

Focusing on your financial goals/Fall 2006

Wealth Management



Philanthropy

Creating durable positive change is more easily envisioned than attained, but investors may gain useful insight from the ideas offered in this issue

Structured products

These flexible investments may be used to help address the portfolio needs for a variety of risk/return profiles

Inflation

There are four key drivers of one's personal inflation rate: age, family status, socioeconomic status and housing status

Yield curve

The shape of the yield curve is closely scrutinized because it helps give an idea of future interest rate changes and can help predict economic output and growth



UBS celebrates culture / **page 2**

Jimmy Carter and The Carter Center have made a significant impact on people's lives / **page 10**

Martha Schwartz builds landscapes almost devoid of nature / **page 13**

News

Making headlines: UBS sponsors a variety of cultural activities now and in the coming months. UBS opens its first U.S. office dedicated to ultra high net worth clients. Our Client Satisfaction Survey will be coming to your mailbox soon. UBS celebrates 40 years in Puerto Rico by making donations to several charities.

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Philanthropy

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Conducting Business with UBS

It is important that you understand the ways in which we conduct business and the applicable laws and regulations that govern us. As a firm providing wealth management services to clients in the U.S., we are registered with the U.S. Securities and Exchange Commission (SEC) as an investment adviser and a broker-dealer, offering both investment advisory and brokerage services. Though there are similarities among these services, the investment advisory programs and brokerage accounts we offer are separate and distinct, differ in material ways and are governed by different laws and separate contracts.

It is important that you carefully read the agreements and disclosures that we provide to you about the products or services we offer. While we strive to ensure the nature of our services is clear in the materials we publish, if at any time you seek clarification on the nature of your accounts or the services you receive, please speak with your Financial Advisor or call **201-352-9999**.

For more information, please visit our website at www.ubs.com/workingwithus.

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The shape of the yield curve can help determine if the nation is on the road to economic transition and interest rate changes / **page 20**

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Inflation: UBS Wealth Management Research takes a novel approach to measuring inflation—viewing it from the perspective of the individual and introducing the concept of a “personal inflation rate.”

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Comments?

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To our clients,

Spreading wealth for social and humanitarian good has gained significant strength in the United States. Americans are responding more and more generously: According to the Giving USA Foundation™, 89 percent of U.S. households give and total giving reached an estimated \$260 billion in 2005, an increase of 6.1 percent from 2004. Today, there are more than 600,000 charities and foundations operating in this country, representing nearly every cause.

In this issue, we offer a window into the current landscape of philanthropy. Social entrepreneur Bill Drayton discusses the impact of social entrepreneurship in philanthropy and how social entrepreneurs increase the range of opportunities for philanthropists. Maximilian Martin, UBS Global Head of Philanthropy Services, points out how effective giving starts with asking the right questions and how UBS can help provide the answers. Additionally, former U.S. president Jimmy Carter shares his thoughts on effective philanthropy and the work of his humanitarian institution, The Carter Center.

These and the issue’s investment-themed articles—and the ideas they present—are designed to help you reflect on your own wealth management and the passions that may drive your personal and financial goals.

At UBS, our approach to serving you focuses on your needs and objectives. We listen and take the time to understand your situation and concerns. This is why our clients’ feedback is so important. To that end, we will be sending a survey in the fall to a majority of clients. We would appreciate your input—your responses this year will help us continue our efforts to deliver the right solutions that address your needs.

I hope you find this issue constructive and informative.

Sincerely,

Marten Hoekstra
 Head of Wealth Management US



Sean Scully
Us, 1988
Oil on canvas in two panels
with four inserted panels
90 x 120 inches
From The UBS Art Collection



UBS celebrates culture

UBS has a deep rooted commitment to supporting the arts and is proud to sponsor a variety of cultural activities now and in the coming months. Following are a few highlights of these sponsorships:

New partnerships with the Minnesota Orchestra, Minnesota Public Radio

As the Minnesota Orchestra's first-ever season sponsor, UBS continues its dedication to investing in cultural expression and making the arts accessible to the communities where UBS does business. UBS has also made a \$3 million contribution to Minnesota Public Radio (MPR), one of the country's premier public radio organizations and the broadcast home of the Minnesota Orchestra. MPR's national distribution division, American Public Media, is the second largest producer and distributor of public radio programs in the country. In return for its contribution to MPR, UBS will receive naming rights to the Forum, a newly constructed public broadcast and meeting facility that will be known as The UBS Forum.

Art Basel Miami Beach

UBS is the main sponsor of Art Basel Miami Beach for a fifth consecutive year. Since its inception in 2002, Art Basel Miami Beach has become one of the most recognized international art shows in the U.S. and a highlight of the social and cultural calendar in the Americas. Exhibitors at Art Basel Miami Beach rank among the world's leading art dealers, representing both established artists and emerging talent.

Last year, 195 galleries from 28 countries exhibited works by more than 1,500 international artists. A record 36,000 visitors enjoyed the fair and its program of special exhibitions, performances, panel discussions, visits to private collections and crossover events. Art Basel Miami Beach will take place at the Miami Beach Convention Center from December 7–10, 2006.

Boston Symphony Orchestra

We are continuing our relationship as the exclusive season sponsor of the Boston Symphony Orchestra (BSO) for the 2006–2007 season. Founded in 1881, the BSO is the largest orchestral organization in the world,

and one of the largest performing arts organizations in the United States. The orchestra's Symphony Hall is a national landmark and was the first concert hall designed with acoustical principles in mind. It is regarded as one of the top three concert halls in the world.

