

Economics

Department Alumni Newsletter

Indiana, PA 15705 (724) 357-2640

Issue #32, Spring 2000

Bob Stonebraker, editor

Photo Quiz

Yes. You see it. A photograph. The first one to ever appear in a Department of Economics Alumni Newsletter. The wonders of digital technology crushed my long-standing editorial resistance.

Most of you imagine us as we were in your undergraduate days -- frozen images locked in the distant past. I liked that. A lucky few grow even more handsome over time, but most of us move decidedly in the opposite direction. Receding hairlines? Expanding waistlines? Should we leave such possibilities to your imagination, rather than expose them to the harsh reality of the lens?

Perhaps. Nonetheless, here we are. All of us. One secretary and eleven faculty members (ten permanent tenure-track, one temporary). Do you recognize us? How many can you identify? *Click on the picture for the answer!*



The fact that we all appear is amazing in itself. Trying to coordinate an entire department of economists takes considerable patience, not to mention side payments and bribes. However, we remain a remarkably cohesive group that shares a common vision of quality undergraduate education. And, students respond to the goodwill and harmony they sense.

Our number of majors continues to rise, and we no longer depend upon business students to fill our classes. Innovative courses like the *Economics of Crime*, *Economics of Sports*, and *Visual Economics* have successfully attracted new types of students. This summer we are experimenting with one-credit courses in the *Economics of Love and Marriage* and the *Economics of Religion*. Even better, the Economics Club has re-emerged from its hibernation. The Club has begun a tutoring program and, despite my personal pleas for alternative frankfurter-like food items, plans to sponsor a student-faculty pizza party. The department is doing well.

Bob Stonebraker, editor

ROAST PIG!?

by George Radakovic

Yes, roast pig. Succulent, savory pig served spectacularly by the sage who brings you this newsletter, Dr. Robert J. Stonebraker. Delicious, delectable pig devoured by students and faculty at the department picnic held in the Stonebraker back yard last fall! Are you salivating? Let's hope so.

As you've probably guessed, Dr. Stonebraker's decision to roast a pig is brimming with macroeconomic policy significance. To roast the beast Bob used a Cuban pig box -- a 4'x30"x2' box lined with sheet metal and equipped with a recessed metal tray serving as a lid and repository for charcoal briquets. You get the idea. The heat from above roasts the meat to perfection as long as master chef Stonebraker removes the tray at just the right moment -- timing is critical.

We suspect that he chose this method of roasting his pig to test the hypothesis -- developed in Charles Lamb's essay, *A Dissertation upon Roast Pig* -- that waging war is a grossly inefficient way to cure unemployment. (See Steven L. Slavin's *Economics*, 5th ed, Irwin/McGraw-Hill, 1999, p. 233.).

Lamb recounts a Chinese fable in which mischievous Bo-Bo (Could Lamb have meant Bob-o?), the son of the swineherd, Ho-ti, burns down the family cottage and, alas, the nine hogs sharing the living space perish. But there's good news; he discovers the gastronomic wonder of roast pig when he puts his fingers into his mouth after burning them on one of the crispy critters. When Ho-ti returns he makes the same discovery and, thereafter, is seen regularly burning down his cottage to enjoy this delicacy. The practice catches on and soon villagers, far and wide, are burning down their cottages to enjoy roast pig.

Lamb's analogy was straightforward. Waging a war will lower unemployment, just as burning down a house containing pigs will create tasty food. Yet, neither is especially efficient. The Stonebraker pig box clearly gets results more efficiently -- roast pig to rival Ho-ti's and with his house still standing. So, it would seem that nonmilitary spending is a more effective means of achieving prosperity (roast pig) without inflation (conflagration).

Those of us who enjoyed last year's feast want a repeat performance next September. And, we want your help. Press Bob to continue. And, as those of us with ancestral links to the Balkans have done, encourage him to add barbecued lamb (no pun intended) to his repertoire. No matter if you cannot attend yourself. Stress the acceptability of the second-best solution -- vicarious pleasure derived from someone else's first-hand enjoyment. Be assured, if you are not here, we will think of you as we lick our fingers.

