BOSTON UNIVERSITY

Global Development Policy Center
Economics in Context Initiative

Comparative Economic Systems: Capitalism and Socialism in the 21st Century

An ECI Teaching Module on Social and Environmental Issues in Economics

Global Development Policy Center
Boston University
53 Bay State Road
Boston, MA 02155
bu.edu/gdp

Economics in Context Initiative, Global Development Policy Center, Boston University, 2021.

Suggested citation: Economics in Context Initiative. 2021. "Comparative Economic Systems: Capitalism and Socialism in the 21st Century." *An ECI Teaching Module on Social and Economic Issues*, Global Development Policy Center, Boston University.

Students may also download the module directly from:
http://www.bu.edu/eci/education-materials/teaching-modules/

Comments and feedback from course use are welcomed:

Economics in Context Initiative
Global Development Policy Center
Boston University
53 Bay State Road Boston, MA 02215
http://www.bu.edu/eci/

Email: eci@bu.edu

NOTE – terms denoted in **bold face** are defined in the **KEY TERMS AND CONCEPTS** section at the end of the module.

TABLE OF CONTENTS

"The capitalist system, driven at its core by the maximization of profit, regardless of social and ecological costs, is incompatible with a just and sustainable future."
Michael Löwy

"Socialism is the philosophy of failure, the creed of ignorance, and the gospel of envy. The inherent virtue of socialism is the equal sharing of its miseries."
Winston Churchill

1. INTRODUCTION

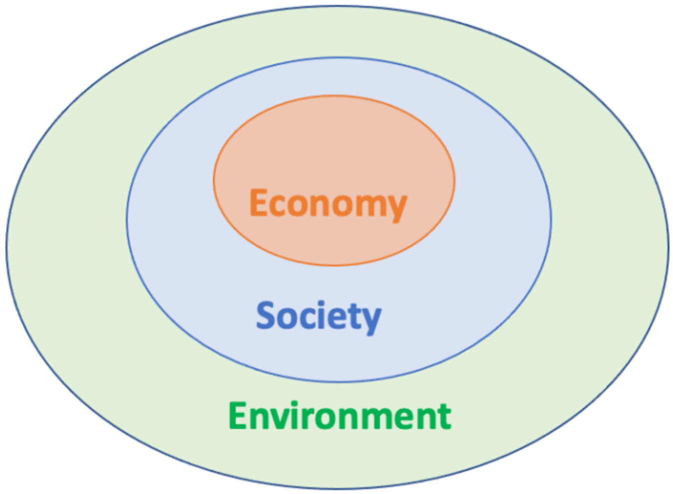
This module introduces the study of **comparative economic systems,** which is concerned with analyzing differences in economic institutions across societies. It focuses on two types of economic systems: capitalism and socialism. Capitalism and socialism are often pitted against each other as economic systems in direct conflict, but perceptions about these two systems vary widely. While some associate socialism with underdeveloped countries ruled by authoritarian governments, others think of socialism as an ideal model for a prosperous and just society. Similarly, while many associate capitalism with wealth, freedom, and prosperity, others see it as an economic system that exploits workers and the environment, leading to an unequal society and a degraded natural environment.

We begin this module by defining different types of economic systems, considering how economic decisions are made and who owns productive assets. We then present some historical context on the emergence of capitalism and socialism. Specific examples of countries with different types of economic systems are presented next along with discussion of economic and social outcomes. The final section turns to some of the key issues of the twenty-first century and their relation to the different economic systems. The overall goal of the module is to provide a good understanding of the various ways in which economies are organized and how they influence social, economic, and environmental outcomes.

2. AN OVERVIEW OF ECONOMIC SYSTEMS

The role of **economic systems** is to manage our resources to produce the goods and services that societies need and to improve human well-being. The economy is a system, that is nested inside the larger social system which includes aspects of history, politics, culture, ethics, gender norms, and other human motivations. Economic activities and outcomes are directly affected by these social structures. The social system is also nested inside the natural environment. All social and economic activities require the input of natural resources and generate wastes that are absorbed by the environment. Figure 1 illustrates this nested relationship between the economy and the social and environmental systems.

Figure 1. *Economy, Society, and the Environment*



There is no one right way to structure an economy to meet all of society's needs. In fact, there is likely an infinite number of possible economic systems, each with its own intricacies and complex rules and structures. However, we can broadly categorize these systems into three types based on their characteristics.

2.1 The Three Major Types of Economic Systems

Modern economic systems can be categorized into three basic groups based on how decisions are made about the management of a society's resources:

- Planned economies
- Market economies
- Mixed economies

In a **planned economic system**, power is held, and important economic decisions are made through a centralized authority. In pre-industrial societies, this authority might be the chief of a tribe. In modern societies, the state is often the central authority that makes the vast majority of economic decisions. An important benefit of a planned system is that it facilitates massive mobilization of resources. A planned system also has the capacity to focus on meeting societal needs, and act strategically for the public good. While a planned system is theoretically capable of producing a vibrant economy, real-world examples (such as the former Soviet Union and modern North Korea) have had poor track records as measured by various social and economic indicators. Also, planned systems are often characterized by authoritarianism, oppression, and economic inefficiency as will be discussed in subsequent sections.

In a **market economic system**, individual actors such as firms, households, and individuals, as opposed to a central authority, determine what is produced, how it is produced, and how the products are distributed in the economy. These decisions are guided by the market forces of supply and demand, which determine prices and quantities. Market economic systems tend to incentivize innovation and entrepreneurship through the prospect of financial profit, and they limit inefficient production processes through competition. However, the focus on profit-making means that firms might be motivated to lower labor standards or exploit environmental resources to expand production and profits, thus resulting in inequality and environmental degradation.

While some economists advocate for "free" markets without government intervention, all real-world market economies display some degree of government involvement. Governments of countries with market economic system (such as the United States and South Korea) all regulate trade, business activity, monopoly power, worker rights, etc. Similarly, there is no complete planned economy, where all economic decisions are made by a central authority.

Most countries can be characterized as having a **mixed economic system** that combines elements of market and planned economies. For example, in some countries ownership of firms is dominated by the private sector for some industries, while the government owns and controls many other industries, such as energy production, mineral extraction, and transportation. In mixed economies the government plays a role in regulating private businesses to enforce competitive practices, social well-being, environmental protection, etc. Common critiques of mixed economies revolve around whether there is too much or too little government intervention, and whether private or public institutions are best suited for providing certain goods and services, such as health care and natural resources. We will look at specific examples of different kinds of mixed economic systems in Section 4.

2.2 Patterns of Ownership

It is important to emphasize the distinction between private, social, and state ownership of the means of production, and how they relate to economic systems. In economics, **means of production** refer to the inputs used in production. These are things like raw materials, land, facilities, machinery, equipment, technology, tools, etc. In a sawmill, for example, the means of production would include the raw materials mainly in the form of timber, the land on which the mill resides, the physical structure of the mill itself, and all of the equipment and tools necessary to transform the timber into lumber and other desirable wood products. One central question that distinguishes capitalism from socialism revolves around who should own the means of production. Supporters of capitalism advocate for private ownership of the means of production, while socialists advocate for social ownership of these means.

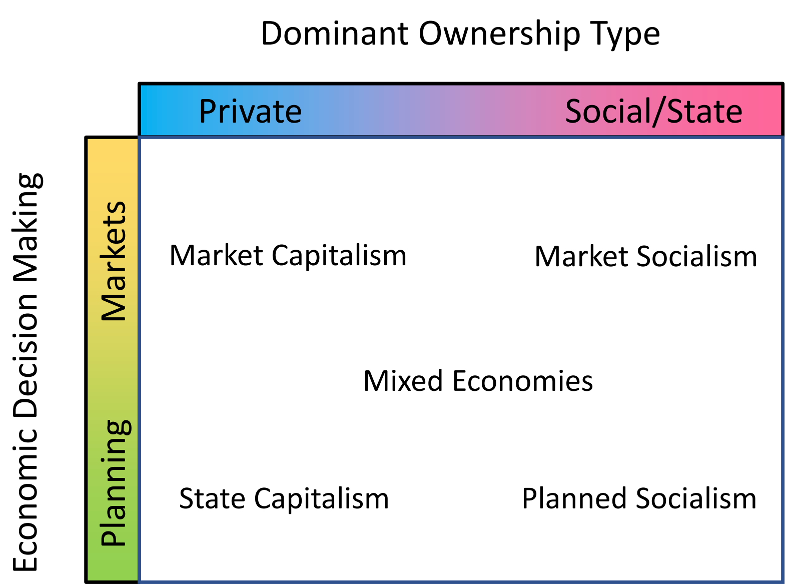
Private ownership occurs when somebody has a legal right to possess something as private property. This usually means the owner has control over the income generated from that property, as well as the right to prevent others from using it, or to charge people to access it. In the sawmill example, the sawmill could be owned by a single person, a small group of individuals, or a private corporation with a large number of shareholders. These individuals, groups, or entities would receive all the profits from the output produced by the sawmill, and they have full control over the mill and its management decisions, including how much to produce, how much to pay workers, and how to use any profits.

With **social ownership** the means of production may be owned and managed by public institutions, by workers, or through other cooperative or collective ownership arrangements. Using the sawmill example again, workers could form a cooperative where profits are distributed among all workers, and management decisions are made collectively, for example, through a democratic voting process. Expanding social ownership to a large scale is a significantly complex process. Socialists have long struggled with how to adequately share ownership of resources and means of production among thousands or even millions of people. Developing social ownership at that level requires finding satisfactory ways to make social decisions about managing resources.

Finally, with **state ownership** the means of production belong to the state. Returning to our sawmill example, state ownership of the sawmill means that the workers in the sawmill are state employees and management decisions are made by a state-appointed management committee who guides the firm towards reaching certain economic and/or social targets. In a well-functioning democracy, state ownership can be considered a type of social ownership as long as the government functions in a way that represents the interests of the broader population.

The three main types of economic systems can be further classified based on the dominant ownership type in the society. Thus we end up with a more detailed classification of economic systems as shown in Figure 2, based on how economic decisions are made and the dominant type of ownership of the means of production. Note that both factors are presented as varying graduations along a spectrum. In all real-world modern economies, factors of production are owned by both private and social entities. Also, economic decisions are made both by planning and through market activity. Even where markets are banned, illegal markets inevitably arise.

Figure 2. *Classification of Economic Systems*



As we can see from Figure 2, the distinction between capitalism and socialism is based on the dominant ownership type. Capitalism relies primarily on private ownership of the means of production, while productive assets are primarily state or socially owned under socialism. In general, market economies are associated with capitalism while planned economies are associated with socialism. However, social ownership may be quite prevalent in a market economy and private ownership may be prevalent in a planned economy. Mixed economies are associated with a somewhat balanced division between private and social/state ownership.

Before turning to a more detailed discussion of capitalism and socialism, we briefly consider the relationship between the various economic systems in Figure 2 and a nation's political system. While a comprehensive discussion of political systems is beyond the scope of this module, we can broadly think of a political spectrum with a well-functioning democracy at one end and an undemocratic authoritarian government (such as a monarchy or a one-party system) on the other. Capitalism and markets are often associated with democratic forms of government, while socialism and planning are often associated with authoritarian governments. But again, these generalizations are not always true. If a socialist country seeks to provide for the needs of its citizens, then a responsive democracy is likely a necessity. Similarly, a planned economy is likely to be more effective at improving well-being if goals and plans are developed through a democratic process.

2.3 Defining Characteristics of Capitalism

We can define **capitalism** as an economic system in which the ownership of the means of production resides with a (normally relatively small) group of individuals, referred to as **capitalists**. One of the hallmarks of capitalism is the notion of well-defined **private property rights,** where the government enforces laws that recognize that private individuals or firms own and control their assets. Private ownership of the means of production means that the capitalists receive all the profits generated from production and control all the decisions related to the management and production process.

In a capitalist system, production decisions are driven by the goal of maximizing profits. Firms that are unable to earn sufficient profits are likely to get weeded out of the market. Hence, capitalist firms continuously strive to outperform their competitors. This creates incentives for developing innovative techniques to raise productivity levels, keeping prices low to capture a greater market share, and investing in research and development to introduce new products to the market and gain at least a short-term monopoly. Capitalist firms are also motivated to use branding and advertising as tools to encourage people to buy their products.

The benefits from innovation and competition are seen as the main strengths of capitalist systems. Increased competition between firms could bring potential benefits not just to individual firms, but to the society as a whole. For example, consumers benefit from lower prices and greater variety of products. Also, innovations and increased efficiency could result in more effective ways of using and managing economic and environmental resources. Adam Smith, the pioneer of modern economics, famously said "it is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest".[1] In other words, the variety of goods and service that are available to us today are largely a result of individuals who identify certain needs and demands in the market and set out to fill that demand, seeking to profit from the activity.

In order to stay competitive, capitalist firms continuously invest their profits to generate new profits by increasing the stock of capital, drawing in new supplies of labor, creating new knowledge, and mobilizing resources for commodity production, thus expanding their production capabilities.[2] This process of **capital accumulation** is what drives growth and motivates continuous change in a capitalist system. As firms acquire more capital and expand their production capabilities, it may be the case that they drive competitors out of the market or buy out their competitors. Thus, ownership of capital may become more and more concentrated in the hands of a small capitalist class unless this is offset by the entry of new firms.

This concentration of ownership of capital means that a majority of the workforce in a capitalist system become reliant on the capitalist class for access to the means of capital. These workers have nothing to sell but their labor in exchange for wages. Reliance on **wage labor** for a majority of the population is thus another key characteristic of a capitalist system. For example, the decline in independent producers in the US workforce and an increase in the proportion of wage workers over the last 150 years is partly driven by the rise of capitalism.[3]

Another key aspect of capitalism is that decision-making is largely decentralized. Businesses make decisions on production and management of their resources primarily based on their profit-making goals. Consumers' decisions on what to buy and how much to buy, and workers decisions on where to work and what wages to accept, are generally left to individuals to decide. The concepts of decentralized decision-making and market freedom are valued highly by supporters of capitalism. To quote the libertarian Ayn Rand, "In a capitalist society, all human relationships are voluntary. Men are free to cooperate or not, to deal with one another or not, as their own individual judgements, convictions and interests dictate".[4]

Supporters of capitalism therefore advocate that market competition should be left to operate with limited government intervention or control. Governments within capitalist systems do play an important role in enforcing property rights, preventing monopolies from undermining competition, and maintaining labor and environmental standards but otherwise, capitalist principles allow for the greatest individual freedom in making choices and minimize the need for time-consuming

[1] Smith, 1776. This is a frequently cited passage from the second chapter of Adam Smith's *Wealth of Nations*, where he discusses what he calls a human propensity to "truck, barter and exchange," and how it relates to advantages created by the division of labor. It should be noted that in later passages where Smith advocates for expenditures on public institutions, including public education, he is highly critical of division of labor, in particular for its harmful effects on the laboring poor whose "whole [lives are] spent performing a few simple operations" rendering them incapable of "bearing part in any rational conversation, or of conceiving any generous, noble, or tender sentiment." Similarly, Smith's remarks about the benefits of self-interested behavior are more nuanced than often presented and tempered by his discussion of moral behavior and the sympathetic feelings between humans. Smith elaborates on these ideas in his other major work, *The Theory of Moral Sentiments*.

[2] Bowles et al., 2015.

[3] Wright, 1997; and Bowles et al., 2015.

[4] Rand,1966, p. 5.

discussions and tedious collection of information for central decision-making. This viewpoint advocates for a **laissez-faire** (from French, meaning "leave alone") approach to government regulation.

We can thus summarize some of the hallmarks of capitalism as follows:

- A dominance of private ownership of the means of production
- An emphasis on capital accumulation
- Predominance of wage labor
- An emphasis on decentralized decision-making, largely guided by self-interest and the profit motive
- Emphasis on individual freedom and competition over collectivist goals
- Markets as the primary means of economic coordination

There are several limitations of capitalist systems. One key issue is that the power relationship between capitalists and workers may become highly unbalanced. The capitalist class controls not just the means of production but also the labor of workers they employ. Capitalists usually have significant control over deciding wage levels and the working conditions for the workers. The concentration of wealth and power among a small capitalist class is often a key source of inequality in the capitalist system.

In traditional theory, everybody in a capitalist market is assumed to be rewarded on the basis of the value of their contribution. If the market values the product of your labor highly, you receive higher wages. Similarly, if a firm produces a product that has higher demand, it will be able to sell (and charge) more for its products. However, this theory of distribution has always been controversial. Demonstrably, there is nothing in the capitalist system that ensures that market valuations reflect fair prices or fair wages. For example, it is hard to justify why the CEO of a firm might earn 300 times more than an average worker at the same firm, or why workers who are essential for the health and well-being of the society (such as nurses and teachers) are paid much less than financial managers or company executives.

In a capitalist system, the decision of "what to produce" is largely driven by what can generate monetary profits by being sold in markets. This does not always produce what society needs given that superfluous and harmful goods can sometimes generate profits. Furthermore, many people may not have sufficient income to purchase what they need. In other words, while they might have a very high willingness to pay for something, they might not have the ability to purchase it.

Goods and services produced with the goal of making profits are called **commodities**. A meal cooked at home to feed the family is not a commodity, but a meal cooked at a restaurant with the goal of serving customers and making profits is a commodity. Focus on commodity production means that there might be little incentive to invest in things that have low monetary returns but are valuable to social well-being, such as providing care to loved ones, preserving the environment, or creating art and cultural vibrancy. Additionally, if the rich in a society have a lot of money to buy luxury cars while the poor lack money to afford basic healthcare, more resources may be directed towards luxury car production than towards healthcare. Note that commodity production also exists in other kinds of economic systems, but the spread of capitalism has resulted in the commodification of more and more aspects of social life.

Excessive competition between capitalist firms could also have several negative consequences. Firms competing to cut costs may use tactics such as exploiting workers by paying them low wages or imposing unfair working conditions, lowering environmental standards, or spending excessively on advertising (sometimes misinforming consumers)—all of which come at a large cost to the society. Additionally, the continuous focus on increasing production has severe environmental impacts, as production requires using up natural resources and generating waste. The rise in consumerist culture is another consequence of excessive production in capitalist economies.

A capitalist system focused on profit-making often neglects these negative externalities. As decision-making is decentralized, there is nothing that requires individuals to consider how their decisions might affect social outcomes. Hence, high inequality and environmental degradation is often a characteristic of capitalist societies. We will explore both issues in more detail in the final section of this module.

2.4 Defining Characteristics of Socialism

Various types of socialist systems have been proposed as alternatives to capitalism. In a socialist system, the means of production are collectively owned, either by workers or by the government. Because ownership of assets is shared rather than concentrated within a small group, wage labor may be less predominant in **socialism**. Also, economic decisions may be guided more by principles of egalitarianism and solidarity, and less by narrow self-interest and profit motives. Universal healthcare, public schools funded by taxes, and numerous other welfare programs are consistent with socialist ideology. In order to advance these socialist ideals, governments and other social institutions play a large role in economic affairs.

As opposed to the largely decentralized decision-making process in capitalism, decision-making in socialism is often more centralized. In cases where the state owns the means of production, decisions may be heavily guided by state agencies with specific social and economic targets. In a system where workers collectively own the means of production, decisions may be more easily made by worker associations or unions through voting or other mechanisms. A firm with a socialist structure could be partly motivated to obtain profits, or at least avoid unprofitability. However, socialists often argue that a genuinely socialist firm is more likely to consider issues of labor security and environmental health and safety, since these aspects directly affect the overall well-being of the workers and the society at large.

Centralized decision-making gives enormous power to those in charge to influence social and economic outcomes. For example, the central authority can create rules to compel individuals to act cooperatively to achieve outcomes that maximize social welfare. Additionally, if the decision-making is guided by the needs of the society, rather than individual profit motive, it is likely that issues of under-production or over-production can be prevented as production decisions are based on need and value of various goods and services. However, if the centralized authority is more concerned with maintaining their own power and influence, or simply cannot determine what maximizing social welfare looks like and/or does not know how certain outcomes can be achieved, their ability to compel individuals to act in a certain way might result in oppressive, dysfunctional, and inefficient systems.

Some of the key features of socialism can thus be summarized as follows:

- Social or public ownership of the means of production
- Higher levels of central decision-making
- A greater role for egalitarian values in guiding social decisions
- More emphasis on collectivist goals such as equality of opportunity
- A larger role for the government and other social institutions

Critics of socialism often point out that the underlying ideas of a socialist system are too idealistic. Implementing national policies based on the ideas of solidarity, egalitarianism, and fairness can be a highly complex task. The large size and conflicting goals between citizens of a country can make it challenging for the central authority to make decisions that are fair for all. Also, an enormous amount of planning is required to manage an entire economy by a central authority. The state needs to set aggregate economic goals and provide detailed instructions to every state enterprise on production goals, allocation of resources, and prices of goods and services. As such, the system is likely to be fraught with inefficiencies and bureaucratic hurdles. The case study of the Soviet Union in Section 4 provides a useful overview of the challenges involved with this type of system. Because of these difficulties, socialists are often accused of not being realistic. Socialists respond in turn that aspirational goals are needed to make progress and acknowledge that the economic system they advocate for is often prescriptive, based on social principles and ideals, rather than descriptive of current reality.

Additionally, the interests of those in power may not align with the interests of the population. An unfortunate common thread between countries that have planned socialist structure has been a prevalence of censorship and undemocratic institutions. Nearly all countries with centralized control by the state (the former Soviet Union, modern day Cuba and North Korea) are based on single party rule, many of which have a history of cracking down on dissent. These countries often restrict negative publications about the country or its government, in some cases monitor their citizen's internet usage, and consistently rank poorly on indexes that evaluate press freedom around the world. These abuses of power, lack of freedom, and other forms of corruption, have all too often served to undermine the success of socialist countries. Unsurprisingly, given the characteristics just described, many socialists reject that these countries are genuinely socialist.

