



Federal Reserve Bank, Houston Branch Essay Contest 2012

Income Inequality:

What role, if any, should the government play in addressing income inequality?

In September 2011 the Occupy Wall Street protest groups took to the streets in cities across the United States. Their claims of income inequality and concerns over the role of the government made headlines. They claimed membership in the 99% of the population whose incomes have increased at a much slower rate than those in the top 1 % of income earners. They contend that economic growth of the last 30 years has created an unfair distribution of income.

In October, the Congressional Budget Office published a report; ***Trends in the Distribution of Household Income Between 1979 and 2007***. It contained the following information:

- For the 1 percent of the population with the highest income, average real after-tax household income grew by 275% between 1979 and 2007.
- For others in the 20 percent of the population with the highest income (those in the 81st through 99th percentiles) , average after-tax household incomes grew by 65% over that period, much faster than it did for the remaining 80 percent of the population, but not nearly as fast as for the top 1 percent.
- For the 60 percent of the population in the middle of the income scale (the 21st through 80th percentiles) the growth in average real after-tax household income was just under 40 percent.
- For the 20 percent of the population with the lowest income, average real after-tax income was 18 percent higher in 2007 than it had been in 1979.

As a result of that uneven income growth, the distribution of after-tax household income in the United States was substantially more unequal in 2007 than in 1979. The share of income accruing to higher-income households increased, whereas the share accruing to other households declined. In fact, between 2005 and 2007, the after-tax income received by the 20 percent of the population with the highest income exceeded the after-tax income of the remaining 80 percent.

This data does not necessarily reflect the experience of particular households. Individual households may have moved up or down the income scale if their incomes rose or fell more than the average for their initial group. Thus, the population with income in the lowest 20 percent in 2007 was not necessarily the same as the population in that category in 1979.

The Statistics Behind Income Inequality

Economists have long debated the causes of income inequality; however, it is generally agreed that educational attainment and family structure are currently two significant factors.

Over the past few decades, more jobs have required high-skilled workers. Therefore, wages for college-educated workers have increased faster than those of low-skilled workers as demand for high-skilled workers increased. This trend accelerated during the late 1990s, when companies continued to rely more on technology. In 2000, individuals with college degrees were on average paid 80 percent more than those who had graduated solely from high school. During the recent recession and recovery, unemployment numbers for individuals with college degrees has been significantly lower than for those with only a high school education. The nature of the American economy, with its increasing emphasis on education and information, has contributed to increased income inequality.

Changes in family structure have also widened the income gap. A growing percentage of Americans live in single-parent households. These families, often headed by single-mothers, earn about half the income of two-parent families. Among the highest paid 20 percent of households, 90 percent were married couple families; among the poorest 20 percent of households, two-thirds are single or single-parent families. This trend in household structure is a second significant factor in explaining income inequality in the United States today.

Identifying the Problem

The economic concept of externality can help identify the costs and/or benefits regarding income inequality issues and help inform what role, if any, government might play in addressing income inequality. **Externalities** are social costs and benefits that spill over beyond the private costs and benefits faced by an individual. One classic example of an externality is a factory's smokestack that pollutes the air and causes health problems for people living nearby. The factory does not face any costs as a result of its pollution; instead, that pollution is a cost that has "spilled over" to the people nearby, who have to "pay" for its unpleasantness and toxicity. One role of government is to sometimes step in and address this form of market failure through regulations, taxes or programs—for if left alone, a market tends not to solve externalities. One way to begin looking at the essay contest question is to ask whether there are external costs or benefits to income inequality.

On one hand, some argue that there are significant external costs due to income inequality. They argue that inequality weakens social cohesion as the lives of the rich and poor become more isolated and separate. With greater inequality, the poor feel disenfranchised and do not participate in civic life, while the rich gain an increasingly powerful influence in politics—thus weakening democracy. Greater income inequality may also result in lower health and increased crime nationally. Furthermore, some contend that poverty breeds poverty, as the children of the poor have to work harder to succeed than the children of the rich. Without intervention, they argue, the problems caused by income inequality will only get worse in the future.