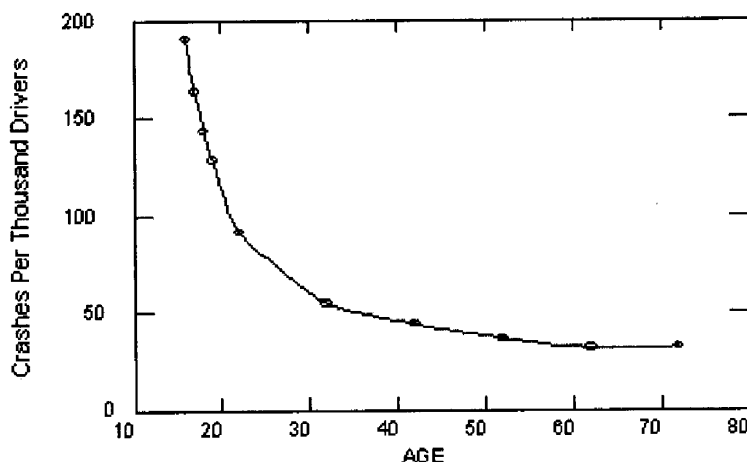
Get Those Kids Off the Roads!

by Willard W. Radell, Jr.

Data circulated in Harrisburg last year have led to a cry by insurance companies and politicians to remove driving privileges from sixteen and seventeen-year-olds and to restrict driving by drivers under age twenty-one to daytime driving only.

The data, reproduced in the graph below, show a strong inverse correlation between crashes per thousand drivers and age. Looking at the graph, policy-makers have concluded that getting the younger drivers off the road will lead to radically lower accident rates. Their chain of logic is:

- a) accident rates are very high among sixteen and seventeen-year-olds;
- b) prevent them from driving when they're sixteen and seventeen and the roads will be safer;
- c) if they start driving at eighteen, they will begin with the lower rate observed on the graph for eighteen-year-olds; thus, overall accident rates will drop dramatically.



So what has this to do with economics? Economists know of several phenomena that could explain the crash data in such a way that the benefits of prohibiting young people from driving would be grossly overstated. I will mention two phenomena, “learning-by-doing” and “survivorship.”

If safe driving is a skill that is learned, then keeping young drivers off the road will only defer that dangerous learning-by-doing phase to an older age. That would shift the curve to the right, but not change its structure. Learning-by-doing is most often associated with Nobel Prize winner Kenneth Arrow (“The Economic Implications of Learning By Doing,” *Review of Economic Studies*, 1962). Before Arrow’s paper was published, a Swedish economist, Erik Lundberg found a multi-plant steel firm that improved technology and training in every steel mill but one - the Horndal factory (*Produktivitet och Röntabilitet*, Stockholm, 1961). In the improved mills labor productivity increased at about 4 percent per year. In the neglected Horndal factory, productivity increased at a rate of 2 percent per year. That 2 percent is often attributed to “learning-by-doing.”

Although that interpretation is controversial among economists, similar “Horndal” effects have been detected by other economists, including Paul David. In a neglected factory, workers and managers somehow learn more efficient ways of doing their jobs as they accumulate on-the-job experience. If the Horndal effect applies to safe driving, then prohibiting driving for the youngest drivers merely shifts into the future the learning of safe driving.

A more macabre explanation for the decline in crashes with age is survivorship. The survivorship principle is most often associated with George Stigler (“The Economies of Scale”, *Journal of Law and*

Economics, 1958). The argument is that some business firms (drivers) will be better adapted to safe driving than others. Although bad accidents can and do happen to good drivers, the odds are not good for those who are slow to learn safe driving habits.

What happens then in the early years of driving is a Darwinian, evolutionary winnowing-out process. Those slow to learn may only be frightened into quicker learning by close calls or tickets from police officers. But they may also be incarcerated, lose their licenses, or sadly, disappear from their age cohort. In keeping with public choice theory, an exceptionally bad driver may even vote with his feet and move to a place with public transportation so he doesn't need to drive. Thus, older drivers are survivors of a process of natural selection that progressively retains the most skilled drivers.

There are other factors that could account for the inverse relationship between auto crashes and age. But before we impose large costs on sixteen to twenty-year-olds, let's measure how much of that inverse relationship is due to Horndal and survivorship effects.

Fat

by Robert J. Stonebraker

*Well I've never used a phone booth, and I've never seen my toes.
When I'm goin' to the movies I take up seven rows.
.....Weird Al Yankovic*

My pants are tight. Too tight. Especially after eating dinner -- especially a large dinner. Especially one followed by a bowl of ice cream -- especially a large bowl. Especially one topped with chocolate sauce, with potato chips for crunch.

Larger pants would help. But, I prefer to ignore the problem. That squishy flesh oozing over my belt is a fleeting phenomenon and will surely vanish next month. Or, so I tell myself. Is there self-deception afoot? Of course. Purchasing larger pants would explode my preferred self-image. Larger pants are a blatant admission of one's true girth. Purchasing that next size signals resignation. It signals defeat. It lends a sense of finality to it all. Delusion is more fun.

