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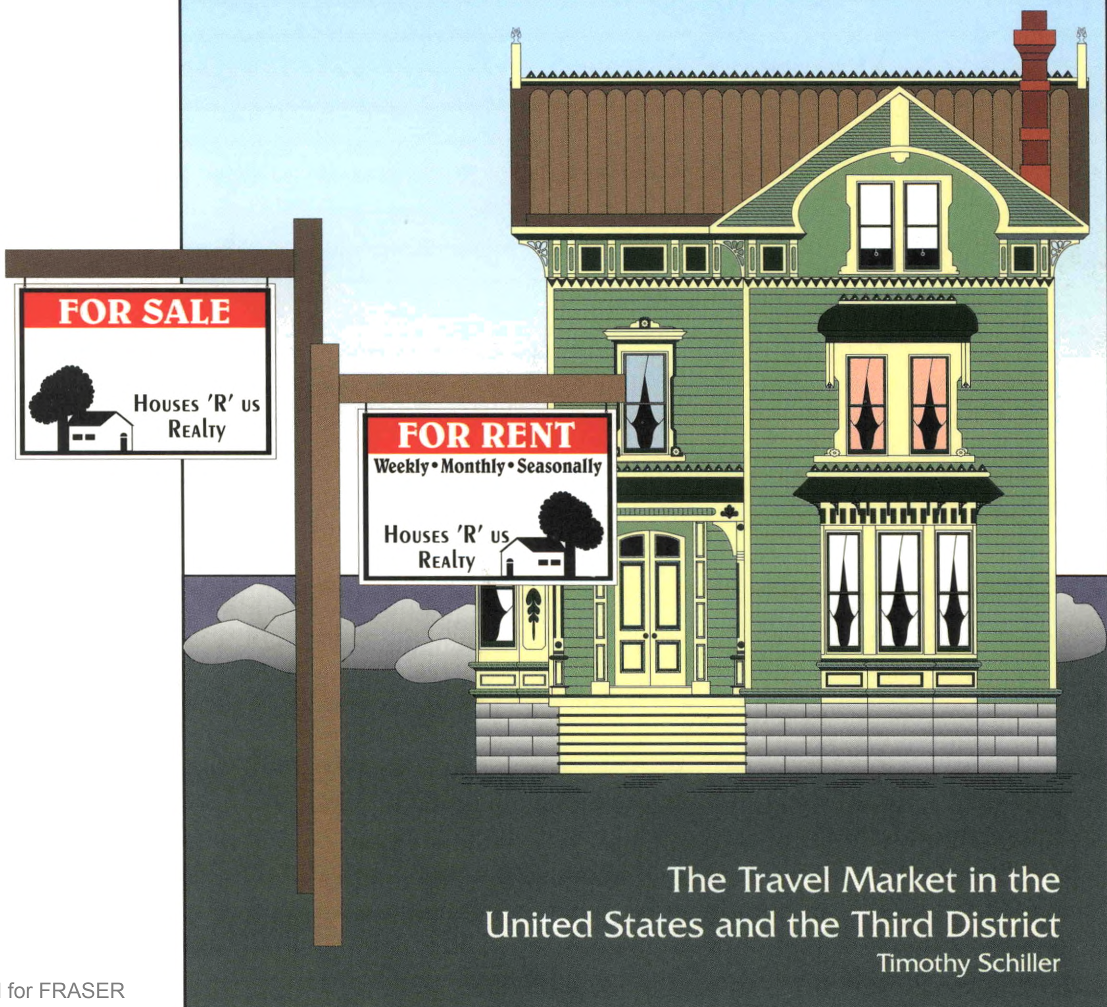

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TAXES, HOMEOWNERSHIP, AND THE ALLOCATION OF RESIDENTIAL REAL ESTATE RISKS
Satyajit Chatterjee
Home equity is the predominant form of savings for most Americans because it helps them save on taxes. However, homeownership also determines how the risks of fluctuations in the value of residential real estate are borne. In this article, Satyajit Chatterjee looks at how the tax benefit of homeownership has moved households toward undiversified investments in risky residential real estate by making it costly for them to rent their homes. He also points out the often overlooked risk-allocation consequences of proposed changes in the U.S. tax code.

THE TRAVEL MARKET IN THE UNITED STATES AND THE THIRD DISTRICT
Timothy Schiller
How much economic activity does travel generate? How many jobs does the travel industry create? And how do the Third District states—Pennsylvania, New Jersey, and Delaware—stack up in terms of travel-related spending? Tim Schiller takes a look at these questions and discusses the importance of travel and tourism to the local and national economy.

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Taxes, Homeownership, and The Allocation of Residential Real Estate Risks

*Satyajit Chatterjee**

The saving habits of Americans have aroused a great deal of interest in recent years. While attention has focused mostly on how much people save (it is commonly thought that the typical American saves too little), the form in which households save is perhaps just as important. In fact, Americans use a large fraction of their savings to buy houses.

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In a recent study, Arthur Kennickell and Martha Starr-McCluer reported that, in 1992, the median holdings of financial assets such as checking deposits, savings accounts, bonds, CDs, mutual funds, life insurance, and stocks were $24,000 among homeowners. In contrast, the median value of a primary residence among homeowners was nearly $82,000, and the median value of their total debt (including mortgages and home equity loans) was only $38,000. Clearly, a large chunk of the typical homeowner's lifetime savings is tied up in the family house. Since 64 percent of American

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households are homeowners, the importance of home equity to household assets is beyond doubt.

Of course, it is well understood that the U.S. tax code encourages homeownership. For instance, experts agree that the reduction in tax liability made possible by homeownership is the main reason for the predominance of home equity in household assets.[1] What is perhaps less well understood is that, by encouraging homeownership, the tax code plays an important role in determining who bears the risk of fluctuations in the value of residential real estate.

Although the risk-allocation consequences of homeownership (and by implication of the U.S. tax code) rarely get mentioned in popular discussions and policy debates, they deserve to be better understood and appreciated for several reasons. First, the risks of owning residential real estate are significant, and the issue of who bears these risks, and why, is an intrinsically important one. Second, the U.S. housing stock is very large, and because the tax code affects the way residential real estate risks are borne, it exerts a significant influence on economic welfare.[2] Finally, proposals to change the tax code with respect to housing appear frequently, and a full understanding of such proposals requires an understanding of their consequences.

THE TAX ADVANTAGES OF HOMEOWNERSHIP

To understand the effect of the tax code on the allocation of residential real estate risks, it's essential to understand the manner in which the U.S. tax code encourages homeownership. Most people regard the deductibility of mortgage-interest payments as homeownership's main tax advantage. In a sense, this is correct, but the fundamental reason underlying the tax advantage goes deeper than that. Indeed, houses can serve as a tax shelter even without the deductibility of mortgage-interest payments. Let's see why.