These countries with overwhelming control of the society by the state are often labelled as communist. The two terms socialism and **communism** are often used interchangeably. This is partly because both socialism and communism emerged as a critique of capitalism and both these systems seek to limit worker exploitation and lessen or eliminate the influence of economic classes in society. However, communism and socialism are not the same. What is distinctive about communism is its highly utopian nature, where private property is entirely abolished, and all property is owned communally. In this society, there is no need for money as wealth accumulation and private ownership ceases to exist and all economic output is distributed according to people's need. Thus, a "pure" communist society is *classless*, *moneyless*, and *stateless*. According to this view, many of the economic problems of scarcity and exploitation would vanish in a truly communist society as all would identify with a clearly visible goal of general good.[5] By these standards, there has never been a communist country because no socialist system has been able to develop to the point that it has created the necessary pre-conditions for the utopian system of communism to take root.

BOX 1: KARL MARX AND SOCIALIST THEORY

Karl Marx, a 19th century German philosopher and economist, was a sharp critic of the capitalist system. He believed that the benefits of the capitalist system, such as productivity and efficiency gains, juxtaposed with problems like rising inequality, poverty, and insecurity. He predicted that at some point capitalist systems would collapse and give rise to socialist systems, which would eventually transition to utopian communist systems.

Marx broadly envisioned the entire history of the world in terms of conflicts between different classes. He postulated that in each historical epoch, one class derives most or all of its income from the labor of another class and creates class conflicts. For example, slaves versus slave owners, peasants versus the aristocracy in feudalism, and capitalist versus worker under capitalism.

Marx argued that in the capitalist system the *bourgeoisie* (the capitalist class) had too much power over the *proletariat* (the working class) because the capitalists owned the means of production, while the workers had to rely on the capitalists to earn a living. He claimed that the capitalists are not engaged in any productive labor. It is the labor of workers that is the sole source of value. Capitalists only derive profits by paying the workers a value that is less than the value produced by the workers. In other words, wages do not represent the true value of the contribution of workers to the output. Thus, workers are exploited, albeit in a manner that may well not be at all obvious to them.

In one of his most influential writings, *The Communist Manifesto*, Marx collaborated with fellow German thinker Frederick Engels to argue that capitalism was unjust and unsustainable and that alternative systems would one day succeed capitalism. This formed the basis of the socialist movement. In Marx's view, capitalism was doomed because the conflicts between the capitalists and workers would eventually cause the workers to revolt against the capitalist system. He predicted that through this worker-led revolution, capitalism would give way to socialism and eventually to communism.

Marx became one of the most controversial figures of the twentieth century as many of the problems and failures of socialist systems were ascribed to his ideas. However, Marx's writings focused largely on identifying the problems in the capitalist system, rather than describing what socialism or communism would look like in practice. Furthermore, much of his writing on

5 Ollman, 1977.

socialism and communism seems vague and at times, inconsistent.[6] Indeed, it is this very lack of detail that has been so regularly used for the acquisition and maintenance of political power within often brutal and dysfunctional dictatorships.[7] It is reasonable to assume that Marx would have been strongly critical of these regimes since Marx was an advocate for freedom of the press and other democratic rights (such as direct election of political leaders by universal suffrage) that were unpopular with the autocratic rulers of his day due to which he had to live part of his early life on the run. Nonetheless, Marxism became the official dogma of communism for oppressive leaders who imposed forms of dictatorship that had little or nothing to do with Marx's vision of the future.[8]

3. A BRIEF HISTORY OF ECONOMIC SYSTEMS

The categories of economic systems presented in Figure 2 are not the only ones that have arisen throughout history. Between the 9th and 15th centuries, **feudalism** was the predominant social, political, and economic system in Europe. Rather than nation-states with coordinated central governments, individual manors ruled by lords were the main organizing structures around which life was centered. In this system, the lord owned the land and made decisions, serfs worked the land and obeyed the rules of the manor, skills were passed down from generation to generation, and life went along relatively unchanged for several centuries.

Over time serfs started leaving the manor to seek freedom and economic prosperity outside. While some of the escaped serfs faced harsh conditions, others found success as traders, acting as middlemen between buyers and sellers. As trade activity grew merchants congregated in towns or cities and amassed wealth and power. These changes undermined the traditional feudal order and gave way to a new social structure called **mercantilism**.

In the mercantilist system, power shifted from the manor to the towns. At the same time, power held by lords was consolidated towards the king, who also managed to gain the support of the wealthy traders. In exchange for their support, merchants expected the king and his government to protect their interests, allowing expanding economic activity and shielding their businesses from competitors or other threats. Merchants, however, were not the king's only constituents. Workers and craftsmen who held certain occupations began to organize into *guilds*, which were associations of producers and merchants. And these guilds, which also financed and supported the king, also expected that their interests be protected.

A new tension thus began to arise in the mercantilist system between business owners (i.e. capitalists or industrialists) and craft guilds representing bakers, potters, shoemakers, artists and the like. The industrialists were developing machines that outproduced craftsmen, and the guilds argued that governments should coordinate economic activity and protect them. The industrialists, on the other hand, argued that government should loosen its grip on economic affairs. Through the

---

[6] Ibid.

[7] Kohler, 1989.

[8] Ibid.

17th and 18th centuries, the economic power base was shifting again, with these two classes fighting to prevail over the other.

Adam Smith, the British moral philosopher, developed a set of ideas that were to become central to how such disputes played out. In his famous book, *The Wealth of Nations* (1776), he made his case for how markets could coordinate the economy with limited government involvement. Smith's influence, along with others, helped tip the scales in favor of the industrialists, who ultimately prevailed, giving way to another economic transition from mercantilism to capitalism.

The rise of capitalism occurred in tandem with the Industrial Revolution and the democratization of western nations. Underpinning these socio-economic changes was the discovery and use of fossil fuels, first in the form of coal, and later with oil and gas. These dense energy sources have fueled the rise of industrial societies and the sustained economic growth we have experienced since the beginning of capitalism. However, this extraordinary period of growth and development has always been marred by significant problems. Slavery was a part of early capitalism, and even after its abolishment, workers suffered through human abuses in the form of long workdays, low wages, child labor, and other dangerous and inhumane working conditions. Rising carbon emissions and various environmental issues including depletion of natural resources, pollution of air, water, and soil, ocean acidification, and biodiversity loss are all linked to the growth of capitalism.[9]

As one of the most notable early critics of the capitalist system, Karl Marx recognized that the harsh conditions and inequality that were pervasive during his time was a consequence of rising capitalism. As discussed above, Marx predicted that the continued exploitation of workers by capitalists would eventually result in an overthrowing of the capitalist class, leading to another economic transition from capitalism to socialism. Though some of Marx's predictions did come to pass, with worker uprisings and political revolutions occurring in several countries throughout the 20th century, capitalism has managed to prevail, proving to be a much more resilient system than many expected. Through struggle and hard-won battles, worker-led movements have often helped curb the worst abuses of unrestrained capitalism, negotiating worker rights and pressuring governments to step in to soften the hard edges of the market system. In this sense, capitalism could be said to have evolved over time, rather than being overthrown.

The twentieth century was a period of significant transformations in the geopolitical relations and socio-economic structures at the global level. The first half of the century was tumultuous with two large wars. The Second World War was followed by decades of Cold War, where the world was essentially divided between capitalist and socialist countries and tensions between these two systems heightened, especially with the rise of socialist regimes in parts of Asia and Latin America. While capitalist principles have generally prevailed, particularly in the developed nations but also in most of the developing world, socialist notions can be found throughout capitalist societies, in the form of universal healthcare, public schools funded by taxes, and numerous other welfare programs. As we've discussed, all modern countries have a mix of state-owned and private enterprises, along with both markets and economic planning.

[9] Magdoff, 2011.

4. ECONOMIC SYSTEMS IN PRACTICE

We now turn to a more detailed discussion of the four types of economic systems presented in Figure 2: market capitalism, state capitalism, market socialism, and planned socialism. We will focus on a representative country for each system:

1. The United States as an example of market capitalism
2. Sweden as an example of market socialism
3. China as an example of state capitalism
4. The former Soviet Union as an example of planned socialism

As discussed above, no real-world economy has a pure capitalist or a pure socialist system. All modern economies can be considered mixed systems with tendencies toward markets or planning, and toward private or social ownership. While we have chosen specific country examples as representatives of the different systems here, this categorization can certainly be debated. For example, Sweden is often identified as a capitalist country with social democracy because of its reliance on market exchange and the dominance of private ownership of capital, despite its large public sector. However, we categorize it as an example of market socialism because of its generous welfare state that provides universal healthcare and higher education, and the large government sector that employs over a quarter of its employed population. Similarly, China identifies its economic system as 'socialism with Chinese characteristics'. However, given the continuing expansion of the market sector alongside the strong government control of all aspects of the economy, we categorize the system as state capitalism.[10] The categorization of United States as an example of market capitalism and the former Soviet Union as an example of planned socialism is less controversial given that both these systems closely align with the key characteristics of the respective systems as discussed below.

4.1 Market Capitalism in the United States

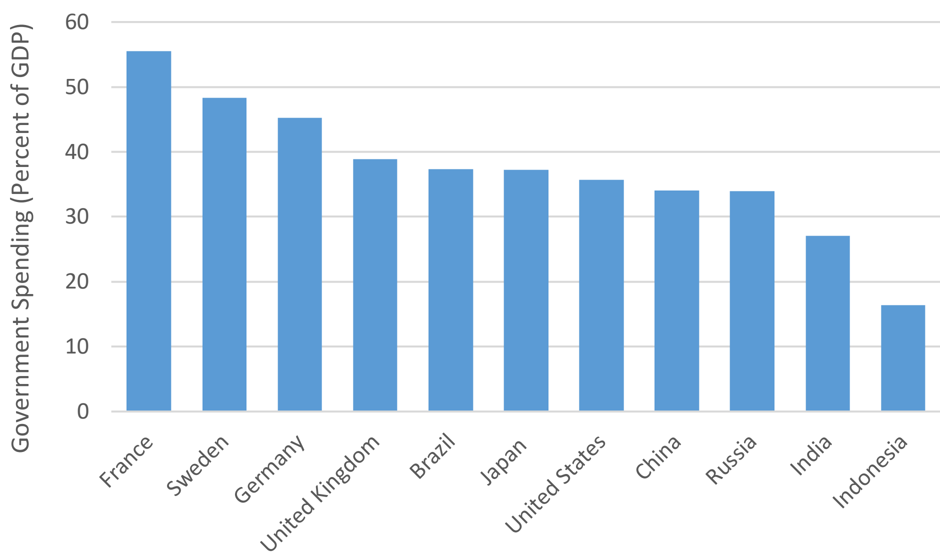
Under **market capitalism**, goods and services are primarily distributed through markets without government planning and the means of production are primarily privately owned. Among the different economic systems described above, market capitalism generally operates with the least amount of government involvement in economic activity. The most common metric to assess the degree of government involvement in an economy is the government spending or tax revenue as a share of GDP.[11] Note that government spending can exceed tax revenue if a country accrues debt to fund the difference. A greater share of government spending relative to GDP is suggestive of more government involvement in an economy.

Figure 3 shows government spending as a share of GDP in select major economies. The data are for 2019 to reflect spending under normal conditions as opposed to spending during the COVID-19 pandemic. The United States has a comparatively low level of government spending among developed countries, while European countries tend to have a greater share of economic activity

[10] Other studies have also categorized the economic system in China as state capitalism. See, for example, Blanchette, 2021; and Li et al., 2015.
[11] Slemrod, 1995.

from government spending. In general, developing countries have a lower level of government spending, often less than 20 percent of GDP. It is important to note that government spending is not necessarily an accurate measure of the degree of government involvement in an economy as it does not account for the degree of government regulation and control. While the United States and China are similar in Figure 3, the Chinese government is much more involved in its economy than the U.S. government, as we discuss later in the module.

Figure 3. *Government Spending as a Percent of GDP, 2019, Select Countries*



Source: International Monetary Fund, World Economic Outlook database, April 2021.

Various other metrics have been developed to assess the degree of "market freedom" in an economy. One common metric is the Index of Economic Freedom developed by the Heritage Foundation. The Index and its conception of what constitutes economic freedom, reflects the conservative principles of the Heritage Foundation, which advocates for increased economic freedoms:

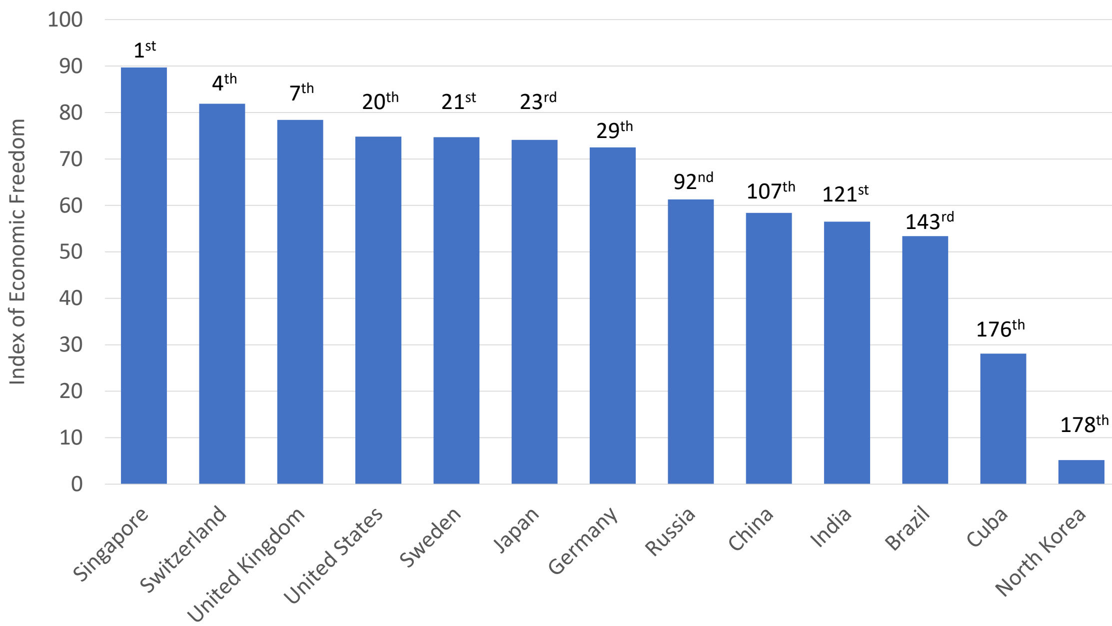
> In an economically free society, individuals are free to work, produce, consume, and invest in any way they please. In economically free societies, governments allow labor, capital, and goods to move freely, and refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself.[12]

The Index is a composite of 12 factors in four areas: rule of law, government size, regulatory efficiency, and open markets. Higher rankings imply that an economy aligns with the principles of market capitalism. Figure 4 presents the 2021 results for select countries. Singapore is ranked as the most economically free country. We see that the United States and Sweden have essentially the same value for the Index of Economic Freedom. However, note that Figure 3 indicates that

[12] Heritage Foundation, https://www.heritage.org/index/about.

government spending in Sweden is a much greater share of GDP than in the U.S. This implies that a high degree of government involvement in an economy can be compatible with a relatively high degree of what is being defined as economic freedom.

Figure 4. *Index of Economic Freedom, 2021, Select Countries*



Source: The Heritage Foundation.
Note: Ranking is out of 178 counties.

China and India are considered "mostly unfree" due to low rankings on factors such as investment freedom, government fiscal health, and labor freedom. The least economically free countries include Cuba and North Korea, which would both be considered planned socialistic countries.

Another metric that provides information on whether a country aligns with market capitalism is the entrepreneurial rankings published by U.S. News and World Report.[13] This metric considers factors such as access to private capital, business transparency, and the legal system. Based on the 2021 rankings, the three most entrepreneurial countries are (in order): Japan, Germany, and the United States. Out of 78 countries ranked, China is #9, Sweden is #10, Russia is #22, and India is #28. Finally, the World Bank ranks countries on the ease of doing business, based on surveys that assess whether the regulatory environment is conducive to business activity. In 2019 the U.S. ranked 7th, behind such countries as New Zealand, South Korea, and Denmark.

While the United States is not necessarily the country that most aligns with the principles of market capitalism, its economy operates largely via markets with a comparatively low degree of government involvement. It is the largest economy in the world and has historically been associated with economic opportunities, attracting immigrants from all over the world. The

[13] U.S. News and World Report, https://www.usnews.com/news/best-countries/entrepreneurship-rankings.

founding principles of the country during the 18th century stressed individual freedom and a limited role of government, although legal rights were clearly not held by all (e.g., slaves and women).

A Brief History of the U.S. Economy

The history of the U.S. economy reveals that support for markets and government regulation has waxed and waned.[14] As the 19th century came to a close, the unregulated excesses of the Gilded Age, leading to concentration of economic power and frequent economic downturns, fostered the Progressive Movement. Progressives such as President Theodore Roosevelt instituted policies breaking monopolies, expanding worker rights, and implementing government oversight of business practices. But economic inequality returned during the economic boom of the 1920s, partially driven by a lack of regulation of financial markets.

The Great Depression of the 1930s led to the election of Franklin Roosevelt, who proposed a "New Deal" to the country with a significantly expanded role for the federal government. The New Deal policies included financial market regulations, the establishment of Social Security, policies supportive of labor unions, and direct government employment for numerous public works projects. From the 1930s through the decades following World War II, U.S. economic policy mostly aligned with the principles of **Keynesian economics**, which states that government policy can effectively stabilize the macroeconomy. During the period between about 1950 and 1973, sometimes referred to as the "Golden Age of Capitalism", economic growth was steady and broadly distributed in the United States and other Western countries. However, not all benefited from this expansion as racial inequality due to discrimination remained pervasive.

The 1970s produced a new economic phenomenon of "**stagflation**", a period of both high inflation and high unemployment, driven by oil crises and increasing foreign competition. As various Keynesian approaches failed, U.S. policy became increasingly supportive of market deregulation in the late 1970s. Economic policy under Ronald Regan in the 1980s generally reduced government involvement in the economy by lowering taxes (particularly on high-income earners), removing labor market protections, and reducing government oversight of businesses. In the 1990s, President Bill Clinton famously stated that "the era of big government is over".

The global financial crisis of 2007-2008, triggered by the bursting of the U.S. housing bubble, renewed calls for government regulation and oversight of markets. The policy responses of Barack Obama included publicly funded bailouts of financial and manufacturing companies in exchange for short-term government equity ownership (i.e., company stocks). The importance of government coordination and support during an economic downturn has been further illustrated during the COVID-19 global pandemic, with the passage of several stimulus and relief packages in the United States.

While the United States of the 2020s continues to lean toward market capitalism, like most modern economies it must ultimately be considered a mixed economy.[15] According to Federal Reserve data, government spending as a share of GDP in 2020 reached its highest level since World War

---

[14] Information on the history of the U.S. economy obtained from https://www.encyclopedia.com/economics/economics-magazines/us-economy-historical-overview.

[15] Moffat, 2020.

II, primarily as a result of stimulus spending due to the pandemic.[16] The Biden Administration's agenda seeks to expand the role of government on issues such as health care, the environment, housing, and infrastructure. At the same time, among developed countries the U.S. stands out as more oriented toward unregulated markets in a number of areas, including:

- Union membership in the U.S. is only 10 percent—one of the lowest rates among developed countries. In Sweden 67 percent of workers belong to a union.[17]
- Tax revenue as a percent of GDP is lower in the U.S. than in any developed country.[18]
- Government spending on social programs, such as cash benefits and in-kind services, is lower in the U.S. (as a share of GDP) than in most developed countries.[19]
- Services such as education, health care, and childcare are more dependent on the private sector in the U.S. than in most developed countries. For example, per-capita private spending on health care in the U.S. is more than five times higher than in any other developed country,[20] but health outcomes life expectancy, suicide rates, and chronic disease rates are generally poorer. The U.S. is the only developed country without universal access to health care.
- The U.S. is the only developed country that does not mandate paid vacations or paid parental leave.[21]

Performance of the U.S. Economy

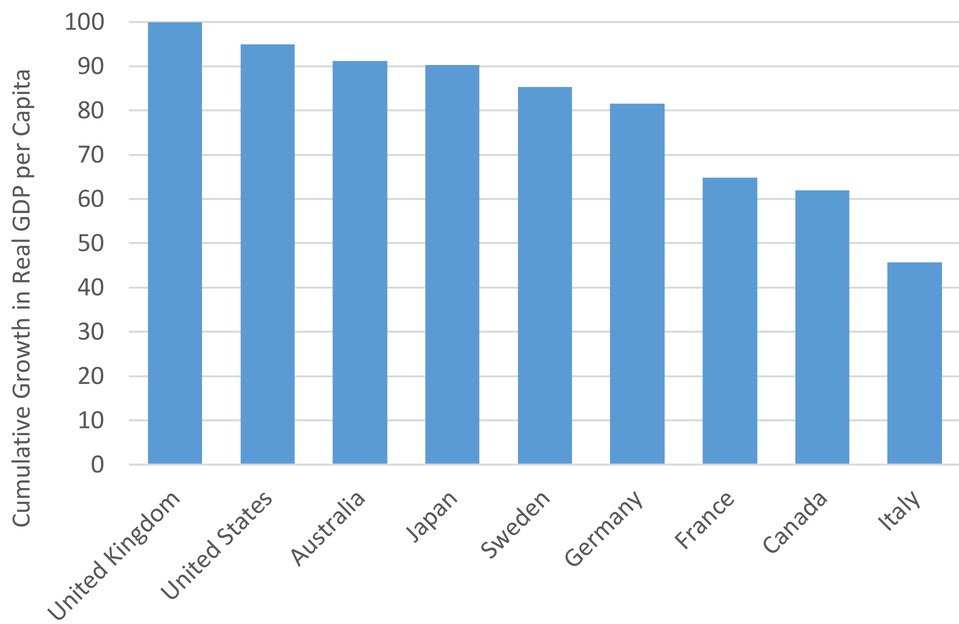
Considering the market principles of the U.S., how has its economy performed in recent years relative to other nations? First, we consider the growth in real GDP per capita since 1980, when the U.S. significantly moved toward deregulation. The countries included in Figure 5 all had relatively similar income levels in 1980. The figure shows the cumulative growth in real GDP per capita over the last 40 years. We see that the U.S., along with the United Kingdom which also took a marked turn toward deregulation in the 1980s, has performed better than other developed countries in terms of economic growth.