Why did this happen? While some might plead genetic misfortune, I cannot. I checked the family photo album. My ancestors bear no blame. I did it to myself. Why? It must be economics. Oh, no. Not another "*economics can explain anything*" article! Absolutely. It's all costs and benefits, supply and demand.

Growing obesity

Obesity *is* growing, and not just around my personal belt. The percent of Americans considered officially obese now tops 33 percent, compared to 25 percent a mere 15 years ago. More than 20 percent of U.S. men and 30 percent of U.S. women are actively trying to lose weight. Other countries suffer similar trends, but the U.S. clearly leads in excess poundage.

Why? The biology is straightforward, a simple matter of calories consumed versus calories burned. We who consume more calories than we burn end up with tight pants. America's collective belly has bulged because we eat more and we exercise less. And that, according to a recent paper by Tomas Philipson and Richard Posner of the University of Chicago, is the result of basic economic principles

[*The Long-Run Growth in Obesity as a function of Technological Change*, Working Paper W7423, National Bureau of Economic Research].

Prices and Quantities

Quick. What has happened to food prices over time? That's right. They have fallen. Technology drives food prices down. With better equipment, better seed, better fertilizer, and better techniques, farmers continue to produce more with less. Since World War II farm productivity has soared at almost twice the rate of the rest of the U.S. economy. Even though we eat out more often, the relative cost of food continues to fall. Americans now spend only 10 percent of disposable income on food, down from almost 25 percent in 1929. In short, food is cheap and getting cheaper. And, when prices fall, the quantity consumed rises.

Of course, increased eating could be offset by increased exercise. Even a bag of crunchy cheese puffs could be counterbalanced by appropriate penance on a treadmill. But, don't bet the ranch on it happening. Food may be cheaper, but exercise is more expensive. Our great-grandparents had no need of treadmills or lap pools or rowing machines. Work was *work* and everyday activities afforded ample exertion to keep their tummies tucked. Exercise was not something one consumed at the health spa after work; it was *part* of work. Sweat was not a recreational expense; it was how people earned a living. Is it any wonder that we exercise less? When prices rise, the quantity consumed falls.

My current students think work is sitting in a computer lab doing a web-search for a research paper. At the same age their grandfathers were swinging a pickaxe at a coal seam 500 yards underground. The caloric expenditures differ. New technologies impact even play. Years ago, our parents flocked to the playgrounds and ballfields for recreation; our own offspring sit mesmerized by Nintendo games.

Rolling down hills and splashing through creeks chasing tadpoles can be fun, but are more likely to be chosen when no affordable alternatives are available. In the distant past, that was often the case. No longer. Television, video games, and the internet create seductive options. The opportunity costs of outdoor adventures rise when we must sacrifice an hour with Big Bird or Pokemon to enjoy them. A friend recently chided his nine-year-old son for playing computer games instead of exercising outside. The son, holding his game controller aloft, replied with a smile, "Don't worry Dad, my thumb's in great shape."

European waistlines are less expansive than ours. A colleague in another department chalks this up as additional evidence of Europe's cultural superiority. Philipson and Posner chalk it up to economics. Europeans do walk more than Americans. But, given their greater population density and higher gas prices, this makes good economic sense. Europe seems less infested with *couch potatoes*, but this too has economic roots. Sofa spuds specialize in television viewing, and the benefits of such viewing here and abroad differ widely. Have you ever surfed channels in Europe? There's nothing to surf. With competition and content long-stifled by government bureaucrats, European broadcasters are no match for either the quality or quantity of U.S. offerings.

In other words, America's battle with the bulge does not stem from some recent depravity. Our collective weight gain does not signal some senseless lack of self-control. It is a rational response to the changing prices of food and exercise. Stick *that* on your plate and eat it.

Wait, there is more! Medical researchers find similar results -- obesity is a *natural* biological response to abundant food. *The Economist* recently reported on a series of experiments led by Luciano Rossetti from the Albert Einstein College of Medicine [July 31, 1999]. Working with rats, Rossetti found that appetite patterns adjusted quickly to environmental changes. Rats allowed to feast freely for

three days actually pursued additional eats more aggressively than those on restricted diet.

Rossetti's explanation comes from evolutionary biology -- and economics. When food is abundant, animals are programmed to eat as much as possible and to store excess fat for potential famines to come. The bodies of those rat coming off a three-day caloric coma were apparently screaming, "food is abundant, forage and eat while you can." However, poorly-fed rats hear very different biological signals. Expecting little food, they turn off their appetites. Why expend scarce energy to forage if no food is to be found? In other words, when "nutrients are available, a sensible animal will hoard them. If they are not, it will get on with other things."