Housing services—shelter and heat, for example—could be had by renting. Therefore, to understand why homeownership has a tax advantage, we need to compare the tax liability of a household that moves from renting to owning. Suppose a household is currently paying an annual rent of $10,000. Suppose further that it can purchase the house for $100,000 using its own funds and that these funds are currently invested in financial assets earning a market interest rate of 10 percent a year. In addition, the household's income tax rate is 30 percent. If this household liquidated its financial investment and bought the house, it would save $10,000 in rent each year, but it would lose a before-tax interest income of $10,000 (10 percent of $100,000). However, since $3000 of this $10,000 would be lost to taxes anyway (30 percent of $10,000), the actual loss in after-tax interest income would be only $7000. Thus, the household would save $3000 by owning the house, even though there is no mortgage interest to deduct.[3]

What explains this tax advantage of ownership? When the household buys the house, it effectively becomes its own landlord. Thus, imagine that the household continues to pay rent, but now, in its capacity as landlord, it is

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[1]See, for instance, the articles by David Laidler and Harvey Rosen.

[2]In 1989, the total value of private residential capital stock was about 80 percent of all private nonresidential capital stock in the United States. See tables A6, on page 213, and A9, on page 276, in the publication by the U.S. Department of Commerce.

[3]The example supposes that regardless of whether the household rents or owns, its income exceeds the standard deduction allowed for federal taxes. It also supposes that the household opts for the standard deduction in either case. Since there is no mortgage interest to deduct, and since state and local taxes alone usually do not make itemization worthwhile, this assumption is reasonable.

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the recipient of that rent as well. While the household's expenses remain unchanged (it is still paying the $10,000 in rent), it is now the recipient of $10,000 of rental income. Against this additional income, the household forgoes a before-tax interest income of $10,000 or an after-tax interest income of $7000. The source of the gain should now be apparent: when the household purchases the house, it replaces $10,000 of interest income on which it paid tax with an equivalent amount in rental income on which it is not required to pay tax. Thus, its tax payments are reduced $3000.

The crux of the matter, then, is what counts as income for personal income tax purposes. Generally speaking, the IRS counts as personal income only those funds households receive from *external* sources, including payment for labor or interest and dividends. What matters for household decisions, however, is not just income from external sources but *full* income, which includes what the household implicitly earns (and spends) when its labor and assets are used within the household. Since implicit rental income is tax-exempt, it gives households an incentive to convert explicit income (from financial assets) into implicit income by owning rather than renting a house. The higher the household's tax rate on explicit income, the greater is its incentive to own rather than rent.

The Role of Deductibility of Mortgage Interest. The above example did not involve a mortgage. Yet, the most often cited benefit of homeownership is the deductibility of mortgage-interest payments. Where does this advantage fit in?

If mortgage interest is not deductible, households that need to borrow money to buy a house would be unable to exploit the tax advantage as effectively as those who don't borrow. To take an extreme case, consider a household that borrows the entire purchase price of $100,000 at a market interest rate of 10 percent. In the first year following the purchase, the household will have an interest liability of $10,000 to match the implicit rental income of $10,000 and will not gain financially from ownership. However, as the household pays down its debt (i.e., accumulates equity), the implicit rental income will exceed the interest liability on the remaining debt, and homeownership will allow the household to save on taxes. The tax savings increase as the mortgage debt declines: borrowing households would have to wait until they own their property free and clear before they could enjoy the same tax advantages as households that buy their property outright.

The deduction for mortgage interest puts these households on a more even footing. Now, the borrowing household can deduct $10,000 from its taxable income in the first year of the purchase, leaving it with the same taxable income as the household that bought its property outright. In later years, the tax deductibility from mortgage interest would of course fall, but there will be a corresponding rise in the tax benefits from owning an increasing portion of an asset that generates tax-exempt implicit income. Thus, allowing a deduction for mortgage interest gives borrowing households roughly the same access to the tax advantages of implicit rental income as households that own their houses outright.[4]

Do Tax Benefits Get Capitalized in House Prices? One objection to the argument that owner-occupancy carries a tax advantage is that competition among potential owner-occupants ought to raise house prices until households become indifferent between renting or owning. In other words, the tax benefit from owner-occupancy should get capitalized in the house price.

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[4]The tax liabilities of these households won't be identical because the borrowing household must *give up* its standard deduction to claim the mortgage-interest deduction whereas the household that purchases its property outright can "deduct" $10,000 from its taxable income without giving up the standard deduction.

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Tax advantages get "capitalized" in the value of houses in the sense that the value of owner-occupied housing is higher because of them. Still, most households will prefer owner-occupancy over renting because the rent on these houses also increases with the rise in their market value. This happens because landlords, who have the option of investing their funds in financial assets, would be willing to hold these houses as rental property only if the rent is high enough to match the interest income forgone. Put differently, the annual rent on a house cannot stray too far from the product of the house price and the interest rate on financial assets. As long as this is the case, households that rent such houses would lower their taxes by becoming owner-occupants.

However, some exceptions arise because the U.S. tax code allows landlords (but not owner-occupants) to reduce their taxable income by an amount that reflects the depreciation on their rental properties.[5] For wealthy landlords facing a high income-tax rate, this depreciation allowance can be quite valuable. Thus, they may be willing to bid more for rental property than the amount of rent charged would justify. Furthermore, if the potential owner-occupants of a house are families with low income-tax rates, the tax benefits accruing to potential owner-occupants of the house may be less than the tax benefits accruing to wealthy landlords who rent it out. In this case, the price of a house will, in effect, be determined by landlords competing to capture tax benefits and will exceed any price that potential owner-occupants may be willing to pay. Thus, households that rent such houses may actually be better off renting than owning.[6]

Are tax benefits capitalized in house prices? To some extent, but not fully for all types of housing.

HOMEOWNERSHIP AND THE ALLOCATION OF RESIDENTIAL REAL ESTATE RISKS

Like the value of any other useful asset, the value of houses fluctuates over time. Indeed, the record shows that house prices are quite volatile (see the Table). For instance, real house prices in Newark, New Jersey, rose 4.1 percent, on average, between 1977 and 1980.[7] Then, after barely rising between 1980 and 1983, they shot up 15.5 percent between 1983 and 1987. Finally, between 1987 and 1991, they declined 4 percent.

Such volatility makes it clear that although houses provide comfort and shelter, homeownership brings with it substantial financial risks. It also means that by encouraging homeownership the tax code partly determines who bears these financial risks. To see this more clearly, note that a home purchase really involves two distinct transactions bundled into one: the purchase of a house and the purchase of the service benefits (comfort and shelter) that flow from the house.[8] In the absence of a tax advantage to owner-occupants, the market would tend to "unbundle" these

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[5]In their book, Edwin Mills and Bruce Hamilton explain: "Annual depreciation for tax purposes is straight line over 27.5 years. That means that 100 (1/27.5) = 3.6 percent of the basis can be subtracted from rents each year for 27.5 years in computing the owner's yearly taxable income. The basis on which depreciation is calculated is purchase price plus transactions costs at time of purchase."

[6]However, on average, an American household's estimated tax savings from owner-occupancy is about 15 percent of the value of its house. See Mills and Hamilton, p. 232.

[7]That is, house prices in Newark rose 4.1 percent faster than the prices of other items households consumed.

[8]The easiest way to grasp the distinction is to see that it's possible to do one transaction without doing the other: someone wanting to purchase only the house (and not the service benefits) could buy the house and rent it out to someone else and someone wanting to purchase only the service benefits could rent the house.

