

# REALITIES OF SOCIALISM

RELYING ON EXAMPLES FROM  
SWEDEN AND DENMARK

Classroom Lesson Plans



Created by  
The Foundation for Teaching  
Economics in Partnership  
with the Fraser Institute

# Overview

In partnership with Foundation for Teaching Economics, in the lesson plan set, Realities of Socialism: Relying on Examples from Sweden and Denmark, you will be able to identify the major themes and shortcomings of socialism, using examples from Sweden and Denmark. These lessons will cover the questions of what socialism is, how it's understood today, and its impacts in the past. These lessons include resources such as slide decks, activities, extended learning assignments, and more to assist in the classroom, whether it be in person or virtual. Lesson content can easily be integrated with economics courses, business courses, social studies courses, and more. These lessons are catered to a Canadian, high-school level curriculum.

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# Lesson 4: The Mirage of Swedish Socialism

## Introduction

For half a century, Sweden has been associated with socialism. When asked to give an example of a successful socialist country, advocates of socialism often mention Sweden. This image of Sweden became fashionable in the 1970s, but it is outdated. In this lesson student learn how before their experiment with socialism in the 1970s and 80s, Sweden was one of the most open economies in the world. Since socialism, they have returned to a very open economy with a large welfare state paid for by the population at large.

## Materials

Lesson 4 slide deck:

[https://docs.google.com/presentation/d/1-nYvgrnEEqGdKl6y\\_pd-oi99-cKjxnrs/edit?usp=sharing&ouid=116660462288476410506&rtpof=true&sd=true](https://docs.google.com/presentation/d/1-nYvgrnEEqGdKl6y_pd-oi99-cKjxnrs/edit?usp=sharing&ouid=116660462288476410506&rtpof=true&sd=true)

Optional: Lesson 4 **Background Information**. 1 copy per student (if assigned as student reading)

## Key Terms

Budget Deficit	The situation where expenditures exceed tax revenues.
Budget Surplus	The situations where tax revenues exceed expenditures.
Inflation	A general increase in the price level.
Nationalization	The process of taking private property and transferring ownership to the state.
Public Debt	The total amount owed by the national government to those from whom it has borrowed to finance the accumulated difference between annual budget deficits and annual budget surpluses.
Socialism	A society in which the state controls resources and makes decisions about production and equitable distribution.
Taxes	Payments that individuals and businesses are required to make to local, state, or national governments.

## Objectives

Students will be able to

- Identify examples of how entrepreneurship was negatively affected by Sweden's move toward socialism.
- Describe the relationship between the move to socialism and increased budget deficits.
- Explain how a transition back to markets alleviated the Swedish economic crisis.

# Time Required

45 minutes

## Learning Objectives

### *Money and Inflation*

Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. The amount of money in the economy affects the overall price level. Inflation is an increase in the overall price level that reduces the value of money.

- In the long-run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.

### *Entrepreneurship*

Entrepreneurs take on the calculated risk of starting new businesses, either by embarking on new ventures similar to existing ones or by introducing new innovations. Entrepreneurial innovation is an important source of economic growth.

- Entrepreneurial decisions affect job opportunities.
- Entrepreneurial decisions are influenced by tax, regulatory, education, and research support policies.
- Productivity and efficiency gains that result from innovative practices of entrepreneurs foster long term economic growth.

### *Role of Government and Market Failure*

There is an economic role for government in a market economy whenever the benefits of a government policy outweighs its costs. Governments often provide for national defence, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on people's incomes.

- Governments often redistribute income directly when individuals or interest groups are not satisfied with the income distribution resulting from markets; governments also redistribute income indirectly as side-effects of other government actions that affect prices or output levels for various goods and services.

## Procedures

- Prepare by reading the **Background Information** included in the next section of this lesson.
- Use the **Lesson 4 slide deck** to teach the key ideas about the socialism experiment in Sweden.
- Alternate Activity: Assign the **Background Information** as a student reading.

## Background Information

*The following background information is quoted directly from the Fraser Institute publications of “The Road to Socialism and Back: An Economic History of Poland, 1939-2019” published as a part of the Realities of Socialism materials. For a complete copy of the readings please go to [RealitiesofSocialism.org](https://RealitiesofSocialism.org).*

### Introduction

Much of what the outside world thinks it knows about the Swedish model is wrong. When American politicians like Senator Bernie Sanders and Representative Alexandra Ocasio-Cortez are asked to name an example of a successful socialist economy, they often point to Sweden.

But Sweden only began to experiment with socialist ideas after it was already one of the world’s most successful societies. Its success was based on a free market model developed after an episode of radical liberalization between 1840 and 1870 and the rapid growth it unleashed. As early as 1950 Sweden was the fourth richest economy in the world, and it was also one of the freest, with public spending below 20 percent of GDP. Government was smaller than in other Western European countries and taxes were slightly lower than in the United States.

Only in the 1970s and 1980s did Sweden expand government dramatically with more spending, taxation, and regulation. It is reasonable to say that during this time Sweden was moving towards socialism. But that was an aberration in Sweden’s history, an aberration that was not associated with success. On the contrary, this was the one period in modern economic history when Sweden lagged behind other industrialized countries.

In the early 1990s Sweden’s political parties decided, often in consensus, to return elements of the older capitalist model. They deregulated the economy, reduced taxes, shrank government, and introduced a set of fiscal rules that has reduced public debt substantially.

At the same time Sweden became a pioneer in privatizing welfare services, making it possible for private providers to compete with public ones on similar terms and funding, and giving citizens the freedom to choose between different providers of elder care, health care, preschool, and education, including for-profit businesses. Sweden learned in the 1970s that a universal welfare state cannot rely on tax revenue from small groups of high-income households but has to take more in income tax from low- and middle-income groups; it also relies on revenues from a proportional value-added tax.

### From Rags To Riches

On June 4, 1857, Sweden’s minister of finance, Johan August Gripenstedt, surprised the other members of parliament with a broad, visionary speech about how Sweden could become a wealthy country. For his audience, this vision was a bit much. Sweden was one of Western Europe’s poorest countries, with a GDP per capita a third lower than Denmark’s and less than 40 percent of Britain’s.

### Poor but Free

Sweden was a very poor country of free farms, but it also had great potential as Gripenstedt had suggested. That potential lay not just in its vast forests and iron ore. It was also present in its people and its peculiar history.

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What sets Sweden apart from almost all other European countries is that it never had a feudal system. Dense woods in a vast, scarcely populated country made it difficult for mounted knights to defeat peasant armies or guerillas.

This meant that the Swedish state did not face much resistance from strong regional elites, powerful aristocrats, or independent cities. Swedish kings could unify the country under national law, one administrative system, and one religion, in a way that was much more difficult on the European continent.

The economic historian Mauricio Rojas has argued that in Swedish farming communities we find an explanation for a peculiar Swedish paradox: Proud, self-reliant individualists who are also conflict averse, consensus-oriented, and ready to submit to the collective. In addition, farmers were remarkably literate. Although Sweden introduced mandatory elementary education in 1842, Swedish literacy rates were around 90% as early as 1800. Egil Johansson, the pioneer of Swedish literacy studies, writes: “It must be regarded as an established fact that general reading was achieved without formal school attendance.” (Johansson, 2009: 55f).

It was this paradox, identified by Rojas that caused Sweden to be a country of extremes. It liberalized the economy more than other countries did in the mid-1800s, socialized more than others in the mid-1900s, and then reversed course and liberalized again faster than others in the late 20th century.

### **The Reform Period (1840-1870)**

Sweden was a very unfree society in the early 1800s. It had a tightly controlled mercantilist economy where most business activities were overseen and regulated by the central government. Just a few privileged banks were allowed, and interest rates were controlled by the government. Women had no right to own or inherit property or do business. Property rights were weak overall. Farmers could own their land, but they were not allowed to divide it or sell it freely.

Between roughly 1840 and 1870 Sweden experienced a peaceful liberal revolution. Secure property rights were established, including the freedom to divide, transfer, buy, and sell land. The regulations that had stopped the development of the timber and iron industries were lifted.

### **The Liberal Era 1870-1970**

The reforms—protected property rights, freedom to start businesses, and freedom to trade—gave Sweden 100 years of growth at a rate that no other European country equaled, just as Gripenstedt had predicted. Indeed, the only country in the developed world that exceeded Sweden’s 8.5-fold increase in per capita income between 1870 and 1970 was Japan, though only by a photo finish.

The liberal era brought significant changes to the economy. The first noticeable change was that this country rich in natural resources began to put its resource wealth to better use and develop new technologies to extract and process them. In addition, craftsmen, liberated from the old guild system, began competing by using new methods, offering new goods and designs, and at lower prices. The old trades were mechanized, and factories started mass-producing goods that even the poor could afford. The new financial system channeled capital to the most efficient producers, and Swedes used export revenue and profits to invest in new machinery and methods. Sweden was starting to transform itself from an agricultural economy into an urbanized, industrial economy with a growing working class.

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Until 1930, public spending did not surpass 10 percent of GDP. In a small economy dependent on imports and exports with competitive international companies, both capital and labour saw the importance of an open economy with limited government. This model has produced impressive social and economic outcomes.

In a highly influential 1926 book the young social democrat Nils Karleby urged fellow socialists to abandon their obsession with ownership. Socialism should be a guiding principle not merely an organizational form. In Karleby's view, socialists should use the power of the market—competition, prices, and the profit motive—to create as much wealth as possible but focus on redistributing the rewards through taxation and a combination of government-provided social services and income support programs.

Slowly but steadily the government took on new powers and responsibilities, but at its heart it remained a limited form of redistribution on top of a free market economy. In 1950, Sweden was the third freest economy in the developed western world, after the United States and Switzerland. In other words, Sweden was one of the richest, healthiest, and most successful societies the world had ever seen—and that was before it was a generous welfare state and had started experimenting with socialist ideas. But that very sense of unequaled wealth and almost automatic progress is key to understanding what came next. After 100 years of growth, Swedes started to take their good economy for granted and forgot where it came from.

### **The Rise and Decline of Socialism**

Sweden never became a textbook socialist country, with the means of production in government hands. However, the whole climate of ideas in Sweden was infused by socialist ideas in the 1970s and '80s, ideas both inherent in the social democratic project and some from external forces. This led to the adoption of a system of tight regulations, price controls, and tax increases that rapidly centralized the economy. Decision-making that had previously been decentralized to individuals and businesses was now taken over by politicians and government authorities, and the consequences—good or bad—were born by taxpayers collectively rather than by those who had made the decisions.