Another metric to consider is the extent of unemployment in an economy. Figure 6 presents the average unemployment rate over the period 1980-2019 for the same countries covered in Figure 5, as well as a few other countries. We see that the average unemployment rate in the U.S. is below that of most developed countries, although unemployment is normally much lower in Japan and Switzerland.

---

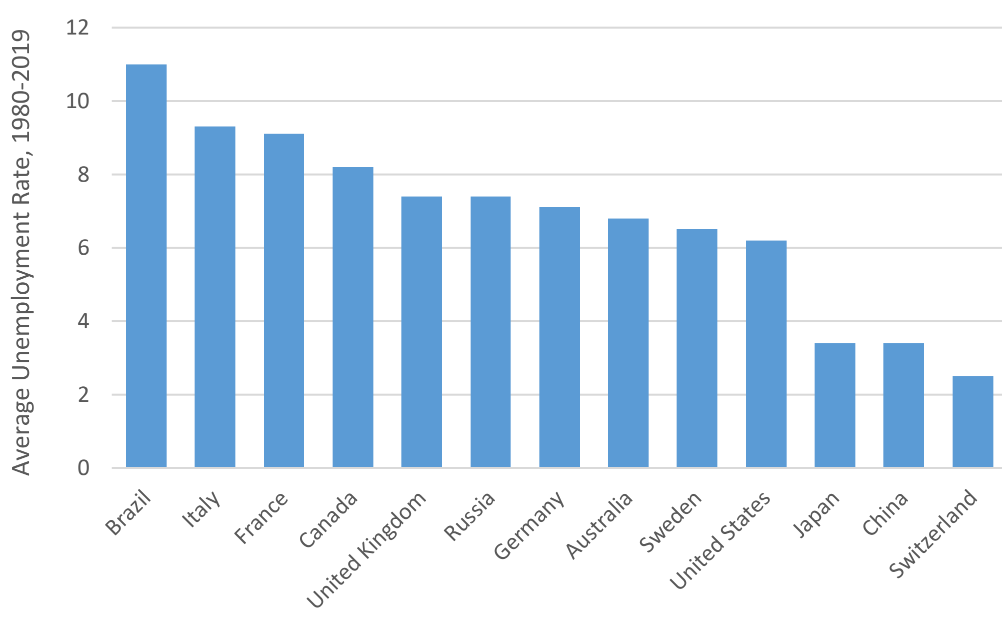
[16] FRED Economic Data, "Federal Net Outlays as a Percentage of GDP", https://fred.stlouisfed.org/series/FYONGDA188S.
[17] Union membership data from the International Labour Organization, https://ilostat.ilo.org/topics/union-membership/.
[18] OECD. 2020. Revenue Statistics 2020.
[19] OECD Data, "Social Spending", https://data.oecd.org/socialexp/social-spending.htm.
[20] Tikkanen and Abrams, 2020.
[21] Livingston and Thomas, 2019; Schulte, 2019.

Figure 5. *Cumulative Growth in Real GDP per Capita, Select Countries, 1980-2019*



Source: World Bank, World Development Indicators database.

Figure 6. *Average Unemployment Rate, 1980-2019, Select Countries*



Source: International Monetary Fund, World Economic Outlook database, April 2021.

Based on standard macroeconomic metrics, the U.S. economy performs relatively well among developed countries, with higher-than-average growth and lower than average unemployment. But standard macroeconomic metrics fail to consider the overall level of well-being in a society. Several other metrics have been developed that aim to measure well-being more broadly—we consider two of them here. First, the Better Life Index developed by the OECD, which notes that:

> Well-being is multidimensional, covering aspects of life ranging from civic engagement to housing, from household income to work-life balance, and from skills to health status. A thorough assessment of whether life is getting better requires a wide range of metrics, captured on a human scale, and able to reflect the diverse experiences of people.[22]

The Better Life Index is comprised of 11 dimensions, including income, housing, community, education, health, the environment, and life satisfaction. Each dimension includes data on multiple variables. For example, the education dimension includes data on the average number of years of education and on standardized test scores. Based on an equal weighting of each dimension the top-ranking countries are (in order): Norway, Australia, Iceland, Canada, and Denmark. Sweden ranks 8th and the U.S. ranks 10th, followed by countries such as the U.K. (14th), Germany (15th), Japan (25th), South Korea (25th), and Mexico (34th). A limitation of the Better Life Index is that it has been calculated mainly for OECD countries, with data for only 40 countries.

A second well-being index that has been compiled for a much larger number of countries (163 as of 2021) is the Social Progress Index. This index was developed in 2014 by the Social Progress Imperative, a U.S.-based nonprofit organization. The Social Progress Index seeks to address three main questions:[23]

1. Does a country provide for its people's most essential needs?
2. Are the building blocks in place for individuals and communities to enhance and sustain wellbeing?
3. Is there opportunity for all individuals to reach their full potential?

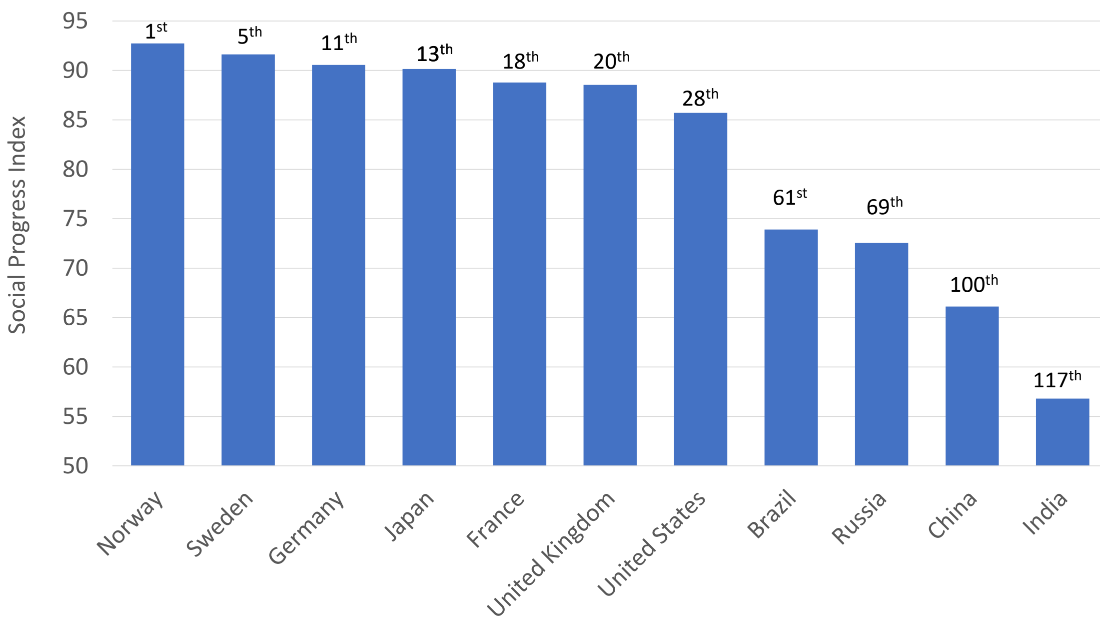
The Index is comprised of 12 components, including access to knowledge, inclusiveness, environmental quality, personal safety, personal rights, and health and wellness. Similar to the Better Life Index, each component includes data on multiple variables. Figure 7 presents the Social Progress Index for select countries based on 2020 data. According to this metric, the U.S. ranks comparatively poorly among developed countries, ranking 28th. The U.S. underperforms on variables such as access to quality healthcare, homicide rates, greenhouse gas emissions, discrimination, and political rights. The top-ranking countries are (in order): Norway, Denmark, Finland, and New Zealand.

[22] OECD 2015.

[23] Stern et al., 2020.

The market capitalism economy of the U.S. has also produced a high degree of economic and social inequality. Income inequality in the U.S. is higher than in any other developed country.[24] While economic inequality in the U.S. generally decreased in the decades following World War II, inequality has increased since around 1970. Income inequality was near an all-time high at the start of the COVID-19 pandemic, and the unequal impacts of the pandemic have surely further increased inequality.

Figure 7. *Social Progress Index, 2020, Select Countries*



Source: Social Progress Imperative, https://www.socialprogress.org/.
Note: Ranking is out of 163 countries.

A common perception has been that the United States is a "land of opportunity" where those who work hard can succeed. Economists refer to the potential for an individual to move up (or down) in income over time as **economic mobility**. While the U.S. once had a relatively high degree of economic mobility, recent research finds this is no longer the case. For example, a 2016 analysis found that among 24 middle- and high-income countries the U.S. ranked 16th in economic mobility.[25] A 2018 World Bank report found that the U.S. ranked 32nd among countries in the probability that a child born with parents in the lower half of the income spectrum will end up in the top quarter based on income.[26] And in a 2020 study of social mobility by the World Economic Forum, which considered factors beyond income including health, education, and working

[24] CIA World Factbook.
[25] Corak, 2016.
[26] Narayan and Roy Van der Weide, 2018.

conditions, the U.S. ranked 27th in mobility.[27] Social mobility was the highest in (in order): Denmark, Norway, Finland, and Sweden.

In summary, while the market capitalist system in the U.S. produces a relatively high rate of overall economic growth, the country does not perform as well according to broader measures of human well-being. In recent years the system has resulted in a very high degree of economic inequality for a developed country, along with a relatively low level of economic mobility. Increasingly Americans believe that the U.S. economic system is rigged to favor the rich. For example, a 2020 survey by the Pew Research Center found that 70 percent of Americans believe the economic system “unfairly favors the powerful interests”.[28] Still, a 2019 Gallup poll found that 87 percent of Americans have a positive view of “free enterprise”.[29] The poll also found that while Americans over age 40 are much more likely to have a positive view of capitalism than socialism, those aged 18-39 are equally as likely to view socialism positively as capitalism. These results:

> suggest that young adults favor Americans' basic economic freedoms but have heightened concerns about the power that accrues as companies grow, and that younger generations are more comfortable with using government to check that power.

4.2 Market Socialism in Sweden

Under **market socialism** economic activity is primarily coordinated through markets but, as compared to market capitalism, the government plays a greater role in the economy. This expanded role can be through the provision of an array of government services funded through taxation, such as public health care and education. The government may also own a greater share of the factors of production, which could include natural resources such as public lands and fossil fuel reserves, public research facilities, and state-owned companies.

Market socialism can exist under a range of political systems, from one-party rule (see Box 2) to a well-functioning democracy. In this section, we focus on the “Nordic model” of market socialism practiced by several countries in Northern Europe including Norway, Demark, Finland, and Sweden. The Nordic model, often referred to as social democracy, seeks to combine the economic efficiency benefits associated with markets and the social benefits of extensive “welfare state” policies such as universal health care, public education, and social security. Under social democracy the government normally does not directly own a significant share of a country’s productive assets or business enterprises, yet a large share of the national economy still runs through government channels. It also promotes a high degree of economic and social equality through redistributive policies dependent on high levels of taxation.

---

[27] World Economic Forum, 2020.
[28] Pew Research Center, 2020.
[29] Saad, 2019.

BOX 2. MARKET SOCIALISM IN YUGOSLAVIA

In the years following World War II, the economic and political system of Yugoslavia was initially modeled after the Soviet communist system.[30] In the late 1940s productive assets such as factories, banks, insurance companies, large farms, and hospitals were nationalized. One-party rule was established by the League of Communists, which centrally planned the economy. However, the ruling party soon recognized the limitations of central planning, leading to reforms starting in the 1950s that permitted self-management of publicly owned enterprises, often with workers democratically participating in business decisions.

Additional reforms instituted during the 1960s gave a greater role to the market in allocating resources. By the end of the 1960s about 60% of the prices of industrial goods were determined by the market, as opposed to being administratively set. Unlike the Soviet Union and other communist countries, Yugoslavia sought trade relations with Western nations. By 1990, about 60% of Yugoslavia's trade was with OECD countries.

Yugoslavia stands out in recent history as the country which most clearly combined social ownership of productive assets and a market-based economy, with a mix of successes and failures. From 1950 to 1980 real GDP per capita in Yugoslavia grew at an average annual rate of over 5%, one of the highest growth rates of any country and higher than all developed nations.[31] But during the 1980s, Yugoslavia's economy stagnated, with high inflation and unemployment. The country also displayed a high degree of regional income inequality, with 1989 GDP per capita ranging from over $12,000 in Slovenia to only $1,600 in Kosovo. Another problem was that a lack of entrepreneurial incentives limited innovation. While individuals were permitted to start their own businesses, if the firm grew above a certain size it would be nationalized.

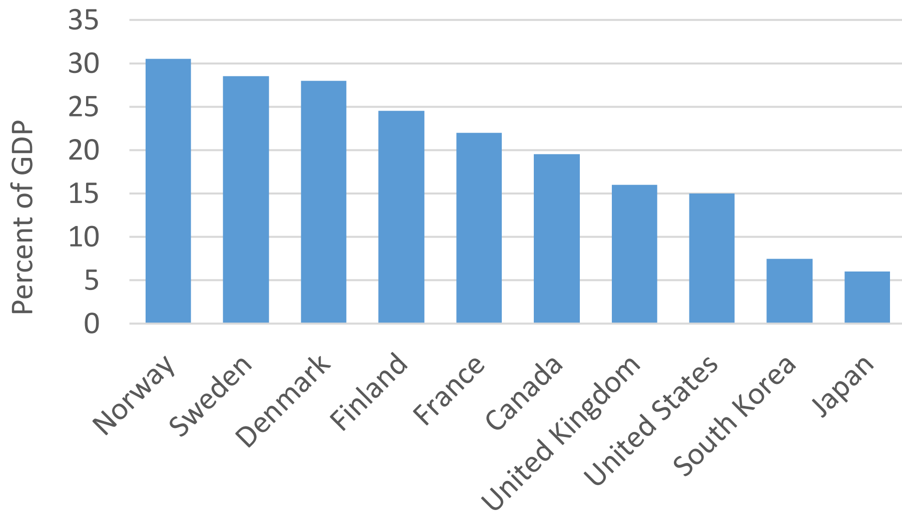
In 1991 Yugoslavia was dissolved as a result of economic crises in the 1980s and the rise of nationalism in the country's republics such as Croatia, Slovenia, and Serbia. These new countries have mostly abandoned the idea of state-ownership of productive assets, pursuing an economy more based on private enterprise.

Figure 8 presents the amount of public spending (as a percent of GDP) on social programs in select countries, defined by the OECD as "cash benefits, direct in-kind provision of goods and services, and tax breaks with social purposes" that "involve either redistribution of resources across households or compulsory participation".[32] We see that several Nordic countries have comparatively high levels of public spending on social programs, although other European countries such as France, Italy, and Germany also have high levels of social spending.

---

[30] Material for this box from Uvalić, 2018.
[31] University of Groningen, Maddison Project Database 2020, https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2020?lang=en.
[32] OECD, https://data.oecd.org/socialexp/social-spending.htm.

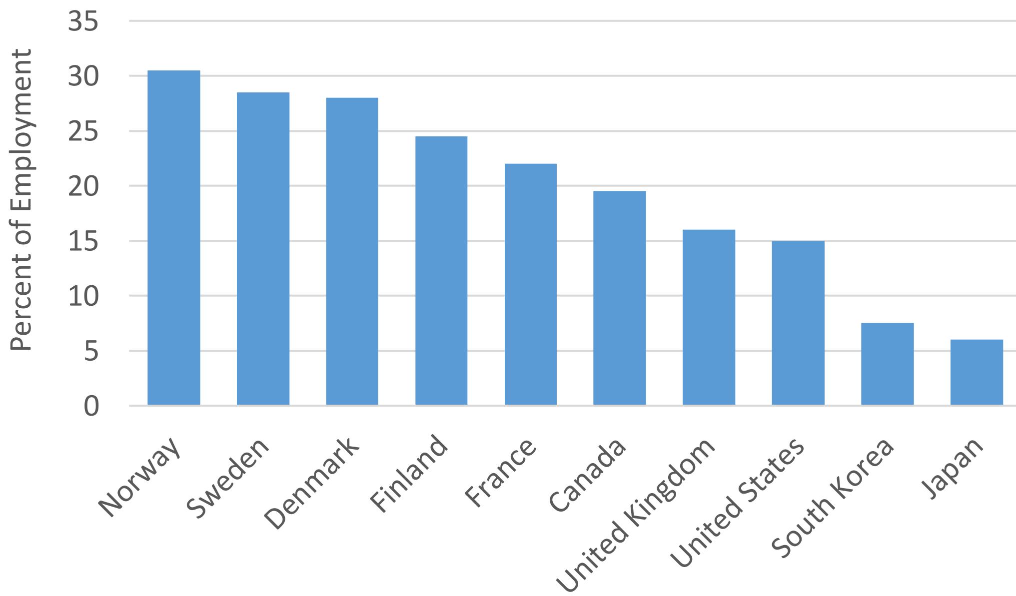
Figure 8. *Public Social Spending, Percent of GDP, 2019, Select OECD Countries*



Source: OECD Data, Social Spending

With a high level of government spending, another characteristic of the Nordic Model is that a large share of workers is employed by the government. We see in Figure 9 that government employment among Scandinavian countries can exceed 25 percent of the workforce.

Figure 9. *Government Employment, Percent of Total Employment, 2017, Select OECD Countries*



Source: OECD. 2019. Government at a Glance 2019. Paris.

The Nordic economic model is not applied exclusively in the Nordic or Scandinavian countries (normally considered to be Norway, Sweden, Finland, Denmark, and sometimes Iceland), nor do all Scandinavian countries operate under the same type of economic, social, and political system. Norway, Sweden, and Denmark are constitutional monarchies, where legislative power is held by democratically elected representatives, with a monarch mostly serving a ceremonial role. Norway stands out as the country with the largest state-owned enterprises, such as the energy company Equinor that manages most of the country's energy resources. According to a 2013 analysis about half of the economic activity generated by the Norway's ten largest firms is attributed to state-owned enterprises.[33] In Sweden state-owned enterprises are fewer and smaller in size. Norway and Iceland do not belong to the European Union, while Sweden, Finland, and Denmark are EU members.

In this section we focus on market socialism in Sweden, primarily because it is the most populous Nordic country and has the largest economy. We first summarize the history of Sweden's economy and then evaluate the performance, advantages, and disadvantages of its economic system.

A Brief History of Sweden's Economy

In the 19th century the Swedish economy was dominated by small-scale agriculture and GDP per capita was only slightly above the global average.[34] Economic growth accelerated in the late 19th and early 20th centuries, driven by expanded exports of wood, iron, and agricultural products. Public support for market socialism emerged across Europe during World War I. In Sweden, the Social Democratic Party gained power in 1932 in response to the impacts of the Great Depression, and held political power uninterrupted until the 1970s. The signing of the Saltsjöbaden Agreement in 1938 established the institutional arrangements that governed Swedish labor markets. The agreement, between labor unions and employers, set guidelines for conflict resolution and limits on actions that could harm the public interest. Wages in specific industries are negotiated through collective bargaining. With successful implementation of the agreement, membership in labor unions significantly increased—ultimately reaching a peak of 86 percent of all workers in the 1990s. As the majority of workers are paid negotiated wages, Sweden has never implemented a national minimum wage given the strengths of the wage bargaining system.

The Social Democratic Party established a wide range of "welfare state" policies during the 20th century. These policies include:

- Universal health care: All Swedish citizens are covered by national health insurance. The system is not free, but out-of-pocket costs are minimal. For example, out-of-pocket annual caps are set at about $140 per year for medical expenses and at $270 for prescription drug costs.[35] While the guidelines for health care in Sweden are set at the national level, administration is decentralized through 21 regional councils.

---

[33] Kowalski et al., 2013.
[34] Information on economic history in Sweden from https://eh.net/encyclopedia/sweden-economic-growth-and-structural-change-1800-2000/, https://en.wikipedia.org/wiki/Nordic_model, and
[35] https://en.wikipedia.org/wiki/Health_care_in_Sweden.

- Parental leave: Swedish families are entitled to 16 months of paid parental leave with the birth or adoption of a child, with each parent receiving at least 2 months. The leave can be used any time until the child reaches 8 years old. Parents' jobs are protected during any leave period. In addition, parents are permitted 120 days off per year to care for a sick child, if needed. In general, parents are paid 80 percent of their wages during a leave period.[36]
- Public day care: All children under 7 years of age are entitled to subsidized day care for working parents. For a first child the cost is capped at about $170 per month or at 3 percent of household income, whichever is lower. Costs are lower for other children.[37]
- Housing allowances: People between age 18 and 28 are eligible for housing cost assistance, subject to income limits. Families with young children are also able to receive housing allowances.[38]

The generous welfare policies in the Nordic countries mean that taxes are high. Tax revenue is about 43 percent of GDP in Sweden, among the highest rates in the world. Among developed countries, only Denmark, France and Belgium have higher rates.[39] Tax revenue is only 24 percent of GDP in the United States.

