Spring 2004

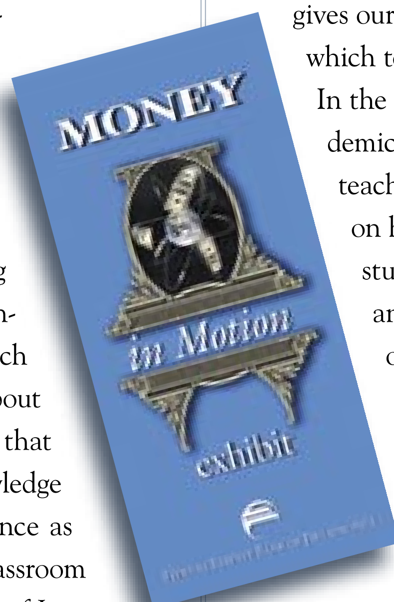
AN ECONOMIC EDUCATION NEWSLETTER

INTERSECTIONS

Published by the Community Affairs Department of the Federal Reserve Bank of Philadelphia

The Philadelphia Fed Presents the Inaugural Issue of *Intersections*

The Community Affairs Department of the Federal Reserve Bank of Philadelphia is pleased to present the inaugural issue of *Intersections*, an economic education newsletter for K-12 teachers. As part of the Philadelphia Fed's ongoing economic education efforts, *Intersections* will bring you economic and personal financial education information aimed at helping you meet state curriculum content standards and expanding your options for using such information in your classroom. Each issue will include information about Federal Reserve publications that can help to extend your knowledge of economics and personal finance as well as materials available in classroom sets. The Bulletin Board feature of *Intersections* will keep you apprised of upcoming teacher-training events sponsored by the Philadelphia Fed.



The Federal Reserve Bank of Philadelphia, which serves the eastern two-thirds of Pennsylvania, the southern half of New Jersey, and the state of Delaware, recognizes that economic and personal financial education gives our young people a foundation on which to build strong financial futures. In the summer and throughout the academic year, the Philadelphia Fed offers teacher training programs focused on helping you better educate your students in the areas of economics and personal finance. Our recently opened, permanent exhibit, "Money in Motion," at our location on Independence Mall offers teachers, students, and the general public an interactive venue through which to learn more about money, banking, and the Federal Reserve.

—*Andrew T. Hill, Ph.D.*

Inside This Issue...

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Changes at the Discount Window

In 2003, the Fed made significant changes to its discount window. Do your textbook and your lessons about the Fed reflect these changes?

"Discount window" is the term used to describe the process by which banks can borrow from the Federal Reserve when they are temporarily short of funds. For more than 20 years, the discount rate, the interest rate at which banks could borrow from the Fed, was below the Federal Open Market Committee's (FOMC's) federal funds rate target. (See the sidebar on this page for basics on both the discount window and the federal funds market.) Since January 9, 2003, the discount rate has been set 1 percent above the target. Why has the Fed made these changes, and what implications do they have for how we teach students about the Federal Reserve and monetary policy?

Economics textbooks explain that the discount rate is one of the three tools of monetary policy. (The other two tools are the reserve requirement and open market operations.) Prior to January 9, 2003, the "discount rate" referred to the interest rate charged on loans made through a Federal Reserve discount window program called "adjustment credit." On January 9, 2003, the adjustment credit program was replaced with what is officially known as "primary credit." Although the media and textbooks continue to refer to the Fed's "discount rate," that term now refers to the lending rate for "primary credit." (See the sidebar on page 3 for a comparison of the old and new discount window lending programs.) More important, the Fed's raising of the discount rate from 0.75 percent on January 8, 2003, to 2.25 percent on January 9, 2003, did not represent a tightening of monetary policy. (See the figure on page 4.) Rather, financial markets understood that the Fed was simply restructuring its lending programs to banks, and other interest rates did not rise when the Fed changed what many people are still calling the discount rate.