"Sean Scully: Wall of Light" at The Metropolitan Museum of Art

UBS is proud to support "Sean Scully: Wall of Light" at The Metropolitan Museum of Art, on view September 26, 2006, through January 14, 2007. "Sean Scully: Wall of Light" presents 60 works—paintings, watercolors, pastels and prints—from the artist's Wall of Light series. Organized by The Phillips Collection, this is the first traveling exhibition in the U.S. to feature these visually rich and compelling works of art.

SITE Santa Fe Sixth International Biennial

We are the presenting sponsor of SITE Santa Fe's Sixth International Biennial, entitled Still Points of the Turning World. The Biennial, on view through January 7, 2007, consists of 13 one-person installations featuring photography, installation, painting, performance art, soundscape, sculpture and video. Among the works exhibited, each in its own space, are a new body of word-based works by the American painter Jennifer Bartlett, a performance and installation by the German artist Jonathan Meese, and a new installation by Kenyan-born artist Wangechi Mutu.



The sponsorship of music, art and other cultural activities and events is fundamental to the philosophy of UBS.



The UBS ultra high net worth office in New York City.

Celebrating our 40th year in Puerto Rico with charitable giving

UBS in Puerto Rico celebrated its 40th anniversary of operating on the island by making donations to a wide variety of children's charities. Some of these organizations include:

- APACEDO—An association of parents and friends of disabled children who sponsor a center for the diagnosis and counseling of children with learning disabilities.
- Fundación Modesto Gotay, which offers care and housing to handicapped children.
- Teaching Center for Families, which helps children with tutorial services and counseling.

In addition, UBS is supporting the Puerto Rico Community Foundation in its efforts to help local charities receive non-profit status with the IRS, which helps the charities further develop and accomplish their goals. The UBS commitment to these charities also includes the volunteer efforts of UBS employees who participate in local fundraising programs and activities.

First U.S. office dedicated to ultra high net worth

We have recently opened our first U.S. office dedicated to serving the Firm's ultra high net worth clients. An initial group of thirteen Private Wealth Advisors, three Private Bankers and related service personnel will offer a comprehensive suite of brokerage, trust and private banking services to ultra high net worth clients from a single location.

Each of the Private Wealth Advisors has completed the Firm's in-depth internal accreditation program, a rigorous educational program covering a range of sophisticated wealth management strategies.

The 25,000-square-foot office is located on the 25th floor at 299 Park Avenue in New York City and is the first in a series of planned offices nationwide that will cater to the specific requirements of ultra high net worth clients based in the U.S. Clients will be able to draw upon the expertise of such professionals as trust and estate planners, banking and lending specialists, and alternative investment and structured product experts.

Coming to you soon—our client satisfaction survey

A key component of our approach to client relationships is understanding your needs and offering appropriate solutions. To help us check in on how we are doing, many UBS clients will receive a survey in the fall that requests feedback about their satisfaction with UBS and their Financial Advisor. Conducted in conjunction with an independent research firm, the survey will come to you from your Financial Advisor.

Clients will have the option of allowing their Financial Advisor to see how they rate the service they receive.

For more information about the survey, please speak with your Financial Advisor.

Look out for the UBS Client Satisfaction survey, coming to you this fall.





Investing in change

By pursuing change on a large scale, social entrepreneurs increase the range of opportunities for philanthropists, argues Ashoka founder Bill Drayton.

Computer schools are now operating in the favelas of many Brazilian cities. Pictured: Christian, 13, takes his first try at the keyboard.

It was a dream that inspired Rodrigo Baggio of Brazil, a young consultant, to combine his two passions, computers and social work. One night in 1993, he had a vision of poor youngsters sitting in front of computers discussing their problems. Launching a campaign called Computers for All, he and his colleagues asked companies to donate used computers to the deprived areas of his native city of Rio de Janeiro.

At first, the idea met with resistance: “A lot of people thought it was a crazy idea, they argued that poor people need food, not computers... yet in urban areas people don’t die of hunger, they die for lack of opportunities,” recalls Baggio. But the reaction in the favelas (Brazilian “shantytowns”) was different: when the first computer training school was opened in the Santa Marta district, more than 300 youths signed up in two days and 70 volunteers offered their help.

The dream proved contagious: within ten months, computer schools sprang up in nine more favelas across Rio and enquiries started to pour in from other Brazilian regions. Today, the organization founded by Baggio is represented in 37 Brazilian cities and in ten other countries, helping to close the digital divide between rich and poor everywhere it operates.

Rodrigo Baggio is a social entrepreneur. He has harnessed the resources of society and applied lessons from the business world in his work for social betterment. The change he pursues ripples outward: as local people are won over to his vision, they become local role models and further increase the number of changemakers.

Social entrepreneurship

Over the past three decades, social entrepreneurship has started to transform the voluntary or citizen sector, as we prefer to call it. It has multiplied the range of possibilities open to philanthropists (see box on next page) or indeed anyone looking to invest in social betterment. And it has greatly increased the impact that philanthropic giving can exert on society.

That point about increased impact is an important one and merits a quick historical survey. Over the centuries from the fall of Rome to the eighteenth century, average per capita income in the West stagnated. Then, over the next three centuries, it grew more than seven-fold. What happened?