### **The Socialist Era: 1970-1990**

The government policy, influenced by Nils Karleby, was always to redistribute as much as the economy could afford, and most of the debate centered on different opinions about how much redistribution the economy could bear and how fast. In the 1960s Sweden was on top of the world. The country had globally admired companies, an educated work force, and an open and competitive economy that delivered high growth, decent profits, and higher wages. Many Swedish citizens concluded that now the economy could afford a very generous redistribution policy.

Implementing this redistributive policy led to a dramatic growth in government spending and regulation of the economy. In just 20 years, public spending more than doubled, from 25.4 to 58.5 percent of the GDP between 1965 and 1985. This came primarily from a rapid expansion of social services like health care, elderly care, and childcare, and transfers like pensions and housing allowances. The marginal tax rate for blue collar workers increased from less than 40 percent in 1960 to more than 60 percent in 1980, and for white collar workers to above 70 percent. The payroll tax rose from 12.5 percent in 1970 to 36.7 percent in 1979. Capital gains were taxed as income, at progressive rates.

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At the same time, the Swedish government raised the cost of doing business. In 1970, Sweden introduced an opaque system of price controls, which forced businesses to negotiate price changes with business groups and government authorities. This was followed by abandoning the traditional model of determining labour agreements through negotiations between businesses and trade unions. Instead, the government directly regulated labour protection, greatly reducing the flexibility of companies to manage their workforce.

It is not difficult to understand why foreigners were fascinated by the Swedish experiment of the 1970s. Here was a small country that experimented with socialist ideas, at least in terms of extensive regulation of businesses and very high taxes, and yet it seemed to be oddly successful. Those who were learning about Sweden for the first time confused the long-lasting preconditions that made the experiment possible with the outcome of it; they failed to see that this experiment was, in fact, starting to erode some of those preconditions and had run into problems almost from the start.

The oil crisis of 1973-74 revealed a productivity crisis throughout the western world. In Sweden, self-assured politicians, responded by trying to bridge the recession with a massive stimulus program that supported both extra demand and production. In this overheated climate, wage and payroll tax increases raised labour costs by 40 percent in just two years, 1975 and 1976. The result was a cost crisis that almost destroyed Swedish manufacturing and exports. Just as the rest of western Europe rebounded from the crisis and the export giant Sweden should have prospered, it entered a deep recession. From 1974 to 1977, steel production in the country decreased by 30 percent, shipbuilding by half, and much of the textile and mining industries collapsed.

In response to this recession the government doled out massive corporate subsidies to keep workers employed. Critics talked about the government's "industrial emergency room," where failed businesses were given a few extra years of life at an enormous cost to taxpayers. In 1977, the ship-building industry was in effect nationalized (and phased out) and in 1978 much of the steel industry was taken over by the government. While under the Swedish government, the steel industry only returned modest profits and was eventual privatization after almost half of the workforce was let go and most of the plants and product lines were eliminated.

During this period fewer companies were created in Sweden and the ones already in existence did not expand. In fact, by 1990, the Swedish economy had not created a single net job in the private sector since 1950, even though the population had increased by one and a half million people. All employment creation took place in the public sector.

Sweden did become more equal during this period. The income Gini coefficient declined from 0.26 in 1967 to around 0.2-0.23 in the 1980s. This was probably one of the lowest levels of inequality in the world and many outside observers still hail it as a success story. The reason inequality was so low was that the Swedish economy had become dysfunctional. Sweden did not increase equality by raising the bottom, but by destroying incentives to work and save through high taxes and inflation. High income earners were leaving the country. Astrid Lindgren, author of Pippi Longstocking, described how she was forced to pay taxes in a single year of 102% of her income, effectively causing her to lose money on every krona she earned.



## **The Crisis (1990-1994)**

When times seemed most desperate and when many had convinced themselves that Sweden could not be reformed, the country's political establishment again surprised outsiders by rejecting the socialist experiment and started working to return to the economic model that had been so successful in the past.

There were three reasons for Sweden undertaking the wave of reforms.

First, there was widespread discontent among the general population with the government's encroachment on their liberties. Public intellectuals, including many on the left, began to question the economic and social cost of big government.

Second, its economic model was in trouble. Sweden lagged behind other countries and suffered from a lack of entrepreneurial dynamism. By 1995, not a single net job had been created in the private sector for almost half a century. Of Sweden's 50 biggest companies in 1995, the only three founded since 1970 were controlled by the national government or the city of Stockholm.

The third reason was the 1990-94 financial crisis. The crisis was deep and devastating—the country endured three years of negative growth—that ended once and for all the wishful thinking about a unique Swedish approach. The 1990-94 crisis was a consequence of long-running problems of productivity and competitiveness that had never been solved. Instead, they had been kicked down the road in a spiral of deficits, devaluations, wage increases, and inflation.

## **The Capitalist Welfare State (1995–)**

"A failure must be described as a failure" commented prime minister Carl Bildt (who had taken over in September 1991) as the fixed exchange rate collapsed. But another way of looking at this episode is that it marked the death of a failed two-decade-long experiment and the birth of a new Swedish model, one that combines a generous welfare state with an open and competitive free market. It is a "capitalist welfare state" as the economist Andreas Bergh (2016) has called it.

Often a financial crisis results in nothing more than fiscal austerity. In Sweden in the 1990s, however, it was met with an ambitious program of structural reforms of the economy, the government, and the public sector.

During the next few years, Sweden cut public spending substantially, moving both expenditures and revenue closer to the OECD average. The country also reduced the benefit levels in its social security systems. Nineteen state-owned companies were privatized and public investment funds that had interfered with the investment decisions of private businesses were abolished. Private and commercial radio and television stations were permitted for the first time. Railways, buses, and domestic aviation were deregulated. The telecom and energy sectors were opened up to competition. The last vestiges of the price control system were abolished, with the infamous exception of rent control, which has continued to make it very difficult to get a rental apartment in growing cities like Stockholm. The central bank was given an explicit inflation target of 2 percent annually.

In 1992, Sweden initiated an ambitious opening up of public services when it created a national school voucher system, which gave families the freedom to choose independent schools for their children's

education. Private alternatives in government-subsidized childcare, elderly care, and health care started to proliferate.

Since 1995 the Swedish economy has once again begun to outperform that of other high-income countries in growth per capita, and has once again begun to spawn successful international companies including Skype, Spotify, King, Mojang, and Klarna. Real wages, which were stagnant between 1975 and 1995, increased by around 70 percent between 1995 and 2021. However, Sweden is still a big welfare state; total public spending is around 50 percent of GDP.

In the 1990s, Sweden also gave up the pipe dream of making the wealthy pay for it all. Swedes learned that you could either have a big government or make the rich pay for it all, but you couldn't have both. High earners and successful businesses are too few and too important for the country's economy to deter or chase away with high taxes. Now Sweden relies more on consumption taxes and flat payroll and local income taxes than it did before the reforms, which means that most citizens pay for most public services out of their own pockets and that the country is once again a more attractive place to do business.

### **Conclusion**

Since the 1970s, Sweden's welfare state has been known globally for its generosity, especially to families with children, but it is often misunderstood. It is frequently presented as a set of uniform, national, single-payer systems where the rich fund the government services and income support for the rest. However, that is not the case. Instead, most Swedes pay high income and sales taxes to support a generous welfare system. Most of the redistribution in Sweden takes place over an individual's life cycle. People pay taxes during their working life and receive benefits and services when they are young, old, or sick. The pension system also includes individual accounts, where Swedes invest in funds of their own choosing and eventually receive benefits according to the yields on their individual investments.

When Sweden is pointed to as a model of a socialist state it should be remembered that the socialist state was an experiment that only lasted for a few years. Sweden for much of its existence prior to and after the experiment with socialism has had a free-market based economy undergirded by private ownership and strong property rights.

# ACTIVITY 3 – Innovation – Is it Rocket Science?

## Introduction

History is replete with examples of societies in which genius spawned invention but made no long-lasting impact on standards of living because the invention did not initiate the cascade of innovation that produces wealth. Innovation translates inventive genius into the production of goods and services that improve people's lives. Throughout history, the nations that have been consistently able to innovate have been those in which the capitalist institutions of markets and property rights have flourished. Nations lacking markets and secure property rights also lack the incentives that make innovation-oriented research and development a routine component of modern production. In the 20th century, the Soviet Union stands out as an example of a society in which the genius of invention had no impact on the standard of living of the masses. A nation with a vaunted system of scientific education, a culture that admired and exalted scientists, and a government that patronized research with money and resources could only provide a per capita income of less than half that of the United States. The U.S.S.R. rocked the complacency of the West by leaping into space but because it lacked the incentives for innovation, it could not ensure that its rural hospitals had sewers and hot water.

The mystery of the Soviet economy's failure to thrive is solved by looking at its institutions. Without viable markets, there was no mechanism for discoveries generated by government-funded research to move into the consumer economy. There were no incentives for innovation to flower from the seeds of invention. In the West, on the other hand, even the results of government-funded research move rapidly into production as the possibility of profit motivates entrepreneurs to risk innovation. Profit proves to be such a strong incentive, in fact, that research flourishes even without government sponsorship and has become a major competitive activity for enterprise.

In this lesson students learn the difference between invention and innovation, they hypothesize why so many more inventions were created in western market economies as opposed to socialist economies and they use clues to solve a mystery.

## Materials:

Activity 3 Slide Deck -

<https://docs.google.com/presentation/d/199R8jxe80YqQjgiwua71WBLGtd1otSU87QBJM5MdHrs/edit?usp=sharing>

Handout 1 – 1 copy per group of 3-4 students.

Handout 2 – 1 copy per group of 3-4 students, cut into strips.

Handout 3 - 1 copy per group of 3-4 students.

Handout 4 - 1 copy per group of 3-4 students.

Handout 5 - 1 copy per group of 3-4 students.

Handout 6 - 1 copy per group of 3-4 students, cut into strips.

Visual 1 (or slide 6)

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## Key Terms

Competition	The effort of two or more individuals or organizations to get the business of others by offering the best deal. Consumers compete with other consumers for goods and services. Producers compete with other producers for sales to consumers.
Incentives	A factor, monetary or non-monetary, that encourages people to do something.
Innovation	The introduction of an invention into a use that has economic value.
Invention	The creation of a new product or process.
Property Rights	Legal protection for the ownership of tangible or intangible resources. Property rights give the holder the ability to do with that property what they choose, including holding on to it, selling it or transferring it to someone else.

## Objectives

Students will be able to:

- Define invention.
- Define innovation.
- Explain why so much more innovation happened in western market economies as opposed to socialist economies.