The same economic forces that create collective corpulence determine how we fight it as well. Have you ever tried to slim down? Go ahead, raise your hand. Mine is already in the air. Now, think about battle plans. Did you rely primarily on diet or on exercise? If you said "diet," join the crowd. That's the dominant approach. Why? Could it be because exercise costs us scarce time and dollars while dieting saves them? Could it be more economics?

Hope on the horizon?

Are we doomed? Will our bellies balloon indefinitely? Not necessarily. Philipson and Posner claim that as incomes continue to rise, demands for healthier foods and exercise rise as well. Obesity is not concentrated at the top of the income distribution. Indeed, it is actually *less* prevalent among the well-to-do. Health foods and health clubs require fat wallets. Wealthy CEO's can afford personal trainers and spinach salads at the local spa; Joe Six-Pack cannot. Joe settles for bowling, burgers, and beer. More wealth could mean more health.

Might education help battle bloat? Maybe. But, U.S. colleges and universities have less-than-impressive track records. We continue to push activity courses out of the curriculum in favor of more academic, and more sedentary, substitutes. Most schools, including IUP, do supply students with well-stocked recreation centers. But use of these are voluntary while the former courses were required. More importantly, we lure students to campus with increasingly well-stocked, all-you-can-eat cafeterias. In effect, we drive up the price of exercise, and drive down the price of food. I recently asked a group of economics majors, "what do you get when you are offered unlimited food at no extra cost?" Their response? "Stuffed."

Perhaps colleges will subsidize exercise more and overeating less. Perhaps someday increased wealth save the day. Perhaps someday the Pittsburgh Pirates will win another World Series. Should I hold my breath? Until then.....*burp*.

Expansion: How Long Will it Last?

by Arthur Martel

The U.S. economy is in the process of setting a record for the longest expansion since World War II. Inflation and unemployment are near thirty-year lows. According to the National Bureau of Economic Research (NBER), the average length of post-war economic expansions is 50 months. We are at 108 and counting.

The previous longest expansions were those of 1961-69 and 1982-90. The 1961-69 expansion was fueled by Kennedy tax cuts and spending for the Vietnam War. The 1982-90 expansion was fueled by

the Reagan tax cuts.

What is fueling the current expansion? One factor is the fruits of the technical revolution in which corporations have invested large amounts in new production processes, equipment and computers. These investments, made in the face of increased global competition, have increased productivity as well. A second factor has been the skillful guiding of monetary policy by the Federal Reserve Board led by Chairman Alan Greenspan.

As the nation enters a new century and an election year, will the expansion continue or will it run aground?

Economic Expansions since World War II

<i>Beginning</i>	<i>End</i>	<i>Duration (months)</i>
October 1945	November 1948	37
October 1949	July 1953	45
May 1954	August 1957	39
April 1958	April 1960	24
February 1961	December 1969	106
November 1970	November 1973	36
March 1975	January 1980	58
July 1980	July 1981	12
November 1982	July 1990	92
March 1991	???	108*

* Through February 2000

Source: National Bureau of Economic Research

Unemployment: How Low Can it Go?

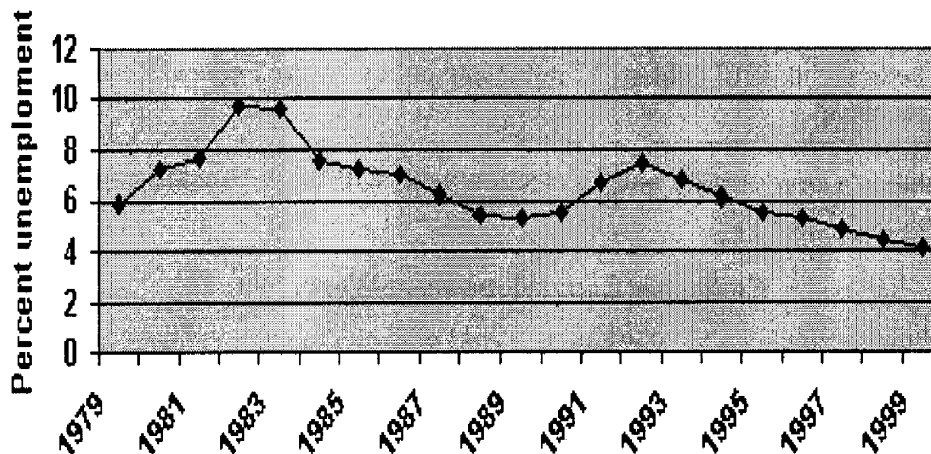
by Robert J. Stonebraker

Down, down, down. How low can it go? Unemployment has not been this low since the 1969. Neil Armstrong was golfing on the moon, the Beatles were topping the hit parade with *Yellow Submarine*, and the Steelers embarrassed themselves with a 1-13 record in Chuck Noll's first season as head coach.

