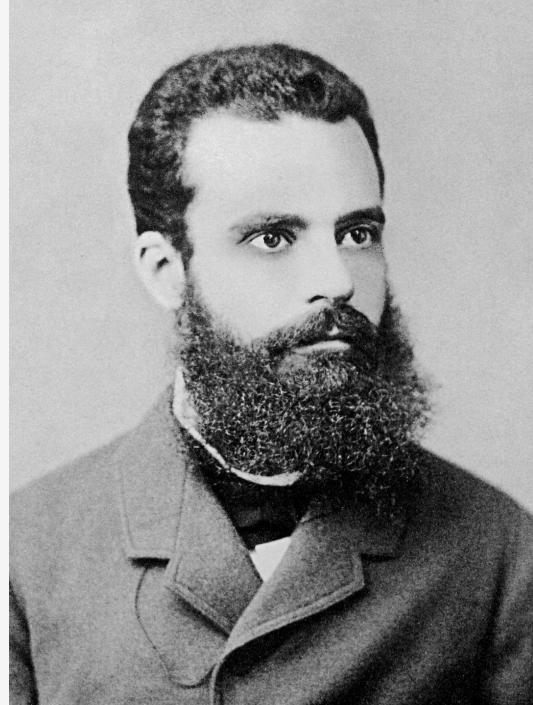
# The Economics of Central Planning I



- **Competitive** markets in **equilibrium** were by then recognized by economists as being:
- **Allocatively efficient**: goods optimally allocated to highest-valued uses
  - Price equals marginal (opportunity) cost
- **Productively efficient**: goods are produced at the minimum average cost
- **Pareto efficient**: no additional exchanges exist that can make at least one person better off without harming another person



# Can Socialist Central Planning Do This Instead?



Vilfredo Pareto

1848-1923

“Consider a collectivist society which seeks to maximise the ophelimity of its members. The problem divides into two parts. Firstly we have a problem of distribution: how should the goods within a society be shared between its members? And secondly, how should production be organised so that, when goods are so distributed, the members of society obtain the maximum ophelimity?”

His answer is an informal precursor of the second welfare theorem:

“Having distributed goods according to the answer to the first problem, the state should allow the members of the collectivity to operate a second distribution, or operate it itself, in either case making sure that it is performed in conformity with the workings of free competition.”

# Can Socialist Central Planning Do This Instead?



Enrico Barone

1859-1924

“[A socialist ministry of production would have to conduct a program of] experimentation on a very large scale [to determine the] economically most advantageous technical coefficients [and figure out which organizations were the most] advantageous to maintain in existence and to enlarge to obtain the collective maximum more easily, and which, on the other hand, it is best to discard as failures.”

Barone, Enrico, 1908, “The Ministry of Production of the Collectivist State”

# The Economics of Central Planning: The Claim



## The Claim:

- If neoclassical economists know the mechanisms of how markets optimally allocate resources and maximize social wealth..
- ...why not install central planners to achieve the *same* marginal conditions *without* the “anarchy of production,” unemployment, & problems of capitalism<sup>1</sup>
- ...and direct the economy with a single plan for socialist ends?



# The Economics of Central Planning: The Claim II



- Socialists: “late-stage Capitalism has got us almost there already”
- Run the *entire* economy as a large corporation to attain socialism
  - Shareholders → “society”
  - Managers → central planners
  - Dividends to owners of capital → dividend to society via socialist principles



# The Economics of Central Planning: The Claim III



L: Adolf Berle(1895-1971)

R: Gardiner Means (1896-1988)

“We now have single corporate enterprises employing hundreds of thousands of workers, having hundreds of thousands of stockholders, using billions of dollars' worth of the instruments of production, serving millions of customers, and controlled by a single management group. These are great collectives of enterprise, and a system composed of them might well be called 'collective capitalism,'”

Berle, Adolf and Gardiner Means, 1932, *The Modern Corporation and Private Property*