## Time Required

50 minutes

## Learning Objectives

### *Incentives*

People usually respond predictably to positive and negative incentives.

- Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide them the highest possible net benefits.

### *Competition and Market Structure*

Competition among sellers usually lowers costs and prices, and encourages producers to produce what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

- The introduction of new products and production methods is an important form of competition and is a source of technological progress and economic growth.

### *Institutions*

Institutions evolve and are created to help individuals and groups accomplish their goals. Banks, labour unions, markets, corporations, legal systems, and not-for-profit organizations are examples of important

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institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.

- Property rights, contract enforcement, standards for weights and measures, and liability rules affect incentives for people to produce and exchange goods and services.

### *Entrepreneurship*

Entrepreneurs take on the calculated risk of starting new businesses, either by embarking on new ventures similar to existing ones or by introducing new innovations. Entrepreneurial innovation is an important source of economic growth.

- Productivity and efficiency gains that result from innovative practices of entrepreneurs foster long term economic growth.

### *Economic Growth*

Investment in factories, machinery, new technology, and in the health, education, and training of people stimulates economic growth and can raise future standards of living.

- The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).

## **Procedures**

1. Use slide 2 to ask students what they think the difference between invention and innovation is? After they've provided several answers, use slide 3 to reveal the definitions.
2. Divide students into groups of 3 or 4 and give each group a copy of Handout 1 and Handout 2 (cut into strips). Ask them to guess whether each invention of the 20<sup>th</sup> century (on the strips of paper) was developed in a socialist or capitalist economy by placing each strip accordingly on Handout 1.
3. Show them the correct answers using Visual 1 or slide 6.
4. Ask students to hypothesize why so many important inventions of the 20th century were invented in capitalist or market-based economies.
5. Next give each group a copy of Handout 3 and ask them to develop a list of 4-6 important inventions or innovations of the 21<sup>st</sup> century. Have them include any innovations that have resulted from the initial invention/innovation and to include who the inventor was and where it was invented. Allow them to use their phones or computers to help with this part of the activity.
6. Have each group share some or all of their findings.
7. Ask student if they see the same trend in the 21<sup>st</sup> century inventions as they did with the 20<sup>th</sup> century.
  - Are there differences in the populations of innovating countries and those that do not?
  - Are there differences in the physical characteristics of innovating countries and those that do not innovate?

- Are their institutional differences between the innovating countries and those that do not innovate?
8. For the last part of the activity, tell students they are going to solve a mystery. Give each group a copy of Handout 4, the mystery, and Handout 5, the mystery directions. You could also display them as visuals (slides 12-16).
  9. Give each group a copy of Handout 6, the clues, cut up. Instruct the groups to split the clues up evenly and to go around the group reading each clue aloud.
  10. As they read through the clues they should sort them into 3 piles
    - Clues that provide information about people's responses to incentives
    - Clues that provide information about how property rights shape incentives
    - Clues that provide information about how markets, profit, and competition shape incentives
  11. As they consider the piles of clues, they should look for ways in which the Soviet economy was similar to or different from the economies of the West. Suggested group discussion questions:
    - How did intellectual property rights in the Soviet Union differ from those in the U.S.?
    - What incentives motivated researchers in the USSR? What incentives motivate researchers in the U.S.?
    - How did invention and innovation spread in the Soviet Union? How do they spread in the U.S.?
  12. Finally, they should solve the mystery. Explain in one sentence, why, despite their high level of education, their wealth of resources, and their government's commitment to and support of research, the Soviets' standard of living was half that of the United States.
  13. Ask each group to share their solutions and explain how 2 or 3 of the clues helped them solve the puzzle, then debrief with the following questions (slides 17-19).

## Debriefing Questions

1. Compare and contrast the Soviet Union and the west in terms of who engages in research and what incentives they have to do so.  
*Research in the Soviet Union was directed by the government and confined mainly to areas that had military or political significance. Researchers were employees of the government and were motivated by their interest and they pay and, to some extent, by the promise of status and recognition (clues # 1, 4, 10). While there is government-sponsored research with a military purpose in the U.S., there are also significant university-sponsored and private research efforts. Researchers are private or university employees. American researchers share many of the motivations of Soviet researchers, but additionally, they have the important incentive of royalties and other monetary rewards for successful innovation (clues #7,12).*
2. What rewards were offered to individual researchers and scientists in the USSR? How did this help to explain the Soviets' relatively low level of innovation?  
*The Soviet Union attempted to motivate researchers by rewarding them with recognition and*

*status, rather than profit. Researchers were paid by the state and their reward was tied to their effort rather than to the outcome of their efforts. They didn't profit from a successful innovation. They had neither the incentive nor the opportunity to innovate and become entrepreneurial, whereas American researchers have both incentive and opportunity by virtue of the fact that they can profit from their innovations (clues # 2, 4, 5).*

3. Compare and contrast the USSR and the West in terms of the relationship between the researcher and the consumer.

*In the Soviet Union, there was little commercial innovation. The results of research and invention tended to stay in the military sector. In the West, inventions and technological knowledge pass relatively quickly from government research agencies (e.g., NASA in the United States) to the private sector, where they spawn many innovations in consumer goods (clues #3, 6, 8, 9).*

4. How did the Soviet institutions of property rights and markets differ from those institutions in the West? *The USSR claimed to recognize intellectual property rights and did issue patents and copyrights just like the US did. However, Soviet patents and copyrights did not grant the intellectual rights holder any economic rights. The inventor/innovator got only the status that goes with being able to claim an invention, while the Soviet government held the right to actually use the invention (clues #4, 10). The Soviet Union claimed to have markets, but it had no market pricing. Prices were set by the government in state stores, so there was no objective way to value an innovation (clue #2 – and students' background knowledge of the Soviet Union).*

5. What impact did differences in intellectual property rights have on incentives to innovate in the 2 countries?

*Granting economic rights with intellectual rights encourages innovation by offering the possibility of profit – which has proven in the long run to be a much more powerful motivator than medals, certificates, or public accolades. Markets in the U.S. quickly pass judgment on innovations; they either generate profit or they don't. The profit motive prompts innovators to pay attention to those judgments in choosing which areas of innovation to pursue (clues # 5, 8, 11, 3).*

6. The results of Soviet inventive genius were most frequently seen in military technology, where it increased world power and influence. Where are we most likely to see the results of American inventive genius? What benefits does it produce? Who reaps the benefits?

*While we see inventive genius in the military realm in the U.S., it quickly spins off into the commercial sector where innovation increases our ability to produce goods and services and thus raise standards of living (clues # 8, 12).*

7. How do the institutional differences help to explain the difference in standard of living in the two nations in 1990?

*Because there were no incentives for innovation, the fantastic research and remarkable inventions of Soviet researchers did little to change the lives of Soviet citizens. There were no economic rights to intellectual property and no mechanisms – no markets, and therefore no market incentives of profit – motivating researchers to apply the results of research to the creation of goods and services. In market economies, these incentives lead to lower production costs and lower prices, making goods and services more affordable for more people.*

8. What impact did differences in intellectual property rights have on incentives to innovate in the 2 countries?

- a. The results of Soviet inventive genius were most frequently seen in military technology, where it increased world power and influence. Where are we most likely to see the results of American inventive genius? What benefits does it produce? Who reaps the benefits?
- b. How do the institutional differences help to explain the difference in standard of living in the two nations in 1990?

*Because there were no incentives for innovation, the fantastic research and remarkable inventions of Soviet researchers did little to change the lives of Soviet citizens. There were no economic rights to intellectual property and no mechanisms – no markets, and therefore no market incentives of profit – motivating researchers to apply the results of research to the creation of goods and services. In market economies, these incentives lead to lower production costs and lower prices, making goods and services more affordable for more people.*

9. Refer to the list of hypotheses recorded during the initial discussion. Which category of national characteristics best explains differences in nations' level of innovative activity – population characteristics, physical characteristics, institutional characteristics?

*Institutional*

## Conclusion

In countries with high levels of innovation, you would expect to find relatively open markets and secure intellectual property rights, because these institutions foster incentives that encourage innovation by rewarding the successful innovator. Factors such as relative wealth, levels of education, and abundance of resources do not adequately explain differences in innovative activity. The presence or absence of institutions that provide incentives for innovators does explain differences in levels of innovation. The major innovations of the 20th century came from nations with open markets and secure property rights.



## Visual 1

<i>Socialist Economy</i>	<i>Capitalist Economy</i>
Space Travel, USSR (1957)	Television, Scotland (1923)
	Flight, USA (1903)
	Penicillin, Scotland (1928)
	Atomic Fission, USA (1945)
	Computer, Great Britain (1943)
	Microprocessor, USA (1971)
	Insulin, Canada (1921)
	Laser, USA (1957)
	Internet, USA (1969)

# Handout 1

<i>Socialist Economy</i>	<i>Capitalist Economy</i>

## Handout 2

Cut into strips.

Television
Flight
Penicillin
Atomic Fission
Space Travel
Computer
Microprocessor
Insulin
Laser
Internet

# Handout 3

<i>Invention/Innovation</i>	<i>Subsequent Innovations</i>	<i>Who/Where Invented</i>

## Handout 4

### *Mystery: The Soviet Union a Historical Case Study*

In 1920, shortly after the communist take-over, the USSR had only a 25% literacy rate, but the Soviet state-run school system effectively transformed the nation into one of the world's most educated. By 1950, there were 1.2 million university-level students. By 1980, the literacy rate was one of the highest in the world, outranking those of the U.S. and many western European nations. By 1985, the Soviet Union had over 5.4 million students and one of the largest bodies of scientific researchers in the world: 1.5 million research scientists paid by the state.

The world's scientific community had nothing but praise for Soviet technical education. At the fall of the Soviet Union, some American educators worried that this 'superior' system of education would be destroyed in the collapse.

Indeed, the collapse of the USSR actually set off a kind of competition for Soviet scientists. A technology-scouting company, Scientific Dimensions, was started by a New York patent law firm specifically to locate and hire Russian scientists and inventors.

Against this picture of sophisticated knowledge is the dismal economic reality of life in the Soviet Union. Here was a country that in 1990 had an untold wealth of natural resources, and was comparable to the U.S. in many respects, but it could not offer its citizens anything remotely close to the standard of living Americans enjoyed. Soviet GNP was \$2,659.5 billion and per capita income a discouraging \$9,211, less than half the U.S. output of \$5,233.3 billion and per capita income of \$21,082. Infant mortality rates in the USSR had risen from 22.9/1000 in 1971 to 33/1000 in 1989, and in rural areas, where 1/3 of Soviets lived, half the hospitals had no sewers and 80% had no hot water.