Unemployment is not supposed to be this low. For twenty years economic textbooks have identified six percent as the *natural* rate of unemployment. Authors have insisted that no lower rate is sustainable. At lower rates, labor shortages will force employers to raise wages in their quest to attract new workers. Higher wages, in turn, ignite inflation. Attempts at driving unemployment below the natural level will, supposedly, spark a surge of accelerating inflation.

What happened? At 4.1 percent, the U.S. rate of unemployment is well below that six percent benchmark. And, it has been well below that mark for five years, with nary a whiff of accelerating inflation in the air. Can it continue? We do not know.

U. S. Unemployment Rates



Economists disagree about the source of recent good fortune. However, we do agree, election-year rhetoric to the contrary, that policy initiatives from both the Democratic White House and the Republican Congress are largely irrelevant. External factors seem to be key. But, which ones? One group insists that current unemployment is *too low* and that inflation has been held in check by a series of favorable, *temporary*, price shocks. Possibilities include:

1. **Dollar appreciation.** From 1995 to 1999 the dollar appreciated almost 10 percent relative to the Canadian dollar, 40 percent with respect to the Japanese yen, and 50 percent with respect to the Mexican peso. Of course, if we can get 50 percent more pesos with our dollar, the net price we pay for a Mexican good falls by 50 percent. Appreciation is a powerful anti-inflationary force. It cuts the dollar price of foreign goods and forces American firms to restrain prices to stay competitive. The dollar has depreciated in recent months. Will inflation follow?
2. **Raw material and technology prices.** Prices for technology and several key raw materials, especially oil, dropped quickly during the mid 1990's. These cuts in non-labor costs could have masked underlying inflationary pressures in the labor market. Will the recent run-up in oil prices end our fun?
3. **Fringe benefits.** Shifts to managed care providers such as HMO's slowed the rate of inflation in the medical care sector and, in turn, the cost of employer-paid medical benefits. Slower growth in fringe-benefit costs has countered higher wages and held overall inflation down. Can this trend in medical inflation continue?

A second group fingers fundamental shifts in the U.S. labor market as the cause:

1. **Demographic changes.** Baby boomers grew up. Those green, unskilled workers who poured into the labor force in the 1970s were seasoned veterans by the 1990s. Over the 1960 to 1998 period unemployment rates for workers aged 16-19 averaged 24.5 percent compared to 3.7 percent for workers aged 45-54. As the labor force ages, unemployment should naturally fall.
2. **Improved job matching.** The recent rise of temporary work agencies probably helped slash

joblessness. By providing a ready pool of pre-screened workers, temporary agencies enable employers to lower hiring costs and more easily resist wage demands of incumbent employees. In addition, the "job tryouts" and experience gained by temporary workers ease their transition into longer-term positions.

3. **Worker anxiety.** The decline of unions, coupled with well-publicized layoffs and corporate downsizing, might have given otherwise aggressive workers a severe case of the *jitters*. Employees who fear for their jobs might prune their pay demands. Possible. But, while media pundits have promoted this theory for several years, its quantitative impact seems minimal.

4. **Incarceration.** Yes. Jail. We have been throwing prisoners in the pokie at record rates. Along with Russia and South Africa, we lead the world in terms of the percent of adults behind bars -- a percent that has doubled in the last 15 years. And, the group most likely to be jailed -- young, poorly-educated, minority men -- suffers the highest unemployment rate. Since we exclude prisoners from the unemployment calculations, it should be no surprise that incarceration lowers the published measure. Although dumping such men behind bars wipes them from the unemployment data, it is clearly no economic triumph. Moreover, it ignores the likely negative impact imprisonment is likely to have on their future employment opportunities.

Is it favorable price shocks? Labor supply shifts? Both? Time will tell. However, in the meantime, the fruits of success are unequally shared. A rising tide supposedly lifts all boats, but not this one. Many boats are bobbing comfortably in calm seas. Others, despite frantic attempts to bail, have taken on water and sunk. Unfortunately, Indiana County is among those listing near the bottom. After another succession of mine closings, last month's unemployment rate for the county hit 9.3 percent, more than double the national level.

Return to the [Alumni Newsletter index](#).

Return to the [IUP Department of Economics Front Page](#).