On the other hand, others contest the validity of these external costs and point to possible external benefits of income inequality. Many say that some of the external costs brought up in the previous paragraph—such as higher crime, lower health and less opportunity—are not effects of income inequality, but of poverty. External costs due to poverty exist (individuals in poverty are more likely to commit crime, have health troubles and have children who enter kindergarten not ready to learn), but these problems are separate from the issue of income inequality. In fact, some contend that instead of

disenfranchising, income inequality provides incentives for those who are at low- to middle-income levels to work hard, attain more education and advance to better-paying jobs.

There is a great deal of contention over the external costs and benefits of income inequality. And externalities are not the only economic lens to look through when considering the issue. Often the results of income equality and inequality are discussed as a trade-off between equity and efficiency. Some argue that relatively equal levels of income may promote social cohesion, but market efficiency may be lost due to government intervention or central planning.

Once students have determined how they view income inequality, they can then begin to consider what policy, if any, government should adopt to address the issue.

What to do?

Those in favor of reducing income inequality might, in their essay, describe why income inequality results in externalities or problems and propose measures government could take to remedy them. Possible policies include a more progressive tax system, increased earned income tax credits, or other such policy that redistributes income from the rich to the poor in order to decrease the income divide. Not only would the external costs of income inequality be removed, they might argue, but poverty itself would also be reduced.

In contrast, those opposed to government involvement in income inequality might argue that externalities do not stem from income inequality, but rather from poverty. Government should therefore focus on the welfare of the poor, rather than worrying about the income gap. Policies to address the welfare of the poor might include programs that provide preventive medical care or housing subsidies—or a policy that promotes early childhood and K-12 education in order to provide greater opportunity for all.

Other papers might argue that the government should remain out of the issue completely, arguing that income inequality is not a problem to current American society—or, perhaps, that it is a natural result of our changing economy and the increasing valuation of education.

Essay writers may also, if they wish, compare income inequality in the United States with that in other countries. For example, the distribution of income in Germany and France is more equal than in the United States. Germany and France also have more extensive government services, such as health care and unemployment benefits. However, there may be a trade-off in these benefits. While Germany and France have lower income inequality, they also have higher unemployment rates than the United States.

The ideas suggested in this primer are just a few of the ways students can think about income inequality when they research the topic and write their essays. Students are encouraged to take an innovative position as well as carefully consider the economic concepts involved.

Federal Reserve Bank – Houston Branch Essay Contest

Student Entry Form



Student's name _____

Home address _____

City _____ State _____ Zip _____

Home Phone _____ Cell Phone _____

Student e-mail _____

School _____

School address _____

City _____ State _____ Zip _____

School phone _____

Supervising teacher _____

Teacher's e-mail _____

I, the undersigned, certify that I am a student in good standing at the school stated above. The essay that I have submitted to the Federal Reserve Bank of Dallas, Houston Branch represents my own research and writing and is an original literary composition.

I hereby authorize the Federal Reserve Bank of Dallas, Houston Branch to edit, publish, disseminate and otherwise use my essay, with authorship credit, in its educational publications and economic education workshops.

Student's signature _____ Date _____

Parent's or guardian's signature _____ Date _____

Supervising teacher's signature _____ Date _____

For additional copies of this form, visit our website at www.dallasfed.org and click on Houston

Essay Contest Deadline: March 20, 2012

Income Inequality:

What role, if any, should the government play in addressing income inequality?

Background:

In September 2011 the Occupy Wall Street protest groups took to the streets in cities across the United States. Their claims of income inequality and concerns over the role of the government made headlines. They claimed membership in the 99% of the population whose incomes have increased at a much slower rate than those in the top 1 % of income earners. They contend that economic growth of the last 30 years has created an unfair distribution of income.

In October 2011 the Congressional Budget Office published a report on, *Trends in the Distribution of Household Income Between 1979 and 2007*. One of the conclusions of the report was the following, "As a result of uneven income growth, the distribution of after-tax household income in the United States was substantially more unequal in 2007 than in 1979.

Economists have long debated the causes of income inequality; however, it is generally agreed that educational attainment and family structure are currently two significant factors.

There are a number of economic concepts that you can utilize to discuss this issue. The economic concept of externality can help identify costs and/or benefits regarding income inequality issues and help inform the role government might play, if any.