Similar to the U.S., Sweden experienced a period of stable and broad-based economic growth after World War II. During the 1970s and 1980s economic growth in Sweden slowed, leading to reforms that reduced the role of the government in the economy, along with an increase in economic inequality. Despite these reforms, democratic socialism in Sweden remains strong, with most welfare state policies still in effect, union membership at about 70 percent, and low inequality. While support for the Social Democratic Party has declined, and they have lost governing power to more moderate parties at times beginning in 1970s, since 2014 they have regained power by forming a coalition government with the Green Party. The Swedish application of social democracy in the 2020s has maintained a strong social safety net while also maintaining economic freedoms—recall from Figure 4 that the Index of Economic Freedom is essentially the same in Sweden and the U.S.

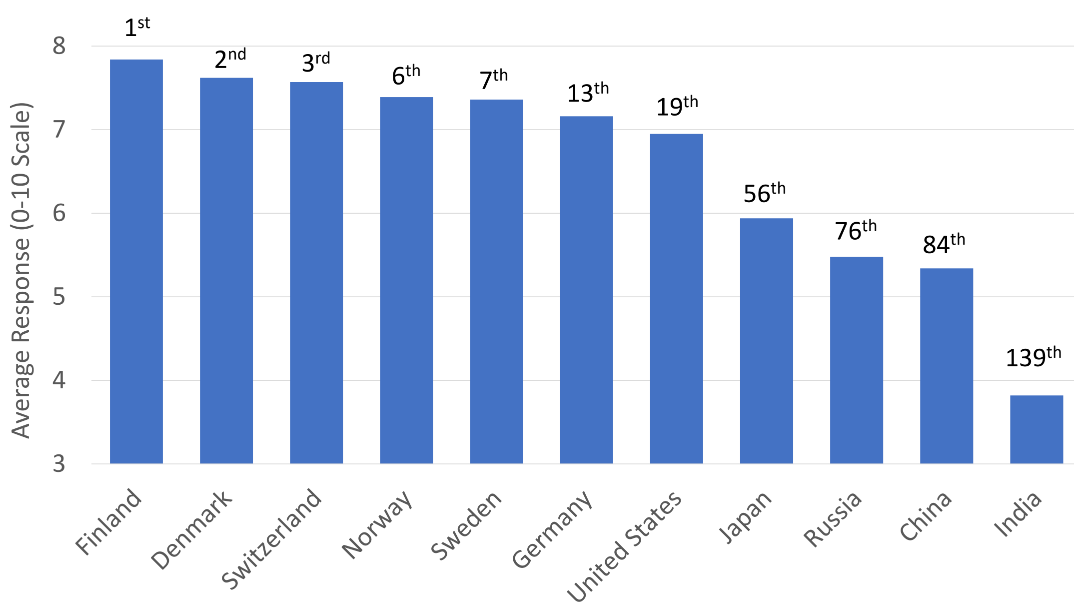
Performance of the Swedish Economy

By most metrics, the performance of the Swedish economy, along with the other Nordic states, has been good in recent years. The growth of GDP per capita in Sweden over the last few decades has been slightly less than in the U.S. (Figure 5) and unemployment has been slightly higher (Figure 6). Based on data from the International Monetary Fund, GDP per capita in Sweden was about $53,000 in 2019.[40] This ranked 18th in the world, based on values adjusted for purchasing power differences across countries. The U.S. ranked 8th, with a GDP per capita of about $63,000. Countries that ranked above the U.S. include Norway, Switzerland, Qatar, and Singapore.

[36] https://en.wikipedia.org/wiki/Social_security_in_Sweden.
[37] https://familyandjob.eu/childcare-in-europe/sweden/.
[38] https://www.norden.org/en/info-norden/housing-allowance-sweden.
[39] OECD Data, Tax Revenue (Percent of GDP), 2019.
[40] IMF, 2021.

As we saw earlier, Sweden ranks above the U.S. on broader measures of well-being, including the Better Life Index and the Social Progress Index (Figure 7). Another metric to evaluate the performance of different countries from a broad perspective is subjective well-being (SWB). Data on SWB are collected from surveys that ask people to evaluate their overall satisfaction with their lives, normally on a scale from 0 to 10. Figure 10 presents the average SWB response from select countries. We see that the Nordic countries are all among the happiest countries, with Finland 1st, Denmark 2nd, and Sweden 8th. While SWB is positively correlated with income levels, research finds that other factors explain a majority of the variation across countries, including social support networks, the freedom to make choices, perceptions of corruption, and generosity levels.[41]

Figure 10. *Average Subjective Well-Being, 2020, Select Countries*



Source: World Happiness Report 2021.
Note: Ranking is out of 149 countries.

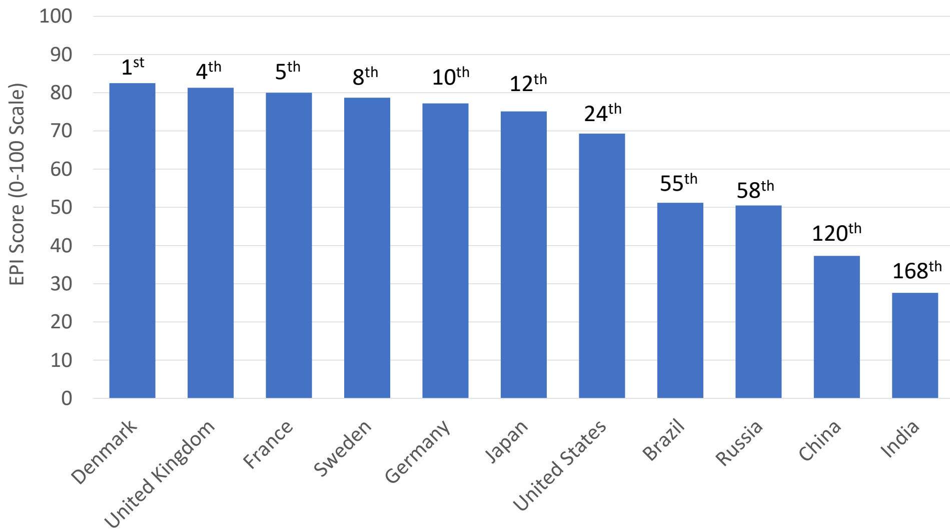
Income inequality is extremely low in the Nordic countries. Among developed countries, Iceland, Norway, and Finland have the lowest levels of economic inequality, with Denmark and Sweden also in the top 10.[42] As mentioned earlier, social mobility is highest in the Nordic countries. The Nordic countries perform well in terms of gender equality. The median gender wage gap is about 18 percent in the United States—meaning that the typical male worker is paid 18 percent more than the typical female worker. The gender wage gap is 12 percent in Sweden and 10 percent in Norway (although it is higher in Finland, at 19 percent).[43]

Sweden also ranks highly in its environmental performance. The Environmental Performance Index, developed by researchers at Yale University, includes data on 32 variables related to

[41] Helliwell et al., 2021.
[42] Income inequality data from CIA World Factbook.
[43] International Labour Organization. 2018.

greenhouse gas emissions, air and water quality, ecosystem vitality, and other environmental factors.[44] As we see in Figure 11, Sweden's overall environmental quality is ranked 8th highest. Other Nordic countries also rank highly, with Denmark #1, Finland #7, and Norway #9.

Figure 11. *Environmental Performance Index, 2020, Select Countries*



Source: Environmental Performance Index, 2020 Results

Note: Rankings are out of 180 countries.

In summary, Sweden performs reasonably well using traditional macroeconomic metrics such as economic growth and unemployment and very well based on broader well-being metrics. Sweden, along with the other Nordic countries, offers an extensive safety net, is egalitarian while offering a high degree of social mobility, and has one of the cleanest environments. Given these results, one is led to conclude that the Nordic model works very well and should be applied to more countries. However, is the Nordic model reproducible outside of the Nordic countries?

One factor limiting the adoption of the Nordic model is its very high tax rates, which may not be politically acceptable in other countries. For the most part, people in the Nordic countries are willing to accept high taxes in exchange for a broad range of government services. According to one survey 90 percent of Swedes prefer high-quality public services over lower taxes.[45] A potential explanation for this finding is that levels of social cohesion and trust in public institutions are quite high in the Nordic countries, driven by cultural factors unique to the region.[46] For example, Sweden's harsh environment is considered to have fostered a strong work ethic and a necessity for strong community bonds. Sweden's lack of racial diversity is another reason why its economic system may not succeed in more diverse countries such as the United States. While Sweden is becoming more diverse, the vast majority of Sweden's population (over 80 percent) are ethnic

[44] Wendling, et al., 2020.
[45] Landes, 2008.
[46] Sanandaji, 2015; and McKay, 2020.

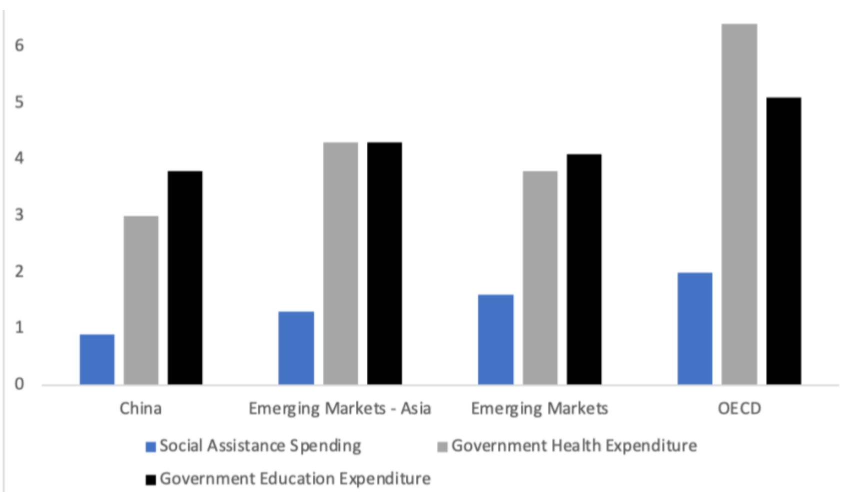
Swedes.[47] Even though a particular economic system is successful in one country, we cannot conclude that it would produce similar results in another country.

4.3 State Capitalism in China

Under **state capitalism**, a private sector with market exchange exists alongside a more powerful government sector with large state-owned enterprises. In this system, the private sector is often heavily regulated, and the government is involved in economic planning to influence market outcomes. China is one of the major examples of state capitalism. While the country has transitioned to a more market-based economy over the last four decades, the government still controls the major strategic industries and has a significant influence over market processes through extensive private-public sector networks.[48]

In terms of the standard measures of government size discussed above, China does not look too different from the United States and some other developed countries. For example, China's government spending relative to its overall GDP is lower than that of some European countries and is similar to the United States (Figure 3). Also, only about 10 percent of the labor force in China is employed in the state sector, which includes schools and hospitals, social organizations, government agencies, and state-owned and state-controlled enterprises.[49] This is lower than employment in the government sector for most OECD countries (see Figure 9). As shown in Figure 12 below, China also lags other emerging economies and OECD countries in terms of its public spending on education, health, and social assistance.

Figure 12: *Comparison of Social Spending (percentage of GDP)*



Source: Jain-Chandra et al., 2018.

Note: Data for China from 2016 and latest available for other regions.

---

[47] Wikipedia, Demographics of Sweden, https://en.wikipedia.org/wiki/Demographics_of_Sweden#:~:text=Sweden%27s%20population%20has%20become%20much,common%20foreign%20ancestry%20is%20Finnish.

[48] Naughton, 2008.

[49] Rutkowski, 2013. d

However, the Chinese government plays a significant role in managing the overall economy. With its one-party authoritarian system, where the Chinese Communist Party (CCP) has a political monopoly, the government is able to control crucial sectors of the economy, including banking, infrastructure, energy, and telecom, and make key decisions on which industries will receive subsidies and favorable loans.[50] The government also tries to influence decision-making in the private sector by educating private sector employees on government policies and ideologies.[51]

Recent reforms by the current leader, Xi Jinping, has further strengthened the role of the government in both state and private businesses. Not only have the state-owned enterprises seen an increase in government monitoring and control through installation of Communist party officials in their boards, but private firms have also faced pressures to include party committees when making important decisions.[52] In a series of policy announcements in 2020, the CCP provided guidelines for the private sector to become a part of the "United Front" (a coalition of individuals supporting the party's agenda), and proposed plans to have representatives from the private sector join the party, so that the private sector could conduct their operations in tight coordination with government policy objectives.[53]

It is widely thought that the ability of the CCP to maintain its political power is dependent on the country's economic performance. Hence, the government has a strong incentive to engage in long-term planning and to pursue policies that avoid conflict between the government's desire to retain power and public economic interest.[54] Note from our discussion above that China ranks relatively low (107th out of 160 countries) in the Index of Economic Freedom, indicating this heavy government involvement. The legal system and private property rights in China are also quite weak by international standards as the Communist party dominates the judicial system and large industries.[55] The Human Freedom Index that includes 76 distinct indicators of personal, civil, and economic freedom to observe relationship between freedom and other social phenomena, also ranks China 129th out of 162 countries.[56]

While the state sector in China remains strong, the government has also made several reforms to facilitate growth in the private sector. As mentioned above, China ranks quite high (9th out of 78 countries) in the entrepreneurship indicator published by U.S. News and World Report. Also, China is among the countries that has seen the largest improvements in the indicator for ease of doing business, as the government has focused on improving the competitiveness of Chinese economy and made several reforms such as, increasing the ease of starting a business, facilitating easier trading across borders, and protecting minority investors, among other things.[57] In fact, private sector is the main driver of the Chinese economy, contributing about 60 percent to the overall GDP, employing about 80 percent of the urban workers, and accounting for 50 percent of government tax revenue.[58]

---

[50] Holz, 2018.
[51] Olson, 2020.
[52] Livingston, 2020.
[53] Mitchell and Liu, 2020.
[54] Schweinberger, 2014.
[55] Hall and Zhou, 2017.
[56] Cato Institute, Human Freedom Index. https://www.cato.org/human-freedom-index/2020
[57] World Bank, 2019.
[58] Mitchell and Liu, 2020.

A Brief History of China's Economy

China's industrialization period started with the establishment of the People's Republic of China in 1949. From 1949 to 1978, China had a centrally planned command economy, where the state directly controlled a large share of the country's economic output and made decisions on production goals, prices, and allocation of resources. Growth in GDP per capita during this period averaged around 3 percent. Most of this growth was driven by high government spending and rise in education levels. The government's approach to industrialization, however, was not very successful as it created huge misallocation of resources and adverse incentives resulting in declines in productivity levels and little improvement in living standards. During this period, the Chinese economy also went through enormous disruptions with a massive famine in the late 1950s followed by the Cultural Revolution of the 1960s that claimed tens of millions of lives.[59]

The transition to a more market-based economy initiated in 1978 with economic reforms implemented by Deng Xiaoping, the chairman of the central advisory committee in the CCP. These reforms focused on price deregulation, sectoral reform, enterprise restructuring, regional development, trade promotion, and foreign exchange management.[60] There was a shift from central planning towards establishing a regionally decentralized system with local governments having considerable power and management capacity. Different regions competed in terms of growth rates, rather than individual firms competing to maximize profits.[61] Three key features of these reforms include:

- Liberalization of township and village enterprises (TVEs) that are collectively owned by rural communities and local government. As the TVEs operated outside the state plan and with a hard budget constraint, the local governments had more incentive to increase profits and productivity at these institutions.
- Expansion of market institutions by reducing discrimination against the non-state enterprises, establishing institutions to support the market, and offering various tax and trade incentives to promote markets. Even state-owned enterprises that were not privatized were introduced to market incentives by rewarding workers who perform well and shifting control of firms to managers of enterprises.
- Increased international trade through establishment of Special Economic Zones (SEZs) in the coastal areas (Shantou, Shenzhen, Xiamen, Zhuhai, Guangzhou, and Shanghai). International trade, foreign direct investment, and more free-market policies were only permitted in these regions, which saw rapid expansion.

The first successful reform was seen in the agricultural sector with increases in prices for agricultural products and partial land reform, where land ownership and distribution remained under state control, but land use rights were granted to individual peasant households. These households had to deliver specific output quotas to the government, but they were also allowed to sell excess production in private markets. This system resulted in impressive growth and increases

[59] Zhu, 2012. *Note that the actual number of deaths from the famine and the Cultural Revolution are unknown. Estimates for deaths from the famine range from 15 to 55 million and estimates for deaths during the cultural revolution range from hundreds of thousands to 20 million.
[60] Woo and Sachs, 1997.
[61] Xu, 2021.

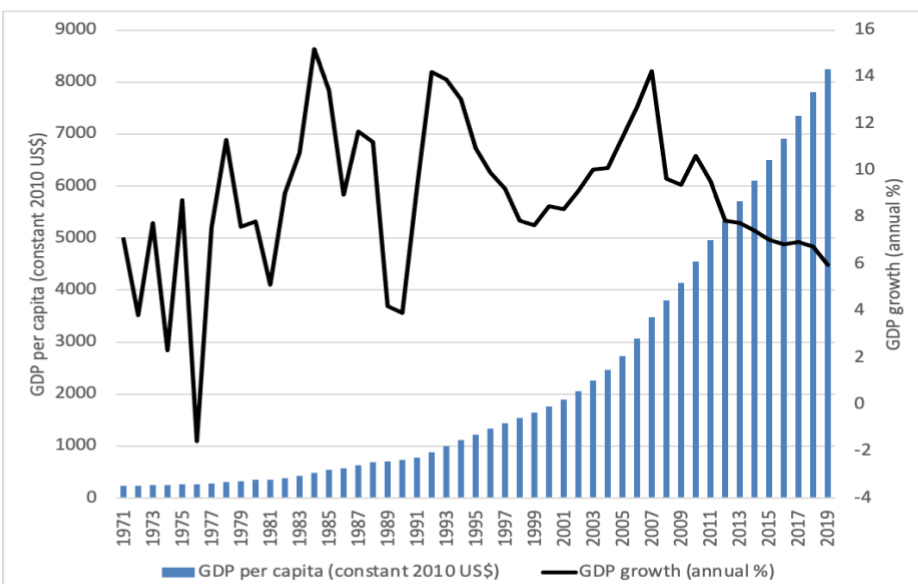
in productivity in the agricultural sector in the initial years. Between 1978 and 1984, agricultural output increased by 47 percent while share of employment in agriculture fell from 69 percent to 50 percent.[62]

The industrial and tertiary sectors of the economy also saw gradual reforms, where managers of enterprises gained more power to make decisions on production, investment, and marketing. Additionally, regulations and supervision of non-state and community-owned enterprises were relaxed. By the 1990s, the government adopted a policy of "grasp the big, and let go of the small", which led to mass privatization of small state-owned enterprises. As the country opened up to trade, growth in manufacturing accelerated as the low labor costs in China gave the country competitive advantage in the global markets.

Performance of the Chinese economy

With the reforms made in the last four decades, China has had the most extraordinary growth path. The annual GDP growth averaged at around 10 percent between 1978 and 2010, compared to a meager average annual growth of 3 percent between 1949 and 1978. While there has been a decline in growth in recent years, with annual growth rate averaging around 7 percent between 2010 and 2019, China is still the fastest growing country. With the high growth rates, the GDP per capita levels have also been rising consistently from less than $280 in 1977 to over $8000 in 2019. As incomes have risen, poverty rates have fallen sharply—over 66 percent of the Chinese population lived below $1.90/day in 1990. This number has declined to 0.5 percent in 2016. Over the last thirty years, China has transitioned from being among the poorest countries in the world to a middle-income country.

Figure 13: *GDP per capita and Growth rates in China*

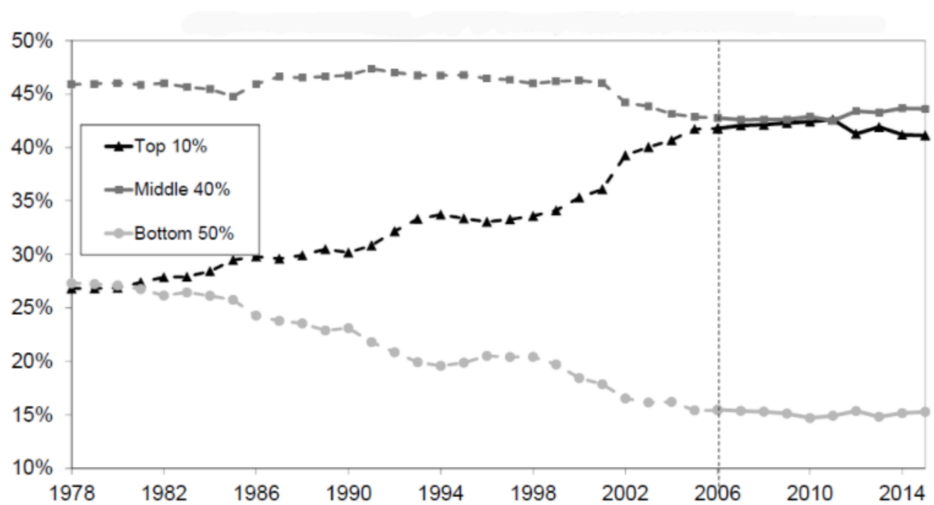


Source: World Development Indicators, World Bank

[62] Woo and Sachs, 1997.

