Forecasting Center | Kiel, 30st January 2018
ASTWIK-Seminar

Paradigm debate

(Macro-) Economics as a Science of Social Coordination Problems

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Shaping a paradigm

- Why at all?
- Why coordinationist?

Shaping a paradigm

- **Why at all?**
- Why coordinationist?

Why phrasing an explicit approach?

- **Coherence in theoretical reasoning**
  - » Validating soundness and consistency

- **Guidance for empirical research**
  - » Identifying analytical relevance

- **Transparency in consulting**
  - » Articulating fundamental propositions

Paradigms (Kuhn 1970, Ratcliffe 1983)

- Paradigms are …
  - … a way of ordering and simplifying the perceptual world's stunning complexity (views on: important vs. unimportant, reasonable vs. unreasonable, possible vs. impossible)
  - … constitutive of all scientific activity, including underlying assumptions made, problem definition, areas of investigation, questions posed and, particularly, data interpretation, conclusions drawn and policy recommendations made at the end of the research process

- References

  - Kuhn, Thomas S.: The Structure of Scientific Revolutions. 2nd Edition, International Encyclopedia of Unified Science, Volume II, Number 2, The University of Chicago Press, Chicago 1970.
  - Ratcliffe, John W.: Notions of Validity in Qualitative Research Methodology. In: Knowledge. Creation, Diffusion, Utilization, Vol. 5 No. 2, December 1983: 147-167.

Paradigms: Ontology/Epistemology/Methodology

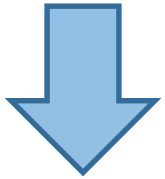
- All science is based on paradigmatic thinking involving
  - » distinct assumptions on the nature of the reality (ontology),
  - » how we can come to know that reality (epistemology), and
  - » how we can systematically access what can be known about that reality (methodology).

Source: Guba and Lincoln (1994)

- Reference
  - » Guba, Egon G. and Yvonna S. Lincoln: Competing Paradigms in Qualitative Research. In: In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research, Thousand Oaks 1994: 105-117.

Paradigms and science

Whether we are aware of it or not,
we all operate on a belief system (= paradigm).

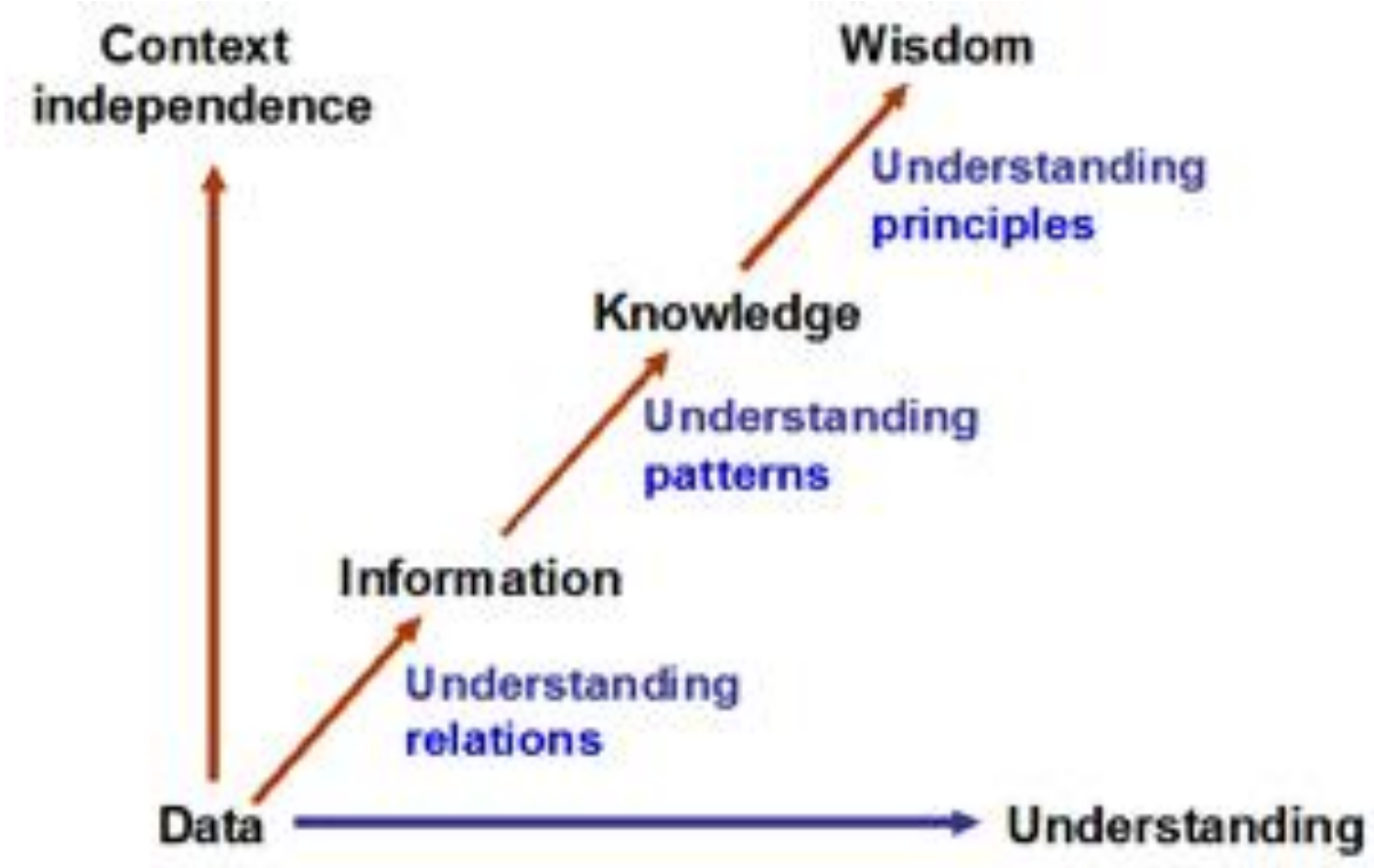


Concealing paradigms hampers inter-subjective understanding and is thus unscientific.

Research Expertise (University of Southampton)

- What is your paradigm?
- Why is philosophy important?
- How does data become knowledge?

How does data become knowledge/wisdom?



