

PAGE ONE ECONOMICS NEWSLETTER

the back story on front page economics

“Wait, Is Saving Good or Bad? The Paradox of Thrift”

May 2012

Classroom Edition

An informative and accessible economic essay with a classroom application.

*Includes the full version of the Page One Economics Newsletter,
plus questions for students and an answer key for classroom use.*

Common Core Standards (see page 9)



Prepared by Scott A. Wolla

Economic Education Group of the Federal Reserve Bank of St. Louis



May ■ 2012

Wait, Is Saving Good or Bad? The Paradox of Thrift

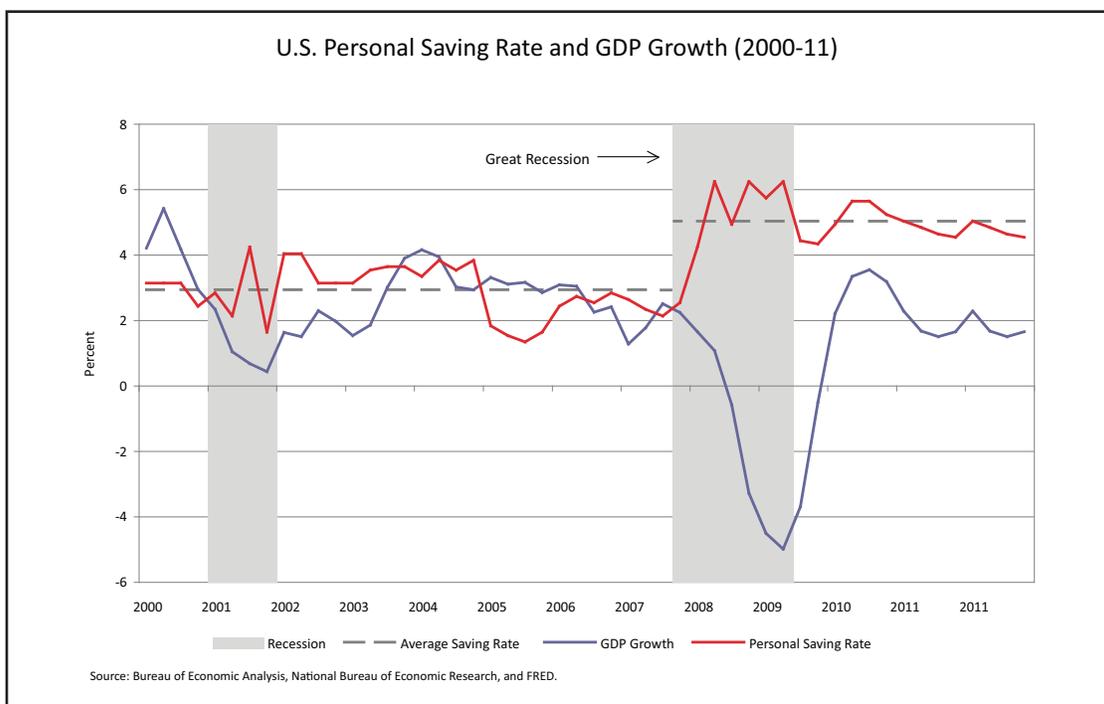
E. Katarina Vermann, *Research Associate*

*"[Saving] is a paradox because in kindergarten we are all taught that thrift is always a good thing."*¹

—Paul A. Samuelson, first American to win the Nobel Prize in Economics (1970)

People save for various reasons. Some save with a specific purchase in mind, such as cosmetic surgery or a Porsche, while others save just to have more money. Economists say that individuals save to buy durable goods and/or accumulate wealth to maintain a certain lifestyle during retirement or in times of financial uncertainty. These reasons all confer benefits to a saver. In the near term, the saver can finally buy the latest and greatest gadget, and in the long term, the saver can be more financially secure during retirement or unplanned unemployment.

Normally, personal saving declines during recessions because people want to maintain their existing level of consumption. During the Great Recession, though, saving increased. The chart shows the **personal saving rate**, the year-over-year growth rate of gross domestic product (GDP), and recession periods from 2000 to 2011. Before the Great Recession, the average saving rate for the typical American household was 2.9 percent. Since the recession started in 2007, the average saving rate has risen to 5.0 percent. This increase was largely driven by uncer-



tainty about future employment, efforts to reduce debt, and wide fluctuations in stock and housing prices. Although this increase in saving benefits individuals who save more, some economists argue the dramatic change in saving behavior is detrimental to the overall economy. Given the benefits to individuals, how could saving harm the economy?