**Given their resources and their intelligence, why weren't the Soviets rich?**

# Handout 5

## *Mystery Directions*

**Group Directions:** Each group will receive a set of the clue strips. All the clues are true and all are relevant to the mystery. The numbers on the clues are for easy reference only.

Note carefully: Each clue exemplifies or illustrates one of the following economic principles:

- People respond to incentives in predictable ways.
- Property rights shape incentives.
- In markets, profit attracts competition and allocates resources to their best uses in order to respond to demand from consumers.

**Step 1:** Distribute the clues as evenly as possible among group members. In round robin fashion, read the clues aloud and discuss to clarify the information offered in the clue.

**Step 2:** Sort the clues into 3 piles:

- Clues that provide information about people's responses to incentives
- Clues that provide information about how property rights shape incentives
- Clues that provide information about how markets, profit, and competition shape incentives

**Step 3:** Consider each pile of clues, looking for ways in which the Soviet economy was similar to or different from the economies of the West. Suggested group discussion questions:

- How did intellectual property rights in the Soviet Union differ from those in the U.S.?
- What incentives motivated researchers in the USSR? What incentives motivate researchers in the U.S.?
- How did invention and innovation spread in the Soviet Union? How do they spread in the U.S.?

**Step 4:** Solve the mystery. Explain in one sentence, why, despite their high level of education, their wealth of resources, and their government's commitment to and support of research, the Soviets' standard of living was half that of the United States.

## Handout 6

### *Clues*

1. In the Soviet Union and Eastern Bloc Soviet countries, research in space, military, and athletic technology was greatly aided by the government giving researchers priority in the use of raw materials and scientific talent – an advantage their western counterparts didn't have as they competed for scarce research funding.

2. The Trabant, East Germany's most popular car, was first produced in 1961. Engineers later came up with improved models but neither the East German nor Soviet government was willing to provide the higher subsidies needed to produce them. In 1989, the factory still produced the 1961 model.

3. The innovation rate of the USSR was extremely low. The Soviets compensated by "importing" major western technologies and by copying western innovations. Decisions about which innovations to copy were made by the Soviet bureaucracy rather than by consumers. Sometimes they were right; sometimes they ended up producing warehouses full of articles – shoes or clothing, for example – that consumers didn't want.

4. After the collapse of the USSR, many scientists and researchers fled to neighbouring countries. Many expressed surprise at the different emphasis of western science: "When our scientists invented something, we didn't care how fast it was implemented in industry. We were paid the same amount whether we applied our theories or not."

5. George and Laszlo Biro of Hungary invented the ball point pen in 1938. Chicago businessman Milton Reynolds bought a sample in Buenos Aires. He found that the "biro" had no U.S. patent, so he started producing them. On the first day, October 29, 1945, the Reynolds International Pen Company sold \$100,000 worth of "Reynolds Rockets" at Gimbel's department store in New York City, for \$12.50 each. Similar pens sell today for less than 25¢.

6. The Internet developed in 1969 from a secret military communications network in the United States, but it became useful to businesses and consumers in 1989, when a British computer wizard, Tim Berners-Lee, thought up an easy-to-use method of links and addresses for sending data. Today, the commercial value of the Internet is in the billions.

## Handout 6 (continued)

7. Patent laws broaden the scope of potential innovators because they provide 2 ways in which innovators can profit without actually becoming producers: 1) Innovators may sell patents outright – for example, the safety pin was patented in 1849 by Walter Hunt, who sold the patent rights for \$400 – or 2) they may licence entrepreneurs to use their patented processes and products. The licenced company then pays royalties to the patent holder.

8. The artificial heart, NASCAR racing insulation, prosthesis material, infrared cameras, infrared thermometers, land mine removal devices, vehicle tracking systems, bar code labels, and video stabilization software are technology spinoffs from NASA's Space Shuttle program in the United States.

9. The technology for the smash-hit computer game Tetris was purchased from a Soviet military agency by a British firm for about \$200,000. The firm has recovered its investment many, many times over.

10. Under the Soviet government, a “patent” was essentially a form of acknowledgement and recognition of an inventor's or innovator's accomplishment. The economic rights to use innovations belonged to the state. Today Russian law recognizes the international patent agreement, which gives patent holders the right to exclude others from “making, using, offering for sale, or importing and selling the invention.” However, Russian inventors frequently apply for foreign patents first because they are more secure and important commercially.

11. Disneyland's famous Matterhorn roller coaster is the modern outgrowth of an ancient Russian toy. In the 15th century, natives used hand-carved blocks of ice to slide down ice-covered mountain paths. Later they added sleds and a hoist pulley system. In the mid-1800s, a Pennsylvania coal mining company, Mauch Chunk Rails, adapted the Russian technology to a gravity-powered cart for transporting coal – but they didn't forget its origins. Roller coaster entertainment began with the company offering scenic tours of the countryside in the carts for 10 cents a thrilling ride.

12. The Association of University Technology Managers reports that in 2002, American universities collected over \$1 billion in revenue from the commercialization of inventions and innovations by faculty members. The universities surveyed by the association claimed more than 3700 licensing deals during the year and had applied for 6500 new U.S. patents. Although the rights to the innovations belong to the universities, they typically give about 1/3 of the income from licences on new technologies to the faculty member who discovered or developed the innovation.



# Lesson 5: Denmark – The Free Enterprise Welfare State

## Introduction

This lesson examines the Danish economic model, including its origins, and draws some important lessons from the experience, including how economic freedom underlies the high standards of living Danes enjoy, how its welfare state is financed with very high taxes on middle-income workers, and how Denmark's experiment with unsustainably large government did not go well and had to be (largely) undone.

## Materials

Lesson 5 slide deck:

[https://docs.google.com/presentation/d/1-nYvgrnEEqGdKI6y\\_pd-oi99-cKjxnrs/edit?usp=sharing&oid=116660462288476410506&rtpof=true&sd=true](https://docs.google.com/presentation/d/1-nYvgrnEEqGdKI6y_pd-oi99-cKjxnrs/edit?usp=sharing&oid=116660462288476410506&rtpof=true&sd=true)

Optional: Lesson 5 **Background Information**. 1 copy per student (if assigned as student reading)

## Key Terms

Entrepreneurship	A characteristic of people who assume the risk of organizing productive resources to produce goods and services.
Economic Growth	An increase in real output as measured by real GDP or per capita real GDP.
Gross Domestic Product	The market value of all goods and services produced in a nation in a calendar year.
Inflation	A general increase in the price level.
Protectionism	The economic policy of restricting imports through methods such as tariffs or quotas.
Socialism	A society in which the state controls resources and makes decisions about production and equitable distribution.
Stagflation	A situation where high inflation and high unemployment occur at the same time.

## Objectives

Students will be able to

- Identify examples of how Denmark's experiment with large government was unsustainable.
- Describe how Denmark's welfare state is different from socialism.
- Explain how Denmark's welfare state is funded by high taxes on middle-income workers.

**Realities of Socialism – Lesson 4: The Mirage of Swedish Socialism**

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## Time Required

45 minutes

## Learning Objectives

### *Money and Inflation*

Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. The amount of money in the economy affects the overall price level. Inflation is an increase in the overall price level that reduces the value of money.

- In the long run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.

### *Role of Government and Market Failure*

There is an economic role for government in a market economy whenever the benefits of a government policy outweighs its costs. Governments often provide for national defence, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on people's incomes.

- Governments often redistribute income directly when individuals or interest groups are not satisfied with the income distribution resulting from markets; governments also redistribute income indirectly as side-effects of other government actions that affect prices or output levels for various goods and services.

## Procedures

- Prepare by reading the **Background Information** included in the next section of this lesson.
- Use the **Lesson 4 slide deck** to teach the key ideas about the socialism experiment in Sweden.
- Alternate Activity: Assign the **Background Information** as a student reading.

## Background Information

*The following background information is quoted directly from the Fraser Institute publications of "The Free Enterprise Welfare State: A History of Denmark's Unique Economic Model" published as a part of the Realities of Socialism materials. For a complete copy of the readings please go to [RealitiesofSocialism.org](http://RealitiesofSocialism.org).*

### Introduction

For more than a century and a half, Danes have been among the most economically free people on earth, and they remain so to this day. They can start and run businesses with little government interference. They can exchange with whomever they want—domestically or internationally—on whatever terms they want, and again the state does not interfere.

The one exception to their economic freedom is that Danes pay for their welfare state with some of the highest taxes in the world. Denmark's two largest sources of state revenue are its value-added tax (VAT) and its personal income tax. Middle-class Danes largely bear the burden of these two taxes. All Danes pay the VAT when they buy goods and services. And at 25 percent, the VAT is one of the highest in the world. Denmark's top personal income tax rate is also among the highest in the world. But it's not just the wealthy who pay it—the top rate kicks in at a comparatively low level of income. So, while Danes have a large and expensive welfare state, they don't foist the bill onto corporations or the wealthy. Instead, they all pay for it.

### **Historical Background**

Since the adoption of Denmark's first democratic constitution in 1849, the country's political and judicial institutions have remained largely unchanged. However, the role of government in the economy has changed significantly over that time, although some features of government economic policy have remained largely the same, most notably broad-based public and political support for free trade.

Prior to the passage of the so-called *Næringsfrihedslov* (the Freedom of Trade and Business Act) in 1856, the Danish economy was controlled by privileges held by market towns and monopolies held by the craft guilds (Sløk-Madsen, 2022). Ever since the Middle Ages, royal and state power had heavily interfered in the economy and controlled corporate life. This was accomplished by, among other things, granting the market towns the exclusive right to trade in commodities originating in the catchment area. According to the legislation, the farmers could sell their commodities in the town square only on market days. The trades were likewise controlled, granting local trade unions a monopoly on the practice of their craft.

With the passage of the *Næringsfrihedslov*, these competition restrictions were lifted. As a result, the economy became guided by a philosophy of free and minimally controlled commercial activity. The *Næringsloven* Act fostered free trade, prevented the creation of trade barriers, and made it straightforward for Danish firms to conduct business abroad. This classical liberalism encouraged **entrepreneurship**, competition, and innovation, which fueled the country's **economic growth**.

In September 1899 the main Danish labour union and the main employers' association agreed to recognize each other as equal partners in the Danish labour market. Since then, collective bargaining agreements have to a large extent governed Danish labour market conditions; consequently the labour market partners rather than government determine labour market conditions such as work time and minimum wages.