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TABLE

Percentage Real House Price Appreciation Over Different Periods

	1977-80	1980-83	1983-87	1987-91	1977-91
Boston, MA	4.7	4.8	16.1	-5.5	4.8
Naussau-Suffolk, NY	0.6	10.3	15	-4	5.2
Newark, NJ	4.1	0.8	15.5	-4	4.1
Atlanta, GA	1.7	-2.5	2.7	-2.2	-0.1
Baltimore, MD	1.1	-2.2	4.2	3.5	1.9
Charlotte, NC	4.6	-2.4	3.2	0.3	1.4
Richmond, VA	0.4	-2.7	1.8	0.7	0.2
Washington, D.C.	3.3	-2.1	3.5	3.6	2.3
Chicago, IL	3	-4.9	3.9	3.1	1
Cincinnati, OH	5.6	-5.3	1.6	1.8	0.2
Cleveland, OH	2	-6.4	1.5	2.4	-0.5
Columbus, OH	3.2	-4	2	1.1	0.2
Detroit, MI	10.5	-7.1	3.8	2.8	1.2
Kansas City, MO & KS	7.3	-4	0.8	-2.8	-0.7
Louisville, KY	4	-3.8	0.8	0.2	-0.3
Minneapolis, MN	10.4	-3.1	1.6	-1	0.7
St. Louis, MO	8.2	-4.3	2.7	-1.8	0.1
Dallas, TX	11.4	-0.8	-0.2	-7	-0.8
Houston, TX	6.2	-1.1	-10	-2.1	-3
Oakland, CA	7.7	-2.6	4	6.4	4
Sacramento, CA	9.6	-3.5	1.4	8.5	4
San Francisco, CA	7.4	-2.3	5	7.7	4.7
San Jose, CA	7.1	-1.9	4.2	7.1	4.3
Santa Rosa, CA	8.7	-2.8	2.1	9.6	4.5
Seattle, WA	13.2	-5.5	1.9	6.8	3.9
Stockton, CA	6.8	-2.2	1.7	7.1	3.4
Anaheim, CA	5.8	-0.7	1.3	6.4	3.3
Los Angeles, CA	9.1	-2.3	3.1	7.9	4.5
Riverside-Santa Barbara, CA	7.2	-3	0.7	6	2.7
San Diego, CA	7.4	-3.9	2.4	5.7	3
Average	**6.1**	**-2.4**	**3.3**	**2.3**	**2**

Figures for each city are taken from Table 2 in the paper by Jesse Abraham and Patric Hendershott. The rate in each column is the growth in average house prices from the middle of the beginning year for that column to the middle of the ending year for that column. Nominal appreciation rates in house prices were converted into real terms by subtracting the growth in local CPI, net of shelter costs. The last row reports the mean for each column.

distinct transactions. The household that most values the services of a house will rent it from those best able to bear the financial risks of ownership. However, the tax code throws a monkey wrench into the works by allowing many households to reduce their tax liability if they own rather than rent. (Recall how, in the basic example, the household paid $3000 in additional taxes if it rented rather than owned its house.) Thus, the tax code leads some households that might otherwise rent into owner-occupancy and the financial risks that attend it.

The record of house-price movements also shows considerable disparity in the performance of residential real estate across cities. For instance, appreciation in real house prices between 1977 and 1991 ranged from an average of 5.2 percent for Nassau-Suffolk on Long Island to -3 percent for Houston. Generally speaking, the different degrees of appreciation in house prices in these cities reflect the pace of their economic growth. For instance, Jesse Abraham and Patric Hendershott found that real income and employment growth helped explain the different degrees

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of real house-price appreciation across cities. Since economic growth is unlikely to be even across cities, sharing real estate risks has potential gains. If homeowners who experience unexpected decreases in the value of their houses could be compensated by those experiencing unexpected increases, the financial position of *all* homeowners would be more stable.

But the practical problems in providing such insurance preclude such arrangements.[9] However, insuring owners against possible declines in the value of their homes is not the only way for households to share the risks of residential real estate. An alternative arrangement is one in which households purchase portions of houses located in different places. By having their "home equity" spread over many houses in different locations, households could share the risks of unpredictable movements in price. An unexpected decrease in real estate values in one location may be offset by an unexpected increase in another. Of course, this sort of risk-sharing is precisely what the equity market offers to its participants. By using their savings to buy small amounts of stock in many different companies, households can make the return on their financial investment more stable.

Could the equity market be used to diversify, i.e., share, the risks of residential real estate? The opportunity for diversified investment in real estate exists in the form of real estate investment trusts (REITs). These businesses raise funds in the stock market (and borrow from banks) to invest in real estate nationwide. To date, REITs have focused on industrial and commercial properties, but a few invest primarily in apartment complexes. REITs (and similar businesses) could potentially offer an opportunity for diversified investment in single-family homes provided households find it economical to rent these homes on a long-term basis. Unfortunately, the tax code chokes off this channel for diversifying residential real estate risks by making it more costly for many families to rent single-family homes than to buy them.

TAX POLICIES AND THE ALLOCATION OF RESIDENTIAL REAL ESTATE RISKS

Proposals for changing the U.S. tax code come up frequently, and sometimes include suggestions for altering the tax treatment of owner-occupied housing. As stated earlier, the debates surrounding such proposals rarely (if ever) mention their risk-allocation consequences. Furthermore, changes that don't directly alter the tax treatment of owner-occupied housing but that do alter the tax treatment of income from financial assets could also affect the allocation of residential real estate risks. This section points out the possible risk-allocation consequences of two proposals for changing the tax code.

A change often proposed is the elimination of the mortgage-interest deduction. Such a change would certainly reduce the subsidy to owner-occupied housing (which is usually the reason given in support of a change), but it would have an ambiguous effect on the allocation of residential real estate risk. On the one hand, it would encourage the rental housing market—a step that would improve the allocation and diversification of residential real estate risks. On the other hand, households that continue to own their own homes would have a tax incentive to put even more of their savings into their houses. Owner-occupants would take on less leverage, but as a result, their asset portfolios would become even less diversified. To see why, let's go back to our example in which a household is contemplating the purchase of a $100,000 house.

This time, suppose that the household has $20,000 in personal funds currently invested in financial assets that earn a market interest rate

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[9]For a discussion of the issues involved in directly insuring house values, see the article by Robert Shiller and Allan Weiss.

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of 10 percent. As before, the household's income tax rate is 30 percent. The question is, how much of its personal funds should the household commit? If mortgage interest is tax-deductible, committing $20,000 versus any lower figure has no tax advantage. For instance, if the household were to commit only $10,000, it would retain $10,000 of financial assets on which it would earn an interest income of $1000 a year. Because its mortgage will be $10,000 higher, it would also have an added mortgage-interest liability of $1000. But if mortgage interest is deductible, the deduction will balance the additional income, and the household's taxable income will not change. Thus, committing $20,000 versus $10,000 will make no difference to the household's taxes.

In contrast, if mortgage interest is not tax-deductible, there is a clear tax advantage to committing all $20,000. If the household committed only $10,000, it would earn interest income of $1000 but have no offsetting deduction, and its taxable income would be higher by $1000. Thus, for families who continue to be homeowners, eliminating the mortgage-interest deduction will increase the desirability of tying up assets in home equity and thereby make the composition of their assets less diversified.