John Maynard Keynes, who published his influential work, *The General Theory of Employment, Interest, and Money*, in 1936, noted saving can ultimately be detrimental to the economy because of the **paradox of thrift**. This theory argues that if everyone individually cuts spending to increase saving, *aggregate* saving will eventually fall because one person's spending is someone else's income. Because increased saving, by definition, decreases current consumption, it stifles demand.

A simple example can illustrate this paradox. Let's assume I want a new computer, so I start saving an extra \$100 each month that I would otherwise spend going out to eat. By choosing not to spend that \$100, I deny the wait staff at my favorite restaurants some work hours and tips (i.e., some portion of their income). As a result, these workers also have to reduce their consumption because they are earning less. If society (as opposed to an individual as in our example) follows this saving pattern, this snowball (or **Keynesian multiplier**) effect could ultimately lead to decreased consumer spending and lower income for everyone. Consequently, Keynes argued, output would decrease and, therefore, limit economic growth/recovery until, of course, I bought my new computer with the money that I've saved.

In the Great Recession, the increase in the number of adult children (25 to 29 years of age) living with their parents is also a good example of the paradox of thrift. According to the Census Bureau's "Families and Living Arrangements" dataset, the percentage of 25- to 29-year-olds living with their parents increased from 14 percent in 2005 to 19 percent in 2011.² This arrangement allows them to save money on rent/mortgages, utilities, cable, and furniture. However, because the addition of just one new household contributes an estimated \$145,000 to the economy when one factors in multiplier effects,³ the rise in the number of twentysomethings living with their parents could have deprived the economy of up to \$25 billion per year during this period. Even if this is accurate, it's a very small share of a \$15.3 trillion economy. In the short run, then, some could argue that this choice by young adults to save slows not only the housing market, but also the retail, construction, and manufacturing industries.

These two examples illustrate that saving can have unintended consequences because one person's consumption is another person's income. During recessions, decreases in consumption could inhibit economic recovery. However, in the long run, the accumulated money from individual savers is available for capital investment, a situation where businesses borrow to purchase **capital** (e.g., machinery and technology). Thus, an increase in the saving rate increases capital investment (e.g., **investment** in machinery for production). Such increases in capital stock ultimately lead to higher levels of business productivity and growth. Because economists are largely concerned with long-run growth and economic theory notes the positive aspects of increased saving, the paradox of thrift remains a controversial concept. So ultimately, it is OK to save for that big purchase since future consumption benefits both you and society. ■

NOTES

¹ Samuelson, Paul A. *Economics*. Fourth Edition. New York: McGraw-Hill, 1958, p. 237.

² U.S. Census Bureau. "Families and Living Arrangements," Table A2 (www.census.gov/hhes/families/data/cps2011.html for 2011 data and www.census.gov/hhes/families/data/cps2005.html for 2005 data).

³ Rampell, Catherine. "[As Graduates Move Back Home, Economy Feels the Pain.](#)" *New York Times*, November 16, 2011.

GLOSSARY

Capital: Resources and goods made and used to produce other goods and services. Examples include buildings, machinery, tools, and equipment.

Investment: The purchase of physical capital goods (e.g., buildings, tools, and equipment) that are used to produce goods and services.

Keynesian multiplier effect: An effect where an increase (decrease) in a component of aggregate demand (i.e., consumption, investment, or government spending) produces an increase (decrease) in national income that is greater than the initial increase (decrease) in the component. This greater-than-proportional change in national income is the result of chain reactions that generate more (less) activity than the original increase (decrease).

Paradox of thrift: A controversial Keynesian economics theory, which proposes that if everyone tries to save more during a recession, then aggregate demand will fall. As a result, the theory argues everyone would grow poorer instead of richer due to the decreases in aggregate consumption, saving, earnings, and economic growth.

Personal saving rate: The ratio of personal saving to disposable personal income; the fraction of income after taxes that is saved.

Page One Economics Newsletter from the Federal Reserve Bank of St. Louis continues the *Liber8 Newsletter* and provides an informative, accessible economic essay written by our research analysts. A classroom edition is also available and includes a lesson plan written by our economic education specialists. The newsletter is published 9 times per year, January through May and August through November.

