ECONOMICS U$A

PROGRAM #3

SUPPLY AND DEMAND: WHAT SETS THE PRICE?

AUDIO PROGRAM TRANSCRIPT

ECONOMICS U$A

PROGRAM #3

SUPPLY AND DEMAND: WHAT SETS THE PRICE

(MUSIC PLAYS)

ANNOUNCER: Funding for this program was provided by Annenberg Learner.

FRANK STASIO: This program was originally recorded in 1985. Though times have changed, the basic economic principles presented here remain as relevant today as they were when this series was produced. Also, please note that individuals interviewed for this series may no longer hold the same titles they held when this program was recorded.

(MUSIC PLAYS)

FRANK STASIO: Economics U$A, one of a series of programs designed to explore twentieth-century micro and macroeconomic principles. The subject of this edition is Supply and Demand. Our guest is John JOHN WIEST, a Senior Account Executive for the Marketing Research Firm of Decision Making Information. I'm Frank FRANK STASIO.

(MUSIC ENDS)

FRANK STASIO: If you had just enough money for two of the following three choices, which would you pick? A Bruce Springsteen Concert, the Super Bowl, or dinner at your favorite restaurant?

MALE VOICE: "The Super Bowl and the Springsteen Concert. They're hard to get tickets for. I can just walk to my favorite restaurant any time."

FEMALE VOICE: "As far as I'm concerned, football doesn't exist. It's a pathetic, disgusting display of human violence, whereas Bruce is a cultural enlightenment. So I would take the rest of money and bring a friend to Springsteen."

FEMALE VOICE 2: "I would choose the Springsteen Concert first because that's sort of a once in a lifetime event from my point of view. I don't…I'm not interested in football or sports. Um, then secondly, dinner because you go out with someone that you have a nice conversation that can be memorable also."

MALE VOICE 2: "If I had that kind of choice, what I would do is I choose uh, the seats at the Springsteen Concert and a restaurant. I love to eat."

MALE VOICE 3: "I'd take the Super Bowl and Bruce Springsteen, of course."

FRANK STASIO: It's safe to say that we never make a purchase without first making a choice. There are simply more ways to spend money than we have money to spend, so whether we realize it or not, whether we're on a budget watching every penny or spending as fast the money comes in, our spending patterns show a certain set of priorities and indicate the relative value we place on the goods and services produced in our economy. To a great extent, the demands we make dictate the amount and type of products that the market will supply. So it's no wonder that economists and businessmen devote a lot of energy figuring out what consumers like and how they act. John Wiest is a Senior Account Executive for Decision-making Information, DMI. It's a firm that does marketing research and public opinion polling.

JOHN WIEST: "The research can address whether you should go or not go. Uh, whether you're enhancing your probability of choice with this new product, and looking at what you…the money that you've already invested in a product, and if you go ahead and spend that ten million dollars, you may indeed lose your shirt or you may make money even despite what the research says. The other thing that you derive from the research is not only whether you should go or not go, but how you should go about it. What are the features that these people want? And maybe you find out a little bit more about how you can communicate those features more effectively, and that is one of the great values of the research is that you are again focusing on those wants and needs of the individuals and that you're getting a little bit closer to how they talk and…and where they place their emphasis."

FRANK STASIO: John wiest and other market researchers use a number of techniques including product sampling and personal and telephone interviews to try to gauge consumer preferences.

JOHN WIEST: "We're trying to identify what issues, in fact, drive a decision in…in selecting a product or service."

FRANK STASIO: Do those issues change from product to product, market to market?

JOHN WIEST: "Very much so, and indeed that's one of the…the difficult and important factors to look in. Are there any differences whether it's sauces for hamburgers or whether it's one's attitudes towards healthcare?"

FRANK STASIO: For John Wiest to deliver reliable information about the buying public, he must first make certain broad assumptions about consumers and how they make their decisions.

