

# **LECTURE 7.3**

# **KNOWLEDGE**

# KNOWLEDGE

Think about some of the knowledge that might be critical in allocating resources in a firm.

- Idiosyncratic knowledge: Knowledge about the skills or preferences of staff, the characteristics of particular machines, the presence of unemployed resources (such as the fact there is space in the back of the truck)
- Scientific knowledge: The knowledge how to make a silicon graphics processing unit. Even if readily available, it is not easily transferred to those without technical skills
- Assembled knowledge: A storekeeper who has worked in a local store for years will have assembled a unique body of knowledge about the needs of local customers, and the local suppliers.

The knowledge for decision making is not held by any one individual. It is distributed across people in the economy.

This specific knowledge is critical in properly allocating resources, yet it is costly to transfer. It can be impossible to aggregate for a central decision maker. Even if it could be aggregated, it would require massive mental ability or computing power to process it.

# KNOWLEDGE

General knowledge: knowledge that is inexpensive to transmit. General knowledge can be transmitted quickly through summary stats – prices and quantities are good examples.

Specific knowledge: knowledge that is costly to transmit among agents. The more costly knowledge is to transfer, the more specific it is. The less costly it is to transfer knowledge the more general it is. Transfer is more than ‘buying a book’ – it requires understanding the knowledge and how to use it

Specific knowledge is often accumulated as a by-product of everyday activities

- Leads to dispersion of specific knowledge
- Centralised decision making is costly because it requires information transmission

Specific knowledge creates two challenges:

- The rights assignment problem – who should have a decision right? (Pre-contractual or adverse selection)
- Control or agency problems – how to ensure the decision maker (agent) acts in the interests of the firm (principle). (Post-contractual or moral hazard)

# KNOWLEDGE

Knowledge considerations:

- People have a limited capacity to accumulate, store, process, and transmit knowledge. Storing, processing, transmitting and receiving knowledge is costly.
- We may want to colocate knowledge with decision authority (either by moving the knowledge or assigning decision making authority to the knowledge holder)
- We could transmit knowledge to the decision maker (often this means centralisation)
- We could assign decision rights to the knowledge holder (usually decentralisation)

In a market economy – the ‘best’ outcome is achieved by optimising decisions on the part of individuals whereby decision rights are acquired or knowledge is acquired by those with decision rights