The answer is that, at the onset of the eighteenth century, business became entrepreneurial and competitive. Anyone with a better idea could get a start and, if they could apply their thinking effectively, they would gain market share, resources, respect and wealth. This inspired others to seek out the next big thing, a productivity-spurring dynamic that has driven the global economy ever since.

However, this liberating change in human organization did not spread to the social half of society, including the structures dealing with education, health and welfare. Instead, governments funded these services or set up monolithic institutions to run them. And, as monopolies resist change, the social sector’s productivity, salaries and enthusiasm fell ever further behind those of commerce. Even today, the transaction costs incurred in foundation and government grantmaking run to roughly ten times the business sector norm, according to “Investing in Society,” an article published in the *Stanford Social Innovation Review*, Spring 2004 edition.

Pioneering steps

Individuals did their best to fill this gap. Maria Montessori, for example, pioneered a new approach to education that has put down roots across the world. She and many others qualify as early social entrepreneurs. Meanwhile, the Rockefeller Foundation (see box on next page), established in 1913, was a pioneering step towards modern social finance or investment in change for the good of society.

Important as they were, these efforts could not address the core problem: the persistent shortfall in social sector effectiveness. Something was needed that would transform the sector and, in doing so, open up new opportunities for philanthropists. That missing ingredient started to appear worldwide a few decades ago, in the shape of social entrepreneurs such as Rodrigo Baggio and the institutions that support them, including Ashoka, the international citizen organization started in 1980.

Since then, social entrepreneurship has grown exponentially in scale and sophistication, thanks to its business-like traits of efficiency and competitiveness. In the Organization for Economic Cooperation and Development (OECD) countries, the citizen sector is adding jobs at two and a half to three times the rate of the rest of the economy. The number of citizen groups has also multiplied rapidly. Their population in Brazil went from perhaps 5,000 in 1980 to probably 1 million now, while tax-deductible



Social entrepreneurship helps put business efforts to work.

Philanthropy: the quest for impact

Modern philanthropy grew up with the industrial revolution. Through the great trusts founded in the late nineteenth century—by Carnegie, Wellcome, Rockefeller, Rowntree and others—the extraordinary wealth generated by big business was recycled into the community. While the individual causes espoused by the great philanthropists may have varied, there was general accord that philanthropy was more than just charitable giving.

“The best philanthropy is constantly in search of the finalities—a search for cause, an attempt to cure evils at their source,” wrote oil magnate John D. Rockefeller, setting the stage for many a contemporary philanthropist’s quest for effectiveness and system in giving. Steel baron Andrew Carnegie also looked for maximum impact. Focusing on “the ladders upon which the aspiring can rise,” he endowed libraries, parks, concert halls, museums and swimming pools.

In recent decades, new economic revolutions have created another wave of large-scale philanthropists. A leading example is Bill Gates, who has endowed the Bill & Melinda Gates Foundation with more than \$29 billion of his personal wealth. The new philanthropists are no less concerned with the question of efficiency and leverage than their nineteenth-century predecessors.

One reason is that, the generosity of wealthy individuals notwithstanding, philanthropic resources are limited. In 2004, for example, America’s total non-governmental giving—from companies, individuals, foundations and bequests—amounted to no more than forty days’ worth of U.S. government spending. In short, even the largest personal fortunes and trusts are dwarfed by the financial means of governments and corporations.

Fortunately, the philanthropic sector has come up with new ways to make scarce funds work harder. Many of these ideas borrow from the business world. As a result, social investors and venture philanthropists seek to apply modern financing techniques to social projects. For their part, social entrepreneurs create projects that social investors and venture philanthropists can support.

With his emphasis on scientific philanthropy, Andrew Carnegie would have recognized and endorsed many of these business-like approaches to giving. Whether in time the new methods will grow up into a new philanthropic economy remains to be seen. For now, though, philanthropists have more ways than ever to make their mark on the world.

groups in the U.S. have burgeoned from fewer than half a million to more than 1.1 million in a dozen years. Slovakia went from 11 in 1989 to 10,200 in a decade.

The multiplier effect exerted by successful social entrepreneurs opens up a hopeful future. Instead of looking to the initiatives of a small elite, a growing number of people will learn that they too can bring about change, seek out problems and solve them. Solutions will increasingly outrun problems. In Ashoka's vision, "everyone will be a changemaker."

Ashoka is seeking to realize that vision by finding and investing in the most effective social entrepreneurs. It is a proven strategy: for 25 years, Ashoka has been spotting the best ideas and entrepreneurs when they are ready to launch, giving them modest financial and community supports that enable them to fly, and then providing long-term support.

The investment needed to free a top entrepreneur to pursue his or her vision is surprisingly modest. The average Ashoka stipend worldwide is \$12,000 a year for three years. This outlay launches a major idea for change, the career of the entrepreneur behind it and the institution necessary to support both. Moreover, the entrepreneur actively recruits like-minded people, so that the venture's success encourages other efforts.

Collaboration with business

Ashoka Fellows are now at work on every continent. In India, another Fellow has set up telephone hotlines that have helped more than three million vulnerable street children get the counseling, medical care, education, shelter and protection they need. In Canada, a Fellow helps aging parents with disabled children overcome their fears of what will happen to these children when they die. As these examples show, leading social entrepreneurs start on a local scale and then move to a national or global level.