Source: www.erm.ecs.soton.ac.uk/theme2/how_does_data_become_knowledge.html

Theory-then-research strategy

- Lynham
  - » Developing an informed conceptual framework that provides an initial understanding and explanation of the nature and dynamics of the phenomenon
  - » Theory is made explicit through the continuous, reiterative interaction between theory construction and empirical inquiry
  - » Well suited to the applied nature of the behavioral and human sciences
- Mises (see Boettke and Leeson)
  - » Theory for interpreting history (conception and understanding)
  - » Praxeology ⇨ Economics as science of human (inter-) action

- References
  - » Lynham, Susan A.: The General Method of Theory-Building Research in Applied Disciplines. Advances in Developing Human Resources, Vol. 4, No. 3, 2002: 221-241.
  - » Boettke, P. and P. Leeson: Was Mises right? Review of Social Economy, Vol. 64, No. 2, 2006.

Shaping a paradigm

- Why at all?

- **Why coordinationist?**
  - » Market and value theory
  - » Knowledge and disequilibrium
  - » Production as a time-consuming, multi-stage process
  - » Aggregation and macro patterns

Social coordination and macro perspective

- Market system
  ⇨ Social coordination mechanism for human interaction

- Complex micro exchange processes
  ⇨ Macro patterns?

The Market …?

CHAPTER 1

THE MARKET

The conventional first chapter of a microeconomics book is a discussion of the "scope and methods" of economics. Although this material can be very interesting, it hardly seems appropriate to *begin* your study of economics with such material. It is hard to appreciate such a discussion until you have seen some examples of economic analysis in action.

So instead, we will begin this book with an *example* of economic analysis. In this chapter we will examine a model of a particular market, the market for apartments. Along the way we will introduce several new ideas and tools of economics. Don't worry if it all goes by rather quickly. This chapter is meant only to provide a quick overview of how these ideas can be used. Later on we will study them in substantially more detail.

1.1 Constructing a Model

Economics proceeds by developing **models** of social phenomena. By a model we mean a simplified representation of reality. The emphasis here is on the word "simple." Think about how useless a map on a one-to-one

Source:
Varian, H. R.: Intermediate Microeconomics – A Modern Approach; 7th edition, New York and London 2005: p. 1 [left] and p. A35 [right]

The market …? (cont.)

- Missing entries
  - » International Encyclopedia of the Social Sciences (1968)
  - » The New Palgrave: A Dictionary of Economics (1987)
- Ronald Coase
  - » *What is studied is a system which lives in the minds of economists but not on earth. I have called the result "blackboard economics". The firm and the market appear by name but they lack any substance. The firm in mainstream economic theory has often been described as a "black box". (…) Even more surprising, given their interest in the pricing system, is the* ***neglect of the market*** *or* ***more specifically the institutional arrangements which govern the process of exchange****. As these institutional arrangements determine to a large extent what is produced, what we have is a very incomplete theory.*

    Lecture to the memory of Alfred Nobel, December 9, 1991

Origin of markets

§ 11. **Origin of markets.** We have in the auction sale, with its gathering of buyers, something near to the idea of a *market*. In all parts of the world, civilized or uncivilized, are found places where both buyers and sellers of various kinds of goods come together to trade. These meeting places (or meetings) were called markets because they were first found on the border (*mark*) between tribes, villages, or clans, as a common ground where strangers met to trade. The notion of trade did not develop within the family and the tribe. There the idea of common ownership seems to have ruled, and the communities seem to have been led to trade by the abundance or the want of certain natural resources in their environment; thus shore tribes had a surplus of salt and fish, forest tribes had meat and skins, tribes living near good mineral deposits had flints and bronze, while each wanted what the other had. Markets developed on neutral ground whither came buyers and sellers, some of whom became regular merchants. Buyers found a better selection of goods, both as to kind and as to quality, and merchants found many would-be purchasers for what they had to sell. Throughout the Middle Ages purchases were made by the more prosperous husbandmen in great quantities once or twice a year at the fairs or markets. As both buyers and sellers came from widely separated places, the feature of combination (or monopoly) was not common and the conditions of a competitive market were present.

Source:
Frank Fetter (1928|1915), Economic Principles, p. 57 f.

Economics and the key allocation problem

- Human needs
  - » Subjectively felt uneasiness (reason for action)
  - » Generally **unlimited**
- Goods
  - » Means for (direct or indirect) satisfaction of a need
  - » Generally **limited**

⇨ **Scarcity (allocation and distribution problem)**

- » Not all needs can be fully satisfied
- » Selection inevitable
  - – Ranking needs
  - – Matching with disposable means (production possibilities)
- » **Economic growth: Reduction of „uneasiness “ (more satisfaction by expanding the pool of means)**

Alternative allocation mechanisms

- Violence (military campaigns, robber barons)
- Discrimination (Sex, Nationality, Age, …)
- Greyhound racing („First come, first served“)
- Communism („Each according to his/her need”)
- Egalitarianism („Each the same“)

- **Market (competitive exchange mechanism)**
  - » **Property rights**
  - » **Voluntary exchange**
  - ⇨ **„Each according to his/her preferences *and* performance“ (ability-to-pay resulting from market income = valuation by others)**

Point of departure

Man acts.