JOHN WIEST: "It is a rational process. You must assume otherwise, you know, we wouldn't be in business. Uh, these people are like you and I uh, interested in getting the most for their money, and so one must make that assumption."

FRANK STASIO: Knowing that people what the most for their money, John Wiest can draft a model of consumer behavior. First, he assumes that people make choices when confronted with alternative ways of spending their money. John Wiest sees examples of these tradeoffs when he measures consumer preferences for individual products.

JOHN WIEST: "That's one of the areas we focus on is how to…what features will enhance your probability of being selected and shows, in fact, what we people, we in the marketing research business call purchase intention. Purchase intention is usually measured on a five point scale in terms of definitely would buy, probably would buy, may or may not buy, probably would not buy or definitely would not buy. Uh, from that one typically measures the top two boxes and examines the scores for different combinations of products, combinations of features and calling them a Product A or a

Product B. And indeed, another level and a completely different study but somewhat related would be actually looking at the total name of a product and what are the images associated with those names and are those images ones which are desirable. Are they addressing and communicating properly the attributes which are in the product? Is it, you know, moist and chewy cookies? Uh, and are those important characteristics of the cookies that you're trying to sell or do you want to call them crunchy but tangy? Uh, those are the things which we can test for the name, but also try to identify the features which will enhance that selection. Uh, the two work hand in hand. That is, in a total product. It's the Gestalt thing of the product, which sells."

FRANK STASIO: Do people articulate and rationalize the things that they like most about a product when you talk about moist and chewy? Those are sort of ad terms that we've come to believe are good qualities in a cookie, for instance. Um, do consumers look at cookies that way?

JOHN WIEST: "Indeed, that…that's a difficult area as to find out how people relate to their products. One of the ways we develop those attributes is through focus groups where we'll gather a group of consumers, sit down in a room and start talking about cookies, and it's very interesting to hear the verbatim responses of the individuals to questions about what do they like about the cookies, what are you looking for in a cookie, what are the situations you remember having the best cookie, and getting a person to spontaneously describe what it is they see in a cookie. From those focus groups you then develop those lists of attributes and there after you will quantify what are those most important attributes. Beyond that there are other techniques and many of which are based in economics in terms of isolating the value of each of the features in each of those attributes in choosing a product which is all part of tradeoff. When you're trading off one feature at a given price for another features, and it's important…it's a very important concept that these consumers are being forced to make a choice between one product and another, and that this Product A is moist and chewy, and Product B might be chewy and crunchy, and they both might be at seventy-nine cents or a dollar seventy-nine and one is then forced to tradeoff the chewy for the crunchy or vice versa. And that's important because it is getting a true measure of…of a store…person walking out of a store and really trading off in his mind or her mind what he or she wants out of that cookie."

COMMERCIAL ANNOUNCER: "Outside, a lot of new refrigerators look pretty much the same, but take a closer look. The new Admiral Party Ice Refrigerator can make more than twice as much ice as GE, Frigidaire, or Whirlpool. Up to twelve pounds of ice every day. So don't get upset, get an Admiral."

FRANK STASIO: The model of consumer behavior also assumes that consumers' preferences are transitive. That is, their choices will be consistent. So, if a buyer likes moist and chewy cookies more than thin and crunchy cookies, and thin and crunchy more than crème sandwich cookies, you would have to presume that the buyer would choose moist and chewy over crème sandwich cookies. Finally, the model of consumer behavior assumes that consumers always want more of a commodity rather than less, presuming that commodity is something desirable to the consumer. Once we've made these assumptions about the way consumers act, we can begin to determine the kind of choices they might make.