The high growth rates and rising average income levels does not necessarily mean that everyone has benefitted equally from this growth. In fact, income inequality in China has increased substantially since the 1980s and China is now among the most unequal countries in the world. As we can see from Figure 14, while the income earned by the top 10 percent of the population has increased from 27 percent in 1978 to 41 percent in 2015, the share of income earned by the bottom 50 percent has declined from 27 percent to 15 percent.[63] World Bank estimates on the Gini coefficient for China show that the value increased from 32.2 in 1990 to a high of 43.7 in 2010, but has declined slightly since then to reach 38.5 in 2016. A 2018 report from the International Monetary Fund points to differences in education and skill premium, and structural factors such as urbanization and aging population as the main drivers of inequality in the country.[64]

Figure 14: *Income Inequality in China, 1978-2015*



Source: Piketty, Yan and Zucman, 2019.

Official data from China's National Bureau of Statistics indicates that unemployment rates have remained relatively stable at around 4-5 percent for decades. However, alternative estimates on unemployment rates are roughly twice this value, as the official data does not include rural unemployment and undercounts migrant workers.[65] A 2014 study shows that both unemployment and labor shortage have emerged as problems in China due to an increase in matching inefficiency in the labor market.[66] Chinese workers also face limited freedom in their ability to bargain for better working conditions. While workers have a right to be represented by a trade union, independent labor unions are illegal, and all trade unions must be under the leadership of the All-China Federation of Trade Unions (ACFTU)—a national organization reporting directly to the CCP. As a government entity, ACFTU focuses more on ensuring that the labor force abides by CCP's goals, rather than representing workers' rights.[67]

[63] Piketty, Yang, and Zucman, 2019.
[64] Jain-Chandra et al., 2018.
[65] Barrett, 2020. Also see, Yang, 2014.
[66] Yang, 2014.
[67] Bozic, 2018.

China also performs poorly in terms of environmental outcomes. As shown in Figure 11 above, it ranks 120th out of 180 countries on the EPI index. China produces more than a quarter of the world's annual greenhouse gas emissions and contributes significantly to climate change. Also, air pollution levels in urban areas in China are among the highest in the world. Much of the growth and rapid industrialization in China has been powered by coal, that has contributed significantly to these environmental problems. To address these issues, China has been investing heavily in renewable technology and implemented more than 100 policies for lowering greenhouse gas emissions. For example, it has pledged $367 billion for investment in renewable power generation, put a cap on coal consumption, imposed emissions standards on motor vehicles, and strengthened policies on particulate matter. However, its overall track record on promoting sustainable development is somewhat mixed, as it has been expanding its capacity to generate coal-powered electricity, and coal consumption actually increased in 2017 and 2018, after having declined for a few years.[68]

Using broader indicators of well-being reveals a more dismal picture of the country. For example, China ranks 84th out of 149 countries in the subjective well-being index, indicating relatively low levels of overall life satisfaction (see Figure 10). China also performs poorly in the Social Progress Index, ranking 100th out of 163 countries (Figure 7). These broader measures suggest that despite the rosy picture from high growth rates and declining poverty levels, the overall well-being outcome is more mixed. This might be partly explained by the limitations on personal freedom, high inequality, and poor environmental quality in the country.

The slowdown in growth rates in recent years have raised concerns that the Chinese economy may be headed towards a period of stagnation with excess capacity and over-investment in traditional heavy industries. There are also concerns about build-up of debt as much of the investment boom has been financed by borrowing, and China's aggregate debt levels have reached about 255 percent of its GDP as of 2016.

Despite these difficulties, China's global influence has increased considerably in the last few decades. The size of the Chinese economy has increased from about 3 percent of the world GDP in the 1990s to over 17 percent in 2020, making it the second largest economy in the world after the United States. In 2020, China also had the largest number of companies in the Fortune Global 500 list for the first time, slightly outpacing the United States, 124 to 121.[69]

China has also emerged as a major player in influencing trade and investment outcomes globally. Its Belt and Road Initiative (BRI) announced in 2013 aims to strengthen China's connectivity with the world through investments in hard and soft infrastructure, enhancement of inter-governmental communications, and building cultural ties. The BRI covers over 138 countries with some 4.6 billion people. The initiative has helped strengthen China's global position through expanded export markets, lower trade frictions, and increased political influence over partner nations.[70] But there has also been some decline in global relationships for China with increased criticism on

[68] China Power Team, 2016.
[69] China Power Team, 2020.
[70] China Power Team, 2017.

recent domestic policies including restrictions on Hong Kong's autonomy, persecution of China's Uighur minority, and its cyberwarfare activities.

4.4 Planned Socialism in the Soviet Union

Under **planned socialism**, the means of production are predominantly owned by the state, and economic activity is largely organized by the public administration. The Soviet Union along with present day North Korea and Cuba are examples of this kind of economic system, with some variation across countries. Because the Soviet Union was among the largest and the most powerful economies of the twentieth century, we focus on this region here.

The Soviet Union was comprised of Russia and 14 other nearby countries, covering a vast geographic area in Eastern Europe and Central Asia with most of the power being centered in Russia's capital Moscow. It existed between 1922 and 1991. Planned socialism in the Soviet Union was characterized by state ownership of the means of production and centralized decision-making by the state. Firms were directly managed by a state ministry, where the structure was hierarchical rather than democratic. The state set specific economic goals, made decisions on allocation of resources, provided detailed instructions on firm operations, and closely monitored performance of firms.[71] Also, full employment of labor was constitutionally guaranteed, and prices and wages were determined by the state.[72]

Figure 15. *The USSR*

---

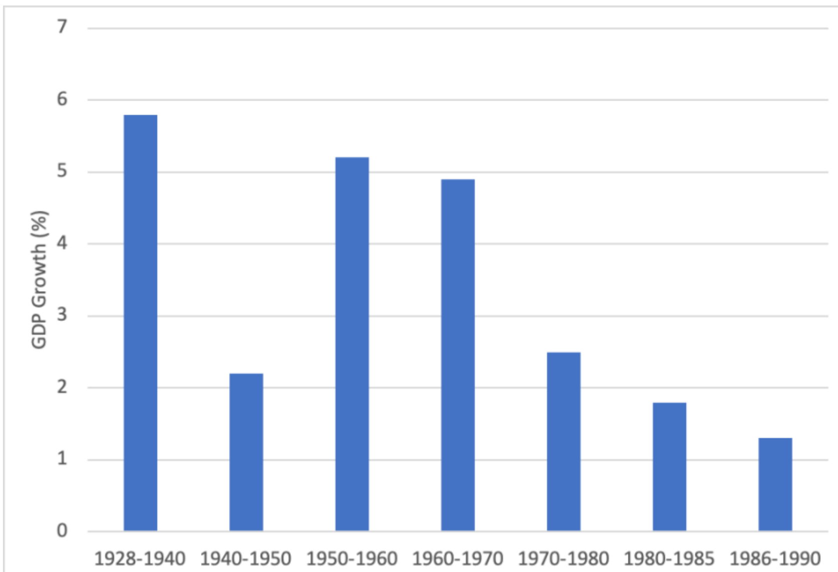
[71] Ward, 1992

[72] Mazat, 2012.

Performance of the Soviet Economy

The Soviet economy experienced relatively high growth rates up to the early 1970s. While there was a significant slowdown in growth during 1940-1950 due to the Second World War, growth rates for the other decades before 1970 averaged around 5 percent (Figure 16). During these initial years, growth was mainly driven by heavy investment in capital, and industrialization. The Soviet Union was forcibly mobilizing resources to utilize new technologies to promote industrialization and urbanization. With its size and strong growth performance, the USSR became an economic superpower. The entire geopolitics of much of the 20th century was shaped by the fact that the USSR was an economic superpower that was often in strategic rivalry with the United States.

Figure 16: *Average Annual GNP Growth Rates for the Soviet Union, 1928-1990*



Source: Ofer, 2004, p.492.

Despite this growth, there was tremendous adversity in the Soviet Union due to political oppression and human suffering, especially between the 1930s and 1950s, when the country was led by the dictatorial and brutal Josef Stalin. The suffering was especially harsh in the agricultural sector, where individual-owned farms were converted into large collective farms, so that the government could get a direct control over agricultural output. The goal was to increase production and make food distribution more efficient, with all farmers working and sharing the benefits equally.[73] However, this forced collectivization was widely resisted by the peasants—many burnt their fields and slaughtered their livestock.[74] This resulted in a decline in overall production levels and produced an essentially 'man-made famine' where an estimated twelve million people died.

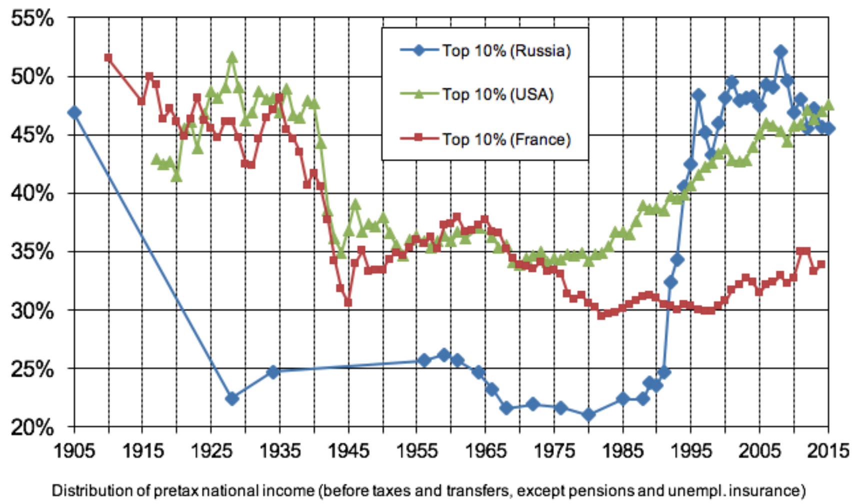
Seemingly intractable problems in the Soviet economy started to surface in the 1970s as growth decelerated causing economic stagnation. Some of the key causes of this decline include a decrease

[73] Finlayson, 2020.
[74] Gardner, 1998.

in the rate of capital accumulation, depletion of natural resources, scarcity of workers, decline in productivity levels, and a slowdown in technological advancements. Given this dismal economic performance, a radical set of reforms was implemented under the leadership of Mikhail Gorbachev in the 1980s. These reforms, referred to as perestroika, aimed to decentralize economic activity, open the markets up to foreign trade, and encourage private incentives while maintaining government control over social goals.[75] Despite these reforms and initial optimism, the economy experienced further slowdown between 1985 and 1991.[76] The economic decline in the 70s and 80s also translated to deterioration in other aspects of well-being. For example, the infant mortality rate in the Soviet Union increased by over 50 percent in the 1970s, and life expectancy for men had dropped from 67 years to 62 years between 1964 and 1982.[77]

While growth performance of the Soviet Union varied over time, inequality levels remained relatively low from the mid-1920s until the early 1990s. As we can see from Figure 17, the share of income going to the richest 10 percent of the population was much lower in Russia, compared to France and the United States. The Gini coefficient for the Soviet Union in the later period was around 0.26-0.29, which is close to the inequality levels in some of the Nordic countries today.[78] This low inequality might be partly explained by government control of prices and wages, employment guarantee policy, along with the public provision of basic services, including health care and education, that ensured that basic necessities remained affordable to the majority of the population.[79] The Soviet system did manage to reduce inequality and poverty to some extent. However, distinctions between urban and rural areas and between different republics continued to exist, and the country was not able to achieve the living standards similar to that of developed countries.[80]

Figure 17: *Percentage of Income going to top 10%, 1905-2015*



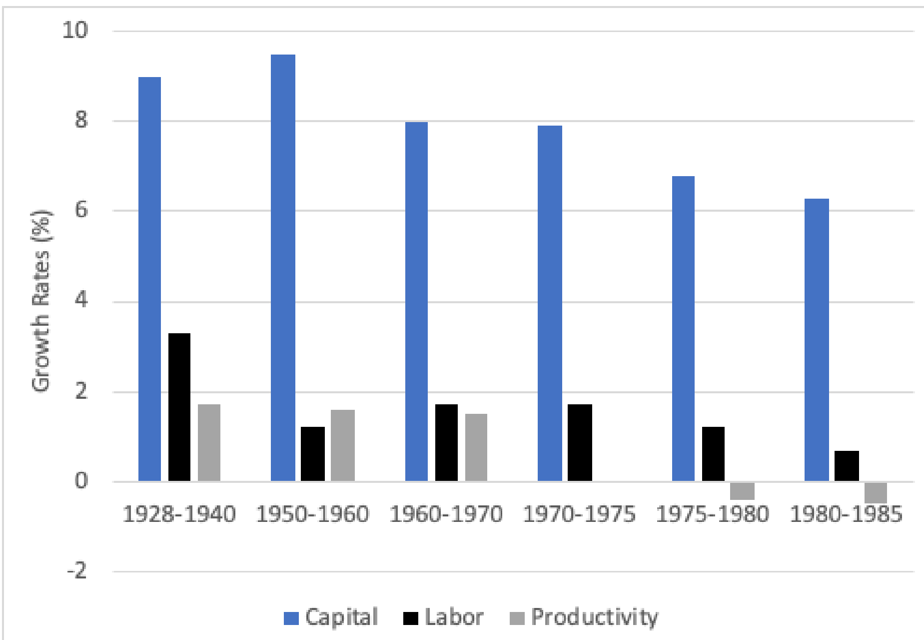
Source: Novokmet, Piketty, and Zucman, 2017.

[75] Johnston and Boyle, 2021.
[76] Mazat, 2012
[77] Feshbach, 1980, Rich, 1980, and Satter, 1982.
[78] Novokmet at al., 2017.
[79] McAuley, 1998.
[80] Ricon, 2017.

Collapse of the Soviet System

The key to understanding both the initial strong economic growth and the eventual stagnation of the Soviet economy is that the growth itself was largely *extensive*, rather than intensive. **Extensive economic growth** is driven by increase in quantity of *inputs* of labor, capital, and land, while **intensive economic growth** is driven by increases in the *efficiency* of these inputs.[81] The coercive nature of the Soviet system meant that it was often able to increase inputs, but in the absence of increases in efficiency, the inputs to growth became increasingly subject to diminishing returns. The economy also ran into supply bottlenecks with scarcity of natural resources and labor shortages.[82] Figure 18 below shows the growth rates of labor and capital, along with the productivity levels for the Soviet economy from 1928 to 1985. As we can see, over time, growth rates of labor, capital and productivity declined. Hence, the slowdown in overall growth was a combination of declining growth in inputs and declines in the efficiency in which those inputs where used.[83]

Figure 18. *Growth Rates of Labor, Capital, and Productivity (%), 1928-85*



Source: Ofer, 1988.

Note: The figures for the 1940s have been omitted to emphasize long-run trends.

Productivity measures the efficiency in which inputs like capital, labor, and land are used. Levels of productivity in the Soviet Union were also much lower than that in most other developed countries (Table 1). This low and declining productivity is partly explained by the failure of the Soviet system to provide incentives to firms and to workers to work efficiently and to innovate. Firm managers would be rewarded as long as they met their output goals, so they had no incentive

81 Krugman, 1994.
82 Bergson et. al, 1966.
83 Allen, 2001.

to increase efficiency.[84] For the workers, the low wages, along with security of employment, and substantial social benefits, failed to motivate productivity and innovation.[85] This made the labor market inefficient and inflexible, as it was difficult to reallocate labor and to expand rapidly.[86] Additionally, because the goals were set in terms of output *produced*, not output *sold*, quality of product and consumer preferences were neglected. As a consequence, the quality and variety of Soviet goods and services was often poor.

***Table 1:** Comparative Average Annual Growth Rates of National Income and Total Factor Productivity, 1950-73*

	GDP Growth (%), 1950-73	Total Factor Productivity Growth, 1950-73
USSR	5.05	0.50
United States	3.66	1.49
France	5.13	3.69
West Germany	5.92	4.14
Japan	9.29	5.47
United Kingdom	3.02	1.98
Average OECD	5.40	3.35

Source: Maddison, 1989. Table 6.10.

Another factor contributing to the low productivity levels in the Soviet Union was the overall dysfunction of the system. As the economy grew and became more complex, it became increasingly difficult to process all the information required for planning and coordination. Centralized decision-making became a staggering administrative challenge with millions of goods and services, tens of thousands of enterprises, and millions of households. A particularly challenging problem was that calculations (and subsequent instructions) made at any point in time would have to be adjusted to continuous changes in resource availability, technology, and preferences.[87] Moreover, there were strong incentives for people to provide false information. For example, workers and managers might be inclined to under-report their true output capacity in to have an easier time of it and as insurance against being given more ambitious output targets in the future. This added to the challenge of efficient allocation of resources and sound management.

Various kinds of inefficiencies and rigidities also arose from the centralized and vertical structure of information flow and decision-making. For example, a firm that required to purchase inputs to production from another firm, would have to put in the request through the state, rather than reach out to the other firm directly. Such inefficiencies sometimes motivated firms to engage in illegal market transactions. To some extent such illegal activities were tolerated by the central authorities, but these arrangements caused long term damage to the legal integrity of many former USSR countries.

---

[84] Allen, 2001.

[85] McAuley, 1998.

[86] McAuley, 1998.

[87] Breth and Ward 1982.

The shortages in labor, natural resources, and technology also contributed to the decline of the Soviet economy. The depletion of oil fields and mining districts, and the exhaustion of water reserves created constraints to growth in the industrial as well as agricultural sectors.[88] All the easily exploitable resources had already been used up and as the country tried to remain self-sufficient, natural resources were extracted from areas that were more difficult to get to and thus more expensive. Additionally, the organization of industries around the country was also very inefficient. In an effort to ensure equality between the different regions and to keep them interconnected, industries were dispersed resulting in substantial costs with supporting the inefficient system.[89]

With the development of the arms race with the Americans, the Soviet government increased its defense spending significantly and directed more resources for research and development towards military rather than civil industries. This resulted in lack of innovation and shortage of industrial goods in other sectors of the economy. Additionally, investment shifted from construction of new facilities to modernization of the older ones, which resulted in little gains in terms of output produced. Such bad investment decisions by the government also contributed to the economic problems of the era.[90]

Finally, the perestroika reforms that allowed for more freedom and more empowerment among local leaders shook the foundations of the planned economy. Gradually, local priorities took precedence over national concerns and the central authority lost power to intervene.[91] Gorbachev also supported increase in government transparency and openness—what he termed as *Glasnost*—but these reforms could not change quickly enough and weak government controls only exacerbated the existing inefficiencies. Eventually, with the rise of democratic momentum in Eastern European countries and the destabilization of the Communist control, the Soviet system collapsed.[92] The downfall of the large and once successful Soviet Union came as a shock, especially to its closest allies, such as Cuba that was reliant on the Soviet Union economically and politically. Box 3 presents a brief description of the current system in Cuba.

BOX 3: PLANNED SOCIALISM AND ECONOMIC TRANSITION IN CUBA

Cuba has been ruled by the Communist party since Fidel Castro's revolution in 1959. It is one of the few countries that still has a planned socialist system. Over 80 percent of Cuban workers are employed in the public sector, and the state controls all major industries. The country has a national healthcare program, free public education, and subsidized housing, transportation, and utilities. While the wages of Cuban workers (mostly set by the state) are low, employment guarantee and substantial social programs provides most with access to basic necessities.[93] However, like other

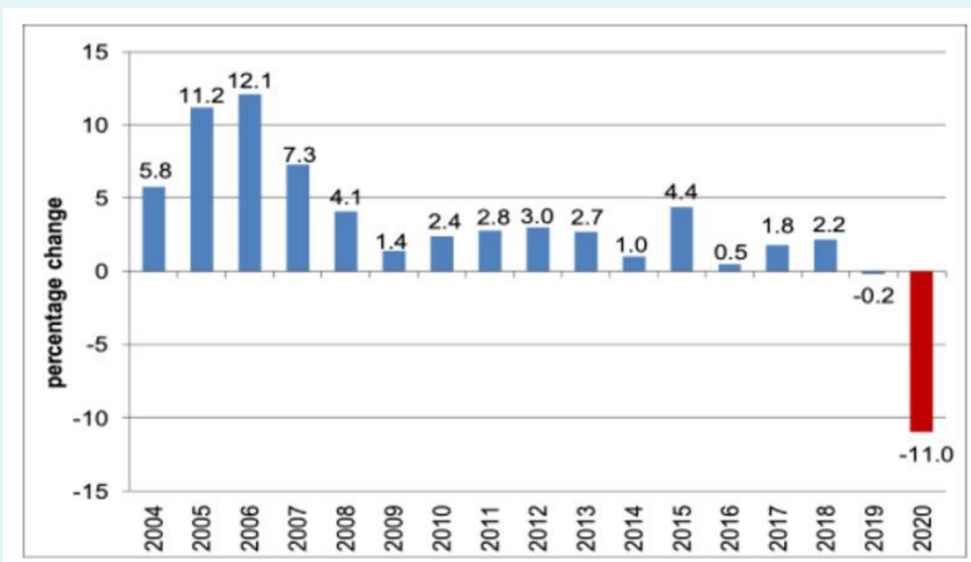
[88] Mazat, 2012.
[89] Finlayson,
[90] Allen, 2001.
[91] Johnston, 2020.
[92] Finalayson,
[93] Seth and Boyle, 2021.

one-party communist states, there is limited freedom of expression with state-controlled media, limited access to the internet, and restrictions on political rights and civil liberties.[94] Also, with poor infrastructure and lack of access to technology, the overall living standards in the country are still poor.

One of the key strengths of the Cuban economy is that it has produced an extremely well-trained workforce with significant investments in human capital (education and healthcare) over time. In fact, one of its main sources of revenue is the export of health services by sending nurses, physicians, and healthcare technicians to Brazil, Venezuela, South Africa, and other countries. Tourism and remittances are other key sources of revenue for Cuba.[95]

The country's economy has, however, been suffering since 2008 with slowdown in overall growth, as shown in Figure 19 below. With the recent covid crisis, the economy has plunged, with growth in 2020 declining by 11 percent for the first time—much higher than the declines experienced in most other countries. For example, GDP declined by 3.5 percent in the United States, 2.8 percent in Sweden, 3 percent in Russia, 4 percent in Brazil and 8 percent in India.