Similarly, in 1933 the Social Democrats—the main centre-left party in Denmark—and the liberal party (Venstre) made a historical compromise (the “Kanslergade Compromise”) that laid the foundation for the Danish welfare state model. This agreement was essentially the beginning of a long-standing compromise in Danish politics: the government would ensure certain welfare benefits for citizens as the Social Democrats wanted, and, in return, would stay out of business activities as Venstre wanted.

During the Great Depression, the Danish economy outperformed that of the United States, the United Kingdom, and Germany. Denmark's relatively favourable economic growth rate was due in large part to the fact that while the US allowed the deflationary shock of the period to worsen, Denmark did not. Instead, Denmark abandoned the gold standard in 1931, sharply devaluing their currencies and thereby ending the deflationary shock of the Great Depression.

On April 9, 1940, Nazi Germany attacked Denmark (and Norway), and Denmark was quickly overrun. The German occupiers and the Danish government established a so-called collaboration agreement, which marked the beginning of a fairly calm occupation of Denmark. Denmark was allowed to keep its own government and political institutions, but Germany had final say in matters of foreign policy, defence, and economic policy. The Danish government also agreed to supply agricultural and industrial products to Germany almost exclusively.

Perhaps most importantly from an economic standpoint, the cost of the German occupation was largely covered by having the Danish central bank print money for the occupiers. As a result, while Denmark was occupied from 1940 to 1945, the Danish central bank subsidized the German occupiers' use of services. This resulted in a dramatic increase in the Danish money supply, which, predictably, resulted in significant **inflation** throughout the occupation years. The Danish economy also suffered a major negative economic shock due to wartime **protectionism** and to the fact that the UK market evaporated during the war.

The removal of post-war economic regulations and the subsequent re-opening of the global economy and the restoration of trade all helped pave the way for a 15-year post-war economic growth boom in Denmark. As the Danish economy improved, the gap in inflation-adjusted per capita GDP between Denmark and the US narrowed. While Danish per capita GDP was just 49 percent of US per capita GDP in 1945, it was 82 percent by 1965. Over the same period, Danish per capita GDP surpassed that of the UK, going from 72 percent to 112 percent over this period.

The second half of the 1960s marked the start of what would become regarded as the “golden period” of economic growth following World War II. Total real GDP increased by almost 35 percent over the 7 years from 1966 to 1973. Over the same time, Denmark's unemployment rate averaged a very low 2.4 percent. While real GDP per capita increased by 54 percent in the US and by 45 percent in the UK, it grew by 59 percent in Denmark.

While many North American politicians characterize Denmark as a “socialist democracy,” it is relevant to note that the size of the government, measured as a percentage of GDP, was actually lower in Denmark than it was in the United States and the United Kingdom throughout the 1950s, '60s, and '70s. *Denmark became wealthy before substantially increasing government spending and taxes to support the large welfare state associated with the country today.*

It was during the late 1960s that things began to change. Danish economist Anders Olgaard (1980) remarked that if the 1950s can be properly labelled as Denmark's second industrial revolution, the 1960s might be called the years of uncontrolled revolution in the size of government. From 1965 to 1980, total taxes as a share of Denmark's **Gross Domestic Product (GDP)** increased from 29 percent to over 40 percent and by 1983 Danish government consumed more than 58% of GDP. The two most important categories of central government spending financed by the increased tax revenues were social services and education.

This change was driven by a widespread shift in political sentiment in Denmark following WWII. During the post war years, the Danish Communist party in particular enjoyed widespread popular support, in part for their role in the Danish resistance movement against German occupation during the war. This sentiment caused the ruling Social Democratic party to adopt increasingly socialist rhetoric to stay in power, although the party never advocated for **socialism** in the sense that the government should take over the means of production.

#### **Realities of Socialism – Lesson 4: The Mirage of Swedish Socialism**

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Government spending on social welfare benefits and education accelerated after 1965. During the same period, external events negatively impacted the Danish economy. The UK, Denmark's main trading partner experienced a widespread economic slowdown. In addition, the two major oil shocks in 1973 and 1979 added to the economic woes. By the mid-1970s, Denmark's economy was experiencing both inflation and rising unemployment – what became known as **stagflation**.

These issues were exacerbated by Danish policy makers who misdiagnosed these economic shocks. They failed to recognize that the expansion of social welfare benefits during the 1960s and 1970s contributed to increased inflation and rising unemployment. The extension of the old age pension benefits to every Dane over the qualifying age, for example, encouraged early retirements, strained the public finances while incentivizing people to leave the labour market.

The combination of high inflation, negative terms-of-trade shocks, deteriorating public finances, and a lack of a clearly defined rules-based economic policy framework weakened the credibility of the government's economic policies. There was a general feeling among both the general population and those responsible for policymaking that Denmark had failed and that its economic policies had failed.

In 1982, the Social Democratic cabinet of Prime Minister Anker Jørgensen collapsed and a new centre-right coalition government was formed under Conservative Party leader Poul Schlüter. Unlike his Conservative counterparts in the US and UK, Ronald Reagan and Margaret Thatcher, Schlüter did not have an ideological agenda and his government's approach to economic policy can be seen as highly pragmatic. It was a policy of necessity and can be seen as a return to "normal" Danish economic policies aimed at balancing public finances and ensuring price stability through stable monetary policy and exchange rate policy.

The new government's course amounted to a major break with the previous decade. Schlüter's macroeconomic approach rested on three pillars: 1. Significant fiscal consolidation through a combination of tax increases and public expenditure cuts. 2. A "hard" fixed exchange rate peg against the German mark. 3. De-indexation of public expenditures and wages.

The post-1982 period has been marked by continuous and gradual economic reforms aimed at reining in public spending and curbing public debt. Beginning in 1993, working-age unemployment and social benefits were gradually reduced. This development, combined with the fact that Denmark's unionization rate had steadily declined since the 1980s as Denmark transitioned from a manufacturing to a service economy led to significant wage flexibility. The result has been a reduction in a structural unemployment rate above 10% to current structural unemployment of around 3% as of 2022.

These reforms have served Denmark relatively well in the aftermath of the Great Recession of 2008-09, the euro crisis of 2011-12, and the COVID pandemic of 2020-22, with unemployment remaining quite low—very low in international comparisons. Although the service sector is now the largest component of the Danish economy, the most important drivers of income growth in Denmark continue to be Denmark's internationally successful industrial firms such as Novo, A.P. Moller – Maersk, LEGO, and Carlsberg, and the country's major agricultural exports. Denmark's relatively low corporate tax rates can be plausibly highlighted as contributing to the development of its home-grown and successful multinational companies. Denmark's excellent governance institutions, particularly its independent judicial system and transparent and relatively corruption-free regulatory system, have also been central to the country's economic development over the long run.

## Public Finances

Broadly speaking, the role of the government sector in the “Danish economic model” can be described as “welfarist” rather than “socialist,” in the sense that socialism traditionally has been defined as an economic system in which the state owns and controls the means of production. But in modern Denmark the state neither owns nor controls much of the means of production, placing the country closer to the capitalist model than to the traditional socialist model.

Government spending as a share of GDP rose precipitously in the early 1970s, more than doubling from under 25 percent in 1970 to more than 52 percent in 1980. By 1983, Danish governments were consuming more than 58 percent of GDP, significantly more than governments in the United States, the United Kingdom, and Sweden. The growth of government spending in Denmark during this period is closely linked to a drastic increase in the supply of social services provided by the government, most at no direct charge to citizens or at heavily discounted prices. Denmark’s municipally operated kindergartens, for example, offer their services at well below cost, while most other education—even university studies—is “free.” Health care is also mostly taxpayer funded.

Economic historian Sven Aage Hansen (1983) has argued that a key reason for the sharp surge in public expenditures during the 1960s and 1970s was very fast growth in tax revenue due to an unexpected acceleration in inflation. Known as fiscal drag, this occurs during inflationary periods if tax brackets are not indexed to inflation. Thus, when higher inflation and higher (nominal) wage growth push taxpayers into higher tax brackets, it produces a surge in government revenue. Although taxpayers’ real (inflation-adjusted) earnings have not increased, they end up paying higher tax rates.

The current Danish approach to economic and fiscal policy is distinctive. On the one hand, limited regulatory intervention, openness to trade, a commitment to sound money, and strong protection of persons and their property make Denmark one of the most economically free nations on Earth. This helps explain why the country has thrived in recent decades. On the other hand, Denmark has a very large government sector with a rather robust social welfare state. The burden of paying for this large welfare state is shared broadly through Denmark’s high VAT and its high personal income tax rates. Although the top marginal income tax rate is quite high, the threshold for paying this rate is comparatively low. Denmark also has a relatively low effective corporate income tax rate. For the past three decades, Denmark has maintained a strong commitment to fiscal sustainability. Deficits are rare and government debt has been declining—although at a slower rate in recent years. This political and cultural commitment to fiscal sustainability lately has been reinforced by institutional mechanisms.

## Danish Health Care System

Denmark’s approach to universal health care encompasses many of the attributes of a national (albeit decentralized) tax-funded system that, over time, has evolved to incorporate (to a modest extent) a blend of features found in health care systems with a permissive private market, such as those in Australia and Sweden.

Coverage for core medical services is universal, compulsory, and defined in broad terms. However, a distinctive feature of Denmark’s health care system is the freedom of individuals to choose between two plans within the universal scheme. The 0.3 percent of the population voluntarily enrolled in a “Group 2” plan can access any general practitioner of their choice and, unlike individuals in Group 1, can access a specialist (in private practice) without prior referral. Further, while private insurance plays a secondary role in Denmark’s health care system, it can offer coverage for core services that are also covered by the

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public system, examinations and medical treatments at private hospitals, increased choice of provider, and faster access to elective surgery in private hospitals. Between 30 and 42 percent of the population has secondary insurance coverage of this nature.

Regardless of which group they are enrolled in; patients can obtain treatment from private for-profit clinics and hospitals using their own funds or secondary private health insurance. Notably, if regions are unable to initiate treatment within a reasonable time (one month from referral), patients have the right to publicly funded treatment in a private hospital of their choice in their region. The one area in which Denmark departs significantly from the vast majority of universal health care systems around the world, is that, like Canada and the United Kingdom, it does not generally expect patients to share directly in the cost of core medical services. That being said, co-payments are generally required for pharmaceuticals purchased on an out-patient basis, as well as for physiotherapy, psychological treatment, home care, long-term care, and dental care (excluding children).

