II

What Can Americans Do About Aging?

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Introduction

The scope of papers discussed at this conference shows that nothing is making the job of actuaries much easier. Most Americans can expect to live longer than earlier generations, so their needs, capabilities, assets, family circumstances, and desires will become increasingly diverse. But despite glowing claims for retirement plans, many baby boomers will not have enough money to retire comfortably.

Just changing blanket provisions such as retirement eligibility ages for large groups of people will not be adequate. The country should develop new ways to identify and meet the widely differing needs of individuals and help them adapt to their changing situations. This should be done in the context of what the country will be able to do in the future.

This paper starts at opposite poles and works toward the middle. The first pole is based on the environmental notion of carrying capacity—how many retired adults the nation and its working population can support. The second pole is the growing diversity of needs and desires of older people and employers.

These two poles—the limits to what the country can do in relation to what individuals, employers, and communities want or need—will frame the issues of aging for decades. The issues will require finding acceptable blends of political, administrative, free market, and individual choices.

Finding these blends will require a high level of thinking that will involve far more than abstract philosophy. The country may be approaching a period like the one that followed May 15, 1776, when the Continental Congress advised the thirteen colonies to develop their own ways to govern themselves to replace the English governors and appointees. We can learn from how they handled that unprecedented task.

Part 1: Carrying Capacity

Physical Limits

Environmentalists have long been guided by the idea of carrying capacity, or what a natural system can support. It shows up many in ways such as how many animals can feed on a range or how much water can be drawn without destroying an aquifer.

In looking for ways to allow millions of boomers to retire, the United States hasn't begun to consider how many people it can support in retirement. Financial retirement schemes including Social Security, employer-provided pensions, and plans that individuals manage by themselves obscure the basic limitations. The schemes are like trees that hide the forest.

The country is trying to use financial techniques to avoid physical realities and nobody has shown how that can work. Let's start with three basic facts:[1]

1. In modern economies, consumption is fed by a continuous flow of goods and services. Most of the goods and services don't keep very long so they must be consumed immediately or shortly after they have been produced.
2. Workers produce the national pie of goods and services.
3. Most retirees are adults who consume slices of the pie without helping to produce it.

By themselves, these facts are not striking. In combination, however, they have profound significance for millions of baby boomers who hope to retire for many years.

After World War II, large companies and other employers planted the seeds of the retirement hope by including pension plans in compensation packages.[2] In recent years, many employers shifted risks to their employees by converting to defined contribution plans. This shift was accompanied by the growth of IRAs and other tax-advantaged schemes for individuals. The details keep changing, but they still fan the hopes of many boomers for years of pleasant, independent retirement without having to rely on other people.

Much of the financial services industry reinforces these hopes. The Social Security debate is an offshoot of the hopes as people look for ways to turn what began as a safety net for those who would otherwise be destitute into a hammock for everybody to enjoy.

But there is a glitch. Unless any of the three facts are wrong, they point to the conclusion that most boomers will not be able to enjoy years of retirement with true independence. Retirees who must depend on workers to make and share the pie of goods and services cannot be independent.

We can see this more clearly if we look at several types of national limits.

Financial Limits

The debates about Social Security illustrate the limits. The program primarily transfers income from workers to retirees and their survivors. The more income the retirees and survivors receive, the more they can buy. At any given time the pie has a finite size, so the more the retirees and survivors consume, the less there is left for those who make it.

But Social Security is just the tip of the U.S. retirement iceberg. Conventional investment and financial analysis techniques hide the fact that most financial retirement schemes—including pension plans, 401(k)s, IRAs and other tax-advantaged arrangements that depend on stocks—are also ways to transfer income from workers to retirees.

There is a fundamental mismatch between what stocks do and what retirees need. These days, few stocks pay significant dividends, so the only reason to buy them for retirement plans is appreciation. But until a stock is sold, any portfolio appreciation is just a paper gain or phantom wealth, and phantom wealth doesn't buy groceries. Retirees need dependable cash income as dividends once provided.