Another proposed change is to exempt all capital income—that is, interest, dividends, and capital gains—from personal income tax. Although aimed at spurring more saving, the proposal would nonetheless affect the housing market. Let's go back to the initial example of a household contemplating using its own funds to purchase a $100,000 house. If capital income is tax-exempt, the household's taxable income will not fall when its interest income declines by $10,000, so its tax liability will not decline either. Therefore, an outright purchase of a house will not generate any tax benefits. Alternatively, if this household *borrows* $100,000 to buy the house, its taxable income will decline by $10,000 in the first year of the purchase, since it can still deduct the interest on its mortgage. In later years, as the tax deductibility from mortgage interest falls, the tax benefits from ownership will fall as well, and there will be no tax benefits at all when the mortgage is completely paid off.

Thus, making capital income exempt from personal income tax but allowing households to deduct mortgage interest will take away some of the tax benefits of homeownership. However, it probably won't affect homeownership rates very much because households that have paid off a good portion of their original mortgage can always take out a home-equity loan to recapture the tax benefits of mortgage-interest deductions. Therefore, this change in the tax code is not likely to encourage the rental market in housing. However, to the extent that it encourages households to have less home equity and larger investments in financial assets like mutual funds, it might lead to a more diversified composition of household assets.[10]

It is worth noting that combining the proposals—making capital income exempt from personal income tax and simultaneously eliminating the tax-deductibility of mortgage interest—would eliminate the tax advantage of owning rather than renting one's house. In this case, the tax code would no longer stand in the way of a larger rental market for single-family houses; that would be a boon for the allocation of residential real estate risks. The combined tax change would, however, do more than eliminate the tax code's bias in favor of owner-occupancy; it would also make investing in housing relatively less attractive, in comparison to investing in financial assets, than is the case today. Over time, adopting both proposals would tend to reduce the share of their savings that Americans put into housing.

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[10]Depending on which financial assets the household buys, its risk could rise or fall.

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CONCLUSION

Home equity is an important vehicle through which households save. This particular form of saving predominates in the United States because it permits households to reduce their federal income-tax liabilities. This article has highlighted one consequence of homeownership, and, by implication, of the tax code, that's often overlooked, namely, its effect on the allocation of residential real estate risks.

If the tax code didn't make homeownership so attractive, households would be less willing to invest such a large fraction of their lifetime savings in their own houses. Instead, houses would more likely be owned by individuals and businesses best suited to bearing the considerable risks of residential real estate. Furthermore, businesses that offered households the opportunity to invest in more diversified, and therefore less risky, portfolios of residential real estate would crop up.

Nevertheless, some proposed changes in tax policy that aim to curtail the tax benefits of homeownership may have ambiguous effects on the allocation of residential real estate risks. For instance, the proposal to eliminate the deductibility of mortgage-interest payments might stimulate the rental market in housing, which would be good for risk allocation, but it would also encourage people who choose to be homeowners to have smaller mortgages and own more equity in their homes, leading them to hold less diversified portfolios. Furthermore, proposed changes in tax policy that are directed at other issues may have consequences for the allocation of residential real estate risks. For example, the proposal to exempt capital income from personal income tax might encourage current owner-occupants to take out more home-equity loans and thereby reduce the level of equity in their own homes; that may lead to greater diversification by allowing them to hold other types of assets.

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The Travel Market in the United States and the Third District

*Timothy Schiller**

Residents of the U.S. took more than 1 billion trips in 1994, and, that same year, almost 46 million people traveled to the United States from other countries. What motivates these trips? Where do travelers come from, and what are their destinations? How much economic activity does travel generate? How does travel-related spending compare to overall spending, and how many jobs are created because people take trips? Finally, how do the Third District states (Pennsylvania, New Jersey, and Delaware) stack up in terms of travel-related spending?

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THE WHERE AND WHY OF TRAVEL

Travel is important not just for travelers but also for the residents of the areas they visit. State and local governments recognize the economic impact of both leisure and business travel, and they devote substantial resources to attracting out-of-area travelers—and their money. Successful public- and private-sector marketing plans are developed on the basis of information that identifies where travelers come from, the kind of travel experiences they are seeking, and the amount of money they are likely to spend on their trips.

The success of any marketing plan is measured by how much additional income is generated for each dollar spent on marketing. State

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and local governments and private-sector tourist enterprises use surveys to measure awareness of their advertising and to gauge visitors' use of promotional arrangements, such as special pricing for group and package tours. Private-sector tourist firms, hotels, and theme parks compare the added profit they make to the costs of their advertising and promotional programs. They adjust their marketing to concentrate on the people most likely to visit their facilities, and they develop new features to attract additional visitors. State and local governments compare their travel marketing expenses to revenues obtained from travelers directly through taxes on lodging and transportation services and indirectly through sales taxes collected from retailers and through wage taxes collected from additional employees in tourist areas. Like private-sector firms, state and local governments evaluate their marketing programs with the objective of obtaining the most revenue for every promotion dollar spent.

Who's Going Where? Americans travel widely around the country, and nonresidents, who take about 4 percent of all trips within the country, make up an increasing share of travelers in the United States. Travel by U.S. residents increased about 11 percent from 1984 to 1994, but over the same period, the number of foreign visitors to the United States increased sixfold. Over half of the visitors from foreign countries are our neighbors from Canada and Mexico. Travelers from Japan account for about 9 percent of foreign visitors, those from the United Kingdom 7 percent, and those from Germany 4 percent.[1] The U.S. Travel and Tourism Administration forecast that, in coming years, these five countries will continue to supply large numbers of travelers to the United States, but the number of visitors coming to our shores from Asian countries other than Japan and from South American countries will grow faster as the economies of these nations grow and their citizens' incomes increase.

Just as most foreign visitors to the United States come from neighboring countries, most visitors to the Third District come from nearby states. A compact geographic area in the middle of a densely populated part of the nation, the three-state region can attract a large number of visitors from neighboring states. In fact, surveys indicate that half or more of the people traveling to Delaware come from contiguous states and around one-third of the visitors to New Jersey come from states on its borders.[2] Although more distant states provide far fewer visitors, some states supply significant numbers: Virginia and California for Delaware, and Ohio and Florida for New Jersey.

Several reasons may explain the pattern of visitors. Travel from nearby locations is less expensive, and advertising by state tourism departments tends to be concentrated in nearby states. Furthermore, travel to Third District states from Florida (and some other southern states) could be the result of visits by family and friends who formerly lived in the area, since Census Bureau studies indicate that southern states are popular destinations for people moving out of the Northeast.

For all types of travel within the country (for business and pleasure, by U.S. residents and nonresidents), the average distance is 870 miles and includes four overnight stays. Most trips are taken by car. For many years, travel by auto has accounted for around 75 percent of all trips, airlines for 20 percent, and Amtrak, bus lines, and cruise ships for the rest.

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[1]The top foreign nations in numbers of visitors are not necessarily the top nations in travel spending in the United States. Visitors from more distant countries are more likely to purchase transportation from American-based airlines and to stay longer in this country, thus increasing their spending. The top nations for travel spending in the United States are Japan, the United Kingdom, and Canada.