Denmark ensures universal coverage for its population regardless of ability to pay, primarily through a national tax-funded system. However, it permits the functioning of a robust private insurance market, does not force health care practitioners to choose between public and private service by restricting dual practice, and has moved increasingly toward funding services on the basis of activity. The associated performance of the system relative to 27 other members of the Organisation for Economic Co-operation and Development (OECD) with universal health care is that of an average spender with mediocre or mixed results.

### **Primary and Lower Secondary Education**

Denmark is known alongside the other Scandinavian nations for its high quality of life, well-educated population, and expansive welfare state funded by relatively high taxes. This might lead one to believe that Denmark's education system involves heavy central planning and control, but instead it is characterized by autonomy and diversity among schools. Although schools are heavily financed by the government, local communities and individuals maintain pedagogical and organizational control of much of the country's primary and local secondary schooling.

Denmark provides fully government-funded primary and lower secondary education and "free" (government-funded) post-secondary schooling. Primary and lower secondary independent schools, which account for about 45 percent of the schools in Denmark, according to the Danish Ministry of Education, are supported financially by the government via a school choice system, at about 75 percent of the rate of fully funded government schools. The Danish government acknowledges that government funding for independent schools receives broad support from all political parties because government public schools, too, benefit from the competition and experiences offered by independent schools. Government funding is sent directly to schools rather than to parents, on a per-student basis.

Danish parents can choose the school to which they send their child. Today, about 16 percent of students attend an independent school and that share is growing. Independent schools attract students from all socio-economic backgrounds and academic abilities. The school choice system, paired with independent schools' high level of autonomy, has resulted in more innovation in Danish classrooms than almost anywhere else, according to the OECD.

### **Income Support System**

The income support system in Denmark offers some of the most generous benefits among advanced countries around the world. Danish social security is based on a philosophy of strong support for families, protecting the most vulnerable in society, and encouraging a duty to participate in the

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workforce. Denmark has one of the most expensive governments to operate and one of the highest tax burdens in the OECD. Transfers to families with children, highly subsidized day care, maternity benefits, social assistance payments, and disability benefits are all important features of the Danish system.

Denmark's income support system emphasizes a large role for the government and an extensive host of generous benefits for individuals and families. The country is one of the highest spenders on public income support in the OECD and employs some of the highest tax rates as well. However, private occupational pensions are one of the most important features of its social security system and Denmark ranks in the top five among OECD countries for spending on private pensions. This allows Danes to have among the highest retirement incomes in the OECD and relatively few poor pensioners. Denmark also boasts a flexible and mobile labour market with comparably shorter durations of unemployment than most advanced economies. Generous benefits for families, maternity, social assistance, and disabled individuals appear not to have hindered the Danish labour market to a significant extent thanks to the country's high employment relative to its peers. A voluntary employment insurance system also differentiates the system from countries like Canada. Overall, Denmark has an expensive but well-managed income support system that features some unique components.

### **Conclusion**

For the past 150 years Denmark has largely been an economic success. Starting the mid-1800s, Denmark liberalized their economy by adopting free trade, free markets, protection of private property and sound public finance. Historically, the Danes have had a relatively small government. This recipe served the Danes well, making them one of the most economically free nations in the world and one of the wealthiest.

However, once the Danes created such abundance, they experimented with redistributing this wealth in the effort to create a more comprehensive welfare state. Starting in the late 1960s, the Danes expanded government spending to provide better pensions, healthcare coverage, and education for citizens. This well-meaning policy soon led to unsustainable public spending. That spending, along with labour reforms that pushed up structural unemployment, combined with the 1970s oil shocks, led to substantial stagflation in Denmark. The Danes realize that if they wanted to maintain their generous welfare state, they needed to commit to sound public finance and institute reforms to their welfare system.

The result of these reforms created an economic system that economist Jim Otteson characterizes as "welfarist" instead of "socialist". The Danes pay high income and sales taxes to fund government spending on social benefits. However, the Danes also remain committed to free markets, protection of private property, free trade, and sound public finance. They have learned that there are limits to expanding the role of government and instead rely on free enterprise to provide the wealth that funds their welfare state. This commitment to economic freedom carries over to education, pensions, and medical care where the Danes have private and public entities competing with each other for consumers. It is a system that makes Danes healthy, wealthy, and happy.



# ACTIVITY 4 – The More the Merrier

## Introduction

The friendly invitation, “the more, the merrier,” may not have originated to describe market competition, but it certainly applies. The happy outcome of open, competitive markets is increased supply at lower prices. In general, markets characterized by ease of entry and relatively large numbers of sellers whose products readily substitute for one another are more competitive than markets with significant barriers to entry, relatively few sellers, and/or unique products with few substitutes. Thus, opening markets to competition by removing barriers to entry also opens the door to improved well-being for the poor. This student activity simulates a transition from a closed, controlled, relatively non-competitive market to one that is open and highly competitive. Students experience the reality that opening markets to the entry and exit of sellers increases output and reduces prices in a process that makes possible higher standards of living for both buyers and sellers.

## Materials

Activity 4 Slide Deck – <https://docs.google.com/presentation/d/1H5ZLOw2ymzAmU8elkZEBs47Vsk7isasWND8b3zG-DNs/edit?usp=sharing>

Several (6-8) boxes of regular-size, identical paper clips

Prototype paper clip bracelet made with 6 paper clips, fastened together chain style, connected into a circle

Large bag of small pieces of candy – as many as 10 per student

Half sheets of paper in 3 different colours (Ok to use scrap paper, if one side is blank.)

Prepare approximately 4 sheets per student’ approximately  $\frac{3}{4}$  colour A,  $\frac{3}{16}$  colour B,  $\frac{1}{16}$  colour c. For example, for a class of 25 students prepare 72 sheets of colour A, 20 sheets of colour B, and 8 sheets of colour C. Colour A will become the 1 Classroom Buck notes, colour B will be the 5 Classroom Buck notes, and colour C will be the 10 Classroom Buck notes.

15 - 20 pieces of 1-Classroom Buck currency for bank and for sellers to use as change (See page 17 for master.)

Handouts:

- Visual/Handout 2: Producer / Seller role description – 8-10 copies (page 12, may be laminated for future use)
- Visual/Handout 4: “Transaction Record” – 1 per student (pages 14-15)

Visuals (or use Activity 4 Slide Deck):

- Visual 1: Scenario (page 11)
- Visual/Handout 2: Producer/Seller role description (page 12)
- Visual/Handout 3: Worker / Buyer role description (page 13)

**Realities of Socialism – Lesson 4: The Mirage of Swedish Socialism**

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- Visual/Handout 4: Transaction Record (page 14)
- Visual 5: Currency Samples (page 16)
- Visual 6: Market Record (page 18)

## Key Terms

Competition	The effort of two or more individuals or organizations to get the business of others by offering the best deal. Consumers compete with other consumers for goods and services. Producers compete with other producers for sales to consumers.
Demand	The quantity of a good or service that consumers are willing and able to buy at given prices during a period of time.
Markets	Places, institutions or technological arrangements where or by means of which goods or services are exchanged.
Price	The amount people pay when buying a good or service.
Supply	The quantity of a good or service that producers are willing and able to sell at given prices during a period of time.
Standard of Living	The level of subsistence of a nation, social class or individual with reference to the adequacy of necessities and comforts of daily life.

## Objectives

Students will be able to:

- Explain the relationship between increased competition and prices.
- Compare and contrast the conditions of open markets vs closed markets.
- Predict the impact opening markets would have on standards of living.

## Time Required

50 minutes

## Learning Objectives

### *Incentives*

People usually respond predictably to positive and negative incentives.

- Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide them the highest possible net benefits.

### *Markets and Prices*

A market exists when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

### **Realities of Socialism – Lesson 4: The Mirage of Swedish Socialism**

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## Competition and Market Structure

Competition among sellers usually lowers costs and prices, and encourages producers to produce what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

- The pursuit of self-interest in competitive markets usually leads to choices and behaviour that also promote the national level of well-being.
- The level of competition in an industry is affected by the ease with which new producers can enter the industry, and by consumers' information about the availability, price and quantity of substitute goods and services.

## Preparation

Room set up – Arrange large furniture so that the room can be easily divided into a “buyer area” and a “seller area” at the beginning of the activity. (The size of these areas will change throughout the activity as students change their roles.) Leave an open space in the middle of the room for the market.

“Hiring” an assistant – Using a teacher's aide or student assistant to distribute materials during the activity is advantageous. The aide can distribute currency blanks and bracelet supplies while you are giving instructions and or conducting discussions after each round, resulting in less unstructured time for students.

## Procedures

1. Put a large pile of candy on your desk and tell students that each person's performance in the upcoming activity will determine how much candy he/she can buy at the end of the period. (If students ask the price of the candy, tell them it will be determined “by the market” or “at the end of the activity.”) Pose the following discussion questions and record students' answers on the board, a flip chart, or overhead transparency. These “hypotheses” will be revisited in the debriefing discussion after the activity.
  - a. Does market competition hurt the poor? (Divide the chart into 2 columns, headed “NO” and “YES.” Record student responses — reasons, explanations, examples — in the appropriate columns.)
  - b. Which are better for the poor: open, highly competitive markets or relatively closed markets in which the government controls the degree of competition? (Divide the chart into 2 columns, headed “OPEN” and “CLOSED.” Record student responses in the appropriate columns.)
2. Display the “**Scenario**” visual and read the description so that students understand the conditions being simulated in the activity.
3. Give **Producer/Seller role descriptions** to 2 students. (Add or subtract 1 producer/seller for class sizes above 30 or below about 20.) Move the 2 sellers to the “seller area” and move the rest of the students to the “buyer area.” Instruct students to leave an open area between.
4. Display the visual of the **Seller/Producer role description** so that all students understand the role of the 2 producers/sellers. Demonstrate how the bracelet is made and give a prototype to