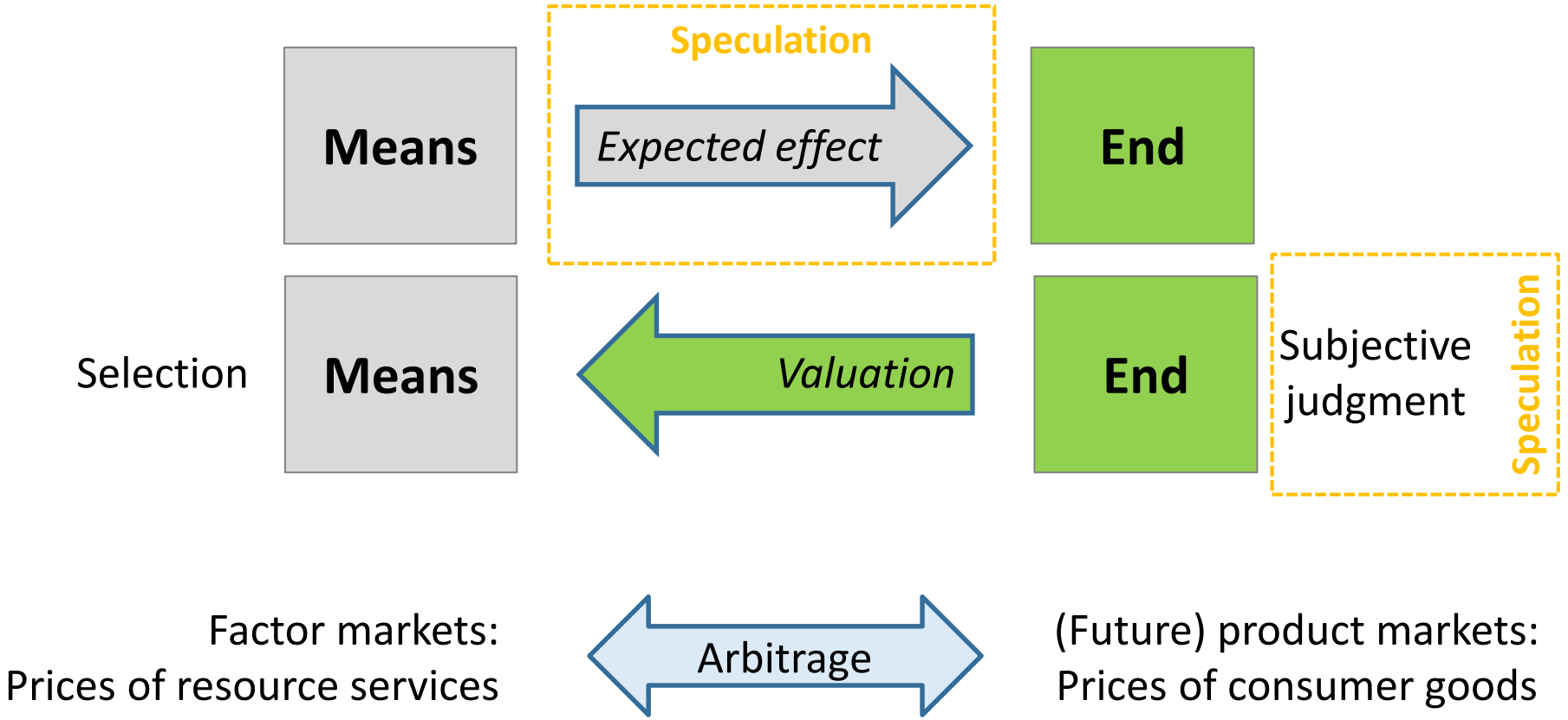
Implications of “human action” (1/2)

- Purposeful conduct: Aiming at reducing uneasiness
  - The human actor “wants to substitute a state of affairs that suits him better for one that suits him less”. (Mises)
  - Human beings as universal entrepreneurs (explorers, not decision automata)
  - Action: decision making + search for means
- Individuals act …
  - … but not in isolation ⇨ society formed by human interaction (social sciences)
  - … groups/aggregates do not
- Preferences as ranks only
  - Chosen ends are strictly subjective
  - Making choices on means (no discussion of ends)
  - No room for interpersonal comparison of utility (no social planner)

Implications of “human action” (2/2)

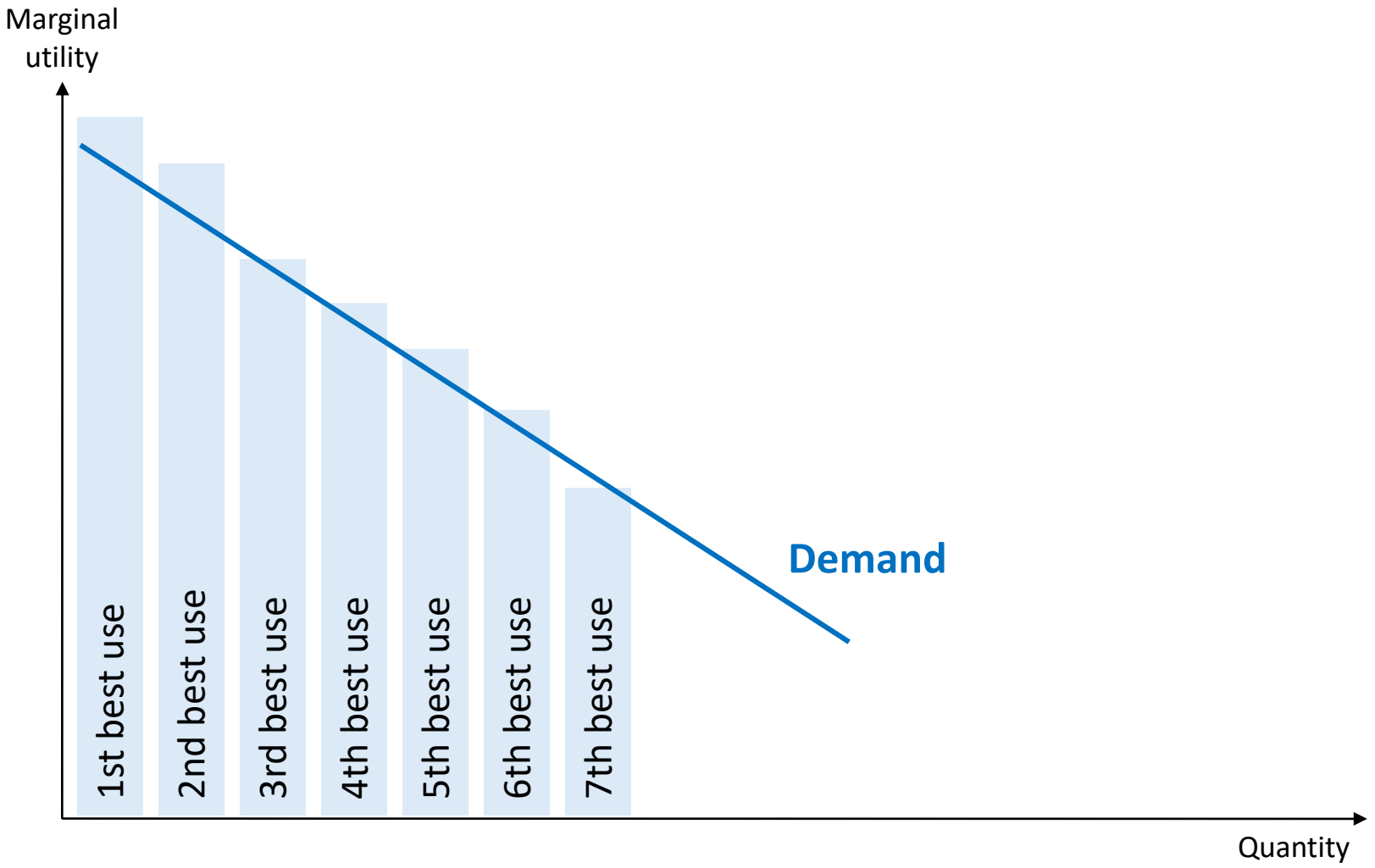
- Diminishing marginal utility
  - » Follows from human choice (outcome, not by assumption)
  - » No psychological/physiological phenomenon
- Action in time
  - » Dynamic disequilibrium approach
  - » Evenly rotating economy as a state of non-action (thought experiment only)
- Uncertainty: Limited and distributed knowledge
  - » Action as speculation based on subjective judgments
  - » Knowledge: Local, fragmentary, non-centralizable
  - » Prices as universal information carriers