[2]Pennsylvania has not conducted recent surveys of tourism.

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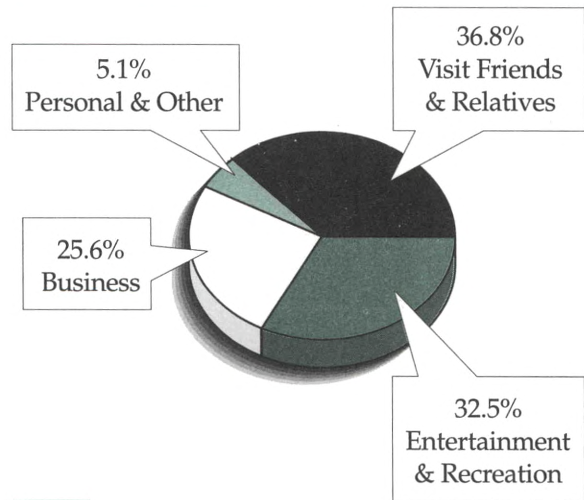
Why Do People Travel? Most trips can be categorized as either recreational/vacation or business trips. Just over one-third of the trips Americans take each year are to visit friends and relatives, one-third are for entertainment and recreation, and one-fourth are for business (including conventions and other meetings). Personal and other reasons account for the rest (Figure 1). This breakdown has remained fairly constant over the years.

Most recreational and vacation trips are made by family groups, and the most popular destinations are sites affording recreational and cultural opportunities. Many families include several types of locations in their vacation itineraries (Figure 2).

Ocean beach resorts have been the most popular destinations for some time. Each year, about one-half of all family vacations are spent at ocean beach resorts. Beaches top the list of most frequently visited places in New Jersey and Delaware. More than half of the people who visit southern Delaware do so primarily to stay at one of the beach resorts from Cape Henlopen to Fenwick Island, and half of the people who make overnight visits to New Jersey seek out the state's shore resorts.

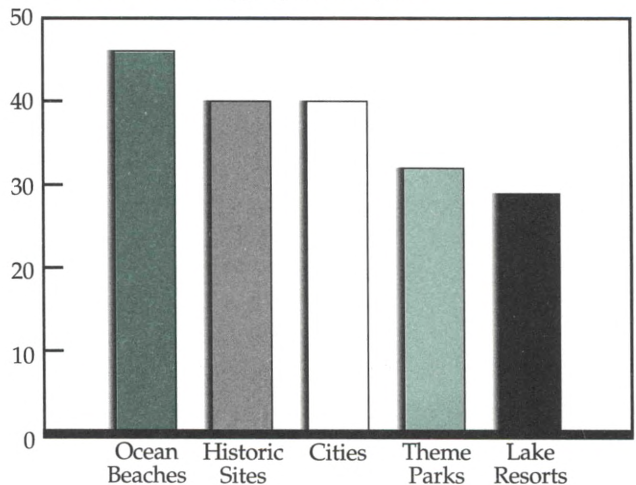
Atlantic City's casinos are an important factor in the large percentage of visitors who head for the South Jersey shore. More than 30 million people visit Atlantic City each year; however, only 15 percent of these people stay for one or more nights. In fact, going to the Atlantic City casinos is the second most frequently cited reason for trips to New Jersey by out-of-state residents. (Visiting friends and relatives is the first.)

FIGURE 1
Main Purpose of Trip



Source: U.S. Travel Data Center/Travel Industry Association of America

FIGURE 2
Leading Destinations For Family Vacations



Source: *Better Homes and Gardens* 1993 Travel Survey

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And although Atlantic City casino earnings have been on the rise and additional gaming facilities are planned, competition for gambling dollars has been increasing. Until New Jersey legalized casino gambling for Atlantic City in 1976, casinos were legal only in Nevada. Since then, eight more states have legalized gambling. Industry analysts believe that individual gaming companies and the localities where they operate will have to exert more marketing efforts just to retain their existing business. It appears, however, that the expansion of legalized gambling is slowing; no states have legalized casino gambling since 1993.[3]

The popularity of ocean beach resorts as vacation destinations shows no signs of fading. This should bolster the economies of resorts in Delaware and New Jersey. However, the tradition of seasonal or long-term family rentals at resorts of this type appears to be waning, and tourist officials and others in the industry doubt if long-term rentals will ever again be as common as they once were. Also, there appears to be a growing trend that favors weekend trips and "mini-vacations" within one-day's driving distance of vacationers' homes. The Delaware and New Jersey beaches are located advantageously near large population centers for such trips. This type of vacation trip is likely to change the types of services in demand at beach resorts, however. Shorter stays, for example, may mean a shift from purchasing groceries to having meals in restaurants.

While ocean beach resorts are the most popular vacation spots for families, approximately 29 percent stay at lake resorts for at least a part of their vacations. Among the three states in the District, Pennsylvania has the most lake resorts, located across the state from the Pocono Mountains in the east, which also offer popular ski resorts, to the Allegheny Mountains and other areas in the west. While not as plentiful in New Jersey, lakes in the northern part of the state provide recreational opportunities that attract visitors from the heavily populated northern New Jersey-New York City area. Also in the northern part of the state, where the Delaware River forms the boundary with Pennsylvania, the Delaware Water Gap National Recreation Area provides boating and hiking opportunities enjoyed by millions of people each year.

Historic sites are growing in popularity as destinations for pleasure trips: 40 percent of families traveling on vacation stop at historic sites. Several factors account for this increased interest. First, such trips tend to be less expensive than other types of vacations or pleasure travel. Second, family travel has increased, and, often, historic sites offer something of interest to all family members. Third, vacationers, especially family groups, are more concerned about adding educational opportunities to their vacation plans.

Pennsylvania, New Jersey, and Delaware are rich in historic sites. Pennsylvania has many significant sites from all periods of American history. The most famous is Independence National Historical Park in Philadelphia, often called the most historic square mile in America. Many visitors go to Lancaster County to observe elements of Amish culture. In addition, America's military history is preserved at Valley Forge and at Presque Isle State Park, Commodore Perry's naval base in the War of 1812 and Pennsylvania's most visited state park. And the only major engagement of the Civil War to take place north of the Mason-Dixon Line occurred at Gettysburg, Pennsylvania.

