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Show Business:
The Economics of Entertainment

- Coming to a (computer) screen near you!
- A new online learning unit on the economics of entertainment!
- It's colossal! It's stupendous! It's FREE!
- Look for it in 2005!

Maybe you're a true believer, convinced that kids need to know more about economics. So, go ahead. Put your convictions to the test.

Walk into a high school classroom and start telling the "leaders of tomorrow" why studying economics will make them healthy, wealthy, and wise. Then launch into a discussion of basic economic principles. And, just for good measure, be sure to work in that tired old chestnut about a factory that produces widgets . . . whatever *they* are. If you're lucky, you might walk out of the room with your dignity intact.

Sadly, the dismal science – along with spinach, daily exercise, and C-Span – falls into the category of "things that are good for you, *but* . . . ".

continued


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Which isn't to say we should give up on teaching economics to anyone under the age of 18. When we manage to spark their interest, kids often respond with enthusiasm and an intuitive grasp of economic reasoning. The challenge, of course, is to spark their interest, and for better or worse, entertainment does the trick.

Not convinced? Try engaging the aforementioned high school students in a conversation about government's role in protecting intellectual property rights. Then, after you recover from the disheartening lack of response, ask them their opinion on free music downloads. Odds are, you'll meet with greater success, and with some skillful direction, the kids will learn a thing or two about intellectual property.

And that's one of our main reasons for developing *Show Business.* The Federal Reserve Bank of Boston's new online learning unit will be the latest effort in our longstanding commitment to making economics more accessible to a greater number of students and teachers.

Show Business will feature six "stand-alone" mini-modules designed to give users the flexibility to focus on sections that best fit their needs. Each module will include a concise narrative, learning activities, and a listing of resources.

We hope to post the first two modules on our web site by mid 2005. In the meantime, if you have any comments or suggestions, we'd love to hear from you:

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Six Stand-Alone Modules

Module 1: Climbing the Charts
How product markets develop and evolve

The entertainment world is glitzy, glamorous, and fun. But make no mistake, entertainment is a business – a *big* business. **Climbing the Charts** looks at how the music industry was born: The shift from homemade music to "factory-produced" music, and the evolution of the music market from local to regional to national to international. It also examines how technological change has affected the market for music products, with a side story on intellectual property rights and the controversy over music downloads.

Module 2: "He'll Be Back."
Labor markets

Back in 1940, Warner Brothers released *You Ought to be in Pictures*, a blend of animation and live action, in which Daffy Duck convinces Porky Pig to leave cartoons and try his luck as a leading man . . . er, leading pig. (Daffy, of course, has an ulterior motive.) Studio boss Leon Schlesinger agrees to tear up Porky's contract, but with a nod to the camera, he lets the audience know that Porky will be back. Although it runs for just nine minutes, the cartoon classic deftly captures the essence of how labor markets function, and that's why we use it as the centerpiece for module two, **"He'll Be Back."**

Module 3: They Might Be Giants
The impact of market consolidation

Media conglomerates are getting bigger every day. **They Might Be Giants** looks at how the trend might affect your entertainment choices and the price you pay for entertainment products.

Module 4: Why Did They Cancel My Favorite Show?
Consumer choice and the marketplace

At one time or another, and in one form or another, every TV viewer has pondered the same question: **Why Did They Cancel My Favorite Show?** Module 4 sets out to find an answer by examining how ratings, demographics, and market forces affect what we see on TV. It begins with a general overview and then focuses on the demise of a critically acclaimed 1980s network TV show, *Frank's Place*. (And if you've never heard of *Frank's Place* . . . well . . . that's why we used the word "demise.")

Module 5: Saturday Night At the Movies
Factors that influence price levels

Mention the movies to grandma or grandpa and you're almost guaranteed to hear:

(1) "When I was a kid, you could see two movies for 50 cents, and popcorn was only a quarter."

and/or

(2) "They don't make good movies anymore."

Saturday Night at the Movies looks at what's happened to the cost of going to the movies and how the product has changed over the years. There's also a side story on the process of bringing a film to the screen, with special emphasis on financing a film project.