Boomers' retirement plans have created a national stocks-for-retirement cycle, in which workers and employers buy shares that will be sold later for retirement income.[3] Already, pension plans, 401(k)s, IRAs and so on hold half of the country's traded stocks.[4] Most of them will be sold to support consumption, and nobody knows how the cycle will play out. Nearly everybody who thinks about stocks and retirement investments concentrates on the front, or build-up half of the cycle, and ignores the back, or selling half. But the problem will arise during the back half when most of these stocks will have to be sold. Nobody knows who will buy them or at what prices.

Most stocks are bought by people in their peak earning years, between the ages of 40 and 60, when they have the most discretionary income. By 2030, about a third of America's adults will be in that age group. Another third, including all the boomers, will be in the retirement age range, from the early sixties on up, many of whom will be selling their stock. The youngest third will be the 20-to-40-year-old workers who tend not to be major buyers of stocks.

The problem with the current Social Security System is this: Shortly after the boomers begin to retire and collect their monthly benefits, starting around 2016, those still working may not pay enough payroll taxes to support the benefits. But Social Security is just the tip of the retirement iceberg. Stock-based retirement plans will have an even greater problem because they will depend on stock buyers in the middle-third, or roughly half as many supporters as Social Security will have.

Some stock advocates hope that foreign buyers will pick up the slack, but nobody has shown why they can be expected to do so. A 1998 report by the Organization for Economic Cooperation and Development said that most developed countries will have greater economic, social and political problems meeting the needs of their aging populations than the United States is likely to face.[5] A recent article in Foreign Affairs said that European retirement plans even threaten the Euro.[6]

In business school, one can study familiar techniques such as discounted cash flow, security analysis, and portfolio management as part of the financial curriculum. A better place to learn what can happen to retirement plans, however, would be in marketing curriculum where one studies inventory liquidation problems

As with any business that buys things to sell later, two factors will determine whether the boomers' stock-based retirement plans can be successful: the quantity of stocks that will have to be sold and the purchasing power that will be available to buy them. This is a simple inventory liquidation question and nothing else will matter.

So far, it looks as if the income that boomers will receive for their stocks will be determined by the prices that workers will be willing to pay. When workers buy stocks to provide income to retirees, the amounts they pay are as much a levy on their income as FICA taxes.

Unless somebody can show why this is wrong, true retired independence is impossible. Most retired boomers will have to depend on workers to share their incomes either through Social Security transfers or by buying their stocks. The same holds true for any other assets that boomers may buy to hold, then sell, whether they are bonds, bungalows or Beanie Babies.

The History of Stocks

"Everybody knows that stock prices fluctuate, but over the years, stocks have been good investments." That mental picture of stocks, which treats the combination of dividends and gains as "total returns", is held by most people, including financial professionals. It comes from widely quoted reports that show how the total returns from stocks have done well for the past 75 years. A close look at the data behind those reports, however, shows that there are actually two pictures and an empty frame.

The 75 Year History of Stocks
Summary of S&P 500

Picture 1–56 Years 1926–1981		**Picture 2–19 Years 1982–2000**		**Picture 3–?? Years 2001–20??**
1925 closing price	12.76	1981 closing price	122.60	
1981 " "	122.60	2000 " "	1320.30	
Gains	109.84	Gains	1197.70	?
Dividends paid	110.99	Dividends paid	222.49	
Returns from gains	49.7%	Returns from gains	84.3%	
Total return rate*	5.3%	Total return rate*	14.3%	

* Dividends not reinvested

The first picture, which covers 1926–1981, shows that gains provided slightly less than half of the total returns during those 56 years, and the average annual total return, without reinvesting the dividends, was just 5.3%.

The second picture of the 1982–2000 bull market covers the period when retirement savings poured into the market and companies were driven primarily to inflate their stocks instead of paying dividends. The average annual total return was 14.3%. Gains were more than five times greater than dividends. Many boomers think the bull market that began in 1982 was typical, but the gains of those 19 years are unprecedented, in part because they were fed by boomers' retirement savings in the front half of the stocks-for-retirement cycle.