Entrepreneurship:
(Search for) Means, ends, arbitrage, speculation,

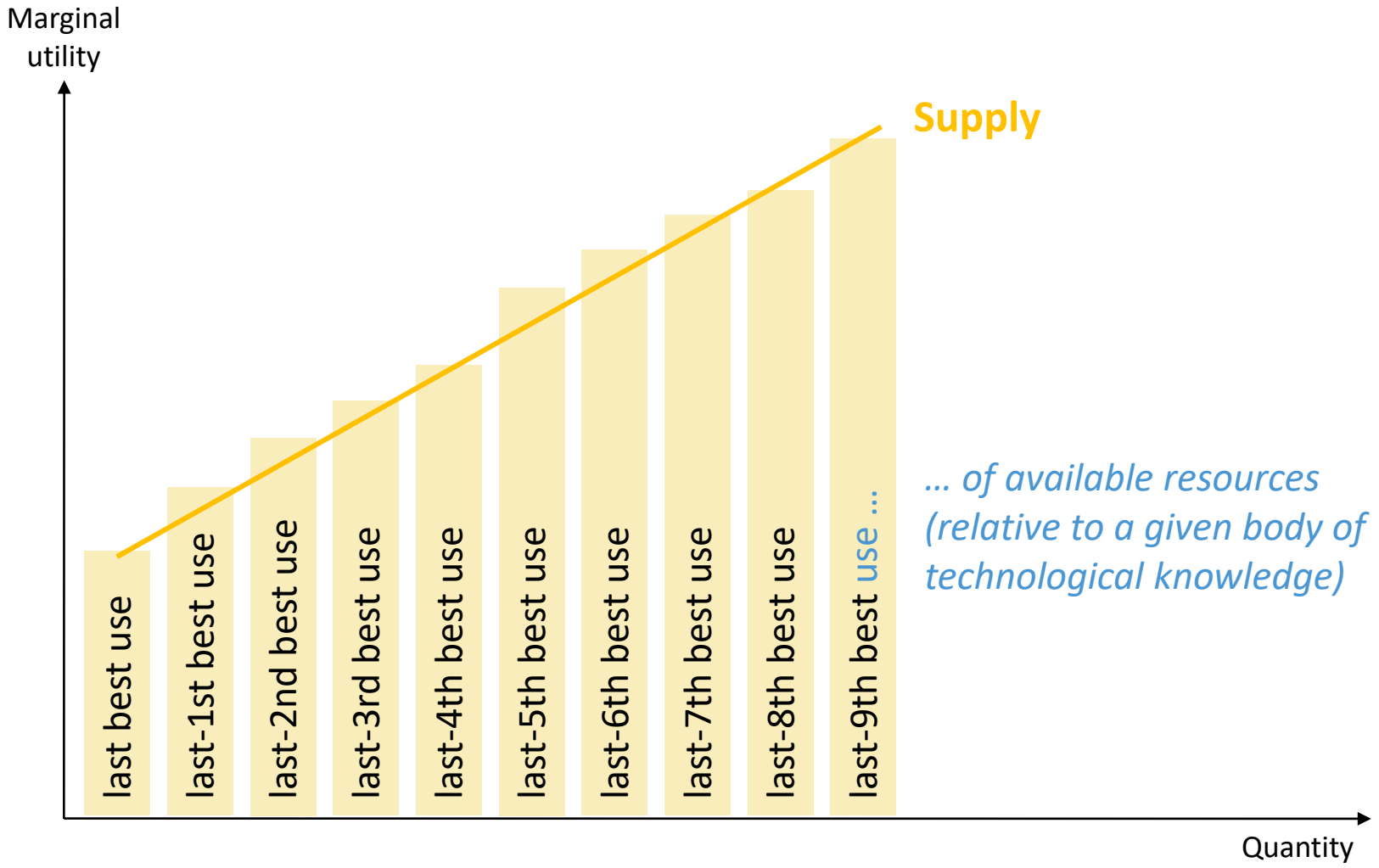


Imperfect communication
between two markets
(price of bundle of inputs ≠ price of consumption good)