# The Economics of Central Planning: The Claim IV

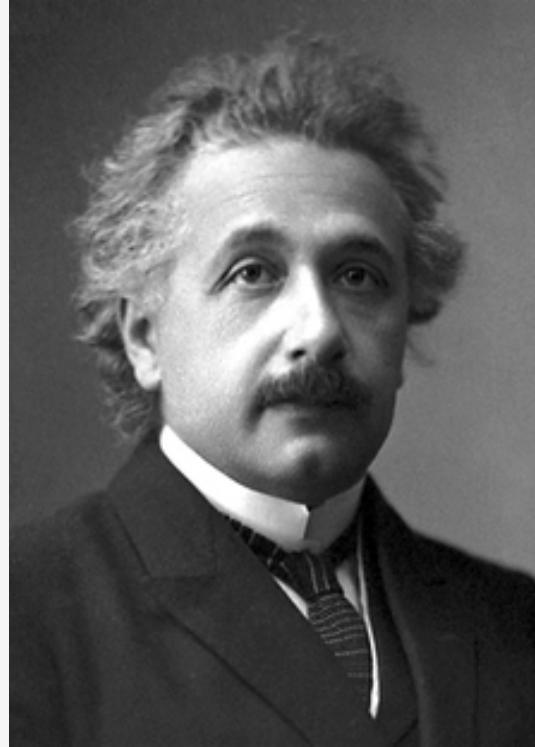


Vladimir Lenin  
(1870-1924)

“For socialism, is merely the next step forward from state-capitalist monopoly. Or, in other words, socialism is merely state-capitalist monopoly **which is made to serve the interests of the whole people and has to that extent ceased** to be capitalist monopoly...The objective process of development is such that it is impossible to advance from **monopolies** (and the war has magnified their number, role and importance tenfold) without advancing toward socialism,” (pp. 361-362)

Lenin, Vladimir, 1977, *Collected Works*, Vol. 25

# Central Planning Was All the Rage Among Elites I



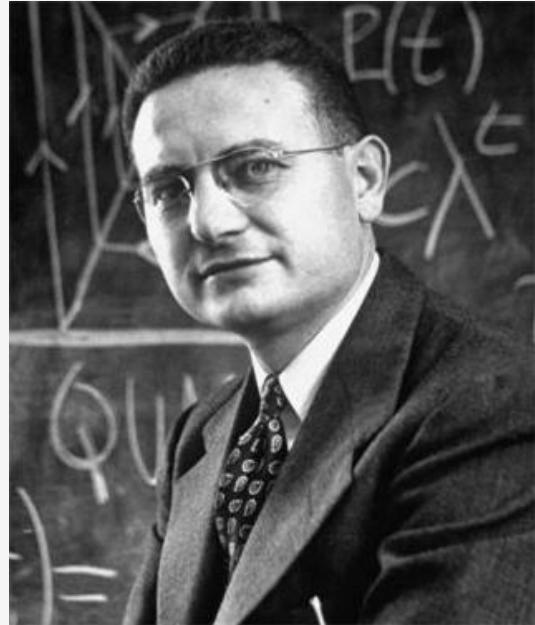
Albert Einstein

(1870-1924)

“The **economic anarchy of capitalist society** as it exists today is, in my opinion, the real source of the evil...I am convinced there is only one way to eliminate these grave evils, namely through the **establishment of a socialist economy**, accompanied by an educational system which would be oriented toward social goals. In such an economy, the means of production are owned by society itself and are **utilised in a planned fashion**. A planned economy, which adjusts production to the needs of the community, would distribute the work to be done among all those able to work and would guarantee a livelihood to every man, woman, and child.” (pp. 311)

Einstein, Albert, 1949, "Why Socialism?", *Monthly Review*

# Central Planning Was All the Rage Among Elites II

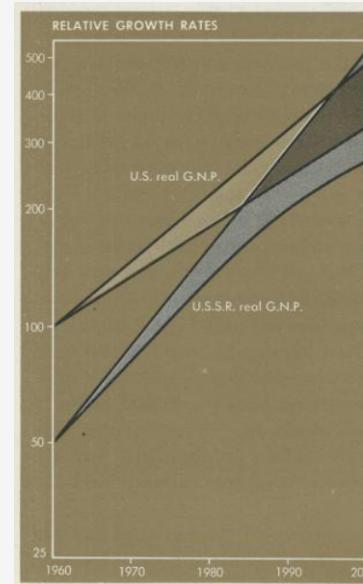


Paul A. Samuelson

(1915-2009)

Economics Nobel 1970

"[T]he Soviet economy is proof that, contrary to what many skeptics had earlier believed, a socialist command economy can function and even thrive."