Please visit our website and archives http://research.stlouisfed.org/pageone_economics/ for more information and resources.

Views expressed do not necessarily reflect official positions of the Federal Reserve System.

Federal Reserve Bank of St. Louis *Page One Economics Newsletter*:
"Wait, Is Saving Good or Bad? The Paradox of Thrift"

After reading the article, answer the following questions.

1. What are some things for which people save?

- Near term—

- Long term—

2. Normally, how does the personal saving rate change during recessions?

3. How did the saving rate change in response to the Great Recession?

4. Why did people decide to save more during the Great Recession?

5. The paradox of thrift argues that saving can be detrimental to the economy. How can saving sometimes lead to poor economic outcomes?

6. How can saving benefit an economy in the long run?

Teacher's Guide

Federal Reserve Bank of St. Louis *Page One Economics Newsletter*: "Wait, Is Saving Good or Bad? The Paradox of Thrift"

After reading the article, answer the following questions.

1. What are some things for which people save?

- Near term—latest and greatest gadget
- Long term—retirement or unplanned unemployment

2. Normally, how does the personal saving rate change during recessions?

Normally, personal saving declines during recessions because people want to maintain their existing level of consumption.

3. How did the saving rate change in response to the Great Recession?

Saving increased during the Great Recession. Before the Great Recession, the average saving rate for the typical American household was 2.9 percent. Since the recession started in 2007, the average saving rate has risen to 5.0 percent.

4. Why did people decide to save more during the Great Recession?

The increase in saving was largely driven by uncertainty about future employment, efforts to reduce debt, and wide fluctuations in stock and housing prices.

5. The paradox of thrift argues that saving can be detrimental to the economy. How can saving sometimes lead to poor economic outcomes?

If everyone individually cuts spending to increase saving, *aggregate* savings will eventually fall because one person's spending is someone else's income. Because increased saving, by definition, decreases current consumption, it stifles demand.

6. How can saving benefit an economy in the long run?

In the long run, the accumulated money from individual savers is available for businesses to borrow and invest in capital. Thus, an increase in the saving rate increases capital investment. Such increases in capital stock ultimately lead to higher levels of business productivity and growth.

For Further Discussion

Read the following to your students and use the activity that follows to lead a classroom discussion on the economic benefits of saving.

Savings provides benefits not only to savers, but also to the economy in general. “Saving” refers to setting money aside for later—that is, not spending it now on goods and services or to pay taxes. “Savings” is the accumulation of money saved. People usually deposit their savings in financial institutions, such as banks, because they provide security and pay interest. Banks and other financial institutions use deposits to make loans to consumers who wish to buy houses and cars. Businesses obtain loans to purchase tools, equipment, and technology to increase their productivity and earn higher profits in the future. Economists call these goods that are used to make other goods and services capital; they call the process by which firms purchase capital goods investment.

To illustrate, imagine a society where all resources are used to produce pizza and pizza ovens. Normally, most of society’s money is spent on pizzas. Just enough pizza ovens are produced to replace the ovens that must be disposed of each year. Imagine what would happen if the residents of Pepperoniville decided to reduce their spending on pizza and instead invest in more pizza ovens (capital). Having more pizza ovens would allow increased pizza production in future years as those ovens are put into service. As pizza firms realized higher profits, they would likely expand their operations and hire new workers. And since each worker would be producing more pizza, future incomes would likely be higher.

This example shows that by taking a broad view of the economy, saving and capital investment can lead to economic growth for a country’s economy and higher living standards for its citizens.

Display or distribute copies of Visual 1. The sentences below are currently in scrambled order. Ask students to put the following sentences in the order that shows the role of saving in the economy. Give copies to or display Visual 1 for students. Use Visual 2 as a reference.

Banks and financial firms use deposits to make loans to businesses.