Figure 19: *Cuba's GDP Growth, 2004 – 2020*



Adopted from Spadoni, 2021.

Cuba is also highly vulnerable to external trade shocks and is reliant on imports for some essential goods such as fuels, food, and machinery. The country has also suffered economically due to the US embargo that restricts exports and travel to the country—the economic cost of the embargo is estimated to be about $130 billion, according to the United Nations.[96] Additionally, the government has been struggling to support its large social programs. Between 2008 and 2016, Cuba's total debt increased by 56.9 percent (from $11.6 billion to $18.2 billion) amounting to

[94] Human Rights Foundation, 2020.
[95] Dominguez, 2015.
[96] Reuters, 2018.

about 20 percent of the country's GDP. The overall debt has declined in more recent years, through debt write-offs from China, Mexico, Russia, and some of its other creditors.[97] In recent years, there has also been an increase in inequality, and a deterioration in the quality of public services.[98]

With these difficulties, the country has been gradually transitioning to a more market- based economy. In 2010, President Raúl Castro introduced reforms that removed state control of smaller firms, made it easier for workers to be self-employed, and allowed market freedom in tourism, and export industries. The country has also established tax free special zones to encourage foreign investments.[99] Another set of reforms were implemented in 2020, by the current President Miguel Díaz-Canel to address the recent downturn. These reforms include expansion of the list of industries that are allowed to privatize, removal of subsidies on a wide range of goods, and cut down in some of the social programs.[100]

With these reforms, some have argued the Cuban economy is transitioning towards capitalism.[101] The government, however, maintains that the intent of the reforms is to preserve socialism, while integrating into a capitalist world. Given that the overall size of the private sector in Cuba is still quite small, and the communist party still has a monopoly over the political process and economic decisions, the country is far from transitioning to capitalism.[102]

5. SPECIAL ISSUES FOR THE 21ST CENTURY

In this final section, we look at two specific challenges of the 21st century—inequality and environmental degradation—and discuss how the different economic systems relate to these issues. We will also examine how countries with different systems have performed in addressing issues of distributional inequalities and environmental sustainability.

5.1 Inequality

It is widely agreed that inequality has become an increasingly serious problem within countries and between countries. For example, the World Economic Forum views inequality as a major threat to the prosperity and sustainability of contemporary societies. It is not hard to see why. The contemporary figures on inequality are striking. For example, the 2019 Credit Suisse Global Wealth Report finds that the bottom half of the wealth holders collectively accounted for less than 1 percent of total global wealth in mid-2019, while the richest 10 percent owned 82 percent of the global wealth and the richest 1 percent owned 45 percent. A report from Oxfam finds that between 2009 and 2018, the number of billionaires it took to equal the wealth of the world's poorest 50 percent fell from 380 to 26.

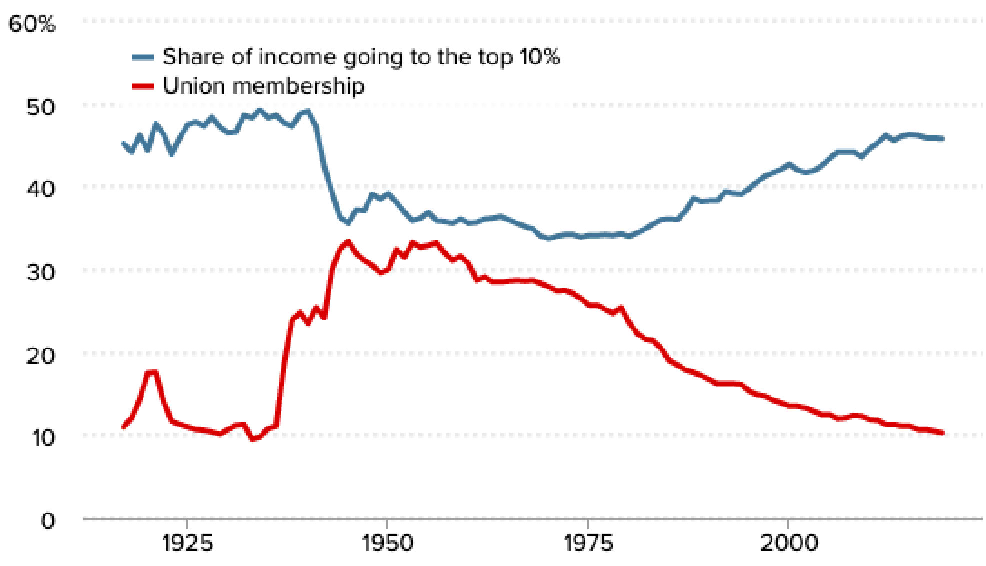
---

97 Spadoni, 2021.
98 Perez, 2021.
99 Feinberg, 2018.
100 Nugent, 2021.
101 See for example Mandell, 2014.
102 See for example Trumbull, 2017 and Nugent 2021.

The issue of inequality is often tied to the structure of the economic system, since how decisions on the distribution of income are made directly affects inequality outcomes. While in principle, capitalist ideas are based on freedom and equality under the law, some scholars view inequality as a recurrent feature of capitalism.[103] Key aspects of capitalism, such as the accumulation of capital by a small group of capitalists, the elimination of weaker firms through competition, and the lower bargaining power of a majority of workers, all contribute to inequality. Additionally, inherited wealth and differential access to education, healthcare, and economic power are all significant drivers of both wealth and income inequality.[104]

The central focus on profit maximization for capitalists can result in lower wages or unfair working conditions for workers. For example, the world's richest individual, Amazon founder Jeff Bezos, has been criticized for paying poor wages and allowing poor working conditions. According to an analysis by the Trades Union Congress, it takes an Amazon worker over 8 weeks (293 hours) to earn what Bezos earns in a single second.[105] However, such disparities do not always have to be the case. In situations when workers have strong bargaining power, higher equality of outcomes may be observed even in capitalist societies. In the United States, for example, inequality was lower in the two decades after World War two, when over one-third of the workers were unionized and had stronger bargaining power. The rise in inequality over the last four decades is partly explained by the decline in union membership rates from over 20 percent in the 1970s to 11.7 percent in 2018.[106]

Figure 20. *Union Membership and Income Going to the Top 10%, 1917-2019*



Source: Shierholz, 2019.

[103] See, for example, Piketty 2014.
[104] Hodgson, 2016.
[105] Trades Union Congress, 2020.
[106] Shierholz, 2019.

Since the 1970s, government policies have also tended to be more pro-business, lowering taxes for businesses and imposing regulations that weaken labor's bargaining power. There has also been a failure of national and international economic governance which has meant that many of the world's largest and most profitable companies have been able to avoid paying substantial amounts of taxes, and often not paying taxes at all. According to an analysis by the Institute on Taxation and Economic Policy, fifty-five of US's largest corporations paid no federal income taxes on more than $40 billion in profits in 2020. Instead, they received more than $3 billion in federal rebates. The report also shows that 26 major corporations have paid no taxes since 2017, including companies such as Nike and FedEx.[107]

The Nobel Laureate Joseph Stiglitz highlights how the concentration of economic wealth and income can both erode political democracy and economic efficiency to perpetuate even higher levels of inequality. For example, he argues that in the United States the wealthy have increasingly been able control legislation to benefit themselves. This has resulted in the prevalence of oligopolies (with a few companies possessing a sizeable share of the market), low taxation of the wealthy, and the creation of biases and loopholes that corrode the quality of legislation and regulation.[108] Stiglitz is not anti-capitalist, but he stresses the need for state governance to prevent concentrations of economic and political power that can badly undermine market governance.

Like Stiglitz, economist James Galbraith relates problems of inequality and other challenges facing the US economy to the quality of state governance. His 2008 book *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too* rests on the belief that no modern economy can exist without an extensive role for state ownership and state governance. Given that the state can never leave the market 'free', the appropriate focus should be on designing appropriate state governance, particularly in the form of economic planning.

We might expect inequality to be lower in socialist systems since values of equality and solidarity are core principles of socialism. Also, price and wage controls by the government along with public provision of basic services in a socialist system could be expected to contribute to lowering inequality. One study finds that the decline in inequality in socialist economies occurs mostly in the initial phases of the new administration when there is a lot of focus on expropriating property of the upper and middle class, and creating laws that rescind discrimination, and increase educational and employment opportunities for all. However, over time as revolutionary fervor declines, a new elite emerges and the liberation of the various repressed elements of the society remains limited. Overall, while class inequalities are reduced with transition to socialism, progress on other forms of inequalities based on gender, race, ethnicity, or region, tend to be much less evident.[109] Sometimes lower inequality through socialist revolutions also has other social costs. For example, as discussed above, socialist experiments in Russia and China have resulted in abuses of human rights and limited freedom for the population.

A 2010 study by Bandelj and Mahutga finds that income inequality in Central and Eastern Europe was considerably lower among countries with socialist structures relative to other countries at comparable levels of development. Also, inequality levels in these countries increased after the

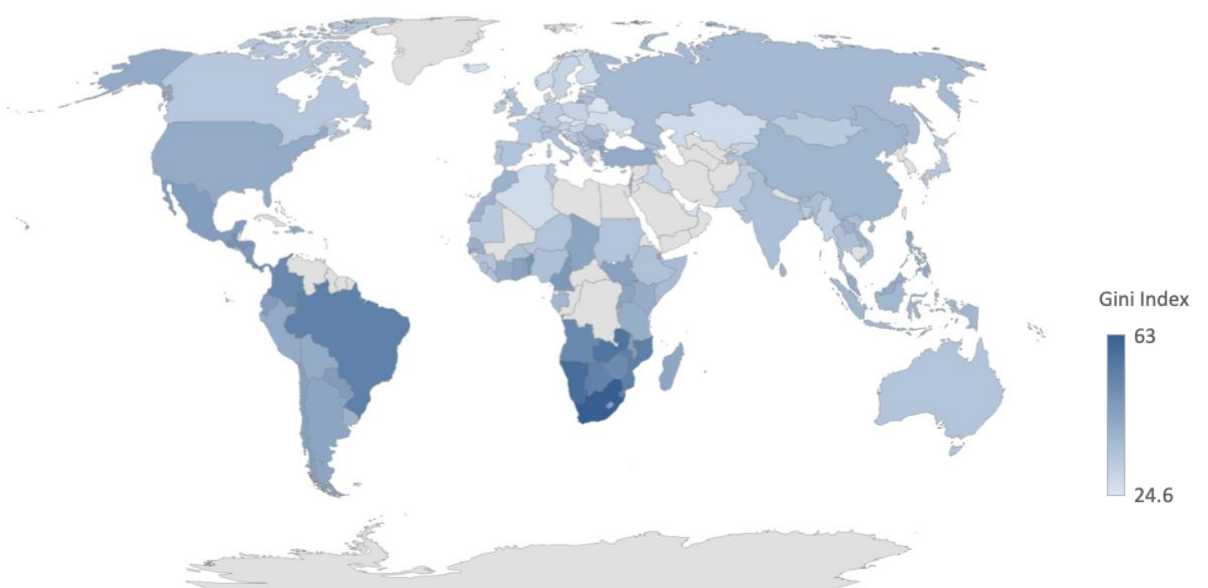
[107] Gardner and Wamhoff, 2021.
[108] Stiglitz, 2012.
[109] Echols III, 1981.

fall communist regimes. Based on a longitudinal cross-national analysis of factors determining the change in inequality in ten Central and East European countries during the first decade after 1989, the study concludes that the rising income inequality is related to the expansion of private sector, retrenchment of the redistributive state, social exclusion of minorities, and penetration of foreign capital.[110]

Note that despite this increase in inequality, most countries in Eastern Europe that were part of the former USSR have among the lowest levels of inequality compared to the rest of the world. In the thirty years since the collapse of the Soviet Union, the transition from communism to capitalism has been relatively successful as most of these countries have experienced an improvement in overall living standards with higher income, better health and education outcomes, and better environmental quality.[111] Such an outcome is suggestive of **path-dependency**, i.e. that history matters and what has been in place previously can significantly influence what occurs after.

Data on inequality level across countries shows that countries with market socialism rank the highest in terms of equality. (See Figure 20.) Research by Milanovic and Ranaldi (2020) shows that Nordic countries are fairly equal and that many Eastern European countries also have low inequality levels similar to the Nordic economies. In most of the advanced economies in Western Europe, North America and Oceania as well as in Japan, the split between capital and labor is less sharp and inequality is moderate or low. Among the developed countries, United States is an exception with relatively high inequality. This might be explained by the pro-business and anti-labor policy environment in the U.S. over the last five decades along with the low government spending on social programs, and higher dependence on the private sector for essential services such as health care, education and childcare, as discussed in Section 4.1 above.

Figure 21. *Inequality Across the World, Most Recent Data (2011-2019)*



Source: World Development Indicators, World Bank.

[110] Bandelj and Mahutga, 2010.
[111] Walker, 2019.

Milanovic and Ranaldi (2020) also find that on average inequality is higher in Latin America and India as these countries have more rigid class-based societies. We see from Figure 21 that some of the countries in sub-Saharan Africa have among the highest inequality in the world. A 2017 study points to the large disparities in access to education, finance, and land along with inequality in opportunity, and ethnic fractionalization as some of the key causes of high inequality in these countries, most of which have a capitalist economic system with a relatively strong role for the government.[112] Most of the countries in this region rank very low, either in the "mostly unfree" or the "repressed" categories, in terms of the Index of Economic Freedom developed by the Heritage Foundation. The regressive taxes and cuts in subsidies for health, transportation, and social services, due to the implementation of structural adjustment programs in the 1980s and 1990s, have also contributed to high inequality in this region.[113]

Over the last few decades, countries such as India and China that have transitioned to a more market-oriented economy have seen an increase in income inequality. While there has been an overall improvement in living standards with an increase in income for both the rich and the poor, the gains made by the rich are much larger than that made by the poor. Most Latin American countries have, on the other hand, seen a decline in inequality in recent years resulting from a decrease in the earnings gap between skilled and less-skilled workers and an increase in government transfers to the poor. For example, implementation of large-scale conditional cash transfer programs in Argentina (Jefes y Jefas de Hogar), Brazil (Bolsa Familia), and Mexico (Pregresa/Oportunidades) have contributed to lowering inequality in these countries (Lopez-Calva and Lustig, 2010). While these countries mainly have capitalist economic systems, government involvement in overall planning is stronger than that in most developed countries. In terms of the Index of Economic Freedom, Mexico ranks relatively high (65 out of 185 countries) under the 'mostly free' category, but Brazil and Argentina rank 143rd and 148th respectively, falling in the 'mostly unfree' category.

5.2 Environmental Sustainability

Any economic system operates within environmental constraints. We rely on nature for inputs into economic production, as well as for assimilation of waste generated from economic activities. The way that our economic systems are structured, including decisions about what to produce, has direct implications for environmental outcomes.

The problem of environmental degradation is often linked to capitalism. Capitalistic economies are generally predicated on continual economic growth—an objective that cannot be sustained on a planet with finite resources. Individuals and businesses acting in their own self-interest will likely fail to adequately account for the environmental impacts of their decisions. The decentralized decision-making in capitalism and the focus on profit-making, means that environmental costs are often borne by the society at large. **Negative externalities** are harmful societal impacts that result from economic transactions. For example, when a consumer buys gasoline neither the seller nor

[112] Shimeles, 2017.
[113] Ighobor, 2018.

the consumer pay for the negative environmental impacts from the production and burning of that gasoline.

Negative environmental externalities are pervasive in modern economies regardless of the type of economic system. A 2013 study estimated that global externalities amount to over $7 trillion annually, equivalent to 13 percent of global economic output.[114] The largest categories of damages were greenhouse gas emissions ($2.8 trillion), water consumption ($1.9 trillion), and land use ($1.8 trillion). The report found that businesses' profits were generally less than the externality damages they cause, implying that corporate profits are largely subsidized by society as businesses avoid paying for the damage from their economic activities.

The rise of capitalism during the Industrial Revolution was driven by increased burning of coal which causes significant local air pollution and contributes to global climate change. Other environmental issues such as deforestation, water pollution, soil erosion, and loss of biodiversity have become increasingly urgent as human activity continues to deteriorate the environment. Based on the argument that capitalism has largely contributed to the climate crisis and other environmental problems, some believe that socialist systems may be better able to address environmental issues.

But are systems with socialistic tendencies any better for the environment? In theory, socialist ideas of production according to needs should avoid capitalist excesses. Also, the prioritization of social well-being over individual well-being implies that environmental outcomes may be better under socialist systems, since environmental costs are borne by the society as a whole. Socialist governments could implement policies that prioritize ecological sustainability through initiatives such as mass public transportation, increased investments in renewable energy sources, and development of efficient and sustainable consumption. However, some scholars argue that the incentive to protect the environment is lower in socialist systems since it is difficult to hold individuals or the government accountable for environmental damage, particularly if country is not a democracy. While a capitalist firm might have the incentive to economize the use of natural resources or use environmental-friendly production processes to appeal to their consumers and expand their market share, socialist firms generally don't have similar incentives.[115]

The empirical evidence on the success of socialist systems to address environmental problems has been mixed. Planned economic systems in Eastern European countries had worse environmental outcomes (higher air and water pollution levels, higher incidence of respiratory diseases, and degradation of biodiversity) than Western Europe at the end of 1990.[116] The highly subsidized energy prices in Eastern Europe and the Soviet Union encouraged energy-intensive production, contributing to poor environmental outcomes in those economies.[117]

As we mentioned earlier, nearly all modern economies can be considered variants of mixed economic systems. Some mixed economies leaning toward modern market socialism generally have more progressive climate policies and relatively good environmental outcomes. For example,

[114] Trucost, 2013.
[115] Regan, 2019.
[116] Hill, 1992.
[117] Reagan, 2019.

all Nordic countries have set ambitious targets to reduce greenhouse gas emissions, imposed carbon taxes for certain sectors, and promoted clean energy policies.[118] The OECD Better Life Index, discussed earlier, ranks the Nordic countries high on the environmental dimension. Nordic countries along with some other European countries that have similar climate policies, such as France and Germany, also rank highly on the Environmental Performance Index, as we saw in Figure 11. The United States, which aligns more with market capitalism, ranks lower (24th) on the Environmental Performance Index. However, the United Kingdom leans more toward market capitalism than other European countries, and it ranks fourth on the Environmental Performance Index.

Current global rates of economic activity are not sustainable. The **ecological footprint** is a metric which estimates the amount of land needed to provide a society with all the natural resources it uses and assimilate the wastes that it generates. A 2021 analysis finds that humanity's ecological footprint exceeds the biological capacity of the plant by 75%.[119] In other words, humanity would need 1.75 earths in order to live sustainably with our current environmental impacts. Even further, if everyone in the world lived like the typical American, the human ecological footprint would exceed the carrying capacity of the earth by a factor of four.[120] Of course, we only have one earth and the conclusion is that current impacts are unsustainable.

There are two main perspectives regarding what changes are necessary in order to transition to a sustainable economic system:

- **Green growth**, incorporating "Green New Deal" policies
- A **steady-state** or **degrowth** economy, incorporating more dramatic policy changes.

We now consider these two perspectives in more detail.

Green Growth

Green growth is an approach to economic and environmental sustainability that is most consistent with the capitalist system. Green growth is sometimes referred to as 'ecological modernization'. At its core, is a belief that economic growth is compatible with environmental sustainability. In fact, many proponents of green growth argue that rates of economic growth and job creation can be increased as a result of stringent environmental policies. The key, according to this perspective, is to de-link or 'decouple' economic growth from environmental damage. A rapid and universal transition away from fossil fuels to renewable energy is perhaps the most significant change required to achieve decoupling.

Many economists and organizations support a green growth perspective, including the World Bank and United Nations. A 2018 report by the Global Commission on the Economy and Climate summarizes the view of proponents of green growth:

[118] Greaker et al., 2019.
[119] Lin et al., 2021.
[120] Center for Sustainable Systems. 2020.

> We are on the cusp of a new economic era: one where growth is driven by the interaction between rapid technological innovation, sustainable infrastructure investment, and increased resource productivity. … We can have growth that is strong, sustainable, balanced, and inclusive.[121]

BOX 4. CLIMATE CLUBS

An enormous challenge facing the earth is climate change. The seriousness of the problem has been known for decades but there has been an inability for governments to forge effective international agreement to reduce greenhouse gas emissions (GHGs). Part of the reason for this is that countries that are prepared to take strong action cannot persuade less committed countries to follow their lead. This makes it hard, or at least harder, for governments to convince their own citizens to make changes and undertake the necessary investments, if it is widely known that other countries are not also taking similar action.

One way of responding to this problem is to form climate clubs whereby those that are committed to strong action to climate change form clubs whereby those are members of the club are accorded privileges and those countries that are not taking meaningful climate action and are outside the club will face penalties such as tariffs being placed on their exports.[122]

It has been argued that even quite moderate penalties, perhaps combined with diplomatic pressure, would be enough to elicit the necessary levels of cooperation.[123] The primary constraint on climate clubs appears to be the reluctance of a critical mass of powerful countries to commit to penalizing laggard countries. This can be, in part, because they themselves are currently laggards. The issue of climate clubs and market penalties is currently under active discussion amongst some US and European politicians and bureaucrats and is an issue to watch.