Demand theory without psychology

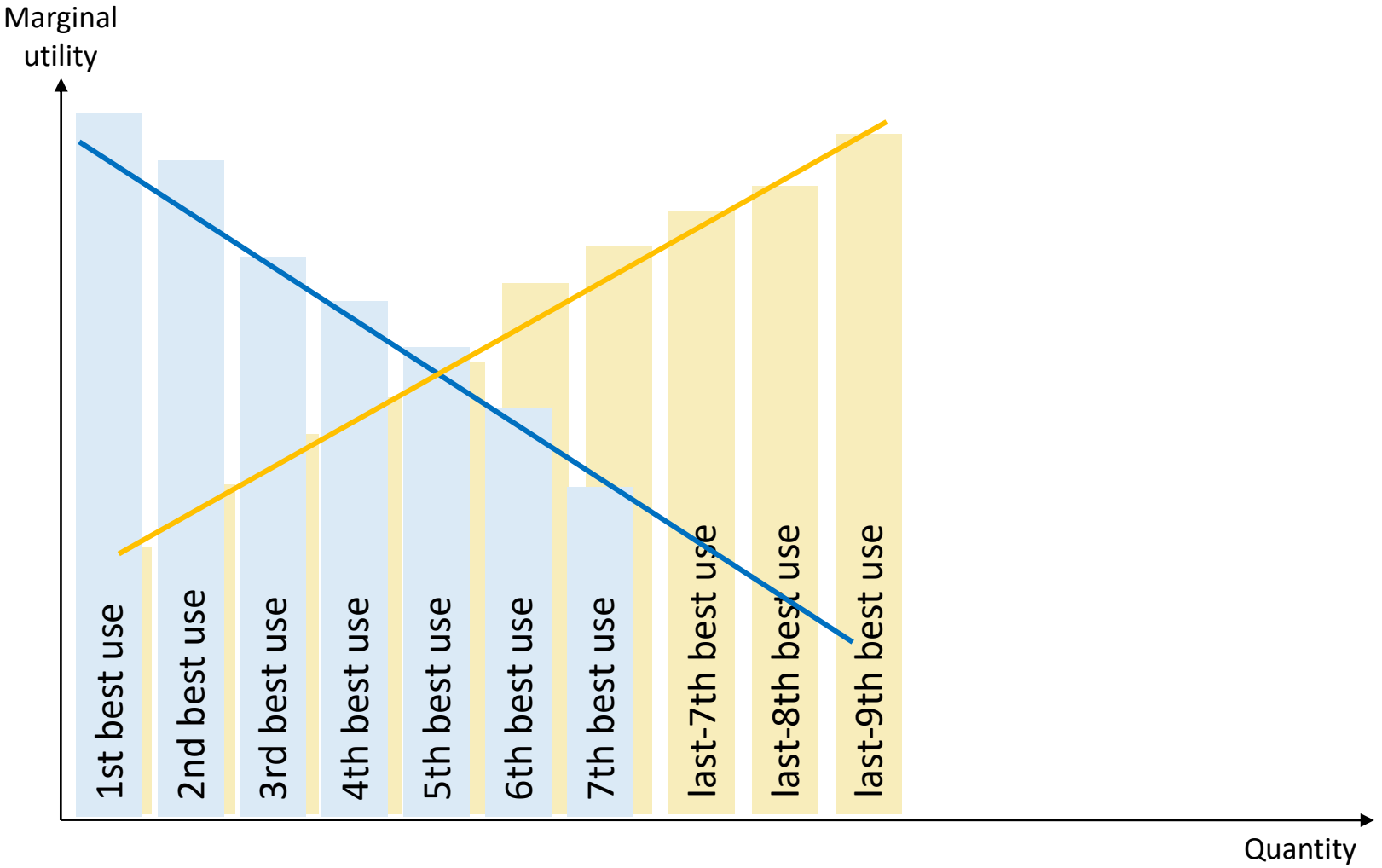


Supply theory without “production cost” (cost as universal social opportunity cost)

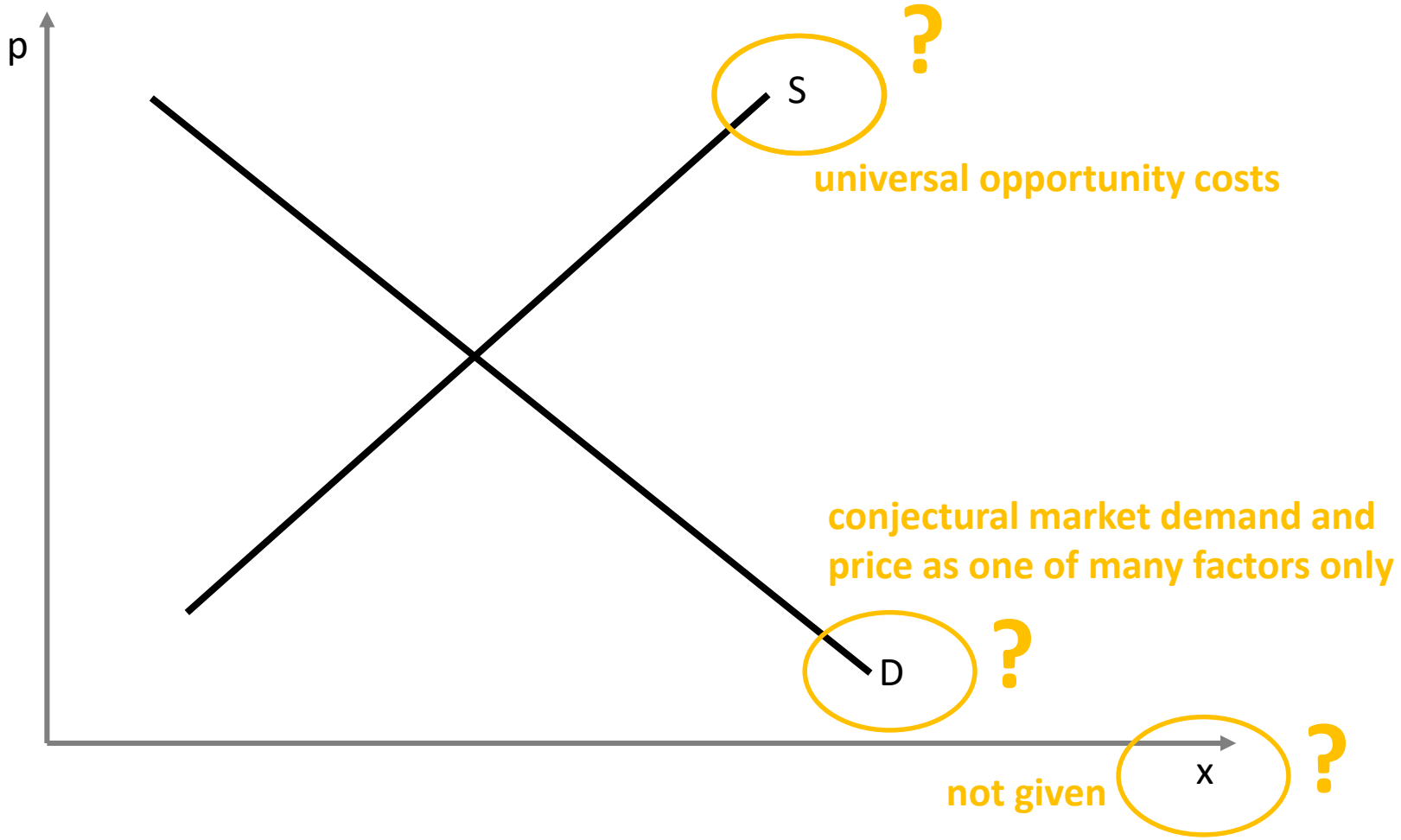


Schumpeter, A.: Das Wesen und der Hauptinhalt der Theoretischen Nationalökonomie. Leipzig 1908: 213ff.

Market coordination for resource allocation

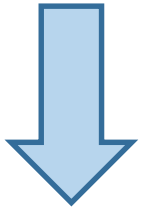


Entrepreneurs: Coordination between resource owners and consumers (permanent adjustment)



Mises on profits and entrepreneurship

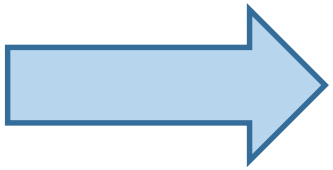
"What makes profit emerge is the fact that the entrepreneur who judges the future prices of the products more correctly than other people do buys some or all of the factor of production at prices which, seen from the point of view of the future state of the market, are too low."