Yet this is only the beginning. The next step is to find structures that will allow business to work with social entrepreneurs more efficiently. To this end, Ashoka has just launched its Social Investing Venture program with the aim of helping social entrepreneurs to foment change in social finance. The new social finance industry will develop many different components, much as business finance has evolved everything from angel investors to mortgage bankers. A sixteen-year-old seeking \$900 to start a tutoring service needs a different institution than an adult social entrepreneur.

The new social finance sector stands to benefit enormously as business and society end their accidental three-century divorce. A large number of business and social hybrid activities will develop, and these will offer high volume, profitable financing opportunities. For-profit financial institutions have an important part to play in this transformation as the intermediaries that match supply and demand in social investment.

A fast-growing and increasingly sophisticated citizen sector will generate a massive and diverse flow of new social business. Will investors step up to the plate? The many billions drawn into socially responsible investment funds suggest that the demand is there. That said, the future shape of the social finance sector remains unknown. What we do know is that people like Rodrigo Baggio who give themselves the freedom to pursue their vision are making a bigger difference than ever before. /

Bill Drayton is the CEO and Chair of Ashoka, an international citizen organization that identifies and invests in leading social entrepreneurs. Before founding Ashoka in 1980, he was a McKinsey consultant for almost ten years and also served for four years as Assistant Administrator at the U.S. Environmental Protection Agency. He has been a social entrepreneur since he started a newspaper as an elementary school student in New York. UBS and Ashoka are jointly offering a prize for social entrepreneurs in Latin America.



Turning aspirations into action

How UBS can help provide philanthropists with the answers they need for wise and effective giving.

The Roman philosopher and statesman Seneca warned, “What is given in a haphazard and thoughtless manner will be prized by no one.” Two thousand years later, in a world where both wealth and need have grown to staggering proportions, these words carry more weight than ever.

Success in philanthropy starts with asking the right questions. What do I want to achieve through my philanthropy? How can I translate my philanthropic aspirations into a tangible action plan? And how do I get the maximum effect from the money I donate?

For Jeff Skoll, the co-founder of eBay, the answers were always clear: “I like to support causes where a lot of good comes from a little bit of good, or, in other words, where the positive social returns vastly exceed the amount of time and money invested.” With that aim in mind, the Skoll Foundation was set up in 1999 to promote change by supporting social entrepreneurs. Effectiveness was also uppermost in Warren Buffett’s mind when he recently pledged \$37 billion to the Bill & Melinda Gates Foundation.

To help others answer such questions, UBS set up a Philanthropy Services unit in 2004. The team advises both individuals and institutions on how best to structure and implement philanthropic ventures. Its aim is to help philanthropists cover that all-important last mile from aspirations to solutions.

UBS takes a structured approach to advice. Only when the client’s needs and aspirations are thoroughly understood are solutions proposed, agreed and put into action (see case study opposite). Sound advice makes for sound decisions, ensuring that resources are used to the

best effect. Then UBS Philanthropy Services mobilizes the resources of the entire UBS group—including its wealth planning and asset management experts—to help philanthropists realize their dreams.

The sheer range of possibilities is often bewildering for a would-be benefactor. On the face of it, we live in a golden age for philanthropy. The means are certainly not lacking in a world inhabited by over 85,000 individuals worth \$30 million¹ or more—the type of individual who may well be thinking of setting up a major foundation or trust if they have not already done so. New causes and demands have contributed to an upsurge in private voluntary activity around the globe. In the U.S. alone, some 90,000 new non-profit organizations are created every year.²

At the same time, the variety of possible approaches to philanthropy has multiplied. New technologies have transformed the way that social and educational projects are tackled. Meanwhile, social entrepreneurs (see article by Bill Drayton on page 4) harness market forces to drive social improvements, perhaps by finding cheaper ways to produce lenses for cataract operations or by supplying low-cost irrigation pumps to drought-stricken farmers.

Striking a balance

Yet this very richness of choice can heighten the risk of haphazard giving as stigmatized by the Roman philosopher. To meet this challenge, UBS Philanthropy Services focuses on three distinct areas in the development of a philanthropist. They are the greenfield stage, the position of established philanthropist and that of the corporate giver.

Greenfield philanthropists may already be involved in charitable commitments, but they have yet to bring these activities into a formal and durable structure. They may be looking for an overview of philanthropic possibilities and thinking of setting up a trust or foundation to structure and perpetuate their giving.

Early-stage philanthropists seek peers and experts in their chosen field to help them develop their ideas further. Then they look for advice on the legal vehicle, project portfolio and asset management strategy that will best support their philanthropic aims.

Established philanthropists, by contrast, have already set up an institution, trust or foundation. But many wish to improve processes and management, or to refocus their activities. To do this, they consult specialists who can advise on questions of family governance or help to tune up philanthropic programs so that they deliver what the donors want them to deliver. They may also wish to align their investment policy with the mission of their foundation or trust.

Corporate philanthropy is often vibrant in countries such as Brazil, Mexico or Russia where comparatively few grantmaking foundations exist. In jurisdictions without a suitable legal or tax framework for private philanthropy, entrepreneurs often choose to channel their philanthropic activities through their companies. Such individuals may seek advice on how to create programs that balance the interests of society as a whole with those of their company.