Rob Melnychuk/Digital Vision

Module 6: Another *Lethal Weapon*?
Globalization

Action movie sequels may not be high art, but they make big money in the global marketplace, where dazzling special effects matter more than crisp dialogue. **Another *Lethal Weapon*?** looks at economic issues related to the worldwide popularity of U.S. entertainment products – movies, music, TV, computer games, and licensed apparel.

Two Thumbs Up!

Winning Essays from the Federal Reserve Bank of Cleveland's 2004 Essay Contest:

Economics Goes to the Movies

Ryan McVay/Getty Images

The Federal Reserve Bank of Boston is not the only Reserve Bank to use entertainment as a hook for teaching economics.

In 2004, the Federal Reserve Bank of Cleveland's annual essay contest gave high school juniors and seniors the opportunity to choose their favorite movie and explain the economic concepts behind the scenes. We were so struck by the quality of the essays that we asked permission to share the first and second place winners with our readers. Here they are. Enjoy!

And if you'd like to read some of the other entries, which are impressive in their own right, here's the link: http://www.clevelandfed.org/Education/essay04/winessay04.cfm

Congratulations to all the contestants, their families, and their teachers. And thank you to our colleagues at the Cleveland Fed, Jennifer Ransom, education coordinator, and Lori Boehm, graphic designer.

First Place

Money and Banking in the Movie *Mary Poppins*

Anna Dev
Shaker Heights High School
Teacher, Mrs. Diana Jones

Mary Poppins is a Disney classic movie, based on a book by P.L. Travers, and directed by Robert Stevenson. The story features the well-to-do Banks family in London in the year 1910. The Banks children, Jane and Michael need a nanny and Mary Poppins appears magically. From tea parties on the ceiling to popping into pavement pictures, Jane and Michael accompany Mary Poppins and her friend Bert, the chimney sweep, on a series of magical adventures.

When George Banks, the conservative father and banker, asserts that the children should learn about the real world instead of playing games of fantasy, Mary Poppins suggests that the children visit the bank with their father. On the way, Michael wants to use his 'tuppence' (two-pence) to feed the birds. His father refuses, pronouncing it a waste of money and promises to share his plans for the tuppence at the bank. At the bank, Jane and Michael are introduced to the chairman, the senior Mr. Dawes. The children's visit to the bank together takes up less than ten minutes in the movie and yet in those few minutes, the movie introduces the audience to fundamental economic concepts. The time value of money and compound interest in financial economics (Hirschey, 727) are introduced in the form of a song sung by the elder Mr. Dawes, "a giant in the world of finance." Accompanied by a chorus of other bankers, Mr. Dawes tries to convince Michael, with a song, the wisdom of saving the tuppence in a bank account and the magic of compounding as the principal multiplies over time. As Mr. Dawes explains, Michael Banks's present value of one tuppence can grow into a future value of a "generous amount" through semiannual compounding, if Michael deposits the tuppence in the bank. Mr. Dawes then goes on to explain the relationship between savings and investment when he tells Michael how the savings "prudently invested by the bank" will fund investments such as "railways through Africa, self-advertising canals and plantations of ripening tea."

Michael, refusing to be swayed, demands his tuppence back, and gets into a struggle with Mr. Dawes. When the other customers at the bank hear Michael yelling "give me back my money," they think the bank is insolvent, and the ensuing panic starts a run on the bank as all the depositors demand their money back immediately. Later that day, George Banks loses his job for having caused a bank run. For Michael, the opportunity cost of the tuppence saved is the pleasure of feeding the birds which is the "next best alternative foregone" (McConnell & Brue, 27). Michael makes a choice between consumption now and consumption in the future (inter-temporal consumption) when he chooses not to save his tuppence. The opportunity cost of the future consumption is present consumption foregone. This episode also illustrates the role of subjective preference and choice and how it varies across individuals. Michael prefers to feed the birds today rather than choose future "opportunities" of savings and investment. Evidently, Michael has a rather strong preference for the present over future consumption, in contrast to his father and the other bankers who express a preference for future rather than current consumption.