Often the results of income equality and inequality are discussed as a trade-off between equity and efficiency. Some argue that relatively equal levels of income may promote social cohesion, but market efficiency may be lost due to government intervention or central planning.

Students can compare income inequality in the United States with other countries.

These ideas are just a few of the ways that students may want to address this issue of income inequality when they research the topic and write their essays. Students are encouraged to take an innovative position as well as carefully consider the economic concepts involved.

Contest Overview

The contest is open to 11th and 12th grade students attending schools in the 41 counties served by the Houston Branch of the Federal Reserve Bank of Dallas.

Participants submit essays to the Houston Branch now through March 20, 2012.

Rules

1. The deadline for entry is March 20, 2012. Essays must be postmarked on or before that date.
2. The student entry form with signatures of the student, a parent or guardian and the supervising teacher must accompany the essay.
3. Each student may submit only one essay.
4. Essays must be in 12-point type and limited to five double spaced, one-sided, numbered pages with one-inch margins.
5. Each essay must have a separate title page listing these items:
 - a. Essay title
 - b. Student's name
 - c. Supervising teacher's name
 - d. School name
 - e. Total number of pages submitted
6. The title of the essay, but not the student's name, should appear at the top of the first page of text.
7. A reference page should be included after the last page of text. All sources must be properly acknowledged and correctly noted in the essay.
8. The entrant must submit two copies of the essay. Essays will not be returned to the author.
9. Essays that do not conform to contest rules and regulations will not be submitted for judging and will not be returned to the author.
10. Family members of Federal Reserve Bank employees are not eligible to participate.

Submission

Mail student entry form and two copies of essay with title page to:

**Essay Contest
c/o Susan Kizer
Federal Reserve Bank, Houston Branch
1801 Allen Parkway
Houston, TX 77019**

Judging

Qualified Federal Reserve staff will judge the essays according to five criteria:

1. Comprehension- How well does the essay reflect a thorough understanding of the topic?
2. Conclusions – Do the conclusions follow logically from the argument? Are the conclusions compelling?
3. Creativity- Were diverse resources and original ideas used to develop the topic?
4. Organization- Does the argument follow a logical and easily understood progression? Does the evidence support the essay's main point?
5. Writing – Were correct grammar, spelling, punctuation and concise language used?

Awards Ceremony

Ten essays will be selected for recognition. The selected students, their parents and their supervising teachers and principals will be invited to attend an awards ceremony and dinner at the Houston Branch of the Federal Reserve Bank of Dallas in April 2012. Winners will be notified by April 7, 2012.

The top three essays will receive the following awards.

First Place	\$ 500 Series EE savings bond
Second Place	\$250 Series EE savings bond
Third Place	\$150 Series EE savings bond

Guest will have an opportunity to tour the Bank during their visit.

Mailing information and contact information:

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1801 Allen Parkway
Houston, TX 77019
Attn: Susan Kizer
Economic Education Coordinator
713-483-3667
susan.kizer@dal.frb.org

ECONOMIC PRINCIPLES TO KEEP IN MIND

The following six concepts are key to evaluate trade-offs and reason economically. Students participating in the essay contest are encouraged to review these concepts and incorporate at least one into their essays.

1. Opportunity Cost: There is No Such Thing as a Free Lunch

People and societies face trade-offs. To obtain something they want, people have to give up something in return, and what they give up is known as the opportunity cost. Individuals face numerous trade-offs, from such mundane choices as whether to attend a ballgame or a movie, to more important choices, such as how much income to spend vs. how much to save. An important trade-off a high school senior faces is whether to go on to college. The opportunity cost of pursuing a college degree is not only the expenses for books and tuition but also the income the student would forego while attending college.

Societies or nations also face important choices. Markets on their own may have undesired outcomes or result in misallocated resources. For example, governments must decide how to redistribute income to alleviate poverty, as well as determine the level and mix of public goods, such as national defense, education, public safety and other programs. Thus, nations must decide the method in which scarce resources are allocated and each method has costs and benefits. The costs and benefits often relate to efficiency (is the nation producing the most given its limited resources) and distributive (is the allocation of resources to individuals "fair").