# Mises' Critique of Socialism

# Ludwig von Mises



Ludwig von Mises

(1881-1973)

- Student of Menger & Bohm-Bawerk at University of Vienna
- Fled to Geneva, then United States during the rise of Nazi Germany
  - Taught at NYU
- Early works on monetary theory, business cycle theory (with F.A. Hayek)
- Polemics: defense of (classical) liberalism; critiques of socialism, fascism, etc.
- Methodological work: *a priori* economic theory
- The foremost thinker in the modern Austrian School
  - Partially mainstream, partially heterodox after 1940s

Mises, Ludwig von, 1912, *Theory of Money and Credit*

Mises, Ludwig von, 1920, *Economic Calculation in the Socialist Commonwealth*

Mises, Ludwig von, 1947, *Human Action: A Treatise on Economics*

# Mises' Critique of Socialism I



"The impracticability of Socialism is the result of intellectual, not moral, incapacity. Even angels, if they were endowed only with human reason, could not form a socialistic community. If a socialist community were capable of economic calculation, it could be set up without any change in men's moral character," (p. 407).

von Mises, Ludwig, 1922, *Socialism: An Economic and Sociological Analysis*

Ludwig von Mises

(1881-1973)

# Mises' Critique of Socialism II



Ludwig von Mises  
(1881-1973)

- Socialism = no private ownership of the means of production
- $\implies$  no exchange of capital goods
- $\implies$  no market prices for capital goods
- $\implies$  no profit or loss signals
- $\implies$  no feedback to determine if an allocation is efficient
- Therefore, **it is impossible under socialism to rationally allocate productive resources**

"Where there is no free market, there is no pricing mechanism; without a pricing mechanism, there is no economic calculation,"  
(p. 18)

# Mises' Critique of Socialism III



Ludwig von Mises  
(1881-1973)

- Sign of a free economy is the existence of a stock market

"Production goods in a socialist commonwealth are exclusively communal; they are inalienable property of the community, and thus *res extra commercium* [things outside of market]"
- Socialists accept this definition: a socialist economy does not allow private ownership of the means of production

von Mises, Ludwig, 1920, *Economic Calculation in the Socialist Commonwealth*

# Mises' Critique of Socialism IV



Ludwig von Mises  
(1881-1973)

"There will be hundreds and thousands of factories in operation...In the ceaseless toil and moil of this process, however, the administration will be without any means of testing their bearings. It will never be able to determine whether a given good has not been kept for a superfluous length of time in the necessary processes of production, or whether work and material have not been wasted in its completion. How will it be able to decide whether this or that method of production is the more profitable?"

von Mises, Ludwig, 1920, *Economic Calculation in the Socialist Commonwealth*

# Mises' Critique of Socialism V



Ludwig von Mises

(1881-1973)

"Calculation by exchange value furnishes a control over the appropriate employment of goods. Anyone who wishes to make calculations in regard to a complicated process of production will immediately notice whether he has worked more economically than others or not; if he finds...that he will not be able to produce profitably, this shows that others understand how to make a better use of the goods of higher order [capital] in question."

von Mises, Ludwig, 1920, *Economic Calculation in the Socialist Commonwealth*

# Mises' Critique of Socialism VI



Ludwig von Mises

(1881-1973)

- Socialists claim we can run the economy like we run a firm
- This mistakes the **economic problem** for a mere **technological problem**
- Capital and production is not a mere problem of management and allocating resources (assuming a static, constant structure of the economy)
- The real problem is *dynamic* and *entrepreneurial!* Activities in the capital market (starting firms, merging them, dissolving them, lending, borrowing, exchanging equity, credit) *change the structure* of the economy!

von Mises, Ludwig, 1920, *Economic Calculation in the Socialist Commonwealth*

# Mises' Critique of Socialism VII



Ludwig von Mises  
(1881-1973)

"The cardinal fallacy implied in this and all kindred proposals is that they...consider the structure of industrial production and the allocation of capital to the various branches and production aggregates as rigid, and do not take into account the necessity of altering this structure in order to adjust it to changes in conditions...The operations of managers, their buying and selling, are only a small segment of the totality of market operations...The entrepreneurs and capitalists establish corporations and other firms, enlarge or reduce their size, dissolve them or merge them with other enterprises; they buy and sell the shares of bonds of already existing and of new corporations; they grant, withdraw, and recover credits; in short they perform all those acts the totality of which is called the capital and money market," (p.703).