The run on the bank is the most succinct economic concept that the movie depicts. A bank panic or bank run is a situation in which all or most depositors appear at once to demand those deposits in cash (McConnell & Brue, 269). Banks only keeps a small portion of their deposits as reserves and lend or "wisely invest" the remaining as the bankers chant in unison to Michael. This is the system of fractional reserve (McConnell & Brue 257) which helps banks create money by loaning out the excess reserves as credit. This is what makes the banking system vulnerable to bank runs. Individually, as customers lose confidence in a bank, they are acting rationally when they demand their deposits back. But in the process, there is a run on the bank causing the bank to fail and a loss for all its customers (Kaufman). If the bank is indeed insolvent, then this could affect other banks and financial institutions which transact with the bank. This is called financial contagion (Kaufman). It is to ensure against such loss of faith in the banking system that central banks such as the Federal Reserve have been charged with being the lenders of last resort and that deposits insurance has been introduced (Parkin, 404). Such interventions make the possibility of bank runs remote. However, financial contagion is still observed in security markets as investors lose faith in financial transactions. Even today, the rule in financial markets is to halt all trading when there is panic selling. This is depicted in the movie, where the bank panic is contained by closing the doors and calling a halt to all transactions. In the movie *Mary Poppins*, since the bank is not financially insolvent and the panic is based on inaccurate information, the bank run is contained, and the story ends on a happy note with Mr. Banks being named one of the directors.

In the end, it is Bert the chimney sweep, who states the moral of the story. He reminds Mr. Banks how short childhood is and how easy it is to miss the precious opportunity of fatherhood. There is yet another classic example of opportunity cost, as Bert drives home the fact that the opportunity cost of Mr. Banks' glowing career at the bank is time foregone with his children. As Bert says to Mr. Banks, "you've got to grind, grind, grind at the grindstone, while childhood slips like sand through a sieve. And soon they've up and grown, . . . and it's too late for you to give." Bert's simple words strike a chord, and the story ends with a reformed Mr. Banks returning to his family, anxious to mend his relationship with his children.

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Second Place

The Opportunity Costs of *Family Man*

Hannah Richman
Pennsylvania Homeschoolers
Teacher, Mr. Howard Richman

I push the videotape in and it clicks with a thud and the arrows turn green as the movie begins to play. I settle back on the sofa, letting my mind fade away from the activity of the screen. In the back of my mind I think about the economics chapter I read that morning and about the essay I will have to write later this night. My mind spins as I try to sort out the concept of opportunity costs in my head. I turn to my dad as the previews drone.

"What *do* opportunity costs have to do with the real value of life?" I say, frowning. "Can't someone make a decision based on happiness anymore, without having to think of exactly what the cost of their next best alternative would be? I know I don't look at my choices in terms of how much more money I will earn or lose if I go one place over another." I pause for a moment to think. "Well, at least not most of the time." My dad turns away from the TV screen.

"Hannah, you can weigh your opportunity costs in different ways. Opportunity costs are basically the costs and benefits of a certain action, as compared to your other choices. For instance, when you decide if you want to watch a movie at home or go to a theater, you might think of the extra cost of the theater, and then the extra benefit of the larger screen and perhaps the friends who you might see the movie with. Then, you weigh the options and subtract from your first choice the value of the second choice, so from seeing the movie at home you would subtract the loss of companions and high quality. You might not do this consciously, but it is a good practice to get yourself into. Now quiet, here comes the movie."

A hush descends on the room as we watch the opening credits. "*Family Man*," I mutter aloud as I read the title of the movie. "It doesn't sound very exciting," I tell my dad. I'm never very happy with my father's choices in movies.

"Shhh, just watch it!" my dad replies tersely. I take a handful of popcorn and watch as the plot begins to unfold. I soon see the movie is not so boring. The main character, Jack Campbell, has the ideal capitalist life. He is president of a large company, drives a Ferrari, is popular and daring, and altogether living the American dream.