New Jersey abounds in historic sites of the Revolutionary War; battlefields at Princeton, Monmouth, and Trenton, and the Continental Army encampment site at Morristown are among the most famous. Other historic sites also attract substantial numbers of visitors, including Thomas Edison's laboratory in Menlo

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[3]Casino gambling has been introduced on some lands owned corporately by Native-Americans, and Delaware legalized slot machines at racetracks in 1994. [4]Data

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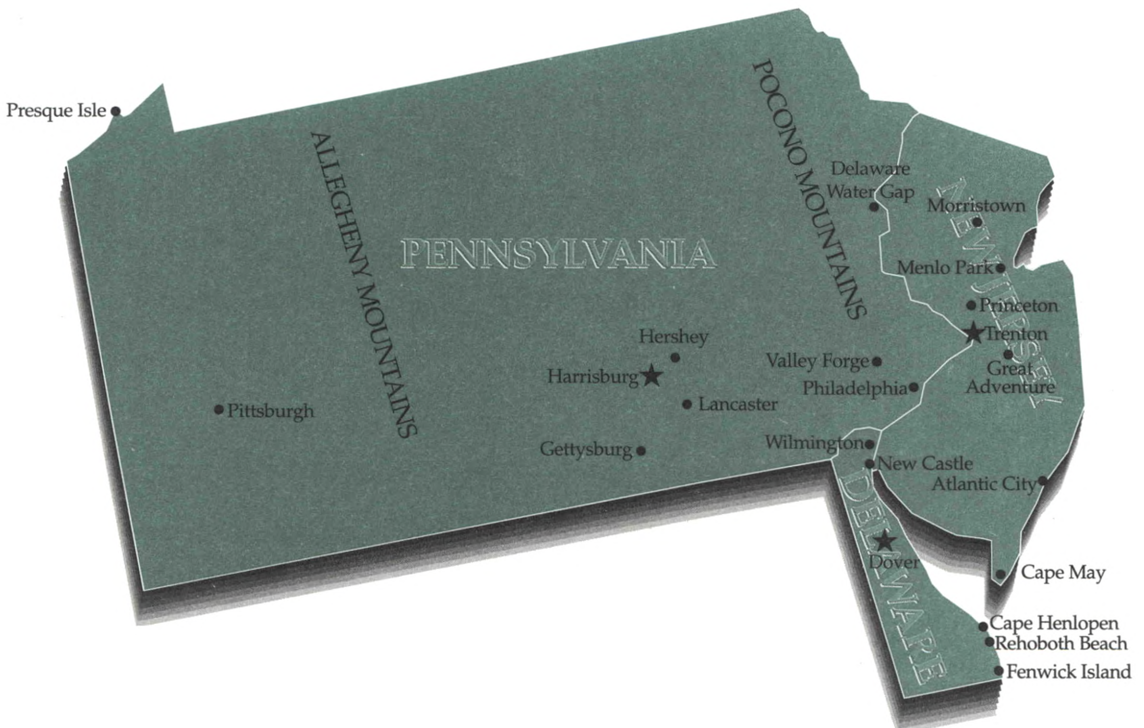
Park and the town of Cape May, a Registered National Historic Landmark, with its many Victorian homes.

American industrial history is prominently represented in Delaware, primarily at the sites of the Du Pont enterprises, the earliest of which is preserved at Eleutherian Mills in the northern part of the state. In addition, colonial history attracts many people to New Castle.

The historic sites that distinguish Pennsylvania, New Jersey, and Delaware should continue to attract visitors, according to local tourism officials. They expect the more famous sites to remain prominent among leisure-travel destinations, especially for travelers from outside the immediate region. Visiting historic sites as part of a family vacation is becoming a common practice, and analysts believe that historic sites, in combination with other cultural attractions such as art museums, are becoming increasingly important as focal points of vacation and short-term leisure travel (see map).

Theme parks, a relatively recent addition to the list of favorite vacation places, are now destinations for nearly one-third of family vacations. Although not in the same league with preeminent parks such as Disney World, theme parks in the three-state area figure prominently in the region's travel market. Six Flags/Great Adventure in central New Jersey was one of the earliest theme parks to open during the most recent wave of park development, and it re-

Three-State Area Map



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mains popular. A recent survey indicates that, except for the beaches, it is the second most-visited site in the state. In Pennsylvania, Hershey Park and related attractions in the town of Hershey have drawn visitors since the park opened in 1907.

The growth in attendance at theme and amusement parks is another trend that is expected to continue. Analysts in the tourist industry say that attractions such as Hershey Park, Great Adventure, and Sesame Place should be able to post further gains in attendance, especially if they continue to add new and expanded features. Like the region's historic sites, the major theme parks draw a significant portion of their visitors from outside the region, either as a main destination or a secondary stop.

Although recreation and vacation trips dominate travel in the United States, business trips make up a significant share. Combining business and pleasure on a single trip is a growing trend. It is estimated that travelers use some vacation time on one-fourth of all business trips, and the frequency of combining business and vacation travel has doubled since the mid-1980s. Furthermore, on 20 percent of all business trips, the business traveler is accompanied by another member of his or her household.

Cities are frequent travel destinations, though perhaps more often for business than for pleasure trips. In Pennsylvania, New Jersey, and Delaware, cities are often the destinations of out-of-state visitors for both single-day and overnight trips. According to surveys of travelers to Delaware, Wilmington and Dover, the state capital, are among the top five most-visited places in the state. Surveys in New Jersey indicate that cities in the northern part of the state are among the top 10 most frequent destinations, excluding the beach resorts. In Pennsylvania, cities at opposite ends of the state—Pittsburgh and Philadelphia—figure prominently among destinations for both business and pleasure trips.

The recent opening of the Pennsylvania Convention Center in Philadelphia has highlighted the city as a destination for business travelers. Indeed, nearly 800,000 people visited the Pennsylvania Convention Center in its first three years of operation, over 60,000 more than initially forecast. The center's economic impact is likely to be significant. A study by the Pennsylvania Economy League estimates that spending in Philadelphia by visitors to the center will grow to $275 million annually by the tenth year of the center's operation (fiscal year 2004). This spending is projected to sustain 4600 jobs and provide annual tax revenues of $30 million each to the city of Philadelphia and the state of Pennsylvania.

TRAVEL ADDS UP

Both the number of people traveling and the money they spend on their trips have drawn the notice of businesses and state and local governments. Private companies and travel development officials in the public sector are focused on gaining some of this business for their firms and regions. They know that personal and business outlays for travel expenses are a significant portion of total spending. (See *Estimating Travel Expenditures*.) For the nation as a whole, spending for travel and tourism amounted to approximately $400 billion in 1992, accounting for 9.2 percent of total consumption spending and 6.3 percent of gross domestic product.[4] Travel and tourism as an industry thus ranks above agriculture, mining, or construction as a component of GDP. The industry has been growing both absolutely and as a share of GDP.

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[4]Data from 1992 are used because that is the latest year for which total output at the state level—gross state product—is available for state-to-state and state-to-nation comparisons. In 1994, travel spending was estimated to be 5.7 percent of gross domestic product and 8.4 percent of personal consumption expenditures.

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From 1987 to 1992, travel spending increased 44 percent in current dollars, while GDP increased only 32 percent.

The share that travel spending contributes to gross state product (GSP) in the Third District falls below the national average, but the amount of such spending is still significant (Table). For Delaware, the share is 3.4 percent of GSP ($0.8 billion), for Pennsylvania, 3.6 percent ($9.6 billion), and for New Jersey, 4.7 percent ($10.5 billion). Travel and tourism as an industry ranks above agriculture and mining in all three states and also above construction in New Jersey. The states at the top of the list when ranked by travel spending as a percentage of GSP tend to be those where a large portion of visitors stay for several days and where the tourist season is year-round, such as Florida, Hawaii, and the southwestern states. Nevada's place in the rankings can be attributed to these factors as well as to its casinos.