# Mises' Critique of Socialism VIII



Ludwig von Mises

(1881-1973)

"Our problem does not refer to the managerial activities; it concerns the allocation of capital to the various branches of industry. The question is: In which branches should production be increased or restricted, in which branches should the objective of production be altered, what new branches should be inaugurated? With regard to these issues it is vain to cite the honest corporation manager and his well-tried efficiency. Those who confused entrepreneurship and management close their eyes to the economic problem...The capitalist system is not a managerial system, it is an entrepreneurial system," (p.703).

von Mises, Ludwig, 1949, *Human Action: A Treatise on Economics*

# Mises' Critique of Socialism IX



Ludwig von Mises  
(1881-1973)

"[A]s soon as one gives up the conception of a freely established monetary price for goods of a higher order, rational production becomes completely impossible. **Every step that takes us away from private ownership of the means of production and from the use of money also takes us away from rational economics,**" (p.14).

"Thus in the socialist commonwealth every economic change becomes an undertaking whose success can be neither appraised in advance nor later retrospectively determined. There is only groping in the dark. **Socialism is the abolition of rational economy,**" (p.17).

von Mises, Ludwig, 1920, *Economic Calculation in the Socialist Commonwealth*

# Mises' Critique of Socialism X



Ludwig von Mises

(1881-1973)

- But there are socialist countries at the time! (Soviet Union)

"The extent to which socialism is in evidence among us constitutes only a socialistic oasis in a society with monetary exchange...[However using world prices would be impossible] in the case of socialist concerns operating in a purely socialistic environment, that is, if socialism covers the globe."

von Mises, Ludwig, 1920, *Economic Calculation in the Socialist Commonwealth*



# Neoclassical Market Socialism

# Socialist/Neoclassical Response I



- We can achieve competitive market equilibria through central planning
- Pure socialism (without prices) is indeed impossible (thanks, Mises), but with central planning, we can still achieve optimal outcomes while avoiding capitalism's problems
- **Market Socialism:** maintaining a price system (or importing one) but having the State direct economic activity

Oskar Lange

(1904-1965)

Lange, Oskar, 1936, "On the Economic Theory of Socialism: Part One," *Review of Economic Studies* 4: 53-71

# Socialist/Neoclassical Response II



Oskar Lange

(1904-1965)

"[It was Mises'] powerful challenge that forced the socialists to recognize the importance of an adequate system of economic accounting to guide the allocation of resources in a socialist economy. Even more, it was chiefly due to Professor Mises' challenge that many socialists became aware of the very existence of such a problem," (p.53).

"Professor Mises' contention that a socialist economy cannot solve the problem of rational allocation of resources is based on a confusion concerning the nature of prices...[Prices are merely trade-off ratios, the] terms on which alternatives are offered," (p.54).

Lange, Oskar, 1936, "On the Economic Theory of Socialism: Part One," *Review of Economic Studies* 4: 53-71

# Socialist/Neoclassical Response III



"The economic problem is a problem of choice between different alternatives. To solve the problem three data are needed: (1) a preference scale...(2) knowledge of 'the terms on which alternatives are offered,' and finally (3) knowledge of the amount of resources available. Those three data given, the problem of choice is solvable," (p.54).

Lange, Oskar, 1936, "On the Economic Theory of Socialism: Part One," *Review of Economic Studies* 4: 53-71

Oskar Lange

(1904-1965)

# Socialist/Neoclassical Response IV

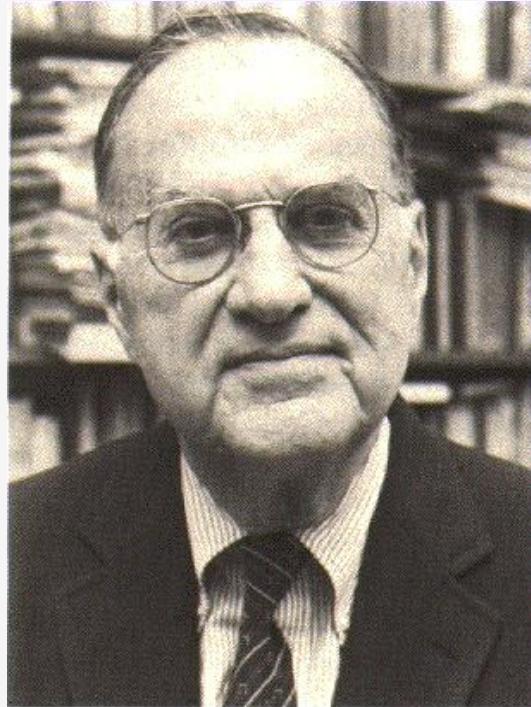


Oskar Lange  
(1904-1965)