"Where is the family? I thought this was about a family?" I whisper to my dad. "The family part is coming, be patient and SILENT!" my dad responds. Sure enough, in a few minutes, Jack Campbell's life takes a strange turn. He is given a magical "glimpse" into what his life would have been like had he married his college girlfriend instead of traveling to England to further his career. A glimmer of light shines in my head like a bright piece of gold. This isn't strictly a business transaction, but it is still opportunity costs at work. Jack's first choice was that the option of going to England was worth more than the cost of possibly losing his lovely girlfriend. I focus back into the present story. His life in this "glimpse" appears completely worthless. He lives in a small house in suburban New Jersey, works as a tire salesman, has two kids to hassle with, and plays on a bowling team for fun. Jack Campbell, of course, does not like this kind of life.

"Well, given this choice, certainly the better opportunity is his former life!" I whisper noisily to my dad.

Suddenly, however, a change comes along. Jack realizes that this life has its challenges, but also amazing rewards. He finds himself suddenly doing things he can respect himself for. He cares about other people, and he falls in love with his children and all over again with his wife. He realizes that suddenly his life has something that GDP cannot measure. He has happiness.

"Oh, so I get it," I announce happily. "He is weighing his opportunity costs again in this choice! He knows his other life would give him money, but he chooses the companionship and joy of being a family man instead, because the value of his family has risen above the value of his job as a rich business man!"

"Brilliant," my dad replies, turning the volume on the TV up a few notches. "Now have some more popcorn."

The popcorn is already gone, I notice. The supply has diminished due to the demands of my appetite. Instead of popcorn, I curl up hugging an afghan with a huge smile on my face. Suddenly economics doesn't seem so distant or even so harsh. Opportunity costs become something that can be used for good, and not just for cold money-hungry misers. As the credits scroll over the closing shot, my mind runs back to the economics chapter with an amazing kind of economical peace.

Less Travel for your Checks

If you use checks – and a lot of you still do – you ought to be aware of a federal law that took effect on October 28, 2004. The *Check Clearing for the 21st Century Act* – "Check 21" for short – dramatically changes the way banks process checks and is certain to have an impact on consumers – especially those who've been known to "play the float."

The float?

OK. Let's assume you're not just playing the innocent, and you really don't understand the concept of "playing the float." Here's a recap.

The Float: A Hypothetical Example

You don't have enough money in your checking account to cover the mortgage payment, but you will by payday, which is only three days away. So, you write the mortgage check, drop it in the mail, and cross your fingers that it won't make its way through the banking system before you get paid.

Yes, you know you're not supposed to write a check if you don't have enough money in your account to cover it. But you're not out to cheat anyone. You're just "playing the float."

Your mortgage company is in another state, so your check will take two or three days to get there.

continued

Facts about Checks and the Payments System

News coverage of Check 21 contained some interesting and enlightening facts about checks and the payments system.

- Only 36 percent of Americans now receive canceled checks in the mail with their bank statements.
  From a study conducted by the American Bankers Association and Dove Consulting. Reported in *The Wall Street Journal,* 10/28/04

- Cash and checks accounted for 47 percent of consumer purchases in stores in 2003, down from 51 percent in 2001, and 57 percent in 1999.
  From the American Bankers Association and Dove Consulting study.

- More than 75 percent of business-to-business transactions are made with paper checks.
  From a survey conducted by the Association for Financial Professionals
  Reported in *The Wall Street Journal*, 10/28/04

- Only 1 in 8 Americans balance their checkbook.
  CNN/Money web site, 10/28/04

- According to the American Bankers Association, 23 percent of Americans aged 18 to 34 and 50 percent of Americans aged 55 and up get their original checks back in the mail.
  CNN/Money web site, 10/28/04

- In 2003, Americans used checks to pay 60 percent of recurring bills. That's down from 72 percent in 2001.
  Source: American Financial Services Association