While these data make the travel industry

TABLE

Domestic Travel Spending as a Percentage of Gross State Product

State	Travel Spending (as % of GSP)	Travel Spending (millions of $)	Rank (in $ spent)
Nevada	31.54	11610.8	6
Hawaii	17.66	5863.1	16
Florida	10.07	27060.8	2
Montana	8.79	1338.5	42
Vermont	8.18	969.2	47
Wyoming	7.88	1039.2	46
New Mexico	7.77	2475	35
District of Columbia	7.34	2967.9	31
Colorado	6.82	5623.5	18
Arizona	6.81	5045.7	19
Utah	6.78	2411.5	36
South Carolina	6.65	4645.1	22
Idaho	6.43	1341.9	41
North Dakota	6.34	828	48
Maine	5.90	1422.1	40
Arkansas	5.89	2590.2	33
Tennessee	5.86	6384.9	15
Oregon	5.61	3518.6	27
Virginia	5.56	8558.5	9
Georgia	5.49	8434	10
California	5.25	41397.7	1
Missouri	5.21	5813.7	17
South Dakota	5.12	774.8	50
New Hampshire	5.02	1280.7	44
Louisiana	4.90	4713.8	21
New Jersey	4.70	10479.9	7
North Carolina	4.65	7417.1	12
Mississippi	4.63	2052.8	38
Texas	4.50	18767.3	4
Alabama	4.48	3501.7	28
Nebraska	4.44	1654	39
Iowa	4.44	2637.1	32
Kentucky	4.39	3316.2	29
Illinois	4.34	12793.6	5
Oklahoma	4.24	2549.9	34
Massachusetts	4.18	6767.2	14
West Virginia	4.17	1281.3	43
Kansas	4.15	2328.5	37
Alaska	4.13	1071.7	45
Maryland	3.95	4588	23
Washington	3.91	4990.3	20
Wisconsin	3.86	4230.3	24
New York	3.81	18980.2	3
Minnesota	3.80	4188.5	25
Pennsylvania	3.61	9648.7	8
Delaware	3.44	813.3	49
Michigan	3.41	6975.9	13
Ohio	3.38	8162.2	11
Connecticut	3.31	3275.7	30
Indiana	3.29	4005.5	26
Rhode Island	3.23	698	51

Source: Dollar amounts in Travel Spending column are from U. S. Travel Data Center/Travel Industry Association of America.

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appear less important in the Third District states than in the nation, Pennsylvania and New Jersey rank high among all states in terms of absolute amounts of travel spending. The top three states in travel spending—California, Florida, and Texas—account for more than 25 percent of the national market, doubtless because of their large size and year-round attractions. Nevertheless, New Jersey, ranking seventh in the nation for travel revenue, and Pennsylvania, ranking eighth, play important roles in the nation's travel industry. Delaware's small size is reflected in its ranking—49th.

These state-to-state comparisons are based on overnight trips and trips of 100 miles or more. For the three Third District states, surveys indicate that a significant portion of travel into these states is for day-trips of less than 100 miles. While spending for such trips is less than that for overnight and long-distance trips, the number of short trips to the District's states is so large that a substantial amount of travel spending is generated in this way. For example, a survey conducted for New Jersey suggests that day-trip and pass-through travelers add an amount equal to 67 percent of the spending by overnight visitors each year. Surveys conducted in Delaware indicate that day visitors may be responsible for up to 10 percent of all travel spending in the southern part of the state and about 40 percent in the northern part. This difference between south and north in Delaware may be attributed to the existence of large population centers (in Maryland, New Jersey, and Pennsylvania) close to the many cultural attractions of the Brandywine Valley in the north, while beach resorts in the southern part of the state attract proportionally more overnight visitors.

How Do Travelers Spend Their Money? U.S. residents spent more than $300 billion on trips in 1992.[5] Nationwide, the largest category of expense within this total was food service (25 percent of travel-related spending). The next largest was public transportation (23 percent), followed by lodging (17 percent), auto transportation expense (17 percent), entertainment and recreation while on a trip (10 percent), and general retail purchases while traveling (8 percent). (See Figure 3.)

The spending pattern among travelers to the Third District states differs somewhat from the national average, especially in New Jersey. Public transportation is the top category of expenditure for travelers to Delaware and Pennsylvania. Such spending accounts for 29 percent and 27 percent, respectively, of total travel spending in these states. In New Jersey, entertainment and recreation spending is by far the largest category of travel expense (34 percent of the total). This category includes casino winnings, the amount of money earned by casinos from gamblers.[6]

Travel Spending Generates Jobs. Employment in the travel and tourism industry reflects the industry's share of output. Nationwide, employment in the industry is estimated to be 5.7 percent of total nonagricultural employment. From 1982 to 1992, travel-related jobs increased 56.3 percent, twice the rate at which total employment grew. According to recent estimates (1993), around 35 percent of these jobs are in food service, 20 percent in lodging, 16 percent in public transportation, and 15 percent in entertainment and recreation. The breakdown is similar for Pennsylvania and Delaware. In New Jersey, however, employment in the entertainment and recreation sector accounts for 46 percent of total travel-related employment. The presence of casinos in Atlantic City boosts the absolute and relative magnitude of entertainment spending in New Jersey and raises employment in this sector above the na-

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[5]This amount is for U.S. residents only. Detailed breakdowns of spending by nonresidents are not available.

[6]In only one other state—Nevada—is this category a higher percentage of total travel spending.

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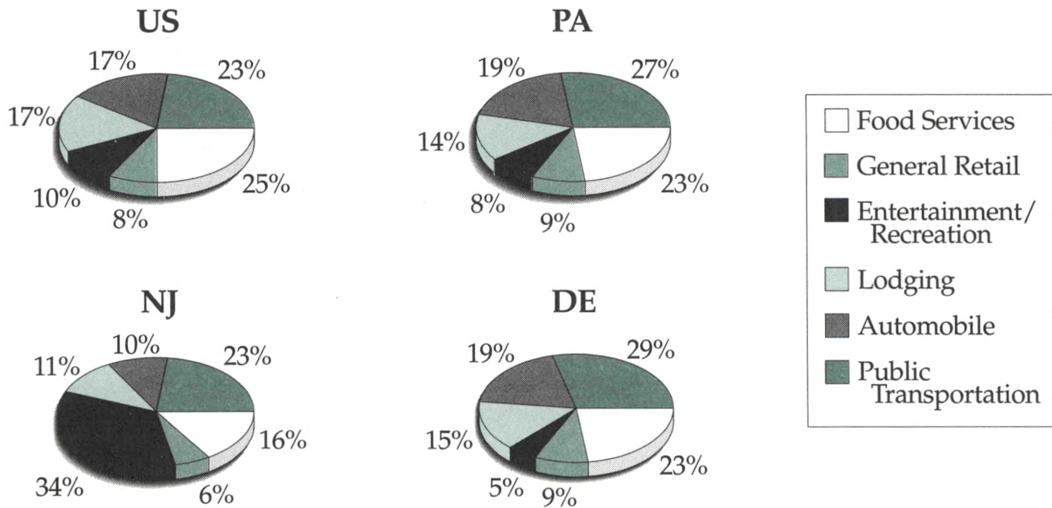
FIGURE 3
Domestic Travel Spending



Source: U. S. Travel Data Center/Travel Industry Association of America

tional average.