It is a mistake to assume that the third picture will be a continuation of the second or even an average the first two pictures. Nobody knows what will happen, but if the preceding explanation of the stocks-for-retirement cycle is correct, the first picture was like crossing a vast and undulating plain, the second picture was like climbing a mountain, and the third will be like the downward slope on the other side of the mountain.

The data on which the widely-quoted reports about the history of stocks are based are probably trying to warn us of the serious declines that can be expected during the back half of the cycle.

Investment Income Limits

As the first picture shows, dividends provided half of the returns from stocks until about 1982. Many (but by no means all) financial advisors say that as people approach their retirement age, they should switch from growth stocks to investments that provide current income such as interest and dividends. But there are national limits to this strategy. If all the interest produced by the economy in 2000 ($567.3 billion)[7] were distributed evenly to the 35.5 million people who were over 65 in 2000,[8] each would get about only $15,980 per year or $1,332 per month.

To get that interest, people over 65 would have to receive all the federal, state, and local bond interest, all the mortgage interest, all the credit card and car payment interest, and all the interest that industry pays on bonds and short-term paper. In other words, to get that interest, these older people would have to own all the country’s underlying credit instruments, which of course, they will never do.

If we add all the dividends paid by U.S. corporations ($352.7 billion)[7] to all the net interest paid in the economy and distribute the sum evenly to people over 65, each would get about $25,915 a year or $2,157 a month. In other words, they would have to own every dividend-paying stock in addition to all credit instruments. Clearly they will never do that either.

There are three points here. First, on a national basis, the total amount of current income that investments could pay to retirees is limited. Because the income goes to those who own the securities, retirees could not even theoretically own all of them at the same time that workers are acquiring them to provide for their own retirements.

The second point is that the percent of the population over 65 is expected to grow much faster than the economy, so the total amount of interest and dividends per older person will decline.

Third, while shifting from stocks to income securities may make sense for some people as they age, there are limits to how many can make this shift, and the process of selling stocks to make the shift would just start the descent down the back side of the mountain sooner.

Carrying Capacity Limits—Conclusion

Without even considering the issues of health care and how it will be rationed, there are both physical and financial limits to the amount of time that aging Americans will be able spend in retirement and what they will be able to consume. For most people, the limits will be due to the fact that most retirees are supported physically, financially, or both by those who are still working. What the retirees receive, workers do without.

This generalization applies to all but the relatively few wealthy people whose investments can provide enough current income such as dividends and interest without having to be sold.

Because Social Security is the only program that publishes 75-year projections, it is the only one that gives the public a glimpse of these limitations. All other programs are evaluated and managed at the individual or portfolio level where the national context in which they must operate is hidden and ignored.

Part 2: Reconciling Individual Desires, Needs and Capabilities with Free Markets

Other papers presented during this program show how much American society has changed since the baby boomers were born. In addition to social and demographic changes, large companies no longer pride themselves on providing jobs for all skill levels, nurturing their communities, and paying dependable pensions and dividends. Many local businesses like banks, newspapers, and hardware stores are gone. Because of deregulation, even utility companies that used to be part of the glue that held communities together have been detached from their service areas.

The keywords for most successful America boomers are *individuality* and *self-sufficiency*. Millions of them are thinking primarily about themselves, their immediate families, and their own living standards. Some boomers are following what they are told is their formula for years of comfortable retirement—work hard, save, and buy stocks.

Most other boomers, however, are ignoring or can't follow that advice and only time will tell how they will fare in comparison with those who are following it. Few boomers have the slightest inkling of how the country's physical and financial limits will affect what they will or will not be able to do in their later years.

Boomers, along with their parents and children, should ask, "What can Americans do about aging?" In the rest of this paper we will examine several aspects of that question.