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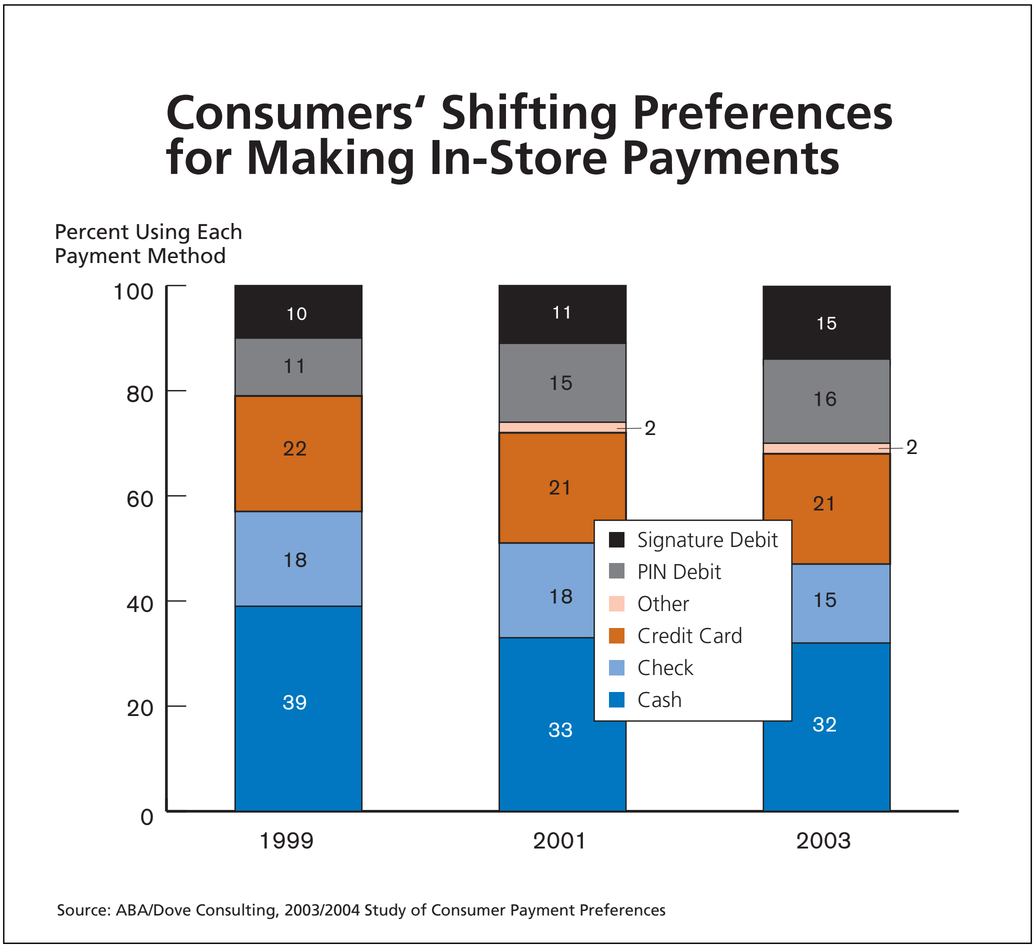

Then your mortgage company will deposit the check in its bank, which will process it, bundle it, and load it on a plane for the trip back to your bank. Finally, your bank will deduct the amount of the check from your account, and if there's money in your account to cover it, the check "clears."

The elapsed time between writing a check and actually having the money deducted from your account is known as "float," and over the years many consumers have used float time as a sort of "financial management tool" to bridge the gap between payday and the due date on their monthly bills. Of course, there was always a certain amount of risk involved because checks sometimes clear faster than expected. But after Check 21 takes full effect, "playing the float" will be more of a gamble than ever.

Two Big Changes

Under Check 21, banks no longer have to send paper checks to other banks in order to receive payment. They can electronically transfer digital images of the check instead, which means that float times will be shorter because electronic images will move through the banking system much faster than paper checks. Bank customers who don't receive their canceled checks in the mail with their account statements won't experience much of a change – but their checks may still clear faster. As a senior attorney for Consumers Union told *The New York Times*, "We need to treat every one of our checks as if it is the one that's going to clear today, and that's new."

The other big change is that banks can now create substitute checks – special paper copies of the front and back of original checks. You can use the substitute checks to prove payment, just as you might have used canceled original checks in the past. Or your bank might provide a substitute check to you when returning a "bounced" check that you deposited in your account.