JOHN WIEST: "We're currently designing a survey for a county government and they are concerned that they are allocating their resources in a manner consistent with their voting population, so they would like us to conduct a survey to find out what are the issues which are most important to you, cleaner streets, a better library, more public concerts, a whole laundry list of different features and different services that…which are to be provided. One of the ways, again, which we try to get the…a very useful response is not just a simple ranking of this is my priority, this my second priority, this is my third priority, rather that we say, here is a hundred dollars and this is your hundred dollar budget. Here is a list of fifteen different things. Allocate them according to the way you would have your money spent for this district. Uh, one of the ways in which you will also aid that analysis is to actually ask the satisfaction level of those respondents whether they are very pleased with the level of the streets and as they should be…continue to have that same level of spending that the county is currently applying to the street. I mean it's…um, and then to take a look at saying, well, they're really dissatisfied with the library because they couldn't get enough books so on a given topic where they couldn't look up a job reference manual and they think that that would be very useful and that they're dissatisfied and maybe their spending level is much lower than it should be."

FRANK STASIO: John Wiest is measuring the utility of various combinations of county services. Utility is a concept that represents the level of satisfaction that the consumer derives from a particular group of goods and services or a market basket. What is perhaps more important than the total utility of the market basket is the marginal utility. That is, the additional satisfaction derived from an additional unit of the commodity. The idea of marginal utility plays a part in determining how much of a product an individual is likely to buy. Consider this example in which a woman placed an unusually high value on reading a particular newspaper.

FEMALE VOICE: "I was in New York City for a job interview, um, and I walked out of the interview and was in downtown Manhattan and I wanted to go somewhere and get a cup of coffee and read the paper, and I wanted to read *The Washington Post* 'cause I'm from Washington, and so I went into the Sheraton…no, the New York Hilton. I went into the New York Hilton and I got a cup of coffee and …I really wanted to read the *Post* that day, and the *Post* was five dollars, and I paid it 'cause I wanted to read it."

FRANK STASIO: For this woman, reading *The Washington Post* was important. It had a high utility, but how much would even the most voracious news junkie pay for a second *Washington Post* that day? Probably nothing at all. This is an extreme example of something economists call diminishing marginal utility. It's true of most products or services that as we consume more, the marginal utility declines. That is, the value of each additional unit is lower than the previous unit. But consumer decisions are based on more than just utility. Prices and income are factors too. Consider the woman who paid five dollars for a newspaper. If she didn't have the five dollars, it wouldn't matter how much she wanted that paper. She couldn't buy it. Also, we must presume there's a price that she would not have been willing to pay even if she had the money with her. It is important to realize that when we talk about utility and marginal utility, we're not simply referring to usefulness, and when we say that consumers make rational spending choices, that's not to say their choices are always practical. Marketing can often help to mold consumer judgments. Consider the designer jeans industry which captured millions of dollars through a carefully staged promotional effort to convince America that blue jeans could be high fashion and that designer labels could enhance one's personal appeal.

JORDAN AKACHE: "We created such a demand that the consumer went directly to the department stores and said, 'I want that jeans.' "

FRANK STASIO: Jordan Akache is President of Jordache Enterprises. The appeal of designer jeans is explained by apparel research consultant Brenda Gaul of Merrill Lynch.

BRENDA GAUL: "These brands were built up with a lot of T.V. hype and it attracted the consumer that this was a new lifestyle and it would give them an image that they didn't have, if they wore this jean, so they were willing to pay a premium for it for those reasons."

FRANK STASIO: One should also not assume that the lowest price for a given product is the most attractive price. John Wiest of Decision Making Information explains that in some cases a higher price tag may have greater appeal.

JOHN WIEST: "There's a store, I mean a wonderful store in New York called Bendel's, Andre Bendel's, and on 57th Street where they have every week, you know, the designers line up to show their wares to the store. Uh, this store will have dresses ranging from five hundred to twenty-five hundred dollars, and if they sold the same dresses at thirty-nine dollars, I would assure you that they would have fewer customers than they currently have because it doesn't communicate the real special nature of these unique designs which are being offered to a unique group of people. Yet if you tried to sell those same dresses at thirty-nine dollars to people in Topeka, they may not want those at even thirty-nine dollars, so it's a unique sample that you're dealing with, unique populations, and therefore, you may need to communicate that this is a special product with that price. So indeed, price is something which is part of the marketing mix to communicate. It is not simply a utility maximizing civilization. Uh, we are looking at people who may maximize their utility simply because part of that is spending some of the money rather than maximizing the given values of a warmer skirt with brighter colors, it might…part of that might be saying, 'I bought it at Bendel's and I spent more than I should have, but I feel so much better because I've been working so hard and I deserve it.' "