Intertemporal speculative arbitrage

Knowledge, foresight, and equilibrium

- Disequilibrium
  - » Imperfect knowledge
  - » Uncomplete coordination



Entrepreneurial-competitive process (communicating information)

Price movements and changing patterns of product quality

- Equilibrium
  - » Perfect knowledge
  - » Complete coordination
    - – Information (prices)
    - – Action (exchange)
    - ⇨ **Market clearing**

⇨ Perfect foresight as result of, not condition for equilibrium

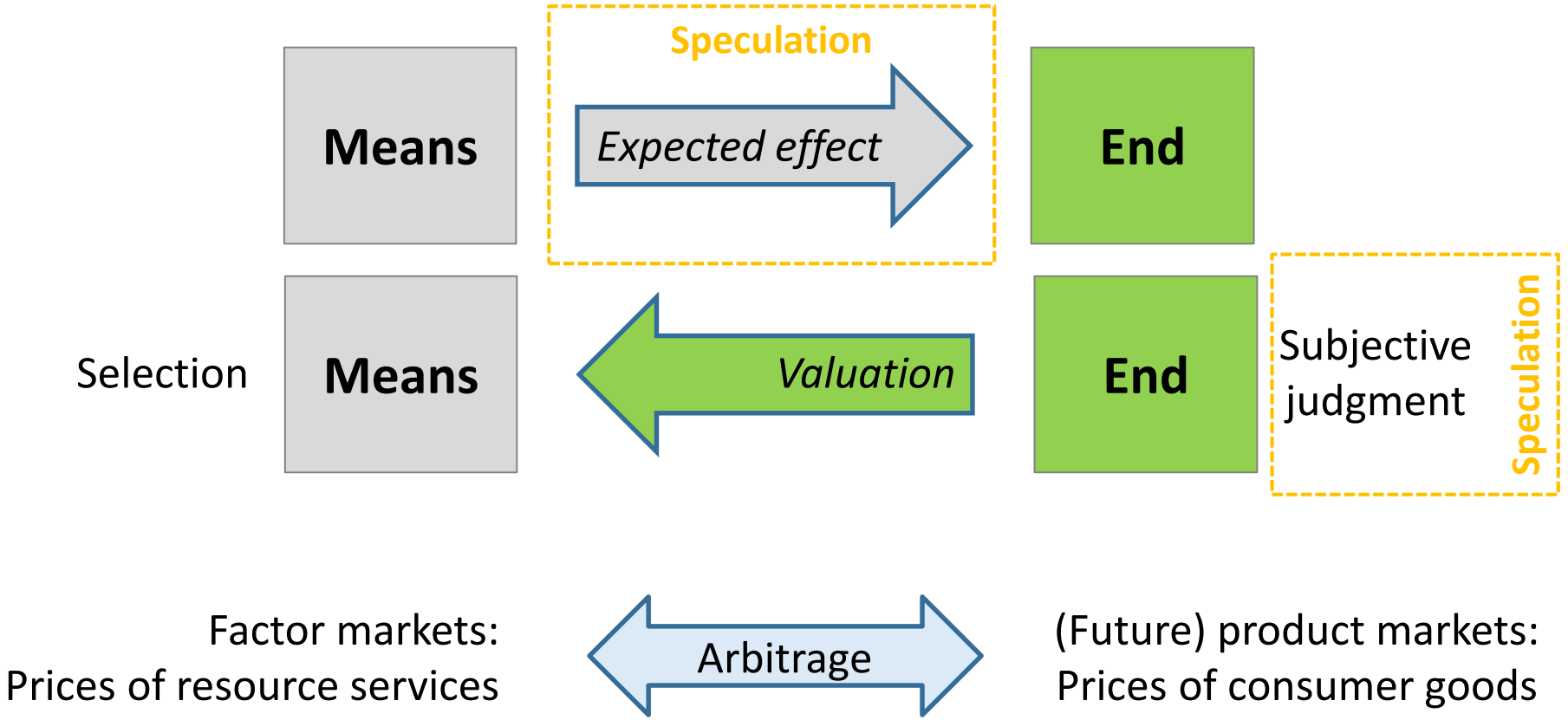
⇨ Profit opportunities directing coordination process

Knowledge, social coordination, and business cycles

- Individualism and Economic Order (Hayek 1948)
  - Economics and Knowledge (Economica 1937)
  - The Ricardo Effect (Economica 1942)
  - The Use of Knowledge in Society (AER 1945)
  - The Meaning of Competition (Princeton Lecture 1946)
- Profits, Interest, and Investment (1939)
  - and other Essays on Industrial Fluctuations

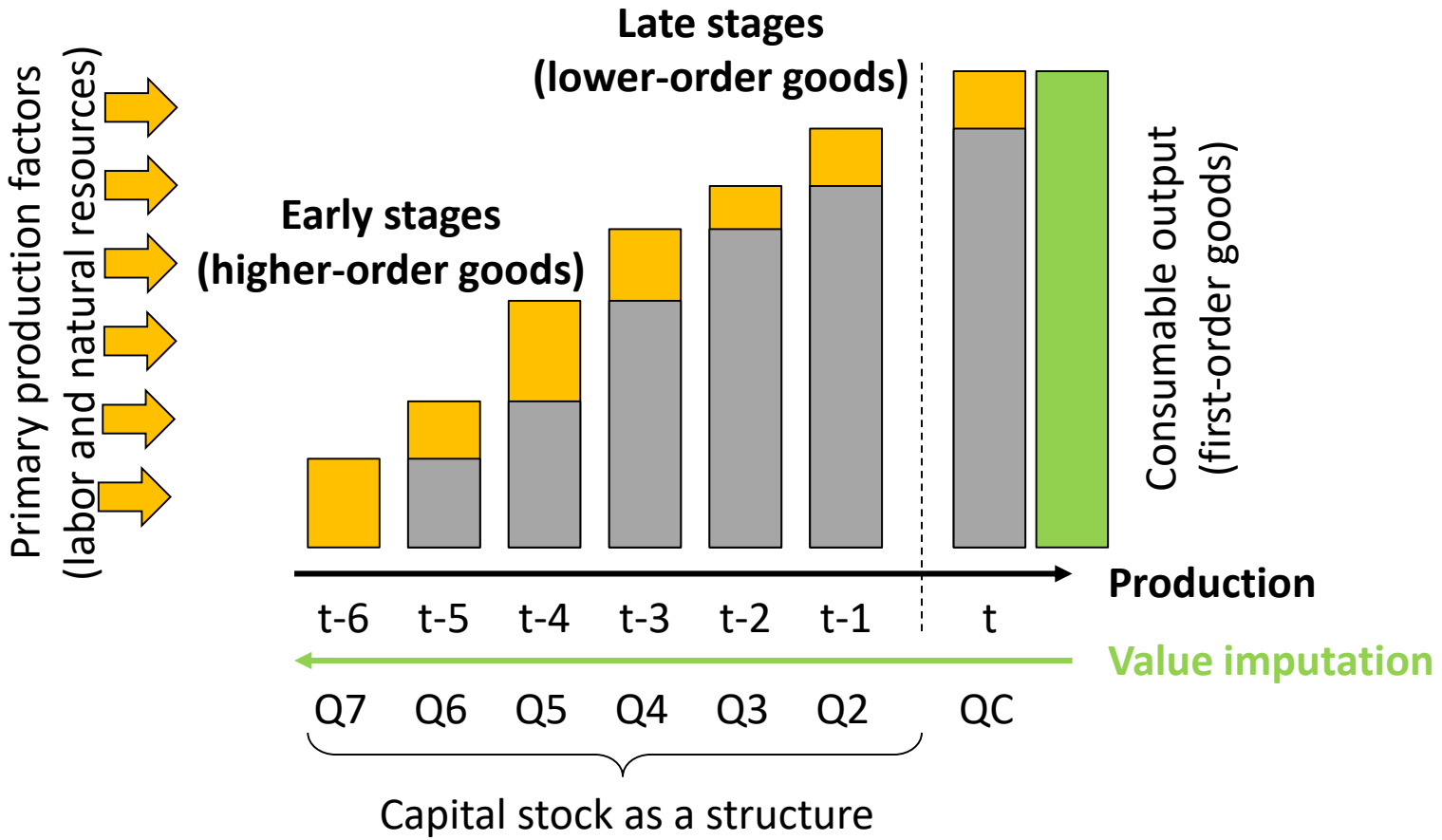
- O'Driscoll, G. P.: Economics as a Coordination Problem – The Contributions of Friedrich A. Hayek. Kansas City 1977.