Minimum Living Standards for Older People

America has established standards for people. Some of them are rights, such as protection from discrimination, that go back to the Constitution, while others are guidelines, as for nutrition. *De facto* standards, such as those that have become accepted and are being expanded for education, are among the most interesting. We believe that Society should pay for teaching a child to read, write, and do arithmetic unless there is some reason why the child simply can't learn. The premise is that everybody needs at least a minimum level of education.

But at the other end of life, and despite reams of regulations for retirement homes and care facilities along with periodic inspections to ensure compliance, there have been few attempts to array the range of older peoples' needs and think realistically about how they can be met. Nor have there been even nibbles at how to resolve the conflict between minimal living standards, whatever they may be, and the national limits on much of the country's pie of goods and services that can be provided to people who no longer help make the pie. This is all new country.

Seven Classes of Boomers

As boomers pass their mid-sixties, they will fall into several possible categories. The following seven classes are offered as one way to array the possibilities. Over time, and as events play themselves out, individuals may move from one class to another.

The seven classes are

1. The WEALTHY, who will have enough assets to support themselves regardless of what happens to financial markets and the economy
2. The LUCKY, whose assets or employer-furnished retirement plans will prove to be adequate
3. The EMPLOYED, who will find appropriate and accessible jobs with adequate benefits
4. The REALISTIC, who want or expect to work because they know they do not have adequate retirement plans
5. The SURPRISED, who expect to retire but will find that they must work when their retirement plans or assets prove to be inadequate
6. The UNEMPLOYED, who will need appropriate and accessible jobs but will not be able to find them
7. The NEEDY, who will be without adequate retirement plans or assets and will not be able to work even if jobs are available

Note that all of these classes are described in terms of what will happen in the future. Few people can know in advance where time, events, and their own actions will place them.

The SURPRISED class is one of the most important to consider, because for many, it can be a stepping stone to the UNEMPLOYED and NEEDY classes. If the stocks-for-retirement cycle can't work, many boomers who expect to be

WEALTHY , LUCKY, or even EMPLOYED will find themselves SURPRISED. These will include people who followed the standard advice, saved, and bought stocks, only to watch in horror as the value of their savings declines.

If recent surveys are correct, many of the SURPRISED boomers will be those who are not thinking seriously or preparing for their later years. But here we must be careful. If the stocks-for-retirement cycle can't work, people who are not following the standard advice may not turn out to be worse off than those who are following it, and those who are putting their retirement savings in more pedestrian but safer investments could wind up ahead of those who are relying on stocks.

The SURPRISED class will include boomers whose retirement income depends on selling assets when they discover the difficulties of predicting how long they will live and stretch the sales. Actuaries routinely make longevity predictions for groups of people, but for an individual, that becomes the Impossible Decision. Overestimating how long one will live results in a lower standard of living than was necessary, while underestimating can lead to spending one's last years destitute—one loses either way.

The SURPRISED class will also include those who prepared for jobs that were not available for a variety of reasons, and this brings us to the role of large corporations.

Large Corporations

Several papers presented at this conference discuss the role of employers and how they might provide different or more flexible benefit and retirement packages. In considering what large corporations might do, however, we must understand the loop in which they operate.

Since the early '80s, billions of dollars of employer contributions and individuals' retirement savings have flowed into pension plans and mutual funds whose managers were expected to make the money grow. The managers passed the pressure for growth on to corporations that responded by cutting costs, downsizing, merging, moving operations overseas to lower labor cost areas, laying off employees, and encouraging older employees to retire early or accept part-time work with reduced benefits—all to inflate stock prices.

One of the paradoxes of the current situation is that many of the problems discussed at this conference have been exacerbated by retirement savings. As retirement portfolios managed by financial institutions grew, the managers became like absentee landlords over the companies. They created a zero-sum game in which the interests of employees compete directly with the interests of stockholders even though the employees are beneficial stockholders.

The country appears to be approaching a fork. One road would continue the paradoxical loop with retirement savings pressing companies to inflate their stocks above all other considerations. The other road would lead to drastic shifts in the goals of major corporations and how they are run. Let's consider both roads.