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Reasons for the Changes

The Fed adopted the new discount window program for three primary reasons. First, with the discount rate above the federal funds rate target, the discount rate can now serve as a ceiling on the level of the federal funds rate and help to keep the actual federal funds rate closer to the FOMC's target in times of financial stress. Second, under the new discount window provisions, depository institutions will likely be less reluctant to borrow at the discount window and can re-lend the funds they borrow. Third, the Fed now has significantly less administrative burden because the new discount rate provides price-rationing while previ-

Discount Window and Federal Funds Market Basics

The **discount rate** is the interest rate at which an eligible depository institution may borrow funds, typically for a short period, directly from a Federal Reserve Bank. By law, the Board of Directors of each Reserve Bank establishes the discount rate every 14 days, subject to the review and determination of the Board of Governors of the Federal Reserve.

The **discount window** has three roles: (1) The Fed, as part of its function as lender of last resort, supplies liquidity to the market through the discount window. (2) The discount window supplies funds to banks that experience overdrafts, especially late in the day. (3) Funds supplied through the discount window stabilize the federal funds rate in the face of unexpected, temporary shortages of bank reserves. Discount window loans are fully collateralized and short term, usually overnight. All federally insured depository institutions (banks, savings banks, savings and loan institutions, and credit unions) that have deposits subject to reserve requirements are eligible to borrow at the discount window.

The **federal funds rate** is the interest rate charged by a bank on an unsecured overnight loan to another bank—called a loan of federal funds (or reserves). The rate is determined in the **federal funds market**. The Federal Open Market Committee (FOMC) sets a target for the federal funds rate, and the Trading Desk at the Federal Reserve Bank of New York conducts open market operations to keep the market federal funds rate as close to the target as possible.

ously, Federal Reserve officials used administrative procedures to limit (that is, ration) discount window loans requested by banks.

Before 2003, Reserve Bank officials rationed use of the discount window by establishing rules that stated that depository institutions should not borrow too frequently, should not re-lend discount window credit in the market, and should exhaust alternative sources of funding before borrowing from the Fed.

Under the new system, financial institutions are likely to seek credit elsewhere first because the discount rate will usually be higher than the prevailing federal funds rate. However, when the federal funds rate spikes above the discount rate, as can happen in times of financial stress, financial institutions are now likely to borrow at the discount rate rather than continue to seek funds in the market. The substitution from the federal funds market to the discount window will provide a safety valve for the federal funds market and an upper ceiling for the federal funds rate roughly equal to the level of the discount rate. When the federal funds rate begins to rise above the discount rate, some banks will borrow at the discount window, then re-lend funds to other banks that need them. The new discount window program will reduce the need to use open market operations to fine tune the supply of bank reserves in the face of shocks in the federal funds market.

Before 2003, financial institutions were restricted from borrowing at the discount window and then re-lending those funds in the federal funds market. If it weren't for these restrictions, as banks borrowed at the discount window and re-lent those funds in the federal funds market, the federal funds rate would have been bid down until it equaled the discount rate. Under the new program, financial institutions are allowed to re-lend funds obtained at the discount window.