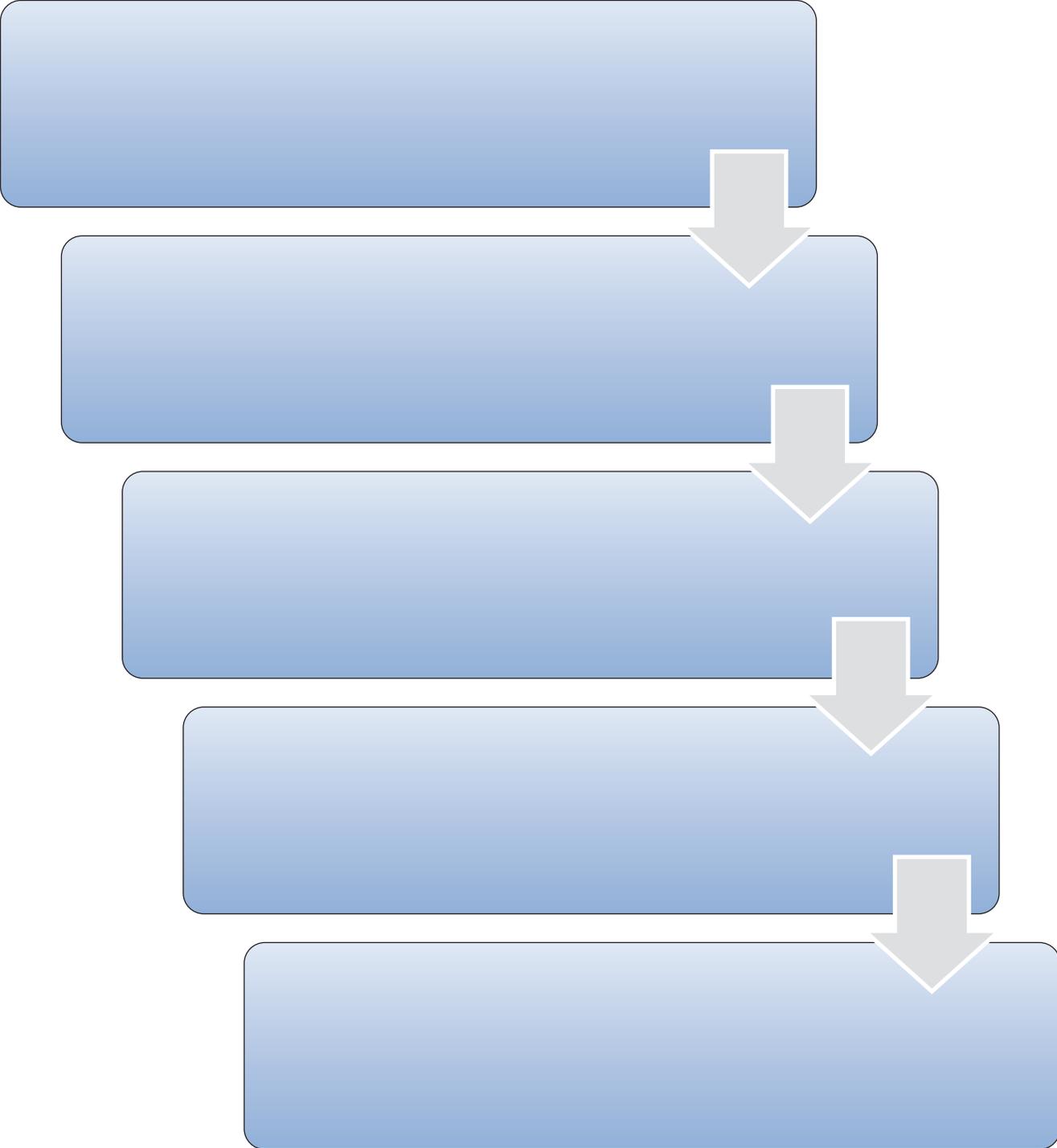
As productivity rises, the profits of firms increase, thereby allowing them to expand.

Consumers save and invest their money.

Higher productivity results in more jobs and higher income for workers.

Businesses obtain loans to buy tools and equipment to enhance productivity.

Visual 1



Visual 2

Consumers save and invest their money.



Banks and financial firms use deposits to make loans to businesses.



Businesses obtain loans to buy tools and equipment to enhance productivity.



As productivity rises, the profits of firms increase, thereby allowing them to expand.



Higher productivity results in more jobs and higher income for workers.

Common Core Standards

Grades 6-12 Literacy in History/Social Studies and Technical Subjects

- **Key Ideas and Details**

RH.11-12.1. Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

RH.11-12.2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

- **Craft and Structure**

RH.11-12.4. Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).