The UBS team complements its services with events such as the annual Philanthropy Forum. These gatherings bring together philanthropists and practitioners from the voluntary sector to exchange expertise and ideas on what Andrew Carnegie, a leading philanthropist of the nineteenth century, called “the infinitely more serious and difficult task of wise distribution.” With its conferences and services, UBS Philanthropy Services aims to provide Carnegie’s modern-day successors with some of the answers they need for effective and wise giving. /

¹ Source: World Wealth Report 2006

² Source: Tides Foundation



The range of possibilities for modern philanthropists is boundless.

Turning intentions into structures

A mother, son and daughter had all been active in healthcare or rural development. The time had now come, they decided, to bring all these philanthropic commitments under a single structure.

Analysis

When the family consulted UBS Philanthropy Services, the group took the time to get a clear picture of the family's aims. They also organized a field trip to a developing country to help the family map out the way forward. The daughter decided to join the proposed foundation as its managing director. Meanwhile, the mother was shocked to discover that some of her supported projects had performed less well than similar ventures. And the son decided that, while he would help to set the philanthropic agenda, he preferred not to be involved in day-to-day operations.

Implementation

Once the donors' objectives were well understood, work could start on creating a suitable vehicle for the foundation. The step-by-step approach to advice at UBS Philanthropy Services ensured that the aims and means were understood before a legal framework for the foundation was chosen. As a result, the charitable objectives determined the foundation's structure and investment strategy.

Maximilian Martin is Global Head of Philanthropy Services at UBS Global Wealth Management & Business Banking.



Jimmy Carter, a former U.S. president who received the Nobel Peace Prize in 2002, has dedicated his life to improving conditions for poor people in underdeveloped countries.

‘We’re the hands-on people’

Jimmy Carter, former president of the United States, talks about effective philanthropy.

Was it difficult for you to go from being the world's most powerful person to being a private citizen with no particular agenda?

When I was involuntarily retired from the White House, I was surprised, taken aback and discouraged. I had no opportunity for gainful employment. I realized that I had a life expectancy of 25 more years. Remember, I was one of the youngest survivors of the White House.

Why did you decide to devote your new life to humanitarianism?

I assessed my talents, abilities and interests. I was most proud of the peace agreement I had mediated between Egypt and Israel. I thought: what if I could emulate that on a smaller scale and help everyone from individuals to countries settle their disputes. That was the concept for The Carter Center.

Most philanthropists have an 'aha' moment, when they discover a connection between themselves and the wider world. Was this yours?

As Rosalynn wrote in our book, *Everything to Gain: Making the Most of the Rest of Your Life*, the idea for The Carter Center came to me in the middle of the night. But the connection was there all my life. My mother was a registered nurse; she took care of all our neighbors, none of whom were white. So I was brought up seeing first hand the ravages of racial discrimination and the deprivation of the poorest of people.

You were a successful politician, rising from the Georgia state senate to the presidency in 16 years. How do the satisfactions of governing compare to your current work?

As president, you're focused on very large issues—a nuclear agreement with the USSR, diplomatic relations with China, the situation in the Middle East, the domestic budget. There are few opportunities to understand the plight of the most destitute. The impact I have now on people's lives is much more immediate. I see them develop a sense of self-respect, hope and confidence in themselves for the first time in their lives.

You're a hands-on person. Does involvement drive enthusiasm?

Absolutely. The things we do through the Center are so intimately personal. We put medicine in people's mouths. We show them that their water is full of parasites, and how to deal with that. We teach them to wash their faces and to use a latrine, to avoid trachoma. We teach them to grow corn, rice, millet, wheat, soybeans. It's very gratifying.

You do a lot of travelling?

Going to the place is important. Rosalynn and I have visited more than 120 nations since leaving the White House. International travel is exciting, challenging and enlightening.

I advise people who travel to get out of the international hotels and go to the villages. Talk to shopkeepers. Wander through neighborhoods. Too many American travelers don't do this, and their experience is almost like visiting the suburbs of New York City.

One of the reasons affluent people don't give is the fear of doing harm. As the leader of a humanitarian institution and an active participant, how do you ensure your work actually ends up helping people?

That's a concern. We work side by side with many organizations. Some establish a nice office in a nation's capital, install phones, buy pickup trucks, hire a staff. Then they start meeting with the assistant minister of health. These things have their place, but the goal is to achieve something tangible, whether it's alleviating suffering or bringing about peace. We start by meeting with a country's ruler and his or her entire cabinet. I set expectations. We'll send the foremost experts in the world, you'll pay for your own people. If we buy a bicycle for you, you'll pay us back. We'll be here five years, at which time we want you to be self-sufficient. Then we sign a contract between The Carter Center and Bali or Burkina Faso, whatever country we're working with. We're the hands-on people. It's one of the things that has made our projects attractive to donors.

We also measure results. We know exactly how many latrines we've built in Ethiopia in our effort to wipe out trachoma. We know how many cases of Guinea worm are out there, and which villages they're in, so we can better focus on eradication. We avoid duplication. If the World Bank, the World Health Organization or Harvard University is already doing something adequate, we don't get involved. We're there to fill vacuums.

Today's generation of philanthropists wants to know all about what they're giving to before they invest their time and money. How important is this?

Very. We can extend an invitation to go with us to Zambia, to Mali, and help us monitor an election, for instance. In this way, we get their help. We get transportation (some of them have jets). We get them immersed in the culture, the history, the politics. Late last year, it was Liberia's historic election of Africa's first woman leader. Early this year,



Jimmy Carter talks to the media and voting observers during elections in Ethiopia in May 2005 (left). The Carters observe the 2006 Palestinian parliamentary elections at a polling station outside Jerusalem (right).