Travel employment in New Jersey and Pennsylvania in 1993 placed these states eighth and ninth in a listing of all states based on numbers of total jobs attributable to domestic travel. But travel-related employment made up only 4.7 percent of total New Jersey employment, which matched the nationwide percentage of jobs attributable to travel by U.S. residents, 3.2 percent in Pennsylvania, and 3.4 percent in Delaware. Nonetheless, for some local areas in these states, travel-related employment accounts for a significant share of all jobs. For example, in the New Jersey shore counties of Atlantic, Cape May, Monmouth, and Ocean, travel-related employment constituted 25 percent of total employment in July 1993. In the Pennsylvania Pocono Mountain counties of Carbon, Monroe, Pike, and Wayne, travel-related employment was 16 percent of total employment in mid-1993.

WHERE TRAVEL IS HEADED

Industry analysts have identified some trends that they expect will shape the travel and tourism industry for the rest of this decade. These trends affect both business and pleasure travel, and they will bring changes in the amount of travel within the country as well as in the types of destinations travelers will favor. Some of these trends have positive implications for the states of our region.

The trend toward combining business and pleasure in a single trip should benefit the region as a whole. Its well-established business base and wealth of historical sites and cultural and recreational opportunities, all in a relatively compact area, make the three-state area a logical place for such combined trips. In addition to attracting greater numbers of visitors, the region's variety of business and leisure attractions encourages longer stays per visit, thus magnifying the economic impact.

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Another emerging feature of travel in the United States is an increased desire for a variety of activities per vacation trip. However, people in the travel industry are keenly aware that coordinated regional planning and active marketing will be crucial to any particular region's ability to take advantage of this trend. For example, out-of-state visitors to the 1996 Philadelphia Flower Show took advantage of other tourist attractions in the region and extended their stays, many in response to a marketing effort that highlighted special accommodation and tourist packages for Flower Show attendees.

A travel trend that will have negative implications for the region, and for domestic travel destinations generally, is the growing popularity of ocean cruises. Americans have been spending more of their vacation time in this way in recent years, and an increasing percentage of cruise ship business is made up of family groups. The overall impact of this trend on other types of travel is likely to be minor, however, as cruise ship capacity remains small in relation to all other types of travel.

SUMMARY

In 1994, domestic passenger-miles topped 2 trillion for the first time as U.S. residents took 1 billion trips and nearly 50 million visitors arrived in this country from other lands. Spread among many types of businesses and made up predominantly of small firms, the travel and tourism industry is sometimes difficult to see as a whole, but it is clearly a big business. Visits to friends and relatives, vacations and other recreational travel, and business trips add up to a $400 billion industry that employs more than 5 percent of American workers, and those numbers are growing.

The three states of the Third District—Pennsylvania, New Jersey, and Delaware—do not spring to mind when glittering travel images are conjured up. But the beaches, casinos, historic sites, and sheer numbers of people passing through and around the region generate a travel and tourism industry that is significant within the regional economy and crucial in many localities. The travel industry even propels New Jersey and Pennsylvania to national prominence, placing them among the top 10 states in dollar value of travel spending.

SOURCES

The national statistics and some state statistics cited in this article were obtained from the U.S. Travel Data Center, the Travel Industry Association of America, and the U.S. Commerce Department (Bureau of the Census, Bureau of Economic Analysis, Tourism Industries/International Trade Administration, and the now-defunct Travel and Tourism Administration). The following major publications of the U.S. Travel Data Center were consulted: *Impact of Travel on State Economies* (various years), *The Economic Review of Travel in America* (1995), and *1995 Outlook for Travel and Tourism* (1995). Some data on employment were obtained from *A Portrait of Travel Industry Employment in the U.S. Economy,* published by the Travel Industry Association of America. Commerce Department data were obtained from *Gross State Product* (Bureau of Economic Analysis, 1992), *U.S. Industrial Outlook* (International Trade Administration, various years), and *Geographical Mobility: March 1991 to March 1992* (Kristin A. Hansen, Bureau of the Census, 1993).

State data were obtained from the tourism divisions of Pennsylvania, New Jersey, and Delaware. Published data may be found in Pennsylvania's *The Economic Impact of Travel in Pennsylvania Counties* (Pennsylvania Office of Travel Marketing, 1995), Delaware's *Visitor Profile Studies 1994-95* (Delaware Tourism Office, 1995), and the *New Jersey Travel Research Program 1993* (New Jersey Division of Travel and Tourism, 1994).

Estimates of the economic effects of the Pennsylvania Convention Center are published in *Economic Impact of the Pennsylvania Convention Center, FY1995 to FY2004,* Report 673 (Pennsylvania Economy League, Inc., Eastern Division, March 1995.)

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APPENDIX
Estimating Travel Expenditures

The United States Travel Data Center, the research department of the Travel Industry Association of America, compiles the most comprehensive data on travel in the United States. The center conducts regular surveys that seek to measure the amount and characteristics of business activity generated by travelers. These data, along with data from other authoritative sources, are used to estimate spending both on direct travel expenses and on other goods and services purchased during a trip. Data from the Center's surveys are supplemented by data gathered by the Bureau of the Census and other federal agencies, by data gathered in other private-sector surveys, and by information obtained directly from companies in the lodging and transportation industries. In combination, this information is used to estimate domestic travel spending by major category.

There are some limitations to using these data to assess the full economic magnitude of travel and tourism. First, the basic travel survey is intended to measure only travel within the United States. Second, survey respondents are asked to give details only for major trips, usually ones that are not a regular part of their daily activities. These trips are defined as those of 100 miles or more from the respondent's home or trips that involved an overnight stay away from home. Third, the survey tabulates spending only in states where travelers began or ended their trips or stayed overnight. Spending in the so-called "pass-through" states of a trip is not counted.

While these limitations reduce the completeness of the data, the information is fairly comprehensive and is collected on a consistent basis for all states. Nonetheless, for geographically small states and states that border large population centers, day-trips of less than 100 miles, and pass-through travel can be a significant source of travel-related business. This is an important factor in the Third District, especially for Delaware, a small state, and New Jersey, which sits between the major cities of New York and Philadelphia. Recognizing this, Delaware and New Jersey have undertaken their own studies to supplement the Travel Data Center information.

In addition, there are also some limitations with respect to the categories of spending covered. The categories covered are public transportation costs; private automobile expenses; lodging and vacation home rental and ownership costs; food service; entertainment and recreation spending while on a trip; and general retail spending while on a trip, not including purchases of goods in anticipation of travel. Travel industry analysts believe that this last type of spending is significant, but because it cannot be linked to specific trips, it is not included in estimates of travel spending. For the same reason, spending for off-road vehicles and boats is not included.

The Travel Data Center uses its estimates of travel spending to compute travel-related employment for states and counties. Each type of spending covered by the travel surveys and other data sources is associated with an industry for which business receipts and employment information are available (e.g., food expenditure is attributed to eating and drinking establishments). Then the ratio of receipts to employment for that industry in each state (based on Bureau of Labor Statistics surveys) is used to estimate the employment generated by travel spending (in each state and county indicated by the surveys and other data) for the goods and services produced by that industry.

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