Now that the discount rate is significantly above the federal funds

Discount Window Lending Programs

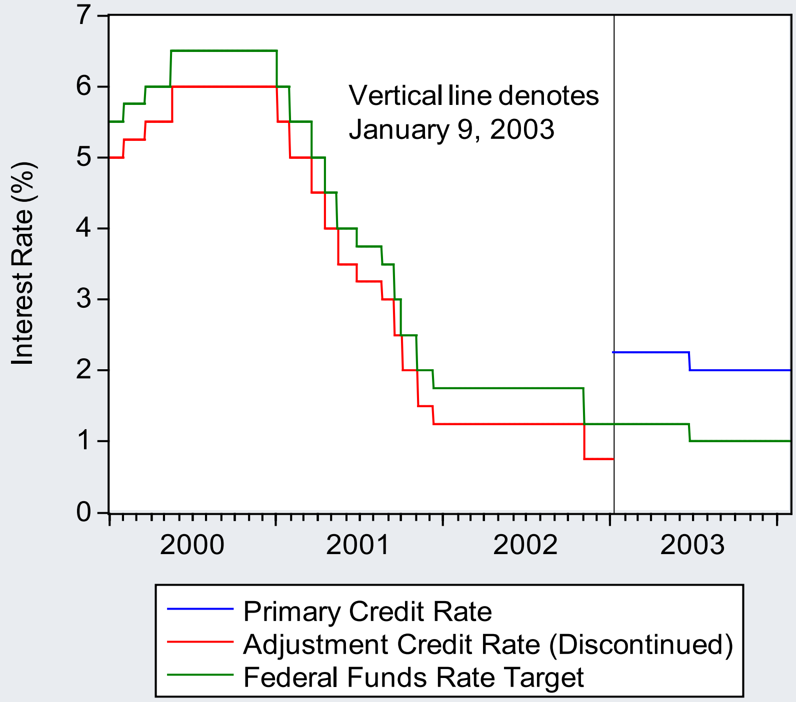
The table presents comparisons between the old and new discount window programs. Healthy banks that previously received adjustment credit can now generally obtain primary credit on a no-questions-asked basis. Although textbooks have primarily focused on the adjustment credit program and are likely to focus on the primary credit program in their next revisions, the Fed has two additional lending programs: secondary credit and seasonal credit. The secondary credit program replaced the extended credit program. Some less healthy banks that were previously eligible for adjustment credit are ineligible for primary credit and must seek secondary credit when using the discount window. The seasonal credit program, which remained unchanged after January 9, 2003, is available to small depository institutions, usually in agricultural or tourist areas, that experience seasonal swings in loans and deposits.

Comparisons Between Old and New Discount Window Programs

Old Discount Window Programs	New Discount Window Programs
Adjustment Credit • Very short-term loans were available to most banks. • Discount rate was usually 0.5% below the FOMC's federal funds rate target. • Credit was not readily available because Fed officials were rationing availability administratively. • Rate was 0.75% on January 8, 2003.	**Primary Credit** • It replaces most adjustment credit lending. • It is available to healthy banks generally on a "no-questions-asked" basis. • Discount rate has been 1% above the FOMC's federal funds rate target since January 9, 2003. • Discount rate was 2.25% on January 9, 2003. • Discount rate was lowered to 2% on June 25, 2003.
Extended Credit • Longer-term loans were mostly to troubled banks. • Lending rate was usually 0.5% above the average of the effective federal funds rate and the 90-day bank CD rate. • Lending rate was 1.8% on January 8, 2003.	**Secondary Credit** • It replaces extended credit lending. • It replaces adjustment credit for weaker banks. • Lending rate is now 0.5% above the primary credit rate. • Lending rate was 2.75% on January 9, 2003. • Lending rate has been 2.50% since June 25, 2003.
Seasonal Credit • Longer-term loans are made to small banks that are subject to seasonal variations in deposits or loans. • Lending rate is an average of selected market interest rates. • Lending rate was 1.30% on January 8, 2003.	**Seasonal Credit** • Seasonal credit has same provisions as before 2003. • Lending rate remained 1.30% on January 9, 2003. • Lending rate has been 1.05% since September 4, 2003.

Adjustment Credit Rate (discontinued January 9, 2003), Primary Credit Rate (beginning January 9, 2003), and Federal Funds Rate Target

Data Plotted for January 2000 to February 2004



rate, financial institutions will be unlikely to borrow at the discount window too frequently, since they usually will be able to obtain cheaper credit in the federal funds market. Likewise, the requirement under the pre-2003 discount window that financial institutions demonstrate that they have exhausted alternative sources of credit has been lifted under the new discount window program, since it is unlikely that financial institutions would seek to borrow at a premium from the discount window unless they have exhausted cheaper alternatives. Therefore, under the new program, it is the discount rate itself that provides price-rationing and makes administrative rationing by Fed officials unnecessary.

Why Were Banks Reluctant to Borrow at the Discount Window?