2. Marginal Analysis: Thinking Incrementally

Recognizing trade-offs does not in itself tell us what choice to make. Assuming (as economists do) that people behave in their own best interests, then incremental thinking—that is, marginal analysis—leads to the right decision. For example, you and two friends pay \$10 to attend a movie on Friday evening that the critics gave five stars. Forty-five minutes into the movie you all agree that the film doesn't even rate one star. One friend wants to leave and go to your house and play pool, but other friends argue that you should see the rest of the film because you have paid for it. They turn to you to resolve their dispute, and it's an easy decision—you favor going to play pool.

On the way to your house, you explain to your friends how marginal analysis led to your decision. In this situation, it was how to spend the rest of Friday evening after you had already started watching the movie. Once you started watching the movie, the cost of a ticket was what economists call a sunk cost; that is, it's an outlay that once made cannot be recovered. The trade-off you faced was spending another hour and one-half watching a boring movie or playing pool.

In addition to keeping sunk costs from distorting your decision, you explain that marginal analysis means that decisions are reached by weighing additional costs against additional benefits. In this case, the benefit of playing pool is greater than the benefit of watching the rest of the movie. So, despite the fact that you had spent money and time watching the movie, your best choice was to play pool. If you had let sunk costs (that is, the money and time spent watching the movie) dictate your decision, you would have spent the hour and one-half in a less gratifying activity.

While marginal analysis can be used to salvage an evening on the town, it also guides businesses to maximize profits. A business will continue to expand sales and output to the point that the incremental cost of providing the particular good or service equals the price of that good or service.

Marginal analysis can also be used by societies and nations. The decisions policy makers choose regarding national affairs should also factor in the concepts of sunk costs. So leaders must decide how policies will effect the country at the margin and also think about the opportunity costs. For example, if program A will cost the nation \$100 million in taxes but provide the nation with \$110 million in societal benefits, the marginal benefit is a positive \$10 million. However, if program B costs the same but provides more benefits, the marginal benefit may be greater with program B. Another wrinkle to this analysis is that the cost may be greater than the tax dollars collected, because the taxpayers may have invested those tax dollars in endeavors that would yield an even larger benefit.

3. Markets: Coordinating Consumption and Production

Market-determined prices—that is, prices determined by producers and consumers acting in their own best interest—are the signals that help define the trade-offs we face and that ultimately lead society as a whole to allocate resources efficiently. Understanding how changes in supply and demand affect prices is an important

component of economic literacy. When a prospective college student, for example, contemplates majors, she might speculate about where demand for workers is increasing fastest, because wages and job opportunities will probably be greatest in those occupations.

When prices change then trade-offs change, and people's decisions change. Our college student might discover, for example, that the demand for software engineers has increased and, subsequently, that wages for those jobs have also risen. Also, many public policy decisions, such as changes in the tax code, involve changing incentives with the hope of changing behavior.

Many times people are unhappy with the prices that markets produce, but an economically literate person realizes that prices are important signals that reflect underlying changes in supply and demand. Consumers and producers respond to these signals in ways that make society better off. For example, as gasoline prices rose dramatically in the 1970s due to supply disruptions in the Middle East, consumers reacted by driving fewer miles, and U.S. oil producers had an incentive to increase production. Subsequently, oil prices declined over time. When governments interfere with these market adjustments, society is usually worse off. Recall that as gasoline prices first rose in the 1970s, the U.S. government attempted to control prices. So instead of energy conservation and increased production, we got shortages, long lines at gas stations and a more serious disruption in economic activity than otherwise.

Nations not only decide through the rule of law how much free market activity is allowed, they also decide how much to use the market in the provision of government services. Should the government hire and manage government services directly, or should the government decide what services are needed and then use market forces to provide these services.

4. Prices

For prices to play this coordinating role, people must be able to distinguish relative price changes from changes in the overall price level. To examine how a particular price change alters the trade-offs, it must be abstracted from an overall change in prices. Suppose cost of a college education has risen from \$5,000 to \$10,000 during the last five years. The nominal increase would be 100 percent. But if overall prices had risen 50 percent, the purchasing power of the dollar would have dropped. Thus, inflation accounts for half of the \$5,000 increase, and the other half would represent a real increase in the cost of a college education.