The Carter Center

Jimmy Carter, who was U.S. president from 1977 to 1981, started The Carter Center in 1982 with his wife, Rosalynn. The mission of the Center is to “wage peace, fight disease and build hope by both engaging with those at the highest levels of government and working side by side with poor and often forgotten people.”

One way to support The Carter Center is through its Winter Weekend live and silent auctions, which feature everything from fine art to presidential memorabilia to vacation packages. Participants can bid online at www.cartercenter.org.

Honoring success

The Carter Center’s Global Health Programs received the 2006 Gates Award for Global Health funded by the Bill & Melinda Gates Foundation. In 1986, the Center took up the fight to eradicate Guinea worm disease, a parasitic infection spread through contaminated water, affecting an estimated 3.5 million people in Asia and Africa. By 2005, the Center’s program had reduced the number of cases to less than 11,000. The Center expects that by the end of the decade, transmission of the disease will be stopped completely.

we observed the momentous elections in the Palestinian territories.

A factor moving philanthropy is a wish to remove the heavy burden of wealth from the next generation. How have you done this with your children?

Our family has no accumulated wealth, so we don’t have that issue. But they are deeply involved in The Carter Center when their help is needed. For example, in the first election among the Palestinians in January 2005, my daughter, Amy, was in charge of election observation in Bethlehem and my oldest grandson filled the same role in Gaza.

There are more than 66,000 grantmaking foundations in the U.S. alone. What would you say to those donors who are baffled by the choices out there?

Many organizations are eager to help you learn about what they do. For example, The Carter Center hosts a Winter Weekend each year. Attendees pay their way and get acquainted with our programs. We also give prospective donors a chance to join us at the Center to learn what we’re about. There are a lot of darn good organizations who do outstanding work. I’m proud to say that The Carter Center is just one of those organizations.

What has been the most gratifying time of your life?
Now. That has always been my answer to this question. /

Joe Polidoro is a journalist and business writer based in Sarasota, Florida. This article was previously published in the Summer 2005 issue of *Symposium*.

Revolutionizing landscape architecture

The innovative genius of Martha Schwartz has created urban landscapes that both defy the conventional and satisfy the needs of city dwellers. She makes parking lots beautiful.

Martha Schwartz stands at the window of a high-rise office complex in London and looks across the Thames to the south of the city. The area is booming. Modern office blocks sprout from the earth like enormous glass mushrooms. “For most people, landscape means forests and oceans, meandering rivers, sand dunes, endless prairies and other untouched natural spaces. But the landscape in which most of us live and work is very different,” says Schwartz. She gestures towards the scene from the window, “This is the landscape we’re living in: highways and byways, parking lots, shopping malls, embankments and industrial wasteland.”

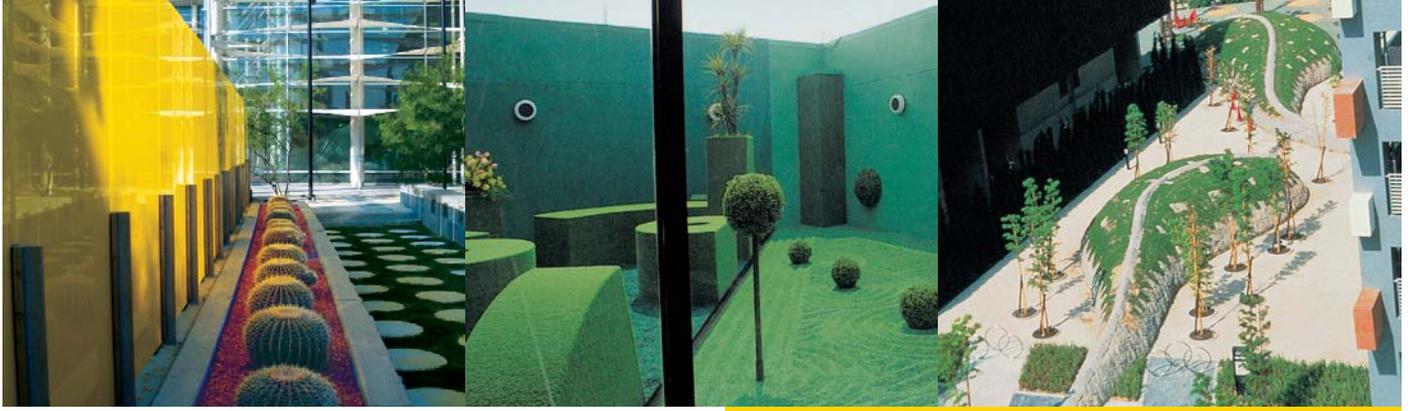
For this U.S. landscape architect, creating urban environments of rare originality has become a mission in life. Schwartz is firmly convinced that “it is within our power to design urban spaces that are both functional and full of beauty.” With that in mind, Schwartz and her team have designed public plazas, parks and gardens in major cities such as London, New York, Tokyo, Berlin and in Qatar, as well as more private courtyards and gardens for private and public-sector institutions. With her highly individual approach, the 54-year-old has turned conventional notions of landscape design on their head by rejecting native trees, shrubs and plants in favor of glass, tiles, concrete and plastic. Using these man-made materials, she lets her imagination run wild, creating public spaces imbued with playful lightheartedness, where form and color cannot fail to enchant.