Depository institutions' reluctance to borrow at the discount window grew over time. When the Federal Reserve System was established in 1913, the discount window was the primary vehicle of monetary policy in terms of changing the supply of credit in the economy. During the 1920s, the emergence of the federal funds market, the discovery of how open market operations could alter interest rates and credit availability, and the sentiment that banks should borrow from other banks when in need of additional funds, all contributed to infrequent borrowing at the discount window by depository institutions. Indeed, depository institutions came to fear they would be perceived as unsound if they borrowed at the discount window. In addition, since Fed officials administratively rationed discount window borrowing, depository institutions feared that if they borrowed at the window, they might "use up" an implied limit on the number of times they could borrow from the Fed.—*Andrew T. Hill, Ph.D.*

Applicable Academic Standards

Voluntary National Content Standards in Economics:
Standard 20

> "Students will understand that Federal government budgetary policy and the Federal Reserve's monetary policy influence the overall levels of employment, output, and prices."

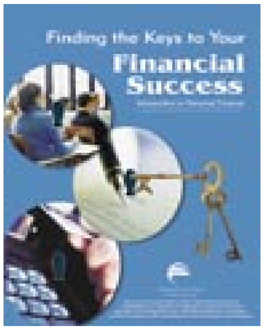
Delaware Social Studies Curriculum Framework Economics:
Standard 2

New Jersey Core Curriculum Content Standards for Social Studies:
Standard 6.6

Pennsylvania Academic Standards for Economics:
Standards 6.2.9, 6.2.12

For more information on the discount window:

- Stevens, Ed. "The New Discount Window." *Economic Commentary*. Federal Reserve Bank of Cleveland, May 15, 2003. Available at: www.clevelandfed.org/Research/Com2003/0515.pdf
- www.frbdiscountwindow.org
- www.federalreserve.gov/monetarypolicy/discountrate.htm



"Keys to Financial Success" Course

According to a survey conducted in 1998 by *USA Weekend*, 42 percent of teenagers surveyed thought they would be making $75,000 by age 30. In that same year, the average salary for a 30-year-old was about $27,000. Nellie Mae, a national provider of student loans, reports that the average college student has more than $2,300 in credit card debt.

To better equip young people with the knowledge necessary to have strong financial futures, the Federal Reserve Bank of Philadelphia is seeking Pennsylvania, New Jersey, and Delaware high schools interested in introducing a semester-long financial education course called "Keys to Financial Success." In cooperation with the University of Delaware Center for Economic Education and Entrepreneurship, the Delaware Bankers Association, and the Consumer Credit Counseling Services of Maryland and Delaware, the Philadelphia Fed started the "Keys" course in one Delaware high school in 2001-02. Since then, the course has been extended to many other schools across the state and will be offered in more than 20 high schools in Delaware in 2004-05.

The "Keys" course, which was designed by the University of Delaware Center, includes five units: Future Financial Goals and the Decision Making Process; Career Planning—Investments in Human Capital; Money Management; Consumer Skills; and Risk Protection. Students learn important life skills, such as budgeting, borrowing, saving, and investing. The program includes pre- and post-testing of students, quarterly roundtable meetings for teachers, and the complete curriculum package designed with state standards in economics and personal finance in mind. Teachers are provided, free of charge, with one week of training, a complete copy of the National Council on Economic Education's *Financial Fitness for Life* curriculum, and a binder that includes the suggested day-to-day lessons for the entire course. Schools commit to offer at least one section of the course per year but decide which department within their school will teach the course and where the course will appear in their schedule. "Keys" can be easily adapted from the semester format to a full-year course or block schedule and is designed to provide schools with a complete course ready for use in the high-school classroom.

Pennsylvania and New Jersey high schools interested in learning more about the "Keys" course should contact Dr. Andrew Hill (andrew.hill@phil.frb.org) at 215-574-4392.

Interested high schools in Delaware should contact Barbara Emery (emeryb@lerner.udel.edu) at the University of Delaware Center for Economic Education and Entrepreneurship at 302-831-4622.

Tips for Teachers

With class time at a premium, it is important to find ways to incorporate economics and personal finance material into existing mathematics, language arts, and social studies classes.