If the pressure stays on retirement fund managers to make their portfolios grow, they will continue to press companies to take actions that primarily benefit the stockholders. Company executives will not be able to change their employment, compensation, and benefit policies in ways that increase costs but not stock prices.

When, for example, corporate executives must decide between helping the majority of their older, domestic employees whose capabilities may be declining or replacing them with workers in other countries, the decisions will continue to favor replacement.

If more is going to be done to meet the needs of older domestic employees, the pressure for change may have to come from outside the financial loop that is dominated by institutional investors who manage the retirement savings. In this case, it will probably come as more federal or state government regulation, which the corporations and institutional investors will resist.

Alternately, it may come by changing the goals, expectations, and performance measures for the mangers of the retirement funds. If they were instructed to take a more balanced approach to meet the needs of employees and retirees as well as stockholders, and if they were measured by those actions, the companies could be made to respond. *But the companies are not the drivers, they are the driven.*

The second path may be more effective in the long run. If the stocks-for-retirement cycle cannot work, then at some point, the supply of stocks offered for sale to pay retirement incomes will grow in relation to the demand, and prices will decline. When that happens, the primary goal of institutional investors and corporations to inflate stocks will become impossible and obsolete. Corporations will then have to look for new reasons for being and the future could become much more like the past.

In the past, before the era of large institutional investors, public companies were expected to be corporate citizens in their communities. Many of them, particularly those whose founding families played dominant roles, looked out for their employees, provided civic services, and contributed to meeting community needs. Some companies whose stock is privately held continue to do this today.

Henry Ford provided a prime example of the broader view by guaranteeing his factory workers five dollars a day when this was above the prevailing wage. He believed that to sell lots of cars, lots of people would have to earn enough to buy them. He set patterns for Detroit and much of the rest of the country, but he would not have dreamed of doing such a thing if institutional investors had owned large blocks of Ford stock.

It is possible that employees, particularly unionized employees, could press the managers of their retirement accounts to pursue goals that are broader than just making their portfolios grow. If they don't, a chain reaction could be triggered by a collapse of the stocks-for-retirement cycle. This would cause disillusionment with institutional investors and public corporations. It would probably lead to extensive government regulation of employers to meet the needs of their employees and retirees. One may see a precursor of this in reactions to the collapse of Enron.

An obvious conclusion from the discussion of national limits is that people who live longer will have to work longer. This means that appropriate jobs must be available for them, even if their capabilities decline. Sooner or later, the country will probably have to decide whether its measures of productivity and efficiency should apply only to those who are actually working or also to those who need work but can't find it. Is it more "efficient" to pay workers in third world countries a fraction of what older boomers would be paid, while laying off the boomers, to be supported by public assistance or live in poverty?

Should a company's efficiency be measured solely in terms of returns to stockholders or in broader, national terms?

Formulas, Flexibility, and Fairness

As more people live longer, their needs and capabilities tend to become more diverse. It was one thing for Bismarck to set 65 as the retirement eligibility age when few people lived that long or had extended periods of infirmity. It is quite another thing to set blanket eligibility dates now that some workers may develop occupational disabilities in their fifties, while others will stay productive for decades longer.

Eligibility ages may appeal to or violate Americans' ideas of fairness. There are widely accepted minimum age limits for drinking, driving, voting, and even holding federal office. Conversely, upper age limits for working in general have been removed and remaining limits for some occupations are being challenged.

But flexibility causes problems. We have all heard about a company or government official who refused to do something for one person because it would open the doors to everybody who would want special treatment. Yet diversity will require a combination of fairness and flexibility, and the big question is how to achieve it.

Social Security is an interesting case. It provides discretionary bands in which one may retire at reduced benefits, retire at full benefits, or receive benefits whether retired or not. Often overlooked, Social Security provides benefits to those who are disabled as well as to workers' survivors and dependents. This is more flexibility than most employers provide. But are even the Social Security bands too restrictive?