“I find it dishonest to imitate nature in the center of a big city,” comments Schwartz. “Trees in a thin layer of soil on the roof of an underground parking lot are a poor substitute for nature.” Equally, she feels, high-maintenance lawns and borders of flowers have also had their day. “It seems to me that, in this day and age, it’s more important, and makes more sense, to focus on the people who use the urban landscape.”

This was the idea behind public spaces such as Exchange Square in Manchester, England, a softly curving amphitheater that invites you to sit and watch the world go by from one of its benches on wheels, which allow seating to be rearranged as needed. In a residential district in Fukuoka, Japan, Schwartz created giant “whales” that swim between the multi-story houses. These are playful, artificial mounds of roof tiles and grass with rounded backs that contrast with the geometric and sober architecture of the surrounding neighborhood. The original plans included a garden, but tenants got their way. It was replaced with a large parking lot. “First and foremost, communal spaces should meet the needs of the people who use them,” she asserts. So as to create a space that is aesthetically pleasing, she livened up the grey asphalt of the parking lot with bold splashes of orange and geometric patterns so that during the day, when most of the cars are gone, the area is transformed into a bright and cheery plaza.

Creating exciting urban spaces

“The trick is to combine functionality and beauty while staying on budget,” says Schwartz. Based on one of her designs, the soundproof barrier at Miami International Airport was built in the form of a huge organic wave stretching into the landscape. The concrete was inset with myriad circular portholes of colored glass that seem to flicker and shine as you drive by. She was also responsible for the design of the sculptural circular roof structures made of steel and vinyl that now cover the existing open space in front of the BankAtlantic Center arena, located near Fort Lauderdale and home of the NHL’s Florida Panthers. “The budget was tight, so we paid less attention to small details and went for something striking.” For Schwartz, these roof structures on their slender supports symbolize the trees of the Everglades which once would have grown on that very spot. Indeed, during the planning stage, the intention was to use real King Palms. Today, two rows of virtual trees line the entrance to the stadium



Martha Schwartz transforms facades, courtyards and open areas into public spaces which surprise. From left to right: Mesa Arts Center, Mesa, Arizona, Whitehead Institute Splice Garden, Cambridge, Massachusetts, and a housing project in Fukuoka, Japan.

as the roof structures illuminate the night sky in cool shades of green, blue and yellow. For the inhabitants of Fort Lauderdale, these “flying saucers” have become one of the city’s most prominent landmarks.

Schwartz grew up in Philadelphia in a family of architects. Her father, uncle, sister and a cousin all went into the profession. “That very nearly put me off studying anything associated with spatial design,” she laughs, recalling the dried-up felt-tip pens and discarded blueprints that she used to play with on the floor of her father’s office. Thanks to her insight into the reality of the profession, she knew from a comparatively early age that she was not cut out to be a conventional architect. “I needed a more open, less structured outlet for my creativity,” she shares. And so, after training as a graphic artist, she decided to try her hand at landscape architecture.

Nothing like a touch of humor

At the time, artists such as Walter De Maria and Robert Smithson were creating monumental sculptures inspired by nature. Schwartz was fascinated. Today, Spiral Jetty—Smithson’s mammoth 1970 earthwork on Utah’s Great Salt Lake, made from basalt rocks and earth—still fills her with excitement. “I came to realize that the landscape is like an enormous canvas that can be changed through art. That opens up unimaginable opportunities, ways in which we can shape our immediate environment to suit our needs,” she notes. Having graduated from the University of Michigan, she embarked on her first projects along with her husband, Peter Walker, also a landscape architect. Her first big breakthrough came in 1979.

“At that time, we were living in a townhouse in Boston with a small, overgrown garden,” Schwartz recalls. While her husband was away on a business trip, she decided to tackle this forlorn space. Between deep green hedges, she laid down gravel footpaths colored bright purple on which were placed rows of real bagels, lacquered and glistening. To celebrate the Bagel Garden, she invited some friends over to a surprise party for her husband, among them a journalist and a photographer. Suddenly, what had begun as a joke took on a life of its own.

Selection of landscapes by Martha Schwartz

- Puerto de Europa**, Madrid, Spain, 1985
- Whitehead Institute Splice Garden**, Cambridge, Massachusetts, USA, 1986
- Kunsthal Museumpark**, Rotterdam, the Netherlands, 1990
- Snoopy’s Garden**, Ito, Japan, 1991
- Cumberland Park**, Toronto, Canada, 1993
- Jacob Javits Plaza**, New York, USA, 1996
- Geraldton Mine Project**, Ontario, Canada, 1998
- Lehrter Station**, Berlin, Germany, 1999–2004
- Exchange Square**, Manchester, England, 2000
- New Mexico Balloon Park**, Albuquerque, New Mexico, USA, 2001
- NATO Headquarters**, Brussels, Belgium, 2002
- Swiss Re**, Munich, Germany, 2002
- Wimmer Wien**, Vienna, Austria, 2002
- Doha Corniche**, Doha, Qatar, 2003
- Mesa Arts Center**, Mesa, Arizona, USA, 2004
- Fryston Village Green**, Castleford, England, 2005

The pictures of the Bagel Garden made it onto the front page of *Landscape Architecture*. Schwartz herself became an overnight sensation.