- Consider including material about the current Federal Reserve System (1913-) when you teach about the first (1791-1811) or second (1816-1836) Bank of the United States in an American history class. A comparison of these three central banks provides an excellent opportunity to teach history and economics together. Consider using the Federal Reserve Bank of Philadelphia's new publication *History of Central Banking.* (See the *Resource Rack* in this issue for more information about this publication.)
- When teaching literature, consider choosing books that include economic themes. Most books suitable for the K-12 classroom include themes associated with scarcity, opportunity cost, and choice. Some good choices are *Something from Nothing* by Phoebe Gilman; *A Chair for My Mother* and *Something Special For Me* by Vera B. Williams; and *Beatrice's Goat* by Paige McBrier. Introduce your colleagues to the idea of teaching economics and literature together!

Bulletin Board

Making Sense of Money and Banking: A Course for Educators

When: July 19 through 23, 2004
8:00 am to 3:30 pm

Where: Federal Reserve Bank of Philadelphia
6th and Arch Streets
Philadelphia, PA 19106

What: This course, taught by Federal Reserve economists and staff from the state centers for economic education, covers money, banking, and the Federal Reserve System. It will include sessions on the history of central banking and how to choose a good economics lesson. Participants will also visit the sites of early central banking, which are part of Independence National Historical Park. Emphasis is placed on effective strategies and curriculum resources for teaching money and banking in the K-12 classroom. Participants will receive professional development credit in their state. Open to elementary and secondary educators.

Prerequisites: There are no prerequisites for this course.

Cost: **FREE**

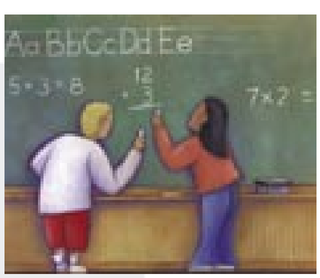
Credit: Teachers will receive professional development credit in their respective states.
OPTION: For a tuition fee, teachers may register with a partner institution to receive graduate credit.
For more information about this option, contact Andrew Hill (see below).

To see the agenda and to register go to: www.phil.frb.org/education

For more information, contact: Dr. Andrew T. Hill
Economic Education Specialist
Federal Reserve Bank of Philadelphia
andrew.hill@phil.frb.org
215-574-4392

Economics and Children's Literature

Coming soon! The Federal Reserve Bank of Philadelphia will present a free three-session program for elementary teachers on how to incorporate economics when teaching children's literature. Teachers need no prior economics background. Each session will be held after school at the Philadelphia Fed and will include a basic presentation by the Reserve Bank's economic education specialist on an economic topic followed by lesson demonstrations from the curriculum package *Economics in Children's Literature*. Teachers who complete all three sessions will receive professional development credit in their respective states and a copy of the complete curriculum package. Open to K-6 teachers. Registration is required. Look for more information and the online registration form in September at www.phil.frb.org/education.



Hot Topics in Economics

Mark your calendars! The Federal Reserve Bank of Philadelphia and the Temple University Center for Economic Education will host the 7th Annual Hot Topics in Economics on Wednesday, October 27, 2004, from 3:30 pm to 7:30 pm at the Federal Reserve Bank at 6th and Arch streets in downtown Philadelphia. Hot Topics is free and open to all primary and secondary educators. Registration is required. Look for more information and the online registration form in September at www.phil.frb.org/education.

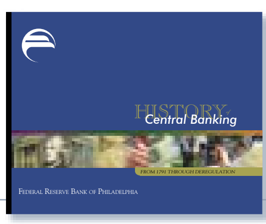
The Resource Rack

The Federal Reserve System has many publications and online resources available for classroom use. Most are available in classroom sets for free.