- the 2 sellers to examine. (Do not hand out production materials yet.) Remind the producers/sellers that their goal in the activity is to get as many classroom bucks as they can.
5. Explain that the rest of the students will be workers in the government's new currency production facility. Display the visual and/or read aloud from the **Worker/Buyer role description** so that all students (including the 2 sellers) understand the role of the workers/buyers. Remind the workers/buyers that their goal in the activity is to get as many bracelets as they can.
    - a. Mention, but don't belabour, the importance of making currency carefully. Explain that as the banker, you will determine whether or not currency is acceptable. Make sure that sellers understand that they may ask you to determine whether currency is valid or "counterfeit." If sellers accept faulty currency, they risk not being able to turn it in for candy at the end of the activity. This is simply a class management tool that allows you to keep all "workers" occupied throughout the production sessions.
  6. Distribute a **Transaction Record** handout to each student and display the corresponding visual. Instruct students to circle their roles at the beginning of each round. Explain that there will be several timed rounds of the game and that they will record their gains at the end of each round. At the end of the game, they may use their Transaction Records to purchase candy.
    - a. Bracelet producers/sellers must have classroom bucks to purchase candy.
    - b. Workers/buyers must have bracelets to purchase candy.
  7. Answer any questions students have about the procedures of the game. Instruct students that they must stay in their assigned roles. (If students question this or object, you may also announce that in later rounds, you may offer opportunities to change roles.)
  8. Caution students not to begin work until you start the time for the production session. Distribute the half-sheets of paper so that the 3 colours are distributed (approximately) in the following ratio: 3/4 colour A; 3/16 colour B; 1/16 colour C. (For a class of 25 students, give 18 colour A, 5 colour B, 2 colour C.) Announce that students will be using the paper to make 1, 5, or 10 classroom bucks, and designate the paper colour (colour A = 1 buck, colour B = 5 bucks, and colour C = 1 buck) for each denomination. Give a box of paper clips to each seller. Display the currency designs on the overhead.
  9. **Round 1:** Open a 5-minute production/work period. Warn students when there are 30 seconds remaining.
  10. End the production session. Quickly remind students that during the market session sellers may offer their bracelets for sale at any price and may even sell at different prices to different buyers. Buyers may offer and/or agree to purchase at any price using the currency pieces they produced.
    - a. Explain that you will act as a bank for those needing change for 5s and 10s.
    - b. Remind sellers to be on the lookout for "fake" currency and that you will be available to judge whether a particular piece of currency will be accepted by the bank.
    - c. Remind both buyers and sellers to record transactions on their "Transaction Record" handouts.
    - d. Explain to buyers that any money not spent on bracelets will be collected at the end of the market period. We will assume that any money not spent on bracelets was spent on something else.

11. Announce the opening of a 3-minute market session.
12. End the market session after 3 minutes (or earlier if all the bracelets have been purchased).  
Instruct students to complete their transaction records for the round.
  - a. While they are doing so, circulate through the room, picking up all the currency from round 1.
  - b. Teacher Note: Anticipate a variety of unscripted occurrences. For example, a group of students may ask whether they can work together to produce currency. The answer should depend on your judgment based on classroom management rather than on the demands of the activity. Similarly, if students try to resell bracelets, decide if you will allow it based on whether it is disruptive. If an occurrence is likely to happen in real markets, let it happen in the activity, unless you believe that it gets students off-task or changes their goals in participating in the activity. The one exception is that students may not change roles except as provided for in later rounds of the game. Do not, for example, allow students to “quit” their jobs at the currency factory and go to work for one of the bracelet producers. This results in too many bracelets and too little money, vastly complicating the debriefing.
13. Collect classroom bucks (or ask your assistant to do so) from the sellers as deposits to their bank accounts. Collect the purchased bracelets from the buyers for safekeeping. This classroom management strategy prevents thefts and eliminates the development of a secondary market. Also collect the worker/buyers’ remaining bucks. (Remind students that they spent the money on other things when they couldn’t purchase bracelets. This step keeps the money supply stable from round to round, so that subsequent price changes reflect changes in supply.)
14. Display the **Market Record** visual or recreate the chart on the board to fill-in. Ask the sellers to report. (If sellers had trouble keeping accurate records because they were so busy, you may also collect this information by having buyers report their purchase prices.) Record the number of bracelets produced at the various prices. Draw students’ attention to the range of prices and the numbers produced and sold.
  - a. Discussion Questions:
    - i. Workers/Buyers: Did everyone who wanted a bracelet purchase one? (*No*) Why not? (*Answers will include both that not enough bracelets were produced and that some workers didn’t have enough money.*)
    - ii. Who was able to purchase a bracelet and who was not? (*Students who made \$10 classroom bucks will have more bracelets than students who made \$1 bucks.*)



- ii. Who was able to purchase a bracelet and who was not? (*Students who made \$10 classroom bucks will have more bracelets than students who made \$1 bucks.*)
  - iii. Producers/Sellers: Were you able to make as much money as you wanted to? (*No. Producers/sellers would have liked to charge a higher price and/or produce more.*) Was round 2 different from round 1? If so, how? (*Sellers may comment that they got better at making bracelets because they had more experience. They may also comment that the buyers knew more about the market and that may have affected the speed of transactions and/or the price.*)
19. **Round 3:** Before beginning round 3, announce that more resources have become available and offer the opportunity for workers/ buyers to become producers/sellers for 4 Bucks cash, or 6 Bucks loan (which must be repaid at the end of the activity). (**Note:** *Limit the number of additional sellers to 3-5, depending on the number of students in the class, or you won't have enough buyers in the market session. Do not announce the number of seller licences available, just open a line. When you have enough sellers, close the line by saying that there are no more resources available.*)
- a. Use a marker to write "seller" on students' transaction records next to Round 3.
  - b. Collect 4 Bucks or write "5 Buck loan" on transaction records. Collect bracelets and any unspent currency from the new producers. (The number of bracelets each student purchased will already be recorded on his/her transaction record. Use the marker to circle the number.) Tell students they will be given credit for the bracelets at the end of the game, but you are picking them up because they can sell only bracelets they produce.
  - c. Direct students to move into the producer/seller area and give them paper clips.
  - d. Collect bracelets and unspent currency from remaining workers/buyers and collect money (bank deposits) from sales by producers/sellers before starting the next round.
20. Announce that some workers/buyers will be working overtime. Distribute 2 half-sheets of paper to some of the workers/buyers. (The purpose of "overtime" is to keep the money supply relatively stable. For example, if you added 3 producers, two former 1-Buck workers and one a former 5-Buck worker, give an extra sheet of paper to 2 of the remaining 1-Buck workers and 1 of the remaining 5 –Buck workers, or to 7 1-buck workers. Distribute only 1 half-sheet to each remaining \$5 or \$10 worker.
21. Conduct the 3rd production period and then the 3rd market period, reminding students to record all transactions.
22. Tally the results of round 3 on the Market Record visual.
23. (Optional) Conduct round 4 if time permits or debrief after round 3. Announce that licences are still available and that sellers have the option of quitting their businesses and becoming worker/buyers. (If bracelet prices dropped enough, some sellers will decide that they would be better off as workers. If only a few take this option, make them 5-Buck workers. If more than a few, designate some 1-Buck workers.)

## Debriefing Questions

1. Direct students' attention to the Market Record visual. What happened to the production level and price of bracelets over the activity?  
*(Price and quantity remained relatively stable in rounds 1 and 2. In round 3, prices fell, and the quantity supplied increased. Note: If you did not play a practice round, you may see differences in rounds 1 and 2 that are attributable to students figuring out their roles and/or gaining more information about the market. If you played a 4th round, the decline in price and increase in quantity should be even more noticeable.)*
2. Why were prices lower in the 3rd round?  
*More bracelets were supplied, and the price was lower because there were more producers who were competing with one another for the buyers' money. Since the bracelets were all the same, the way sellers attracted buyers was to offer a lower price.*
3. Why were there more bracelets produced and sold in the 3rd round?  
*There were more producers, and the price of bracelets was lower.*
4. (To the original 2 sellers) How did your income in the 3rd round compare to your income in the 1st and 2nd round? Why?  
*It is likely that their income was lower in round 3 because they had to lower prices to compete with other producers/sellers. However, some sellers may have experienced an increase in income by selling more bracelets than they sold in earlier rounds.*
5. (To the new sellers) Did you benefit by becoming a producer/seller instead of a worker/buyer? Why?  
*Answers will vary. Some will have improved their situation by becoming sellers, but others may contend that they would have ended up able to buy more candy if they had remained workers/buyers. Point out that while the economy as a whole benefited from greater production and lower prices, the opportunity to enter the market entails risk for an individual and does not guarantee that he or she will be better off.*
6. (To workers) Why did you choose to remain workers/buyers instead of becoming sellers in the 3rd round?  
*Answers will vary. Some students may not have wanted the risk of becoming sellers. Others may have believed that they would make more money (and get more candy) by remaining workers/buyers.*
7. Were you better or worse off in the 3rd round than you were in the 1st and 2nd rounds? Why?  
*It is likely that most of the students will say they were better off in the 3rd round. With the lower price of bracelets, more bracelets available, more income for workers, and more purchases of bracelets, many students were able to earn more candy in round 3 than they were in earlier rounds.*



8. Which group of workers benefited most from opening the market to more competition in the 3rd round?  
*You may wish to take a count, asking how many \$1 workers, \$5 workers, and \$10 workers felt they were better off in the 3rd round. The lower prices and greater availability made the biggest difference for the poorest workers/buyers - both those who remained workers/buyers and those who chose to become producers/sellers.*
9. Rounds 1 and 2 simulated what is known as a “closed” market. What are the conditions of closed markets?  
*Few sellers – sometimes only one, low level of competition, low level of production, high price.*
10. What countries in the modern world or in recent history have market conditions similar to those we simulated in rounds 1 and 2?  
*Accept a variety of answers. Students may propose any of today’s communist nations, nations in which markets are severely restricted, etc. They may also point to historical examples like the Soviet Union, India under the caste system, South Africa under apartheid, etc.*
11. What happened to the level of competition in the market from round 2 to round 3 (and if you ran round 4, from round 3 to round 4), and why?  
*The level of competition increased as additional sellers entered the market.*
12. Given your experience in the bracelet market, what would you predict would happen to the prices and availability of products if a nation restricted entry into markets?  
*Fewer products would be available at higher prices.*
13. It’s easy to think of examples in which communist or dictatorial governments close markets, sometimes to the extent of allowing only 1 producer/seller: the state. However, markets are not either “open” or “closed.” Instead, there are degrees of openness, and even very open, highly developed economies may close particular markets to some extent by restricting the entry of new producers/sellers. For example, import tariffs close markets by making it harder for foreign producers/sellers to enter. What other kinds of regulations within a market economy close markets to a greater or lesser extent?  
*Licensing regulations for doctors, teachers, barbers, lawyers, etc.; taxi-cab medallion requirements in NY city; and permit requirements etc. are some examples. Help students to see that even within market economies we have various levels of open and closed markets, and the more open the market, the lower the prices and the more available goods are to people at lower income levels.*
14. Direct students’ attention to the flip chart “hypotheses” recorded in the discussion before the simulation.
- Which hypotheses are supported by the bracelet simulation?
  - Which hypotheses are challenged by the bracelet simulation?
- The bracelet activity shows that opening markets to competition makes more goods and services available at lower prices. As such, it challenges those hypotheses that suggest the poor are exploited or further impoverished by opening markets to greater competition.*

15. Given your experience in the bracelet market, would it be better to be a poor person in a country with open markets or in a country with closed markets? Why?