"Professor Mises denies [that knowledge of the terms on which alternatives are offered can exist without markets] However, a careful study of price theory and of the theory of productions convinces us that, the data under (1) and under (3) being given, the "terms on which alternatives are given" are determined ultimately by the technical possibilities of transformation of one commodity into another, i.e. by the production functions. The administrators of a socialist economy will have exactly the same knowledge, or lack of knowledge, of the production functions as the capitalist entrepreneurs have." (p.55).

"The Central Planning Board would fix [the price to avoid surpluses and shortages] so as to satisfy the objective equilibrium conditions, just as a competitive market does."

# Socialist/Neoclassical Response V



Abram Bergson  
(1914-2003)

"[O]nce tastes and techniques are given, the values of the means of production can be determined unambiguously by imputation without the intervention of a market process. The [Central Planning] Board...could decide readily how to allocate resources so as to assure the optimum welfare. It would simply have to solve the equations," (p.264).

"There can hardly be any room for debate: of course, socialism can work. on this, Lange certainly is convincing."

# Socialist/Neoclassical Response VI



- Given set of least-cost production functions, we can solve the constrained optimization problem to calculate the appropriate tradeoff ratios between goods, which gives us the relative prices
- Where to get "given" data of (1) and (2)?

Lange, Oskar, 1936, "On the Economic Theory of Socialism: Part One," *Review of Economic Studies* 4: 53-71

Oskar Lange

(1904-1965)

# Isn't This Just Replicating Competitive Markets I



Oskar Lange  
(1904-1965)

- "Market socialism" is superior for 4 reasons:
  1. It can redistribute endowments, namely toward greater equality, "so as to attain the maximum social welfare."
  2. It can modify prices to correct for external effects
  3. eliminate monopoly pricing, in both ways approaching the ideal of perfect competition more closely than a market economy
  4. Socialism is better able to foster technological progress

Lange, Oskar, 1936, "On the Economic Theory of Socialism: Part One," *Review of Economic Studies* 4: 53-71

# Isn't This Just Replicating Competitive Markets? II



Abba Lerner  
(1903-1982)

"If socialism is to be identified with the belief that the abolition of private property would automatically establish the brotherhood of man - and many socialists did, while some apparently still do - then socialism must be counted out as false," (vii).

"**Economics of Control** [takes the stress away] from collectivism and applied to the idea of conscious recognition of the problems of social organization and the exercise of conscious control over the economic system...The economics of *control* is still contrasted with the economics of *laissez faire*, but control does not necessarily mean collectivism. **It suggests the deliberate application of whatever policy will best serve the social interest**, without prejudging the issue between collective ownership and administration or some form of private enterprise," (vii-viii).

Lerner, Abba, 1944, *The Economics of Control: Principles of Welfare Economics*



# **Hayek & The Social Functions of Market Prices**

# Aside: Returning to the Socialist Calculation Debate



- Neoclassical economists and market socialists (Lange, Lerner, Bergson, etc) argued that central planning can, **in theory, replicate the optimal outcomes of markets in competitive equilibrium** without the problems
  - Externalities
  - Monopolies
  - Inequality
  - Unemployment
  - Business cycles



# The Neoclassical/Socialist View of Prices I



- **Prices as sufficient statistics in static equilibrium**
- **Efficiency of prices:** function in equilibrium market-clearing & achieving Pareto optimality
- When prices changes, they don't lose their parametric function, and every individual always takes "the price" as given (price-taking behavior)



# The Neoclassical/Socialist View of Prices II



- **Competition:** an optimal end-state:
  - Consumers maximized utility
  - Producers minimized cost
  - Economic profits are zero
  - No surpluses or shortages
- If you find the right vector of prices, given consumer preferences and given production functions, you can calculate this optimal outcome!