Consider, for example, four single women, age 55, whose Carpal Tunnel Syndrome prevents them from continuing to work as dental technicians, but who are otherwise in good physical health and may have life expectancies of about thirty years. None of them are interested in moving to somewhere else and starting over, nor do they know of any community that would want them to come. In theory, all of them should be able to train for other work and support themselves for many more years.

- *A* is young in spirit, lives in a vibrant community, is eager to take on something new, has access to many educational, training, and employment opportunities, and wouldn't dream of just retiring and doing nothing;

- *B* is physically and mentally tired, lives in a depressed area where there are few other opportunities, has little drive to do anything new, and can't think of anything that she could do that would provide what she considers to be an adequate income;
- *C* enjoys helping people and would like to do volunteer work at a local retirement home and assisted care facility if she had a source of income, and
- *D* believes it would be best for her and her mother if she cares for her mother at home instead of finding another job and paying someone else to provide the care.

These four hypothetical women hardly scratch the surface of the range of real cases but they illustrate at least the following points:

- They are under the age of 59, when they can start to withdraw funds from any retirement accounts they may have without paying a tax penalty.
- They may qualify for Social Security disability payments but not full retirement benefits for another ten years (to be increased over time).
- At least *C* and *D* want to help older people but would need income to do it.
- There are wide variations in the employment opportunities and retraining services that are available in the communities of *A* and *B*.
- *B*'s outlook may be affected by her community surroundings and she may be suffering from depression.
- *D* is guided more by a sense of duty to her mother than desires for herself.

The more one knows about each case, the more different they seem. Opinions will vary over what would be fair for all or in each case. It may be impossible to develop flexible rules that would be widely accepted as fair, in part because of concerns that just trying to be fair would lead to attempts to game the system. These four women illustrate the limitations of legislation, company policies, and cookie-cutter solutions. But when we remember that national limits on retirement will force workers to share their earnings and help support any of these women who do retire, it is clear that they cannot be entirely free to decide when to stop working. Flexibility and fairness will require their decisions to be shared.

Part 3: Approaching the Problem

The Lessons of History

- From one standpoint, nothing that Americans have learned has prepared them for the coming situation. Economics teaches that markets allocate resources efficiently, but it defines efficiency in its own terms—any allocations that are made by free markets are efficient by definition. If free markets lead companies to replace older U.S. employees with foreign workers, that is efficient.
- Abraham Lincoln's statement, "The legitimate object of government is to do for a community of people whatever they need to have done but cannot do at all, or cannot do so well for themselves in their separate and individual capacities," is at the other end of the scale.[9] This leads to a regulatory framework in which markets are allowed to function, but can also lead to rigidity.
- The need to provide flexible and fair treatment for individual members of the growing segment of older people within the limits of America's carrying capacity is a task that neither free markets nor government regulations can do entirely on their own. Something new is needed.

From another standpoint, however, America has been a pioneer in showing the world how to handle new situations.

We all celebrate the 4th of July as the date when the thirteen original colonies declared their independence, but May 15 is a more important date to remember. That is when the Continental Congress advised all of the colonies to develop their own ways to govern themselves and replace the English governors.[10]

As a result of that advice, hundreds of farmers, merchants, and craftsmen, in addition to the few who had studied law began to search for and develop answers to questions that they had never considered before. These questions, which were even debated in town meetings, included:

- Is a legislature adequate to run a state or is something more needed?
- Do individual legislators represent all of a state or factions within a state?

- What role should property ownership play as a qualification for voting?
- Can sovereign power be shared by separate branches of government?
- What is sovereignty? Must it reside in the government, with some rights granted to the people as in England, or can it reside with the people, who transfer some responsibilities to their governments?

The history of what ordinary people did in the period that led from about 1765 through the ratification of the Constitution and George Washington's two terms is fascinating and inspiring. It forces one to realize that the only reason the country might not be able to provide for its aging population within its carrying capacity is that we are not as smart and capable as those people were. I don't think that is so.