Proponents of green growth call for significant policy changes including public investment in green infrastructure, carbon emissions policies such as a carbon tax or a cap-and-trade system, energy efficiency standards, and elimination of subsidies for fossil fuels. Another recent policy idea that is compatible with green growth is the creation of climate clubs—see Box 4. Green growth policies include proposals for a "Green New Deal" that would restructure economies with the scale of the New Deal policies during the 1930s, but with an environmental emphasis. For example, the United Nations has called for a global Green New Deal that would invest about 2 percent of the global economy annually, including both public and private funding, in green investments. The UN's economic analysis indicates that these investments will increase rates of economic growth by 1.0-1.5 percent in developed economies and by 1.5-2.0 percent in developed economies.[124]

[121] The Global Commission on the Economy and Climate, 2018.
[122] Nordhaus, 2015.
[123] Ibid.
[124] UNCTAD, 2019.

Green New Deal policies have been proposed in several nations, including the United States and the United Kingdom. A "European Green Deal" is being implemented that aims to achieve carbon neutrality by 2050 while making "economic growth decoupled from resource use."[125] The Green New Deal, introduced in the U.S. in 2019 but not approved, goes beyond an environmental focus to include provisions for job guarantees and universal health care. Given these institutional features, it can be considered a policy reflective of market socialism. Some advocates of a Green New Deal go further, calling for state and worker-owned firms to come to the fore and for the private sectors' size and power to be reduced.[126]

While all green growth proposals imply increased government regulation of markets, given the variety of green growth proposals it can be compatible with any economic system. However, the political acceptance of green growth seems to be higher in economies that already acknowledge an active government role, such as in the market socialistic economies of Scandinavia. In the U.S., most people support the objectives of the Green New Deal, particularly increasing the energy efficiency of buildings, obtaining all electricity from zero-emission sources, and increasing infrastructure spending to prepare for climate-related risks. However, as of 2019, only 30 percent of people support the necessary increase in government spending to meet these objectives.[127]

Is green growth an oxymoron; can economic growth continue, or even accelerate, while meeting environmental goals? Several studies have attempted to answer this question. A 2016 paper concluded that "growth in GDP ultimately cannot be decoupled from growth in material and energy use. It is therefore misleading to develop growth-oriented policy around the expectation that decoupling is possible."[128] An extensive 2018 review of the literature on the relationship between economic growth and sustainability concludes that "green growth paths are unlikely to be sustainable," mainly because carbon emissions will fail to fall quickly enough to meet global climate objectives.[129] Finally, a 2020 article reviewed 179 studies of decoupling and reached a similar conclusion, finding some national evidence of decoupling but not of "economy-wide resource decoupling, neither on national nor international scales." The authors recommend that "more attention should be given to conceptualizations of economy that do not rely on economic growth as the key route towards ecological sustainability and human wellbeing."[130]

Steady State and De-Growth

Both steady-state and de-growth visions of the economy argue that we need to move away from continual economic growth. A **steady-state economy** (SSE) is one where economic activity, or at least resource- and energy-depleting economic activity, reaches a stable level that is ecologically sustainable. In a SSE, GDP would likely remain at a relatively constant quantity, although GDP growth could still be acceptable as long as the growth was in sectors that did not increase overall energy or resource use, such as online learning. A SSE recognizes that the world's capacity to supply inputs to growth and absorb the waste products is finite and already

[125] European Commission, 2021.
[126] Smith, 2019.
[127] Grandoni and Clement, 2019.
[128] Ward et al., 2016.
[129] Kallis et al., 2018.
[130] Vadén et al., 2020.

overstretched in many respects. Technology can only address this problem up to a point. Thus, economic activity cannot increase indefinitely subject to ecological constraints.

Ideally, the transition to a SSE is gradual, guided by many of the same policies that align with green growth but with even more ambitious ecological targets. While green growth often promises the possibility of job creation and GDP growth above baseline levels, SSE advocates aim to slow, and eventually cease, economic growth. According to ecological economist Herman Daly, a "SSE develops but does not grow, just as the planet earth, of which it is a subsystem, develops without growing".[131] A SSE requires a reduced focused on consumerism, implying that people would likely work less and have more time for leisure activities and other pursuits.

A **de-growth economy** can be considered a subset of a SSE in which the transition to the steady-state is reached only after a planned period where economic growth is actually negative. Degrowth proponents contend that global economic activity already exceeds the carrying capacity of the earth, and that developed nations need to shrink the overall size of their economy below current levels. Economic growth should continue in developing nations, at least for a time, in order to reduce global inequality and ensure that basic human needs are being met.

In sharp contrast to green growth, degrowth would require policies designed to reduce overall working hours, such as shorter work weeks and job sharing. The New Economics Foundation, for example, proposes a 21-hour standard workweek that could help to address a range of urgent, interlinked problems. These include overwork, unemployment, over-consumption, high carbon emissions, low well-being, entrenched inequalities, and the lack of time to live sustainably, to care for each other, and simply to enjoy life.[132]

Either a SSE or a degrowth economy would require an increase in government planning. Depending on the health of the ecosystem, the steady state of the economy may need to be occasionally adjusted by government planners. Predominant ownership of factors of production could be either private or public. There are both capitalist[133] and socialist[134] formulations of steady state or growth economies. Herman Daly suggests that capitalism is compatible with a SSE as long as ecological impacts are limited by polices that regulate natural resource use, income and wealth levels, and population growth.

A more extreme eco-socialist viewpoint argues that *any* form of capitalism can never reach a point of environmental sustainability because harmful forms of economic growth (and various other ills like corporate and political corruption) are simply built into a capitalistic system.[135] For this reason, eco-socialists generally reject green growth and support a steady-state or de-growth economy that must be a socialist economic system.[136]

[131] Daly, 1993.
[132] Simms et al., 2010.
[133] Lawn 2011; Daly 2015; Victor 2018.
[134] Smith, 2015.
[135] (Smith 2015; Pirgmaier and Steinberger 2019a
[136] Smith 2010, 2015.

We offer no decisive verdict on this matter, but we do note that there is a significant amount that concerned capitalist and socialists can agree on in terms of creating sustainable societies. For example, corporate corruption of our political system and ongoing misinformation in corporately controlled media has been an increasing problem. Any reforms to address these problems would be a move in the right direction, whether these are labelled as socialism or regulated capitalism. Similarly, green taxes that internalize negative environmental externalities are supported by nearly all economists, although they may disagree about the specific tax levels. Inefficient subsidies on fossil fuels, unsustainable agriculture and fishing, and groundwater depletion are also widely supported by economists. As we discussed earlier, nearly all real-world economies are mixed economies with leanings toward one of the corners in Figure 2. Rather than overly focusing on whether a sustainable economy must be a specific type of economic system, the pressing challenge in response to concerns such as climate change and the loss of biodiversity is for different countries to implement a variety of environmental policies that are both effective and compatible with their existing economic and political systems. Ultimately, environmental factors may further blur the lines between capitalism and socialism as modern environmental challenges call for collective thinking and regulation, as well as the innovation of the private sector.

6. CONCLUSION

The goal of this module has been to help you think about ways in which we can build better systems. We hope we have offered a springboard for further exploration not only in the area of comparative economic systems, but in other areas such as economic history and the various schools within economics and political economy. Regardless of whether you feel an affiliation to capitalism, socialism, or something in between there is obvious work to be done in making *all* different types of economic system better able to address the challenges of the current century. In the appendix to this module, we present ideas from three scholars who present their views on ways to create stronger economic systems for the future.

The point of economics is not just to understand the world but to change it for the better. Accordingly, it seems inappropriate to finish without a few words about how change occurs. In doing so we stress the complexity and unpredictability of economic and social systems and the opportunities this always presents for making some improvement. Rather than being pessimistic, or optimistic about the economic systems of the future, we should be opportunistic. Much theory and evidence point to the value of our skillful agency either as individuals as members of groups or organizations to make a difference working by ourselves, in small groups, or much larger alliances.[137] As Jane Godall points out “what you do makes a difference, and you have to decide what kind of difference you make”.

[137] Green 2017; Beinhocker 2006)

DISCUSSION QUESTIONS

1. What do you think of when you hear the terms ‘capitalism’ and ‘socialism’? How have your perceptions about these terms changed after reading this module?
2. Do you think it is warranted and sensible to try and classify every national economy in the world today as either some form of capitalism or socialism? If not, what do you think would be a better alternative?
3. What is the role of competition in supporting the operation of markets? Can you think of instances where competition might be economically or socially harmful?
4. Choose a country that you know something about and that has not been discussed in detail in this module. What do you know about the economic system in this country? How would you categorize it?
5. Do you think, in general, strong state regulation helps strengthen the economy? Explain why or why not.
6. Which of the measures of economic performance discussed in the module do you think are best for analyzing economic outcomes? Why?
7. Of the various mixed economic systems discussed in the module, which system do you think is best suited to address the challenges of the current century? Discuss why.
8. Find a news article or other publication that discussed the different types of economic systems. Analyze it in terms of the four main categories of economic systems discussed in this module. In what way are terms such as “capitalism”, “socialism”, “markets”, and “big government” being used?

KEY TERMS AND CONCEPTS

comparative economic systems
economic systems
planned economic system
market economic system
mixed economic system
means of production
private ownership
social ownership
state ownership
capitalism
capitalists
private property rights
capital accumulation
wage labor
laissez-faire
commodity
socialism
communism
feudalism
mercantilism
market capitalism
Keynesian economics
stagflation
economic mobility
market socialism
state capitalism
planned socialism
path dependency
negative externalities
ecological footprint
green growth
steady-state economy
de-growth economy

APPENDIX: KEY THINKERS FOR 21ST CENTURY ECONOMIC SYSTEMS

We look here at the work of three thinkers: Alec Nove, Eric Olin Wright, and Elinor Ostrom who propose adjustments to the current economic systems to create systems that are just, sustainable, and equitable. The work of Nove and Wright are associated with market socialism while Ostrom's work is related to the capitalist system.

Alec Nove's Feasible Socialism

Alec Nove was a noted expert on the history of the USSR and on socialist systems more generally.[138] His expertise also covered alternatives to planned socialism, such as the systems that were tried in Yugoslavia, Hungary, and Poland,[139] as well as socialism in developing economies such as Chile.[140] We focus here on Nove's 1991 book *The Economics of Feasible Socialism* which distilled much of his writing into a single work that provides a detailed outline of what Nove regards as feasible socialism. The vision is ambitious but not extravagant, with the system's objectives being to provide:

> *better opportunities for more people to influence their own lives and working conditions, reduce the dangers of unemployment and of civil strife, provide sufficient encouragement to enterprise and innovation and give some attention to the quality of life.* [141]

In Nove's model for feasible socialism, economic activities are coordinated primarily via market, but the state plays an important role in economic planning, regulation, and policy making required for a market-orientated economy. Most goods and services are bought and sold rather than publicly provided, with exceptions for subsidized or free education and health care. He identifies the importance of political democracy in this model to allow people to experiment and learn from errors to make adjustments to the system as needed.[142]

Nove advocates for collective ownership of the means of production as the dominant form of ownership structure, but all forms of property ownership are allowed in his model. He includes centrally controlled and administered state enterprises that are natural monopolies, publicly owned socialized enterprises with workers having full autonomy over management decisions, worker-owned and managed enterprises (such as cooperatives, employee shareholding etc.), as well as limited private enterprises, and individual workers (such as freelance journalists, plumbers, artists).

In describing the limits on private ownership in this model Nove notes, without obvious disapproval, that in some socialist countries within the former USSR, private firms could employ up to 10 people. However, he stops short of nominating a specific number instead arguing the limit best "be decided democratically in the light of circumstances and experience. The limit could be

[138] Nove, 1992b
[139] Nove, 1991.
[140] Nove, 2011.
[141] Nove, 1991.
[142] Nove, 2003: 192.

on numbers employed, or on the value of capital assets, and could be varied by sector. One possible rule might be that above this limit there be a choice, either to convert into a co-operative or to become a socialized enterprise, with proper compensation for the original entrepreneur".[143] (Nove 2003: 198-99). He is more prescriptive about firm owners also being firm workers to avoid the creation of a capitalist class.

Nove goes on to discuss issues of regulating competition, dealing with loss-making firms, distributing profits, wage differentials, self-management, investment and growth, and foreign trade. The key features of his proposed system are:

1. *The predominance of state, social and co-operative property, and the absence of large-scale private ownership of the means of production.*
2. *Conscious planning by an authority responsible to an elected assembly of major investments of structural significance.*
3. *Central management of current microeconomic affairs confined to sectors (and to type of decision) where informational, technological and organizational economies of scale, and the presence of major externalities, render this indispensable.*
4. *A preference for small scale, as a means of maximizing participation and a sense of 'belonging'. Outside centralized or monopolized sectors, and the limited area of private enterprise, management should be responsible to the workforce.*
5. *Current output and distribution of goods and services should whenever possible be determined by negotiations between the parties concerned. There should be explicit recognition that this implies and requires competition, a pre-condition for choice.*
6. *Workers should be free to choose the nature of their employment and given every opportunity to change their specialization. If they prefer it, they could opt for work in co-operatives, or on their own account (for instance in a family farm, workshop, or service agency), or in private enterprise.*
7. *As an unlimited market mechanism would in due course destroy itself, and create intolerable social inequalities, the state would have vital functions in determining income policies, levying taxes (and differential rents), intervening to restrain monopoly power, and generally setting the ground-rules and limits of a competitive market. Some sectors (education, health, etc.) would naturally be exempt from market-type criteria.*
8. *It is recognized that a degree of material inequality is a precondition for avoiding administrative direction of labor, but moral incentives would be encouraged and inequalities consciously limited. Unemployment is an evil to be minimized.*
9. *The distinction between governors and governed, managers and managed, cannot realistically be eliminated, but great care must be taken to devise barriers to abuse of power and the maximum possible democratic consultation.*[144]

For Nove there is no perfect or simple economic system socialist or capitalist. The very solving of old problems may create new problems, which in turn will need to be addressed by intelligent (and evolving) institutional design. The economic systems of the future will be *evotopias* (i.e. evolving economies and societies) not utopias (perfect and essentially static economies and societies). He

[143] Nove, 2003: 198-99.
[144] Nove 1991: 221-22.

emphasizes the desirability of constant reform and vigilance rather than the dreams of a utopian end state "…permanent vigilance, permanent reform, will surely be a must".[145]

Nove argues that contradiction, tensions, and problems are inevitable in any system. However, there are usually better and worse institutional designs and it is worth identifying the differences given the subsequent impact on economic, social, and environmental outcomes. Nove's approach is pro-socialist and also pragmatic as he acknowledges that the socialist system he is proposing may not guarantee that the objectives stated will be met. He points out, however, that:

> *At least the socialism here presented should minimize class struggle, provide the institutional setting for tolerable and tolerant living, at reasonable material standards, with a feasible degree of consumer sovereignty and a wide choice of activities for the citizens.*

Eric Olin Wright's Realistic Utopias

Eric Olin Wright (1947-2019) was a prominent US theorist of socialism. Two of his final books *Envisioning Real Utopias* and *How to be an Anti-Capitalist in the 21st Century*, along with his 2006 Article 'Compass Points' summarize much of his ideas on socialist economic systems. He provides a critique of capitalism, a particular vision of socialism, and a distinctive theory of how transformation towards that vision might be achieved. He is concerned with not repeating the failures of the past nor of pursuing *unrealizable* utopias.

Wright does not offer the level of detail put forward by Nove about the specifics of institutional design, though he acknowledges the problems of previous socialist systems. Instead, his key idea is to follow a socialist 'compass' that shows when changes are moving in a socialist *direction*, without offering any *detailed outline of the final destination*. This quite open-ended approach allows for adaption, experimentation, learning, and evolution. His view is that there is no complete and compelling socialist alternative to capitalism that engenders wide consensus among socialists. Furthermore, even if there was a fully detailed alternative it would also have to continue to evolve over time in response to technological, social, political, and other changes. This seems a prudent position given the problems of both overreach and uncorrected missteps that have often characterized attempts at socialist systems.

Wright argues there are three economic systems: capitalism, statism, and socialism. These models reflect three different types of power: economic power in capitalism, which is exercised via private owned firms in the pursuit of profit; state power in statism, which takes the form of rules and regulations on a those living within the state's territory; and social power in socialism, which is exercised via mobilizing people to engage in voluntary collective behavior. The three forms of power are related to three types of property relationships: economic power by privately owned firms, state power by state owned firms, and social power with property owned by social groups. Under these intellectual structures socialism becomes an 'economic structure within which the means of production are socially owned and the allocation and use of resources for different social purposes is accomplished through the exercise of what can be termed "social power"'.[146] In

[145] Nove, 1991: 224.
[146] Wright, 2011: 121.

Wright's view, socialism is an economic system where social power and social property are *predominant* but not exclusive. Indeed, he notes that a system of complete social power and social property simply is not possible because some level of state power is necessary.

What is significant about Wright's framework is that it supports the idea that any extension of social property and social power over economic power and state power will be usually be making *any* economy *more* socialist. Indeed, pockets of social power and property within capitalism, that are also consistent with socialist emancipatory goals, become 'realized socialist utopias.' Wright provides Wikipedia, and some open-source software, as examples of a realized socialist utopia in that these are socially owned and governed primarily by social power. Particular policies such as unconditional basic income, a tax on private firms to fund the purchase of work shares in firms, or worker-owned cooperatives are also consistent with socialism. Social power can be extended in various ways. It could occur via social ownership of the means production, consumer boycott of a firm that is behaving unethically, or by persuading the state to raise the minimum wages that companies must pay workers, or to provide free health care for low paid workers.

Wright stresses that existing institutions, ideological indoctrination, and concentrations of economic and political power can make change difficult, but also points to our agency to prevail or work around existing structures. He argues that transformation can take three forms:

- Revolution (ruptural change)
- Metamorphosis (interstitial change)
- Symbiosis

He views transformation through revolution to be most viable and desirable when directed at clusters of institutions than the total system as it is often easier to achieve change in a section of a system than at a large-scale. Also, there are risks involved whereby a revolution might inadvertently result in one form of oppression replacing another because the institutions necessary to support the large-scale change cannot be constructed quickly enough. Many socialist countries illustrate this problem where revolutionary socialists soon become oppressive dictators. Obviously, much depends on how one defines revolutionary change. A democratically elected government with strong social democratic leanings such as the Whitlam Labor Government in Australia or the Social Democratic Party in Sweden are not normally seen as being revolutionaries, yet achieved significant change.

Metamorphosis or interstitial change is about building "new forms of social empowerment in the niches, spaces and margins of capitalist society, often where they do not seem to pose any immediate threat to dominant classes and elites. This is the strategy that is most deeply embedded in civil society and often falls below the radar of radical critics of capitalism."[147] Wright argues that the cumulative effect of such changes can make a real difference in people's lives in the here and now, but also carefully lay solid foundations for more transformative change in the future.

Symbiotic transformations are notably deft, though sometimes they are also unintentional. They involve social power solving problems faced by dominant classes and elites. For example,

[147] (Wright 2006: 122)

improvement in the state's ability to meet social needs such as health and education through social power could contribute to stability and productivity of capitalism by producing more skilled and able workers. However, by creating a more educated and healthier workforce, the capacity of social power to push for further changes is strengthened. Key to symbiotic transformations are differences between short- and long-term effects of institutional changes. A change might initially favor elites (and thus elicit little opposition from elites) but in the long term it shifts the balance of power to the social majority.

Other socialist thinkers like Marx were adamant that capitalism's ongoing existence was an impossibility. By contrast, Wright offers a mix of agnosticism that is combined with a constructive engagement with different possible future states of the world. For example, he is open to the possibility that "a radical democratic egalitarian system is impossible" but he is certain that it is possible to extinguish much more of capitalism's worst negative effects than is currently the case. His summary view is that:

> *"The best we can do, then, is treat the struggle to move forward on the pathways of social empowerment as an experimental process in which we continually test and retest the limits of possibility and try, as best we can, to create new institutions which will expand those limits themselves. In doing so we not only envision real utopias but contribute to making utopias real."* [148]

Elinor Ostrom and The Commons

Elinor Ostrom was the first woman to win the Nobel Prize in economics partly for her work on how local communities manage 'commons' which are commonly held resources such as shared grazing areas, forests and fishing areas. Because excluding people from such resources can be difficult, there always exists the potential for these types of commonly held resources to be overused, leading to their destruction. This is often referred to as the 'Tragedy of the Commons'.[149] Traditionally it was thought the best way to avoid a tragedy of the commons was to privatize it, put it under government control, or implement policies such as user fees or taxes and quotas. However, through field work, combined with new concepts and theory, Ostrom demonstrated that there was a third way: local communities could often manage the resource.[150] Out of her work came eight principles to guide the management of common resources which are listed below:

1) *Clearly Defined Boundaries*. Members of the group should know who they are, have a strong sense of group identity, and know the rights and obligations of membership.
2) *Proportional equivalence between benefits and costs*. Having some members do all the work while others get the benefits is unsustainable over the long term. Everyone must do their fair share and those who go beyond the call of duty must be appropriately recognized. When leaders are accorded special privileges, it should be because they have special responsibilities for which they are held accountable. Unfair inequality poisons collective efforts.

[148] (Olin-Wright 2011: 373).
[149] Hardin, 1968.
[150] Ostrom, 2010.