# F.A. Hayek



Friedrich August von Hayek

1899-1992

- Student of Wieser at University of Vienna
- Informal student of Mises, worked together at Center For Study of Business Cycle Research
- Famous for his capital theory and main alternative explanation of business cycle vs. Keynes'
- Focus on economic of *knowledge* & information, another leading economist of "Austrian school"
- Turned to social philosophy in last stage of his life
- Nobel Prize 1974

Hayek, F. A., 1933, *Prices and Production*

# Hayek's Realization From Mises



- Competition is not an optimal **end-state**, it is a **discovery process!**
- Competition is not a *noun* (perfect competition), it's a *verb!*
- Key question is, how will the knowledge of the optimal allocation of resources, optimal prices, and optimal technologies be **created and discovered?**
  - It **cannot** be known in advance!



# Hayek: Markets as a Discovery Process I



"Planning in the specific sense in which the term is used in contemporary controversy necessarily means central planning - direction of the whole economic system according to one unified plan. Competition, on the other hand, means decentralized planning by many separate persons," (pp.519-520).

Hayek, F. A., 1945, "The Use of Knowledge in Society," *American Economic Review* 35(4): 519-530

F. A. Hayek

1899-1992

# Hayek: Markets as a Discovery Process II



F. A. Hayek

1899-1992

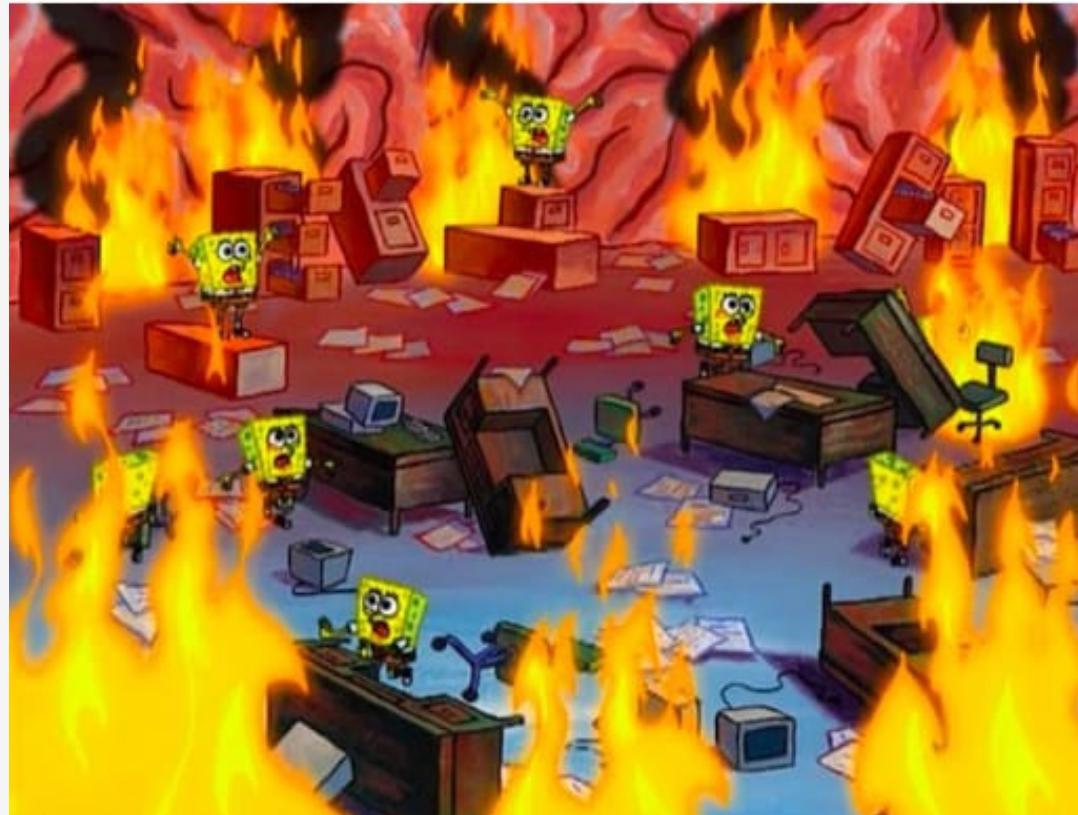
**"The economic problem of society is thus not merely a problem of how to allocate given resources if given is taken to mean given to a single mind which deliberately solves the problem set by these data. It is rather a problem of how to secure the best use of resources known to any of the members of society, for ends whose relative importance only these individuals know. Or, to put it briefly, it is a problem of the utilization of knowledge which is not given to anyone in its totality,"** (pp.519-520).