Entrepreneurship:
(Search for) Means, ends, arbitrage, speculation,



Imperfect communication
between two markets
(price of bundle of inputs ≠ price of consumption good)

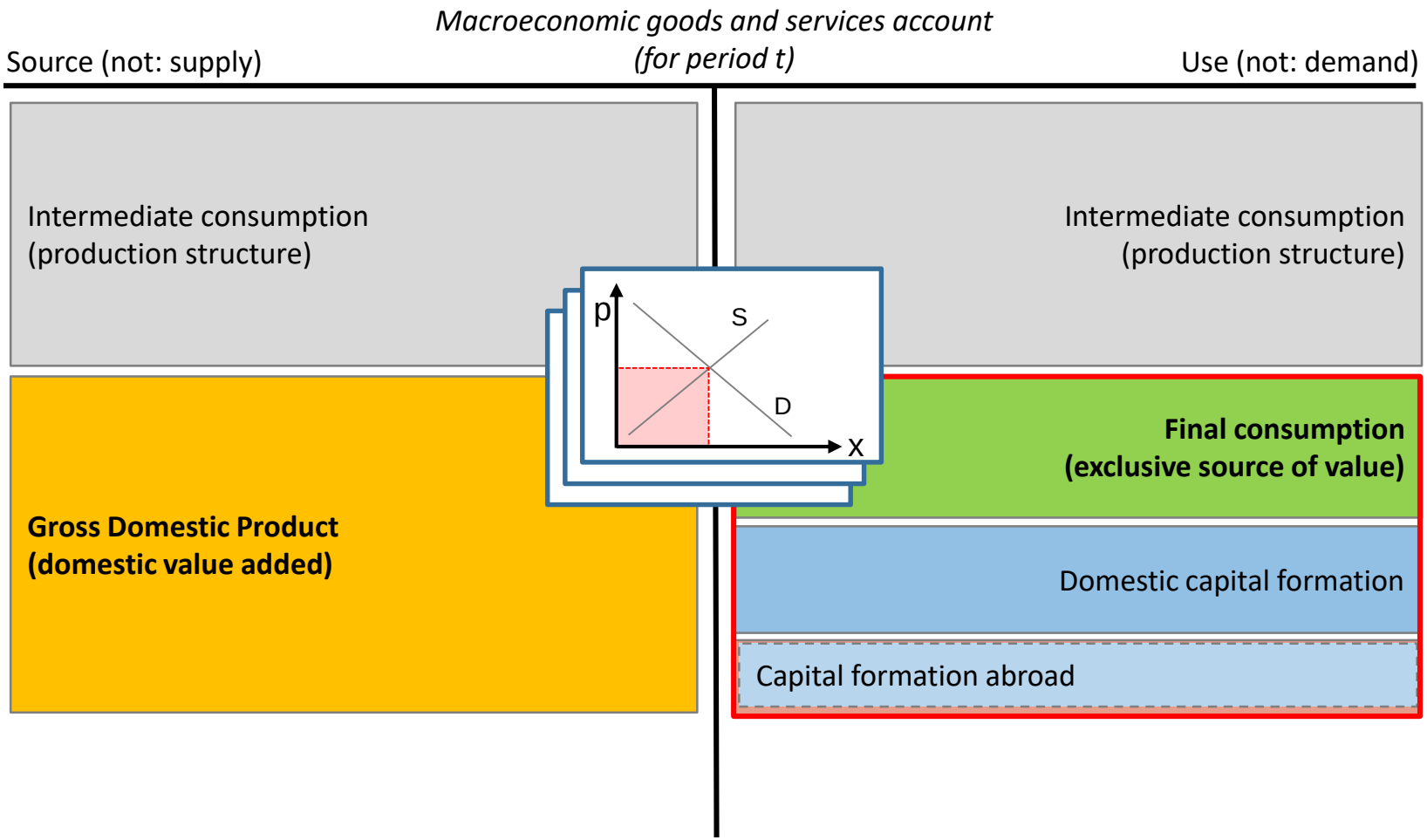
Production as a time consuming, multi-stage process



"From the soil or the mine downward, every productive instrument is, economically, a consumption-good *in the making*." (W. Smart)