COMMERCIAL: "As long as there are people who can afford perfection, BMW will continue to pursue it. The BMW 635 CSI."

FRANK STASIO: But certainly the percentage of purchases based on this snob appeal is very small. Usually consumers are interested in the best value for their money. So far we focused on how consumers make their demands. Now let's see how those choices affect the price and supply of goods and services. Remember, we know that consumers' choices are limited by their income and that consumers usually try to get the maximum utility from their money. So, consumer's preferences and income taken together will help to determine the demand at a given price.

JOHN WIEST: "If you describe a service to an individual, one can't readily experience that unless you take a week to spend in a hotel to find out whether that you enjoy it or not. So what you may indeed do is test the price sensitivity asking the other person at what point is a product cheap. Uh, what product…At what point would it be so expensive that you might be reluctant to choose a product?

At what point would a hotel room be so cheap that you would be concerned about the quality of the service? At what would it be so expensive that you might be reluctant to choose it? Um, and then there's another question beyond that. What would be too expensive and what would be too cheap? Uh, from the intersection of those graphs where you're taking a look at the accumulative distribution of percentage of people who find it cheap and the accumulative distribution of those people who find it expensive, at that intersection…at the intersection of and where you have the equality of people who find it cheap and people who find it expensive that would be an optimal pricing point."

FRANK STASIO: This is not to suggest that the pricing point remains fixed. On the contrary, changes in personal attitudes tastes and income can have an effect on demand.

JOHN WIEST: "Whereas a certain level of sugar content may be acceptable today, if you tried to increase that, it may be too sweet. Uh, or people are starting to say, I would like less sugar in my products and that that product claim may become more and more meaningful as people's attitudes change with further information, whether that's coming from different government institutions or other studies. Uh, for instance, in the food and healthcare business that is indeed very important, whether that's for new claims for products which are low in sodium or low in salt or less sugar for instance."

FRANK STASIO: In this case firms will respond by producing more kinds of food with lower sugar and salt content. Businesses plan their output based on changing consumer preferences and the price they're able to command for their product. A dramatic change in price acts as a signal to producers to turn out more or less of their product.

MALE VOICE: "You know, I don't understand it. This country, you know, and back east they have gas wars. Gas is twenty-seven cents a gallon. They seem to have no shortage at all, and then just right around in this area, you know, you just can't get gas. It just doesn't seem fair. You know, why can't they ship gas in here also?"

MALE VOICE 2: "Like I've been waiting, I think about, you know, a half an hour and like uh, the situation…the reason for me, you know, waiting so long to get gas is because of, I mean, the man's time, but it's a funny thing but you know I believe it's time to pick me up."

FRANK STASIO: When the members of the Organization of Petroleum Exporting Countries pushed up oil prices 400 percent, it created a tremendous shock throughout the U.S. economy, but the OPEC price hike did more than create shortages at the pump and cut into consumers pocketbooks. It stimulated a sluggish American oil industry. Economist Ike Carriage of the Hughes Tool Company explains that before 1973 a combination of low oil prices and escalating operating costs for the petroleum industry slowed U.S. oil output considerably.

IKE CARRIAGE: “The price of oil, which is a critical factor in the incentive drill, the price had been very stable over a number of years, actually through 1971, and of course, as inflation began to accelerate in this country about 1965, this meant that in terms of purchasing power, the real price of oil was declining, and therefore, there was less incentive to drill and drilling activity declined by about seventy percent from the ’55-‘56 period to the low point in 1971 when on average we had fewer than a thousand rigs running in the United States.”