Hayek, F. A., 1945, "The Use of Knowledge in Society," *American Economic Review* 35(4): 519-530

# Hayek: Markets as a Discovery Process II



Central planners using the Lange-Lerner model the instant one person decides they no longer prefer 7 apples to 6 eggs



# Hayek: Markets as a Discovery Process III



F. A. Hayek

1899-1992

"Which of the systems is likely to be more efficient...depends on whether we are more likely to succeed in putting at the disposal of a single central authority all the knowledge which ought to be used but which is initially dispersed among many different individuals, or in conveying to the individuals such additional knowledge as they need in order to enable them to fit their plans with those of others," (pp.519-520).

Hayek, F. A., 1945, "The Use of Knowledge in Society," *American Economic Review* 35(4): 519-530

# Hayek: Markets as a Discovery Process IV



"The marvel is that in a case like that of a scarcity of a raw material, without an order being issued, without more than perhaps a handful of people knowing the cause, tens of thousands of people whose identity could not be ascertained by months of investigation, are made to use the material or its products more sparingly," (pp.527).

Hayek, F. A., 1945, "The Use of Knowledge in Society," *American Economic Review* 35(4): 519-530

F. A. Hayek

1899-1992

# Hayek: Markets as a Discovery Process IV



F. A. Hayek

1899-1992

"The problem arises because one of the most important forces which in a truly competitive economy brings about the reduction of costs to the minimum discoverable will be absent, namely, price competition...[T]he question is frequently treated as if the cost curves were objectively given facts. What is forgotten is that the method which under given conditions is the cheapest is a thing which has to be discovered, and to be discovered anew, sometimes almost from day to day, by the entrepreneur, and that, in spite of the strong inducement, it is by no means regularly the established entrepreneur, the man in charge of the existing plant, who will discover what is the best method," (p.196).

Hayek, F. A., 1948, "Socialist Calculation II: The Competitive Solution," *Individualism and Economic Order*

# Hayek: Markets as a Discovery Process V



"The force which in a competitive society brings about the reduction of price to the lowest cost...is the opportunity for anybody who knows a cheaper method to come in at his own risk and to attract customers by underbidding the existing producers. But, if prices are fixed by the authority, this method is excluded," (p.196).

Hayek, F. A., 1948, "Socialist Calculation II: The Competitive Solution," *Individualism and Economic Order*

F. A. Hayek

1899-1992

# Mises-Hayek View of Prices



- **Prices are knowledge surrogates in dynamic disequilibrium**
- **Efficiency of prices:** use distributed knowledge and incentivize local actors to exploit opportunities, which reduce error and bring about greater social coordination
- **Prices are never "given", prices emerge** dynamically from negotiation and market decisions of entrepreneurs and consumers



# The Social Functions of Prices



F. A. Hayek

1899-1992

"The most significant fact about this system is the economy of knowledge with which it operates...by a kind of symbol [the price], only the most essential information is passed on and passed on only to those concerned...The marvel is that in a case like that of a scarcity of a raw material, without an order being issued, without more than perhaps a handful of people knowing the cause, tens of thousands of people whose identity could not be ascertained by months of investigation, are made to use the material or its products more sparingly," (p.527).

# Scientific vs. Tacit Knowledge



F. A. Hayek

1899-1992

"Today it is almost heresy to suggest that scientific knowledge is not the sum of all knowledge. But a little reflection will show that there is beyond question a body of very important but unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules: the knowledge of the particular circumstances of time and place. It is with respect to this that practically every individual has some advantage over all others in that he possesses unique information of which beneficial use might be made, but of which use can be made only if the decisions depending on it are left to him or are made with his active cooperation," (pp.521-522).