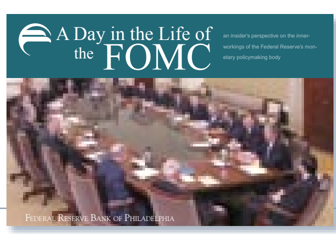
The Federal Reserve Today
Provides a detailed explanation of the functions, objectives, and organization of the Federal Reserve System. The last three sections focus on monetary policy and the policy-making process. Great for high school AP economics classes and college classes.
Published by the Federal Reserve Bank of Richmond
Order at www.newyorkfed.org/publications/frame1.cfm

In Plain English
Describes the structure and functions of the Federal Reserve System in an easy-to-read format using illustrations that help explain the topics. Perfect for high school.
Published by the Federal Reserve Bank of St. Louis
Order at www.newyorkfed.org/publications/frame1.cfm

The Federal Reserve (Everyday Economics)
Looks at the Federal Reserve and its role in maintaining an effective and efficient payments system, supervising and regulating banking organizations, and conducting the nation's monetary policy.
Published by the Federal Reserve Bank of Dallas
Order at www.newyorkfed.org/publications/frame1.cfm



History of Central Banking
Outlines the history of central banking in the United States, from the opening of the first Bank of the United States in 1791 to the modern-day Federal Reserve System.
Published by the Federal Reserve Bank of Philadelphia
Order by e-mailing andrew.hill@phil.frb.org



A Day in the Life of the FOMC
Gives an insider's perspective on the inner workings of the Federal Reserve's monetary policy-making body.
Published by the Federal Reserve Bank of Philadelphia
Order by e-mailing andrew.hill@phil.frb.org

FederalReserveEducation.org
FederalReserveEducation.org is the Federal Reserve System's portal to economic and personal financial education materials on the web. From the portal teachers and students can link to print and online resources offered by the 12 Reserve Banks and the Board of Governors.
Created by the Federal Reserve System
Available at www.federalreserveeducation.org

FED101
FED101 teaches students interactively about the purposes and functions of the Federal Reserve System.
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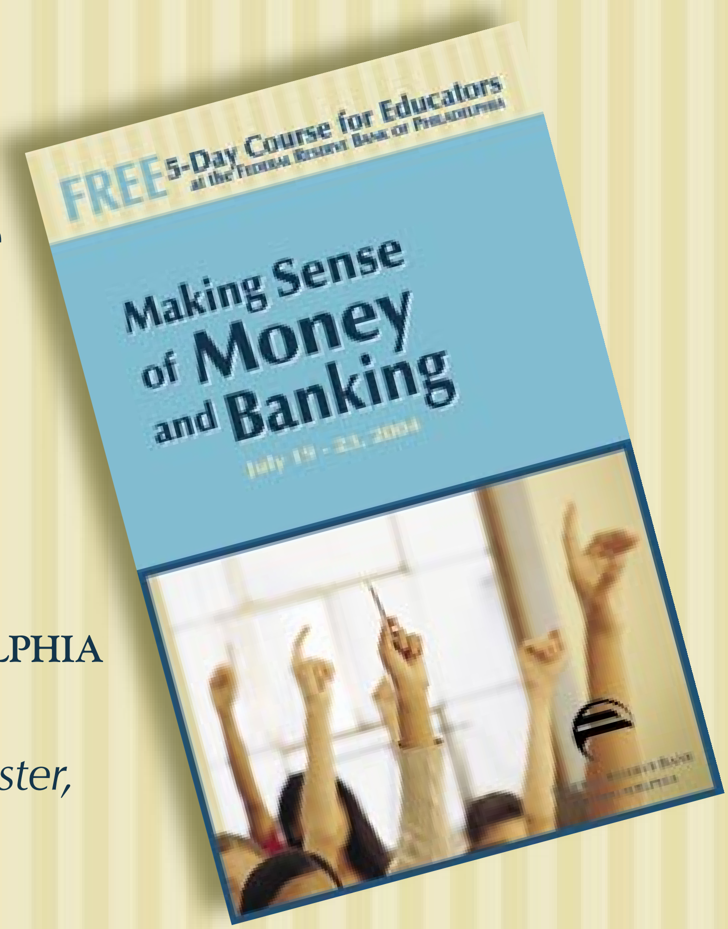
FREE 5 -Day Course for Educators



July 19 through 23, 2004

FEDERAL RESERVE BANK OF PHILADELPHIA

For details and to find out how to register, *see page 6*

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