This conference and its sponsors provide an example of why I think the country can do what is necessary. The studies and debates on what to do about Social Security are another example. They are different ways to analyze what is desirable in relation to what is possible. As I see the questions unfolding, they include:

- What are the limits to the country's carrying capacity for retirees?
- What is the range of needs and desires that individuals, employers and the country will accept responsibility for trying to satisfy?
- What different ways are there to satisfy those needs and desires?
- How far can the country go in allowing decisions to be made by free choices and markets when most older people will have minimal purchasing power?
- What sort of framework is required to guide those free choices and markets?
- What sort of mechanisms can allow for accommodating individual needs and desires in the context of national limits?

Possible Actions

Again looking to history, America faced difficult choices during World War II when men had to be drafted and gasoline rationed. In each case, broad policies were set by legislation, and applied by local boards and officials. Except for medical conditions, the decisions to defer, or exempt men from service, were made by neighbors like jury decisions. Similarly, local officials decided how much gasoline a person had to have. There was some grumbling and abuse, but for the most part, people accepted the results as fair.

It would help to look at the way the country handled such difficult situations in the past; first to learn from those experiences, and second to realize that although the issue of aging is new, there is nothing unique about finding new ways to accommodate legitimate ranges of needs and even desires.

As considerations of aging go forward, I think that older people will need at least three new types of services in addition to just money.

1. *Advice and assistance that they can trust:*
   The wealthiest ten-or-twenty percent of the population can hire the advisors, but the rest of the people should also have advisors, and advocates when necessary, whom they can trust. How does an 80-year-old former store clerk or truck driver with macular degeneration cope with the bills and insurance forms that follow an operation? If one has no family, where does one get advice on where to live and what to do with any savings that one may have?
2. *Investment pools:*
   The trend toward retirement self-sufficiency is creating millions of individual islands of assets that must be managed and sold over time by people who have no training. Each must make the Impossible Decision of how long to stretch his or her assets when there are penalties for both overestimating and underestimating how long one will live. So far, financial institutions are not meeting the need for simple, economical investment pools like annuities, particularly for people with relatively small savings.
3. *Cooperatives, buying services or barter arrangements that don't just need cash* One way to help older people is by making their money go farther. One of the least efficient purchasing units imaginable is an older person with limited funds and mobility who lives alone in a rented apartment. In a free market system, life is largely a result of money in and money out. There are many ways to help older people who have little money. One way is to help them organize to do things that are beyond what they can do for themselves.

At first glance, these examples may seem far removed from the concerns of actuaries, but these and other arrangements should be part of the country's approach to providing for its older people. Each arrangement should help to move from simply considering how much money an older person has, to increasing how much can be accomplished with the money that is available. For many older people, approaches like these can reduce the need for more money or other types of support that could only be provided by those who are still working.

Conclusion

There are limits to the number of adults who can retire and be supported by those who are still working. We don't and probably can't know what the limits are until we try to exceed them.

As people live longer, the range of good and bad things that can happen to them expands. As their needs and desires become more diverse, flexible ways must be found to satisfy them that most people will consider fair.

Satisfying the expanding range of needs and desires within the retirement limits will require new ways to make decisions that go beyond the capabilities of free markets and government regulations.

The history of the formation of the United States provides inspiring examples of how the country pioneered new ways of adapting to very large changes. Further, there are specific examples of how the country met unusual needs that required flexibility and fairness.

The country needs to array what can be known about the coming needs, the national limits and examples of ways that have worked to tackle large sets of issues like these. The sooner we do, the better our chances will be of being pleased with the results. *Actuaries should understand that whatever they recommend to their clients must operate in the context of what going on throughout the country. Techniques that consider only information related to an isolated employer or retirement plan will become less effective. They should be augmented and eventually replaced by techniques that relate the actions of their clients to what employers and retirement plans are doing in the aggregate.*

Thornton Parker is the author of *What If Boomers Can't Retire? How to Build Real Security, Not Phantom Wealth*, published in 2001 by Berrett-Koehler.

Endnotes

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