CHAPTER 1: The Power of Principles: A Historical Perspective

SUGGESTED ANSWERS TO END-OF-CHAPTER QUESTIONS

1. **Why is infrastructure essential to economic development?**
Infrastructure includes those assets that assist in the production or distribution of goods and services that firms themselves cannot easily provide. Infrastructure facilitates transportation, communication, and financing. It includes basic research, which can enable firms to find better production techniques. The government also has a key role, both because the government affects the conditions under which firms do business (e.g., regulations) and because the government is a direct supplier of infrastructure (e.g., interstate highways). Infrastructure reduces the costs associated with business transactions, thereby making these transactions feasible.

2. **What was the role of the factor in the mid-19th century economy? Does such a role exist in the modern economy?**
Factors essentially provided the demand for goods and services. Farmers and small manufacturers sold their production to factors who were often local merchants seeking to stock their store, or to agents representing out of town merchants who were essentially "distant" factors. In today's economy, factors still exist in many forms. Think of large online retailers like Amazon that function like the merchants of the 1900's by purchasing the production firms and providing access to the consumer market.

3. **How would John Burrow's life have been different if he had access to the "Internet?" What if farmers and retailers also had access to the "Internet?"**
John Burrows would have faced significantly less risk by having access to the Internet. His business model of purchasing agricultural products locally and shipping them to distant markets left him at the mercy of the product's supply in those distant markets. With access to the Internet he could have researched prices for the products he purchased regionally, nationally and even globally and then shipped them to the market with the lowest supply and highest prices.

If farmers and retailers also had access to the Internet, factors like John Burrows would have become unnecessary. Local factors could have advertised their production on the Internet, or sought out distant buyers without relying on factors to purchase their production and resell it. Likewise, retailers could have similarly sought out both supply of the goods they wished to sell and buyers of their inventory. The "middleman" would have been eliminated if farmers and retailers had access to the Internet. Think of the rise of online stock trading and the demise of the traditional stock broker because of access to the Internet by investors.

4. **What is throughput? Is throughput as important today as it was 100 years ago?**
   Throughput is the movement of inputs and outputs through a production process. Without access and assurance of a supply of inputs, a successful business enterprise would not be possible. Throughput is more important today as firms depend less on vertical integration of raw materials and inputs and more on other firms and outsourced processes to produced finished products.

5. **If nineteenth-century Americans had had the benefit of modern technology as they expanded westward, would Chicago, with its close access to the Mississippi River system, still have emerged as the business center of the Midwest?**
   It is possible that Chicago would still have emerged as a business center. Hubs are still a useful part of distribution chains for products which need to be physically shipped. Although modern technology allows many products to be shipped directly from warehouses to individuals, many are still shipped in bulk for store sales.
   That said, it may be that if transportation and communication levels had been what they are today, there would have been fewer small companies needing transportation hubs. Many large-scale manufacturing facilities may have organized to ship directly from their manufacturing plants or agriculture centers. Likely a location where highways intersect would be a better candidate now that trucking is a main form of transportation.

6. **Two features of developing nations are an absence of strong contract law and limited transportation networks. How might these factors affect the vertical and horizontal boundaries of firms within these nations?**
   A well-developed body of contract law makes it possible for transactions to occur smoothly when contracts are incomplete, while extensive transportation networks allow better coordination and faster flow of goods and services across geographic markets. Developing nations face weaknesses in both of these aspects of modern infrastructure. Extensive vertical integration occurs in these countries because firms face extraordinarily high transaction and coordination costs. To fully exploit production opportunities, firms needing to make significant sunk investments will also need a reliable supply of inputs and distribution channels. The lack of contract law makes the firm's relationship with its suppliers and distributors more vulnerable to holdup problems than are firms in industrialized nations. At the same time, the lack of transportation networks forces firms to coordinate their distribution and allocation activities within the firm's boundaries to ensure smooth functioning of the value chain. To ensure reliability and overcome high transaction and coordination costs, firms have the incentive to vertically integrate. The lack of transportation

7. **Fifteenth century Florence was the birthplace of the Renaissance, home to artists such as Donatello, Boticelli, and Michelangelo. Why did so many great artists emerge from just this one city-state? Do you believe that a single city could become the Florence of the 21st century?**
   While the infrastructure in the 15th century is nothing like today, essentially the infrastructure for

the development of the arts in 15^{th} century Florence was well developed. The government and the church supported the arts by sponsoring artists with commissions to design, paint and decorate public building and places of worship. Likewise, art education in the many studios throughout 15^{th} century Florence provided a means for individuals to develop their skills and network (communicate) with other artists and sponsors of artists.