Price stability—that is, an economy without inflation or deflation—gives people the ability to distinguish between relative and overall price changes. Price instability hurts economic growth because it is harder for decision makers to distinguish between real and relative price changes. Price stability and instability is generally determined by the money supply. Given that central banks control the money supply, part of a nation's economic growth is determined by how governments set up their central banks. Central banks that are given a lot of autonomy and are free from political pressure may have an easier job of providing price stability literacy is understanding how, and to what end, central banks control the money supply.

5. Trade and Specialization

Trade is an engine for economic growth because it enables an economy to take advantage of specialization, and increases and improves the trade-offs confronting society. Along with the "invisible hand," Adam Smith saw how the division of labor, that is, specialization, increases the wealth of nations. He visited a pin factory and found:

One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds at the top for receiving the head; to make the head requires two or three distinct operations; to put it on, is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands ... I have seen a small manufactory of this kind where ten men only were employed, and where ... each person ... (averaged) four thousand eight hundred pins a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each them make twenty, perhaps not one pin in a day.

Having established a specialty in the manufacture of pins, a nation would then have to establish a trading relationship with another country that specialized in some other product; without trade, the benefits of specialization cannot be realized. It may be to the advantage of that country to specialize in pins even if other countries can produce pins at a lower cost, if the first country can produce pins more efficiently than it can produce other goods; that is, it has a comparative advantage. Quite simply: "Each producer has a 'comparative

advantage' in doing what it does best—and trading for the rest," wrote Leonard Silk, former *New York Times* business writer.

Specialization allows a person, business or nation to specialize in those endeavors that they do best, instead of striving for self-sufficiency. This benefits us in two ways: First, a greater variety of goods and services are available; and second, they are available at a lower cost. Between 1960 and 1995 world exports rose at a 6.1 percent annual rate and world output advanced 3.8 percent. "This growth of trade has led to wider competition, allowing countries to benefit from their comparative advantage and raising living standards everywhere," according to the 1997 *Economic Report of the President*.

In addition to specialization, trade also promotes technology transfer, cultural awareness and increases social capital all of which can increase economic growth.

6. Market Failure

Although many decisions in a market economy occur in private markets, government has a role, and being able to evaluate whether or not government should intervene in the economy is another element of economic literacy. For markets to function properly, governments must define property rights and make contracts enforceable.

But it may also be necessary for government to intervene if markets are allocating goods and services inefficiently, in other words, if there is a market failure. In some markets, either the buyer or the seller may have incomplete information that distorts the trade-offs confronting them; for example, the government may require certain labeling disclosures on food products to help consumers make choices. Antitrust laws are intended to keep producers from restricting output and charging higher prices than would be set in perfectly competitive markets.

Left alone, markets may produce too few or too many particular goods. The justification for many of the goods and services that government provides is that provisions would be inadequate if left to the markets alone. That's why the government provides public goods and services ranging from provision of national defense and police protection to roads, education and health care. In other instances, markets may fail to consider the cost imposed on third parties; for example, market prices may not reflect the costs imposed by air pollution (when the affected parties cannot easily negotiate an agreement), and it may be necessary for the government to intervene.

Besides correcting market failures, governments have a role in guaranteeing a socially acceptable distribution of income. Markets compensate people according to their ability to produce goods and service that others will purchase. They do not secure for everyone adequate food, clothing, shelter, health care and so on, thus the justification for a progressive income tax and government assistance programs. Moreover, because of government's large relative share of economic activity, it has a big impact on overall economic performance. Therefore, another aspect of economic literacy is to understand government's role in dealing with economic fluctuations and growth.

To acknowledge that government in some instances can improve market outcomes does not necessarily imply that government always does improve them. Public policy is often far from perfect—as noted in the above example regarding 1970s gasoline prices. Sometimes policy is made with incomplete knowledge or to reward the politically influential. Thus, an aim of economic literacy is to teach people how to ascertain when a government policy will improve market outcomes. That doesn't mean that economically literate people will necessarily agree on outcomes or policy, but at least they will understand the choices and trade-offs they are making.

Underlying these six concepts are the 20 Voluntary National Contents Standards in Economics that were prepared under the leadership of the National Council on Economic Education.

Adapted from:

Dahl, David S. "Why Johnny Can't Choose: And what Johnny (and Jane) needs to know to understand the economy." *The Region*. Federal Reserve Bank of Minneapolis. 1 Dec. 1988.