FRANK STASIO: The effect of low prices was compounded by the Nixon Wage and Price Controls in 1971. It costs a lot of money to drill for oil, land, manpower, equipment, machinery all committed to a search that may turn up nothing. Without the promise of big profits on productive wells there would be no incentive to drill for oil. In other words, if an entrepreneur were deciding to start a business and looked at say oil drilling and highway construction as two possibilities, he might soon see that he would make a higher rate of return on his investment if he went into the paving business. If he decided to go ahead in the oil business anyway, he would have pay all of the explicit costs of production, drilling equipment, trucks, labor and so forth, but there would also be an implicit cost attached to his decision. That would be the difference between how much money he’s making in the oil business compared with what he could have made in road construction.”

FRANK STASIO: “This example of course presumes that the same initial investment would be required for both businesses. In 1972, the Nixon administration allowed newly discovered oil to rise to world prices. The nation’s first Energy Secretary, James Schlesinger, explains why that action came as such a relief to the domestic oil industry.

JAMES SCHLESINGER: “If we attempted to control the price of oil or of natural gas based upon the assumption that a fifteen percent rate of return was the ceiling because there are so many failures, so many dry holes, we would discover there would not have been the entrepreneurial activity in the industry that was necessary to maintain any kind of activity. The control of price in a highly risky industry will destroy that industry and we were doing a fair amount of damage to the industry during the period of control.”

FRANK STASIO: The oil market would soon have another chance to prove the effective implicit costs on production. In 1975, Gerald Ford placed a cap on all domestic oil prices causing another decline in U.S. oil production. When the ceiling was lifted by President Jimmy Carter in 1979, oil once again became an attractive business. The number of new wells drilled each year in the United States more than doubled between 1979 and 1982. Independent oil producer William Rutter.

WILLIAM RUTTER: "When the price of oil went up enough, it…I started looking at deals that…that were, you know, would pay out in a reasonably short period of time and that total reserve…the total estimated or hope for value of the reserve was an attractive multiple of the perceived risk. The price of these commodities has gone up but they always come back down, because as soon as they get high the producers want to produce a lot and…and the consumers want to consume less and so you have a balance. This is the supply, you know, law of supply and demand and it works."

FRANK STASIO: Let's look back now at some of the key points in our discussion on supply and demand. Economists use a model of consumer behavior to try to determine how consumers make choices about spending their money. This model presumes that faced with a choice between two products, consumers will state a preference for one product or the other or they will remain indifferent. The model also predicts that consumer preferences are transitive or consistent throughout the choice process, and finally the model presumes that consumers will always choose more not less of a commodity. The amount of satisfaction that a consumer derives from a group of goods and services is called utility. More important than total utility is the marginal utility of a group of goods and services. This is the extra pleasure received from each additional unit the product. Economists presume that consumers reach a point where an additional unit of commodity will not be as satisfying as some other product. This is the point of diminishing marginal utility. Business decisions on how much to produce and at what price are based largely on demand. Firms must also consider their costs when determining the price and the output. Businesses have explicit costs like land, machinery, supplies and labor, and they also face implicit costs. Implicit costs is the difference between how much money a firm makes at its business compared with how much it could be making had it used its resources to produce another product or service. To determine its profit, a business must consider both its fixed and its variable costs over the short and long run. To insure their survival firms must be ready to adjust to shifts in consumer demands and changes in the costs of production.

(MUSIC PLAYS)

FRANK STASIO: You've been listening to Economics U$A, one of a series of programs on micro and macro economic principles. Our guest has been John Wiest, a senior account executive for the Market Research Firm of Decision-Making Information. Economics U$A has been produced by the Educational Film Center in Annandale, Virginia. I'm Frank Stasio.

(MUSIC ENDS)

Announcer: Funding for this program was provided by Annenberg Learner.