Yes, in today's economy there are many examples of geographically localized industries that thrive because of their proximity to each other. Consider Silicon Valley (while not one specific city, it is a "city-like" region) where many high-tech firms design and produce new products. Silicon Valley shares a developed infrastructure that fosters the creation of technology with its many industrial parks, venture capitalists and access to technology education at universities such as Stanford and U.C. Berkley.

8. **The advent of professional managers was accompanied by skepticism regarding their trustworthiness and ethics in controlling large corporate assets on behalf of the shareholders. Today, this skepticism remains and has changed little since the founding of the managerial class a century ago and new laws concerning appropriate governance, such as Sarbanes-Oxley, continue to be introduced. Why has this skepticism remained so strong?**
The growth of managerial hierarchies fostered the emergence of a class of professional managers, many of whom owned little or no share of the business. Hence, primary cause of the skepticism is this separation of ownership and control—similar to the skepticism one might feel upon hearing a parking valet claim that "s/he treat's the cars as her/his own". These individuals tended not to have worked their way up in a particular business, but rather have been trained as engineers or in business school. On behalf of the owners these managers applied their expertise in control and coordination to the firm and its business units. In doing so, they pioneered the standardized collection of data on a firm's operations, and with it the beginnings of cost accounting.

These changes in the nature of the firm and its managers caused problems and conflicts. Since there was little precedent for the rapid growth of firms at this time, growth of volume and expansion into new markets could easily lead to overexpansion and overcapacity. The development of internal controls needed for coordination and efficiency could easily turn into excessive bureaucracy. The very skill that new professional managers exhibit in guiding the growth of their firms raises the problem of ensuring that these managers continue to work in the best interest of owners rather than for their own ends. Ironically, these problems become particularly acute when management well-aligned with shareholder interests is most needed—during downturns in the firm's product market.

9. **There is considerable disagreement as to whether government regulation has largely positive or negative influences on economic growth. Compare and contrast the ways in which government involvement in particular industries may positively or negative influence the evolution of those industries.**
Regulation can protect the incumbents in the industry and stifle innovation. Incumbents could develop specialized skills in compliance and have an advantage over potential entrants. They could

also lobby for the kind of regulation that favors them over potential entrants. Deregulation of airlines shifted the industry from being primarily in the business travel to business and leisure travel.

On the otherhand some kinds of regulation serve to instill trust in the industry. (The regulation of banks, insurance, mutual funds and the securities industry). Exemption from regulation is often cited as one of the reasons for the Enron debacle.

10. Some firms seem to last forever. (For an extreme example, go to www.hbc.com.) In some industries, however, even the most effective firms may expect short lifetimes (e.g., lawn crews, Thai restaurants). Size certainly has something to do with longevity, but are there other factors involved? How does size help larger firms or imperil smaller ones? What other factors besides size contribute to longevity?

When it comes to survival, size and age seem to matter. Small firms' life span tend to be associated with the life span of the owner. Large firms will have the resources to exploit new market opportunities.

Industries that support small firms (such as Thai restaurants) are characterized by easy entry and hence low survival probabilities. Industries that are concentrated (large firms are more competitive due to lower costs) tend to have old names.

Industries that are not hospitable to new entrants (e.g., banking, insurance) tend to have long- lived firms.

Incumbents have better survival when the technological change is slow (newspapers, retailing).

11. How might a persistent global credit crisis affect the scale and scope of modern firms?

The continuation of a global credit crisis over an extended period of time would limit the ability of firms to finance the expansion of production facilities, the acquisition of firms in horizontal markets and the development of supporting infrastructure by government. The lack of liquidity caused by a credit crisis would force firms to depend on internally developed capital and slow their diversification and growth. Additionally, a global credit crisis would close distant markets to firms as financing for shipments and inventories would be significantly reduced.