Hayek, F. A., 1945, "The Use of Knowledge in Society," *American Economic Review* 35(4): 519-530



# The Socialist Calculation Debate: In Retrospect

# The Socialist Calculation Debate In Retrospect I



- Overall, the socialist calculation "debate" largely ended with **economists talking past each other**
  - Both sides walked away believing they had "won"
- Mises & Hayek (["The Austrians"](#)) begin to recognize that they view "prices," "equilibrium," "competition," and "efficiency" *very differently* than neoclassical economists



# The Socialist Calculation Debate In Retrospect II



Stages of the debate:

1. Marxists argue for moneyless, propertyless, centrally-planned economy as a superior system for achieving coordinated, "advanced material production" as compared to the anarchy" of capitalist production
2. Mises (1920) argued that socialism cannot achieve its defined goals due to its inability to solve the economic calculation problem
3. Developments in NC-GE theory show logical/formal similarity of systems of equations between the socialist and capitalist system under static, ideal, conditions
4. Hayek extends Mises' calculation point as a problem of dispersed tacit knowledge (impossible to achieve via equation-solving) that is not *given* to any agent or system; competition and market prices enable *discovery* of optimal resource uses
5. Lange & others argue "market socialism" can approximate *perfect competition*

# The Socialist Calculation Debate In Retrospect III

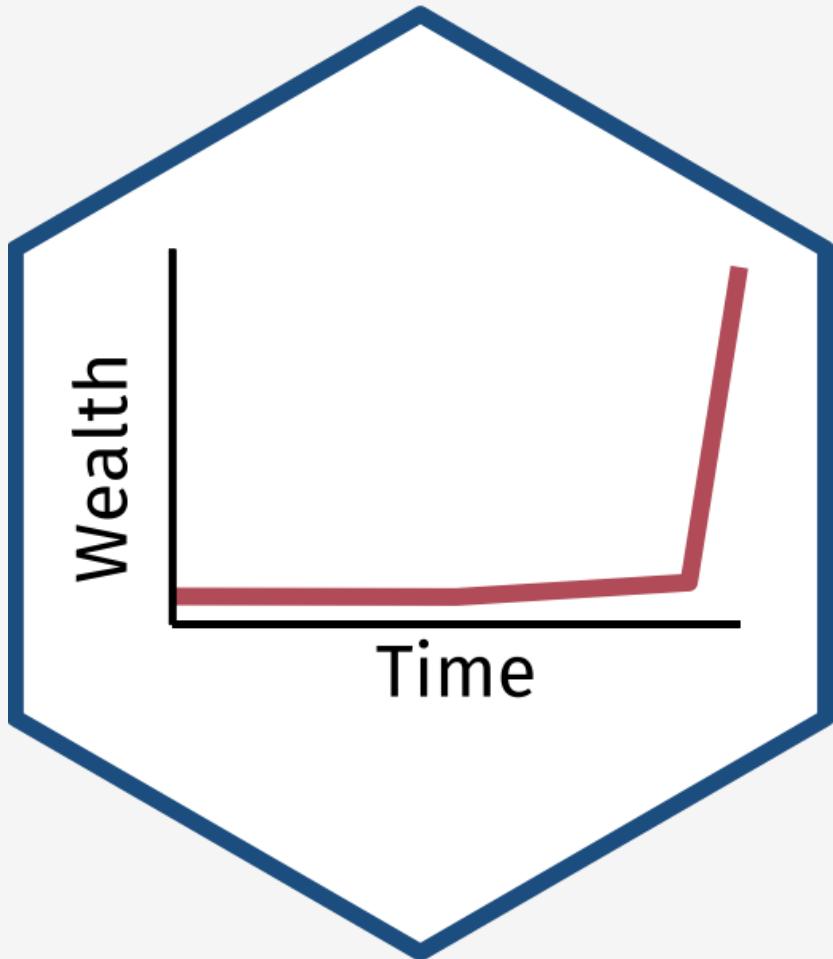


- Main disagreement is about **rivalry**
- **Marxists:** **rivalry as inherent flaw** in capitalism leading to conflict; central planning removes rivalry and leads to pre-coordinated harmony
- **Mises-Hayek:** **rivalry** under specific institutions (market prices, property rights) **is the only way to generate the information** necessary to rationally allocate resources
- **Neoclassical economists:** **assume rivalry away** in perfect competition models, viewing prices as just parametric statistics, allowing a central planner to achieve the same optimal outcome



Lavoie, Don, 1985, *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered*, p.25

# So How Did it “Work” in the Soviet Union?



See lesson 12 in my Economics of Development Course: [Russia and Post-Communist Transition](#)

# Socialism Across the World