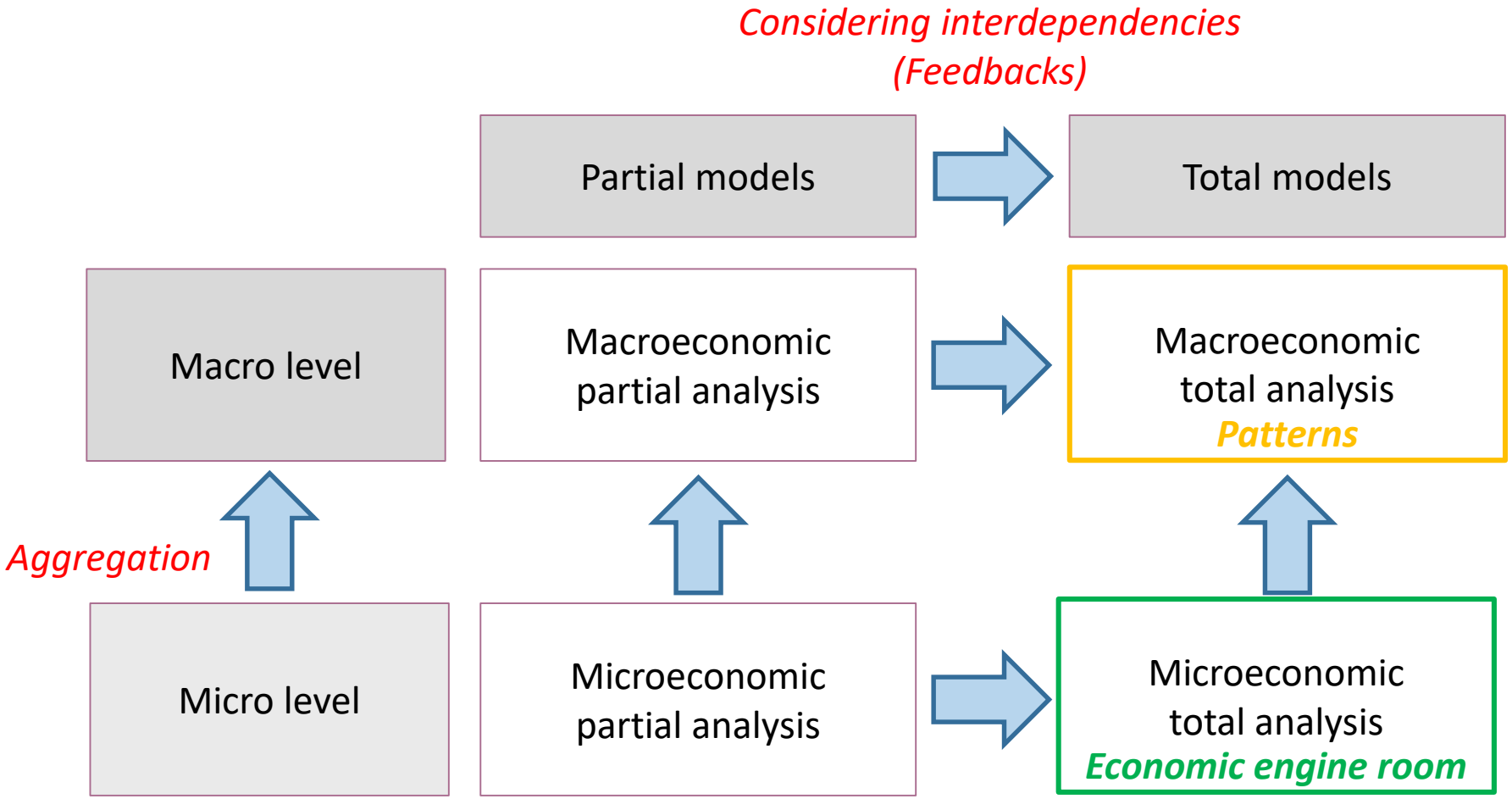
⇨ **Capital formation: Intertemporal intermediate consumption**

Pitfalls of hydraulic macro accounting: "Final aggregate demand": No demand and not all of it is final



GDP = C + I + Ex - Im

Micro/macro vs. partial/total analysis



Lachmann, L. M.: Macro-Economic Thinking and the Market Economy – An Essay on the neglect of micro-foundations and its consequences. London 1973

Universal economic drivers and pervasive coordination failures

- Money (medium of exchange)
- Interest (price of time)
- Capital (structure for intertemporal coordination)
- Labor (most universal production factor)
- Constitutional framework (regulations, policy)

Summing up

Uneasiness (scarcity) ⇨ human action

Division of labor ⇨ Human interaction
(exchange processes)

Social coordination problem
(allocation/distribution mechanisms)

Pervasive coordination failures ⇨ Macroeconomic patterns

Coordinationist approach to macroeconomics

- **Integral micro/macro process view**
  - » Capital-based production as a time-consuming, multi-stage process
  - » Systemic mismatches: Symptoms of pervasive coordination failures
  - » Structural analysis: Level + composition of aggregates
- **Universal (= pervasive) drivers**
  - » Money (medium of exchange)
  - » Interest (price of time)
  - » Capital (structure for intertemporal coordination)
  - » Labor (most universal production factor)
  - » Constitutional framework (regulations, policy)

⇨ **Macro imbalances as systemic micro distortions**

⇨ **Beyond demand-side/supply-side economics**

Analytic profile (1/2)

Topic	View		Focus
Production	Multi-stage, time consuming process; capital-based and consumption-driven	⇨	▪ Demand-supply mismatches ▪ Use-dependent potential output (path dependency) ▪ IC+GDP+IM = IC+C+I+Ex
Capital (physical + human)	Structure („unfinished entrepreneurial plans"), not a homogenous fund; intertemporal IC	⇨	▪ Marketable value (affecting potential output) ▪ Distortions/concentration
Interest	Component in all product prices; time preference superimposed by liquidity positions (loanable funds)	⇨	▪ Capital stock (volume and structure) ▪ Product classification along durability/distance from consumption
Prices and profits	Price structure matters (more than levels	⇨	▪ Prices (profitability) of consumer vs. investment goods

Analytic profile (2/2)

Topic	View		Focus
Money and monetary policy	Not neutral, impact on price level and price structure via interest rates, globally pervasive	⇨	▪ Impact on level and structure of prices and economic activity ▪ Cantillon effects ▪ Alternatives to inflation targeting ▪ Global liquidity positions
Business cycles	Booms precede busts, impact of credit expansion and interest rate distortions	⇨	▪ Monetary analysis, composition of production, disaggregated potential output; underutilized vs. obsolete production possibilities (output gaps vs. shifts in potential output)
Concept of man (human action)	homo agens (purposeful conduct driven by uneasiness under uncertainty)	⇨	▪ Macro pattern as mass phenomena resulting from human interaction in society ▪ Evolutionary social process

Upcoming: Capital-based macroeconomics

- Roger W. Garrison
  - » Time and Money – The Macroeconomics of Capital Structure
- Peter Lewin
  - » Capital in Disequilibrium – The Role of Capital in a Changing World
- Steven Horwitz
  - » Microfoundations and Macroeconomics – An Austrian Perspective

Feedback welcome!

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