3) *Collective-choice arrangements*. Group members must be able to create their own rules and make their own decisions by consensus. People hate being bossed around but will work hard to do what *we* want, not what *they* want. In addition, the best decisions often require knowledge of local circumstances that *we* have and *they* lack, making consensus decision-making doubly important.
4) *Monitoring*. Cooperation must always be *guarded*. Even when most members of a group are well meaning, the temptation to do less than one's share is always present and a few individuals might try to actively game the system. If lapses and transgressions can't be detected, the group enterprise is unlikely to succeed.
5) *Graduated sanctions*. Friendly gentle reminders are usually sufficient to keep people in solid citizen mode, but tougher measures such as punishment and exclusion must be held in reserve.
6) *Fast and fair conflict resolution*. Conflicts are sure to arise and must be resolved quickly in a manner that is regarded as fair by all parties. This typically involves a hearing in which respected members of the group, who can be expected to be impartial, make an equitable decision.
7) *Local autonomy*. When a group is nested within a larger society, such as a farmer's association dealing with the state government or a neighbourhood group dealing with a city, the group must be given enough authority to create its own social organization and make its own decisions, as outlined in 1-6.
8) *Polycentric governance*. In large societies that consist of many groups, relationships among groups must embody the same principles as relationships among individuals within groups.[151]

A 'commons' is not just limited to certain types of environmental resources, but to any resource that is subject to social decision-making about how it is used and maintained. For example, Wikipedia and much open-source software is a digital common or knowledge common, there can be urban commons like community vegetable gardens. Ostrom's eight principles have since been generalised into an evolutionary framework that can supply design principles that apply to various groups including NGOs, government departments, universities and other organisations.[152] There also seems to be obvious scope to use the type of principles first developed by Ostrom to better guide the workings of communes and worker owned/managed firms.

Ostrom's work is consistent with other evidence from the social sciences that one of the most distinctive aspects of human beings, and a key foundation for our proliferation as a species, is that we are notably cooperative in nature.[153] The degree of cooperation is obviously sensitive to the institutional context, and of course groups can cooperate to elicit bad outcomes upon other groups, but the key point to understand is that simply prizing competition as an organizing principle for society is likely to undermine success.

---

[151] Wilson, 2016.
[152] Wilson, Ostrom, and Cox, 2013.
[153] Bowles and Gintis 2013a

REFERENCES

Allen, Robert C. 2001, "The Rise and Decline of the Soviet Economy," *Canadian Journal of Economics*, Vol. 34, No. 4, p. 859-881.

Bandelj, N. and M. C. Mahutga. (2010). "How Socio-Economic Change Shapes Income Inequality in Post-Socialist Europe." *Social Forces*, Vol. 88. No. 5, pp. 2133-2161, July 2010.

Barrett, Eamon. 2020. “The Mystery of China’s Unemployment Rate”, Fortune, May 24, 2020. https://fortune.com/2020/05/24/china-unemployment-rate-2/

Bergson, Abram et al., “Soviet Economic Performance and Reform: Some Problems of Analysis and Prognosis (A Round-Table Discussion),” *Slavic Review* 25, no. 2 (June 1966).

Blanchette, Jude. 2021. “Confronting the challenge of Chinese State Capitalism,” Center for Strategic and International Studies. https://www.csis.org/analysis/confronting-challenge-chinese-state-capitalism

Bowles, Samuel, Richard Edwards, and Frank Roosevelt. 2015. *Understanding Capitalism: Competition, Command, and Change.* Third Edition, Oxford University Press.

Bozic, Ivana. 2018. “5 Facts about Workers’ Rights in China.” The Borgen Project. https://borgenproject.org/facts-about-workers-rights-in-china/

Breth and Ward, 1982.*Socialism: The Options*, Hargreen Publishing, Melbourne.

Center for Sustainable Systems. 2020. “U.S. Environmental Footprint Factsheet.” University of Michigan, Publication Number CSS08-08, September 2020.

China Power Team. 2016. “Is Air Quality in China a Social Problem?” Center for Strategic and International Studies. Updated February 26, 2021. https://chinapower.csis.org/air-quality/

China Power Team. 2017. “How Will the Belt and Road Initiative Advance China’s Interests?” *Center for Strategic and International Studies*. Updated August 26, 2020. May 8, 2017. https://chinapower.csis.org/china-belt-and-road-initiative/

China Power Team. 2020. “Rise of Chinese Companies.” Center for Strategic and International Studies. https://csis-ilab.github.io/cpower-viz/china-brands/global-top-brands/dist/

Colander, D. C. (2016). Economic Institutions. In *Microeconomics* (10th ed., p. 519). McGraw-Hill Education.

Corak, Miles. 2016. “Economic Mobility” in The Poverty and Inequality Report 2016. The Stanford Center of Poverty and Inequality

Credit Suisse, Global Wealth Report 2019. Research Institute, October 2019. https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html

Daly, Herman. 1993. “The Steady-State Economy: Toward a Political Economy of Biophysical Equilibrium and Moral Growth,” Chapter 19 of Valuing the Earth, p. 330. Second Edition (Herman Daly and Kenneth Townsend, eds.). MIT Press, Cambridge, MA.

Dominguez, Jorge I. 2015. “What you Might Not Know about the Cuban Economy.” International Business, Harvard Business Review. https://hbr.org/2015/08/what-you-might-not-know-about-the-cuban-economy

Echols III, J.M. (1981). Does Socialism Mean Greater Equality? A Comparison of East and West Along Several Major Dimensions. *American Journal of Political Science*, 25(1), p. 1-31.

European Commission, 2021. A European Green Deal, https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en.

Feinberg, Richard E. 2018. "Cuba's Economy After Raul Castro: A Tale of Three Worlds'" Brookings Institute. https://www.brookings.edu/wp-content/uploads/2018/02/fp_20180220_cuba_economy.pdf

Feshbach, Murray. 1980. "Health in Russia: Statistics and Reality," *Wall Street Journal*, Sept. 14, 1981.

Finlayson, Caitlin. 2020. “Economics and Development in the Soviet Union”. https://socialsci.libretexts.org/@go/page/21064

Gardner, 1998. *Comparative Economic Systems*, Dryden Press, Fort Worth

Gardner, Matthew, and Steve Wamhoff. 2021. 55 Corporations Paid $0 in Federal Taxes on 2020 Profits. Institute on Taxation and Economic Policy. https://itep.org/55-profitable-corporations-zero-corporate-tax/

Grandoni, Dino, and Scott Clement. 2019. “Americans Like Green New Deal’s Goals, but They Reject Paying Trillions to Reach Them.” *The Washington Post*, November 27, 2019.

Greaker, M, R. Golombek, M. Hoel, 2019, Global impact of national climate policy in the Nordic countries, Nordic Economic Policy Review, 157-202, DOI: 10.6027/Nord2019-012.
https://www.frisch.uio.no/publikasjoner/pdf/2019/Postprint/NEPR_GolombekEtAl.24jan19.pdf

Hall, Joshua and Yang Zhou. 2017. The Sinuous Dragon: Economic Freedom and Economic Growth in China. West Virginia University Department of Economics, Working Paper No. 17. http://busecon.wvu.edu/Phd_Economics/Pdf/17-12.Pdf

Helliwell, John F., Richard Layard, Jeffrey D. Sachs, Jan-Emmanuel De Neve, Lara B. Aknin, and Shun Wang. 2021. World Happiness Report 2021.

Hill, Peter J. (1992) “Environmental Problems under Socialism,” *Cato Journal*, Vol. 12, No. 2.

Hodgson, Geoffrey H. 2016. “How Capitalism Actually Generates More Inequality.” Evonomics. https://evonomics.com/how-capitalism-actually-generates-more-inequality/

Holz, Carsten. 2018. The Unfinished Business of State-Owned Enterprise Reform in the People’s Republic of China. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3392986

Howard, M. and J. King (2001). "Where Marx was Right: Towards A More Secure Foundation for Heterodox Economics " *Cambridge Journal of Economics* 25(November): pp. 785-807.

Human Rights Foundation. 2020. Cuba: 60 Years of Revolution, 60 Years of Oppression. https://hrf.org/cuba-60-years-of-revolution-60-years-of-oppression/

Ighobor, Kingsley. 2018. "Closing Africa's Wealth Gap," *Africa Renewal*, March 2018. https://www.un.org/africarenewal/magazine/december-2017-march-2018/closing-africa%E2%80%99s-wealth-gap

International Labour Organization. 2018. Global Wage Report 2018/19: What Lies Behind Gender Pay Gaps. International Labour Office, Geneva.

International Monetary Fund, World Economic Outlook database, April 2021

Jain-Chandra, Sonali, Niny Khor, Rui Mano, Johanna Schauer, Philippe Wingender and Juzhong Zhuang. 2018. Inequality in China – Trends, Drivers and Policy Remedies. IMF Working Paper 18/127.

Johnston, Matthew. 2020. Why the USSR collapsed economically, *Investopedia*, October 3, 2020. https://www.investopedia.com/articles/investing/021716/why-ussr-collapsed-economically.asp#citation-2

Johnston, Matthew and Michael J Boyle. 2021. Why the USSR Collapsed Economically. https://www.investopedia.com/articles/investing/021716/why-ussr-collapsed-economically.asp#citation-2

Kallis, Giorgos, Vasilis Kostakis, Steffen Lange, Barbara Muraca, Susan Paulson, and Matthias Schmelzer. 2018. "Research on Degrowth." *Annual Review of Environment and Resources*, 43:291-316.

Kohler, Heinz. 1989. *Comparative Economics Systems*, Scott Foresman and Company, Northbrook.

Kowalski, Przemyslaw, Max Büge, Monika Sztajerowska, and Matias Egeland. 2013. "State-Owned Enterprises: Trade Effects and Policy Implications." OECD Trade and Policy Papers, No. 147. April 2013.

Krugman, 1994. The Myth of Asia's Miracle. *Foreign Affairs*. Vol 73. No. 6 pp.62-78

Landes, David. 2008. "Poll: Swedes Prefer Paying High Taxes." The Local SE, April 10, 2008. https://www.thelocal.se/20080410/11016/

Lin, David, Leopold Wambersie, and Mathis Wackernagel. 2021. "Estimating the Date of Earth Overshoot Day 2021." Global Footprint Network, May 2021.

Livingston, Gretchen, and Deja Thomas. 2019. "Among 41 Countries, Only U.S. Lacks Paid Parental Leave." Pew Research Center, FactTank, December 16, 2019

Livingston, Scott. 2020. The Chinese Communist Party Targets the Private Sector", Center for Strategic and International Studies. October 8. https://www.csis.org/analysis/chinese-communist-party-targets-private-sector

Magdoff, Fred, and John Bellamy Foster. 2011. *What every environmentalist needs to know about capitalism: a citizen's guide to capitalism and the environment*. Monthly Review Press.

Mandell, Lewis. 2014. Capitalism in Cuba? It's closer than the U.S. may think. PBS Newshour. https://www.pbs.org/newshour/nation/capitalism-in-cuba-its-closer-than-the-u-s-may-think

Mazat, Numa, and F.J. Serrano. 2012. "An Analysis of the Soviet economic growth from the 1950's to the collapse of USSR.

McAuley, Alastair. 1998. "Social Policy and the Labor Market in Russia During Transition" in *Transforming Post-Communist Political Economies.* Ed.Joan M. Nelson, Charles Tilly, and Lee Walker p. 223-244.

McKay, Andrew. 2020. "Scandinavian 'Socialism': The Truth of the Nordic Model." Life in Norway, August 3, 2020. https://www.lifeinnorway.net/scandinavian-socialism/.

Mitchell, Tom and Xinning Liu. 2020. "Chinese Communist party asserts greater control over private enterprise", The Financial Times, September 28, 2020

Moffat, Mike. 2020. "A Mixed Economy: The Role of the Market". ThoughtCo. January 27, 2020. https://www.thoughtco.com/overview-of-a-mixed-economy-1147547

Narayan, Ambar, and Roy Van der Weide. 2018. Fair Progress? Economic Mobility across Generations around the World. World Bank Group. Equity and Development Series.

Naughton, Barry. 2008. "A Political Economy of China's Economic Transition." In China's Great Transformation, ed. Lauren Brandt and Thomas G.Rawski, pp. 91-135. Cambridge University Press.

Nordhaus, William. 2015. "Climate Clubs: Overcoming Free-Riding in International Climate Policy," *American Economic Review,* I05(4): 1339-1370.

Novokmet, Filip, Thomas Piketty, and Gabriel Zucman.2017. "From Soviets to Oligarchs: Inequality and Property in Russia, 1905-2016". VoxEU – Center for Economic and Policy Research. https://voxeu.org/article/inequality-and-property-russia-1905-2016

Nugent, Ciara. 2021. Cuba is Opening Up Its Economy: But Don't Call It a Shift to Capitalism Just Yet." TIme, February 9, 2021. https://time.com/5937706/cuba-private-business/

Olson, Stephen. 2020. "Are Private Chinese Companies Really Private?" The Diplomat, September 30. https://thediplomat.com/2020/09/are-private-chinese-companies-really-private/

Organization for Economic Cooperation and Development (OECD). 2015. "How's Life? 2015: Measuring Well-Being." Paris

Organization for Economic Cooperation and Development (OECD). 2020. Revenue Statistics 2020.

Ofer, Gur. 1988. Soviet Economic Growth: 1928-1985, The Rnad/UCLA Center for The Study of SOviet International Behavior.

Ofer, Gur 2004. 'Economic Growth', Soviet in James K Millar (ed.) *Encyclopedia of Russian History*, MacMillan, New York.

Ollman, Bertell 1977. 'Marx's Vision of communism a reconstruction.' *Critique* Vol 8, No 1. pp.4-41.

Oxfam. 2021. "The Inequality Virus". January 24, 2021. https://www.oxfamamerica.org/explore/research-publications/inequality-virus/

Perez, Ricardo Torres. 2021. In Cuba, it's the end of an era. Economy and Ecology. https://www.ips-journal.eu/topics/economy-and-ecology/in-cuba-its-the-end-of-an-era-5129/

Pew Research Center. "70% of Americans Say U.S. Economic System Unfairly Favors the Powerful". FactTank, January 9, 2020. https://www.pewresearch.org/fact-tank/2020/01/09/70-of-americans-say-u-s-economic-system-unfairly-favors-the-powerful/

Piketty, Thomas. 2014. *Capital in the 21st Century*, Harvard University Press, Boston.

Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. 2018. "Distributional National Accounts: Methods and Estimates for the United States". *The Quarterly Journal of Economics* 133.2, p. 553-609.

Piketty, Thomas, Li Yang, and Gabriel Zucman. 2019. Income inequality is growing fast in China and making it look more like the US", London School of Economics. https://blogs.lse.ac.uk/businessreview/2019/04/01/income-inequality-is-growing-fast-in-china-and-making-it-look-more-like-the-us/

Ranaldi, M and B Milanovic (2020), "Capitalist Systems and Income Inequality", Stone Center Working Paper Series 25. https://voxeu.org/article/capitalist-systems-and-income-inequality

Rand, 1966. *Capitalism: the Unknown Ideal*. New American Library, New York.

Regan. Shawn. (2019) "Price Not, Conserve Not: Markets are Better for the Environment", in Against Socialism, The Editors of National Review, Post Hill Press.

Reuters Staff. 2018. "U.S. Trade Embargo has Cost Cuba $130 billion, U.N. says." *Reuters*, https://www.reuters.com/article/us-cuba-economy-un/u-s-trade-embargo-has-cost-cuba-130-billion-u-n-says-idUSKBN1IA00T

Rich, Spencer. 1980. "Infant Mortality Soars in Russia, U.S. Study FInds," *Washington Post*, June 26, 1980.

Ricon, Jose Luis. 2017. "The Soviet Union: Poverty and Inequality" *Nintil*, available at: https://nintil.com/the-soviet-union-poverty-and-inequality

Rutkowski, Ryan. 2013. A Shrinking Leviathan: State Employment in China Looms Smaller Than Expected. Peterson Institute for International Economics. https://www.piie.com/blogs/china-economic-watch/shrinking-leviathan-state-employment-china-looms-smaller-expected

Saad, Lydia. 2019. “Socialism as Popular as Capitalism Among Young Adults in the U.S.”. November 15, 2019. https://news.gallup.com/poll/268766/socialism-popular-capitalism-among-young-adults.aspx.

Sanandaji, Nima. 2015. “Trust Not Taxes Have Made Sweden a Success.” The Local SE, July 12, 2015. https://www.thelocal.se/20150711/trust-not-high-taxes-have-made-sweden-a-success-opinion/

Satter, David. 1982. "Soviet Death Rates Rising, Report Says; Tren is Unique in the Developed World," *Wall Street Journal,* Oct 18, 1982.

Schulte, Brigid. 2019. “Why the US Is One of Only a Few Countries with No Paid Time Off”. Vox, December 24, 2019.

Schweinberger, Albert. 2014. “State Capitalism, Entrepreneurship, and networks: China’s Rise to a Superpower.” *Journal of Economic Issues,* 48:1, 169-180.

Seth, Shobhit and Michael J Boyle. 2021. Socialist Market Economies: How China, Cuba, and North Korea Work. https://www.investopedia.com/articles/investing/081514/socialist-economies-how-china-cuba-and-north-korea-work.asp

Shierholz, Heidi. 2019. “Working People Have Been Thwarted in Their Efforts to Bargain for Better Wages by Attacks on Unions.” *Economic Policy Institute. https://www.epi.org/publication/labor-day-2019-collective-bargaining/*

Shimeles, Abebe. 2017. "Why Is Inequality High in Africa?" *Journal of African Economies,* Vol 27, Issue 1, p. 108-126.

Simms, Andrew, Anna Coote, and Jane Franklin. 2010. “21 Hours: The Case for a Shorter Working Week.” New Economics Foundation, February 13, 2010. https://neweconomics.org/2010/02/21-hours.

Slemrod, Joel. 1995. “What Do Cross-Country Studies Teach about Government Involvement, Prosperity, and Economic Growth?” Brookings Papers on Economic Activity.

Smith, Adam. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. W. Strahan and T. Cadell.

Smith, Richard. 2019 “An ecosocialist path to limiting global temperature rise to 1.5°C.” real-world economics review, issue no. 87, 19 March, pp. 149-180, http://www.paecon.net/PAEReview/issue87/Smith87.pdf

Spadoni, Paolo. 2021. "Coping WIth Systematic Problems and a Triple Punch: The Cuban Economy at the Start of 2021", *Cuba Capacity Building Project*, Columbia Law School. https://horizontecubano.law.columbia.edu/news/coping-systemic-problems-and-triple-punch-cuban-economy-start-2021

Stern, Scott, Petra Krylova, and Jaromir Harmacek. 2020. 2020 Social Progress Index: Methodological Summary. Washington, DC.

Stiglitz, J. E. (2012). *The price of inequality*. London, Allen Lane.The Global Commission on the Economy and Climate. 2018. Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times. The New Climate Economy. August 2018.

The Heritage Foundation, https://www.heritage.org/index/about

Tikkanen, Roosa, and Melinda K. Abrams. 2020. “U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes?”. The Commonwealth Fund, Issue Brief, January 30, 2020.

Trades Union Congress. 2020. “Amazon Warehouse Worker Takes Eight Weeks to Earn What Bezos Makes in a Second, says TUC.” https://www.tuc.org.uk/news/amazon-warehouse-worker-takes-eight-weeks-earn-what-bezos-makes-second-says-tuc

Trucost. 2013. Natural Capital at Risk: The Top 100 Externalities of Business.” April 2013.

Trumbull, William N. 2017. The Cuban Economy, Blog, College of Charleston. https://cubaonthehorizon.cofc.edu/the-cuban-economy/

Uvalić, Milica. 2018. "The Rise and Fall of Market Socialism in Yugoslavia." DOC Research Institute, March 27, 2018. https://doc-research.org/2018/03/rise-fall-market-socialism-yugoslavia/.

UNCTAD. 2019. "UN Calls for Bold Action to Finance a Global Green New Deal and Meet the SDGs." Press release, September 25, 2019

U.S. Central Intelligence Agency, CIA World Factbook.

Vadén, T., V. Lähde, A. Majava, P. Järvensivu, T. Toivanen, E. Hakala, and J.T. Eronen. 2020. "Decoupling for Ecological Sustainability: A Categorisation and Review of Research Literature." *Environmental Science and Policy*, 112:236-244.

Walker, Shaun. 2019. "'This is the golden age': eastern Europe's extraordinary 20-year revival," *The Guardian.* October 26. https://epi.yale.edu/epi-results/2020/component/epi.

Ward, 1992. *The Soviet Struggle for Socialism*, VCTA Publishing, Collingwood.

Ward, James D., Paul C. Sutton, Adrian D. Werner, Robert Costanza, Steve H. Mohr, and Craig T. Simmons. 2016. "Is Decoupling GDP Growth from Environmental Impact Possible?" *PLOS One*, 11(10), doi:10.1371/journal.pone.0164733.

Wendling, Z. A., J.W. Emerson, A. de Sherbinin, D.C. Esty, et al. 2020. 2020 Environmental Performance Index. Yale Center for Environmental Law & Policy Index. Yale Center for Environmental Law & Policy.

Woo, Wing Thye and Jeffrey D. Sachs. 1997. Understanding China's Economic Performance. National Bureau of Economic Research, Working Paper 5935.

World Bank, Press Release. October 24, 2019. Doing Business 2020: China's Strong Reform Agenda Places it in the Top 10 Improver List for the Second Consecutive Year.

World Economic Forum. 2020. The Global Social Mobility Report. Insight Report, January 2020.

Wright, Erik Olin. 1997. *Class Counts: Comparative Studies in Class Analysis.* Cambridge University Press, p. 99. Table 3.2.

Xi, Li, Xuewen Liu, and Yong Wang. 2015. "A Model of China's State Capitalism" http://dx.doi.org/10.2139/ssrn.2061521.

Xu, Chenggang. 2021. Demystifying China's Economic Miracle. Institute for New Economic Thinking, video resources. https://www.ineteconomics.org/perspectives/videos/demystifying-chinas-economic-miracle.

Yang, Liu. 2014. The Chinese Labor Market: High Unemployment Coexisting with a Labor Shortage", Center for Economic and Policy Research. https://voxeu.org/article/china-s-unemployment-and-labour-shortage.

Zhu, Xiaodong. 2012. "Understanding China's Growth: Past, Present, and Future" *Journal of Economic Perspectives, Vol. 26, No. 4, p. 103-124*