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According to *Frequently Asked Questions About Check 21*, a section on the Federal Reserve Board's web site, "A substitute check is legally the same as the original check if it accurately represents the information on the original check and includes the following statement: *This is a legal copy of your check. You can use it the same way you would use the original check.* The substitute check must also have been handled by a bank."

You can view the entire section, *Frequently Asked Questions About Check 21*, at **http://www.federalreserve.gov/check21/faqs2.htm** And for other resources, including *Consumer Guide to Check 21 and Substitute Checks*, go to **http://www.federalreserve.gov/check21/**

Another good resource is on the Federal Reserve Bank of Boston's web site: **http://www.bos.frb.org/consumer/check21/index.htm**

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Those *Were the* Days !?

The Early Days of Check Processing at the Boston Fed

We reprint here an excerpt from **Those Were the Days!**, originally published in 1953 to mark the Federal Reserve Bank of Boston's 40th anniversary. The author, Lewis Stoyle, was the Bank's first employee, and his reminiscences on check handling serve as a nice complement to the timeliness of Check 21.

Check Collection, 1953
Federal Reserve Bank of Boston

. . . The Federal Reserve Act was signed by President Wilson on December 23, 1913, but it was not until the fall of 1914 that things really began to happen. Directors were appointed, officers were chosen, banking quarters were obtained and clerks were hired. . . .

The Federal Reserve Bank of Boston was opened for business on November 16, 1914, with three officers and fourteen clerks who reported for duty at the unearthly hour, for bankers, of 7:30 a.m . . . .

And Now Come Checks

Now let's trace the gradual development of a department that has the dubious distinction of probably causing more criticism and more headaches than anything else the bank has undertaken.

The bank joined the Boston Clearing House on November 13, 1914, and five days later began to clear its Boston checks through that institution. Little further progress was made until June 15, 1915, when the collection of checks outside of Boston was started. Forty-three banks put forth the tender leaves of hope and joined the new undertaking. The first day's total number of checks handled was 226, but as time went on the situation slowly improved until on October 15, 1915, the department racked up the outstanding number of 1,803 checks handled in one day.

The real beginning of the Check Collection Department, however, took place on July 15, 1916, when this bank took over the so-called Foreign Department of the Boston Clearing House, a department that handled checks drawn on New England banks.

As most of the member banks outside of Boston preferred to send their checks to their Boston correspondents for collection, progress was far from rapid in the new department for some time. However, with the elimination, on June 15, 1918, of the service charge which had been imposed on member banks for clearing their checks when the system was first inaugurated, volume picked up considerably.


Check Sorting, 1951, Federal Reserve Bank of Boston

Start of Night Force

The average number of New England checks handled daily increased from 9,000 to 35,000, requiring a force of 116 clerks, to say naught of three men who had been inveigled into forming a Night Force (probably frustrated with their daily existence and wanted to try something different. They got it.).

Several different procedures and systems have been adopted by the bank in an endeavor to speed up the work and get the clerks out at a reasonable hour with enough energy left to enjoy the evening.

The system used in the beginning was thorough, to say the least. Each check was handled eight times: first, at the sorting table; second, listed on block sheet; third, run through endorsing machine; fourth, examined to be sure check had been endorsed; fifth, sorted into rack; sixth, rechecked for missorts; seventh, listed on outgoing cash letter; and eighth, listed again for verification.

The clerks got attached to the checks after so long an association and hated to see them leave the bank at the end of the day. Incidentally, it is said that one girl, when she encountered a check for a million dollars, took it home to show her mother. When she brought it back the next day she couldn't understand why the manager seemed so upset and distraught.

The personnel of this department has increased through the years. In 1917 there were 25 clerks handling checks and there are now 346 on the day force. With three as a start in 1917, the Night Force now has a staff of 184, mostly women.

As the Fiscal Agency and Check Collection departments grew and expanded through the early years, so did other departments which were no less important, especially from the viewpoint of providing service to the member banks. Prominent among them were the Accounting, Non-Cash Collection and Currency and Coin departments, all of which required the service of a sizable number of clerks.