*Although the \$10 workers may have found no advantage to opening the market in round 3, the \$1 workers clearly benefited from the freedom of new sellers to enter the market. More bracelets were produced, and the sellers had to compete for sales by lowering their prices. Additionally, workers/producers may comment that they had the opportunity to try to change their condition by becoming producers/sellers - something they couldn't do in round 1.*

16. Given your experience in the bracelet market, what would you predict would happen if a country with closed markets and government sellers were to allow additional sellers to enter the market?

*Standards of living would rise, and poverty would be reduced. Use overhead transparency, "Case Study in Opening Markets," to demonstrate to students the remarkable reduction in poverty that has occurred as China has begun to open its markets.*

## Visual 1

### Scenario

You live in a small country in which the repressive military dictator was recently overthrown. The new government promises to improve standards of living by an aggressive program of industrialization.

To make good on these promises, the government has taken the following steps:

- The property of wealthy (and often corrupt) merchants has been confiscated and many have been jailed or exiled
- All non-licensed stores and production facilities have been closed
- A new loan for industrialization has been negotiated with the IMF (International Monetary Fund) and several new factories have recently come online
- The severely inflated currency of the country has been declared worthless and citizens may trade in their money for replacement currency (in the form of Classroom Bucks)
- To maintain control of marketing practices, only 2 merchants are licensed to operate stores, and it is a crime to operate or buy from an unlicensed store

## Visual 2

### Producer/Seller Role Description

In this activity you are a producer/seller of bracelets. You will produce paper clip bracelets and sell them for Classroom Bucks to others in the class. Your goal is to earn as many Bucks as possible. At the end of the activity, you may use the Classroom Bucks from your sale of bracelets to purchase candy.

- The activity will last at least 3 rounds. Each round will be made up of a production period of approximately 5 minutes and a market period of approximately 3 minutes.
- Each bracelet must be made of 6 paper clips, connected to form a complete circle. You may produce bracelets only during the timed production periods. You may sell only the bracelets that you produce.
- You may sell bracelets only during the market period of each round. All sales are cash sales, using Classroom Bucks. You may sell at any price you wish. You may price all bracelets the same or negotiate a selling price for each.
- At the end of a market period, you may keep any unsold bracelets and sell them in subsequent rounds.

## Visual 3

### Worker/Buyer Role Description

In this activity you are a worker/buyer. Your job will be to help design and produce classroom currency called Classroom Bucks.

The currency you make during the production sessions will be your wage. You may produce currency only during the timed production periods. You will try to spend your wages during the market sessions to purchase paper clip bracelets.

Your goal is to purchase as many bracelets as you can over the course of the game. We will assume that any money you do not spend on bracelets is spent on other goods and services. At the end of the activity, you may exchange the bracelets you have purchased for candy.

You may purchase bracelets only during the market period of each round. All sales are cash sales using Classroom Bucks. You may buy at any price you can find. You may negotiate with sellers over price.

***Reminder:*** *You may not save currency for future rounds. At the end of each market session, any currency not used for bracelets will be collected from you, to indicate that you spent it on other things.*

# Handout 1

## Transaction Record

Producer/Seller

<----- Circle One ----->

Worker/Buyer

### Round 1

	Price Received	Price Paid	
Total Bracelets Sold			Total Bracelets Purchased
	\$Total		

### Round 2

	Price Received	Price Paid	
Total Bracelets Sold			Total Bracelets Purchased
	\$Total		

# Handout 1 (continued)

## Transaction Record

Producer/Seller

<----- Circle One ----->

Worker/Buyer

### Round 3

	Price Received		Price Paid	
Total Bracelets Sold				Total Bracelets Purchased
		\$Total		

### Round 4

	Price Received		Price Paid	
Total Bracelets Sold				Total Bracelets Purchased
		\$Total		

## Handout 2

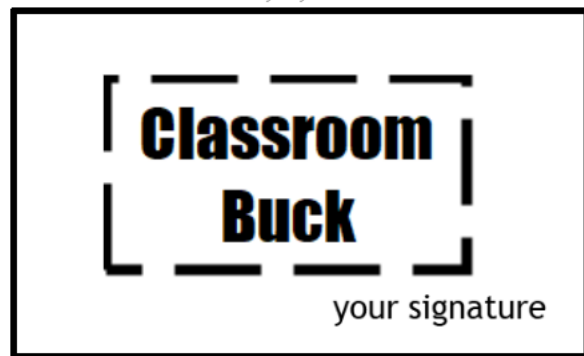
### Currency Production Instructions

- Fold and tear the paper carefully and copy the drawing precisely.
- The currency you produce in this portion of your workday becomes your pay, and you must use it to purchase bracelets.
- Sellers do not have to accept currency they believe to be counterfeit unless the banker tells them the currency is valid.

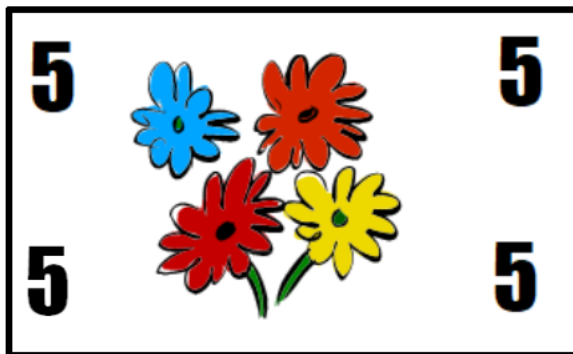
front 1



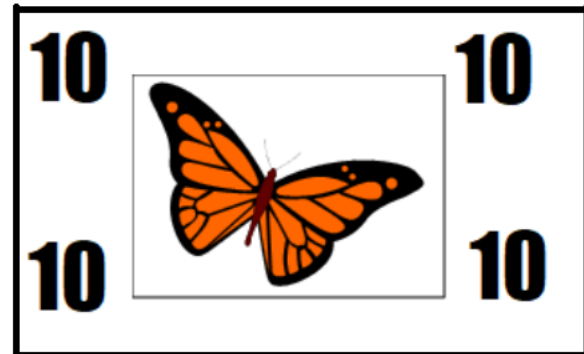
back 1, 5, and 10



front 5

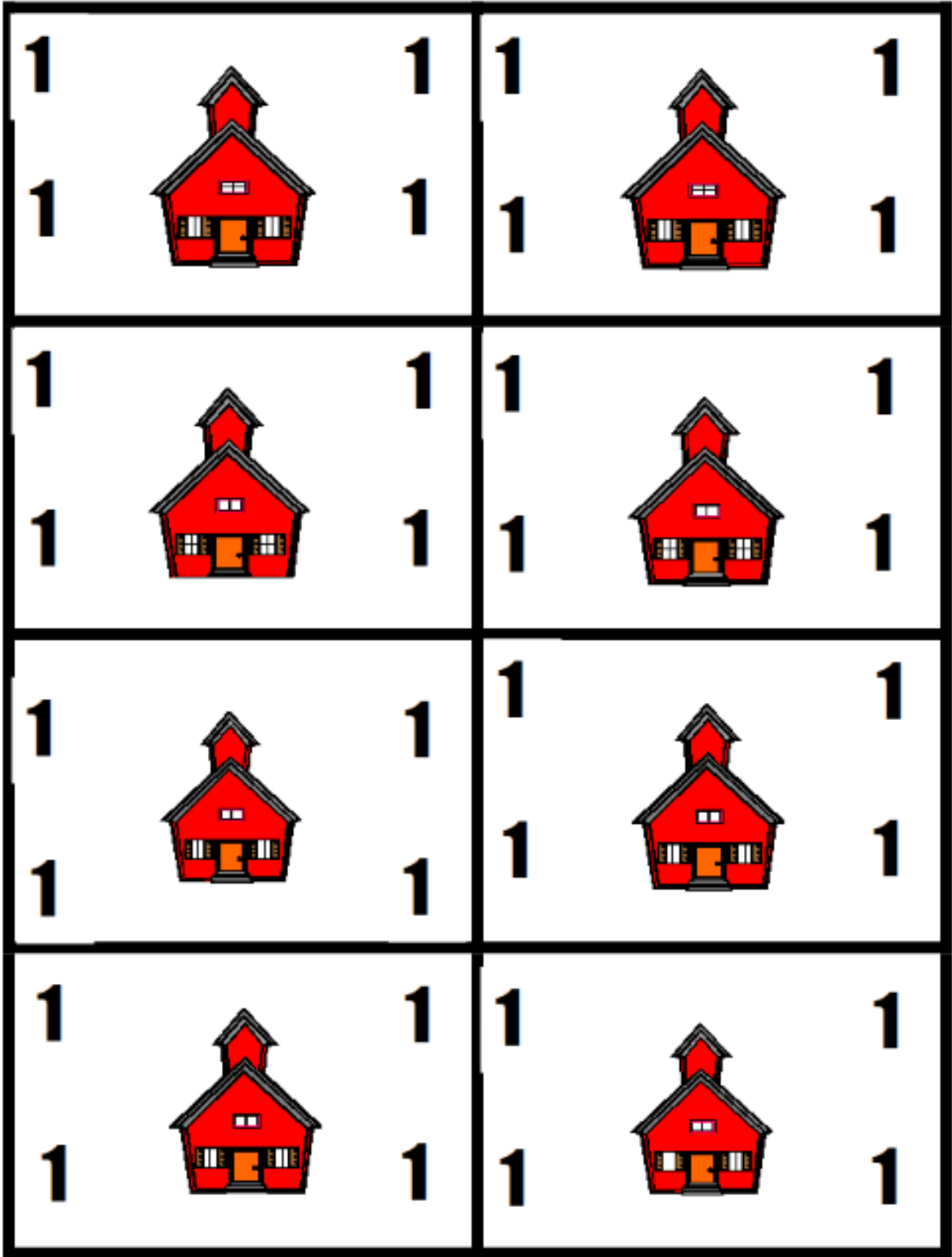


front 10





Handout 2 (continued)



# Handout 3

## Market Record

Sale Price	Round 1	Round 2	Round 3	Round 4	Round 5
24					
23					
22					
21					
20					
19					
18					
17					
16					
15					
14					
13					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					