The humorous and transitory project caused a heated discussion among landscape architects. Some felt that it denigrated the entire profession, while others argued that such ideas represented a much-needed breath of fresh air. As the debate raged and the controversy grew, the Bagel Garden became a media phenomenon and a milestone in the history of landscape architecture, heralding the advent of post-modernism.

“In retrospect, I have come to accept that the Bagel Garden was both a highpoint of my career and also a momentous and fortuitous first step on the road to what was to become my profession,” Schwartz comments. For a long time, she was concerned that she would be known forever more as the Bagel Lady. But, at the end of the day, would that have mattered as this one small project began what is now a remarkable success story.

Today, Schwartz has offices in Cambridge, Massachusetts and London employing 27 people. “We collect ideas, no matter how crazy they may be. Then, at some point, we decide on a solution,” she explains. The path may vary, but the direction is always the same: “To create urban spaces that are both used and loved.” /



Martha Schwartz makes little use of lush greens in her landscapes. She prefers to design her public spaces and amenities around man-made materials that are contemporary and user-friendly.

Structured products: Tools for portfolio diversification

Adding structured products to a portfolio of traditional assets may help enhance total return in today's marketplace.

Investors seeking the benefits of one asset class but with the features of another—such as an investor who seeks equity-like returns but not equity-like volatility—may find what they are looking for in structured products.

Even though structured products have grown in popularity, many U.S. investors do not yet know how they may be able to benefit from these investments.

Once reserved only for institutional investors, structured products have increasingly gained importance in U.S. investors' portfolios, especially following the equity market turbulence in 2000 and 2001. That's why it's no surprise that in the past five years, structured product issuance has increased by nearly 400%*—because adding these versatile investments to a portfolio of traditional securities offers the potential to enhance total return in today's challenging market environment.

By combining an investment in a traditional security (such as a stock, a bond or even a basket of securities) with a non-traditional investment (such as an index, options or futures), an issuer is able to offer a note whose performance is tied to the combined performance of the underlying investments. Issuers will “structure” the underlying investments according to market conditions or expectations as well as investor demand.

Providing flexibility

By strategically combining the underlying investments, structured products can provide the flexibility to potentially satisfy a wide range of risk/return profiles and investor objectives. In general, there are four types or categories of structured products: partial or full principal protection, yield enhancement, market performance or leveraged exposure.

- **Principal protection** structured products are designed for investors with low to moderate risk tolerance who seek a degree of upside potential, with full or partial principal protection at maturity. An example could be a 5-year note that offers 100% of the upside of the S&P 500, but which also offers 100% principal protection.
- **Yield enhancement** structured products are designed for investors with a moderate risk tolerance who want to enhance the low to moderate returns typically generated in a “flat” or “sideways” market. For example, a partial principal protected note offering 125% of the return of a basket of indices may be a solution.
- **Market performance** structured products, by contrast, are designed for investors with moderate to high risk tolerance who seek efficient and strategic participation in a market sector, theme or strategy that they cannot participate in directly, such as a basket of foreign currencies.
- **Leveraged exposure** structured products are designed for investors with a high risk tolerance, have an opinion about market direction, and who seek an opportunity to substantially outperform the underlying securities.

Addressing various concerns

This ability of structured products to address various investor concerns has contributed to their growing popularity. For example, investors seeking growth while protecting their principal might investigate a market performance type of structured product known as Enhanced Appreciation Securities (EAS). This type of structured product gives investors increased upside potential, but leaves downside risk unchanged. Typically, an investor receives two to three times upside appreciation, subject to a specified maximum return. The benefits of such a structured product are enhanced appreciation for positive, moderate returns (up to the maximum return cap)

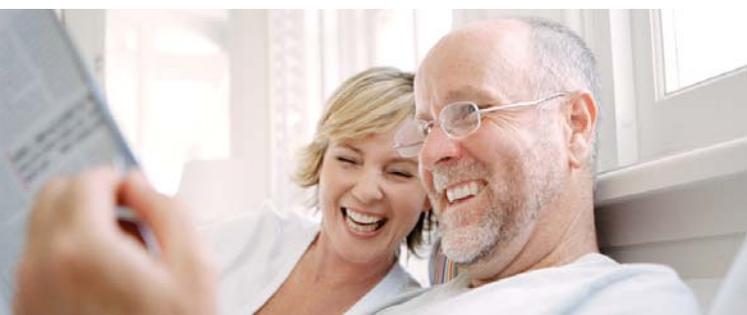
with no additional risk to the downside. An EAS offers the potential to capitalize on a market expectation for or a research call for positive, but moderate equity returns. Also, an EAS linked to an equity index can be considered part of a portfolio's equity allocation.

All structured products involve some risk-return tradeoffs. Investors should be prepared to hold any structured product to maturity. If a structured product is redeemed before maturity, its performance might lag that of the underlying security due to that security's volatility, the market price, the time remaining to maturity, interest rates or supply and demand for the structured product. Each structured product has special tax characteristics associated with it, and because each investor's tax situation is different, it is best to consult with your tax advisor before investing in specific structured products.

Helping all types of investors

As we have seen, structured products are designed to help investors of all risk/return appetites pursue a range of portfolio objectives, including diversifying a portfolio and limiting downside risk, generating income and enhancing returns, addressing various market conditions, and accessing investments and strategies not typically available to the individual investor. If you would like to learn more about structured products and how they may help you diversify your portfolio, please contact your Financial Advisor. Your Financial Advisor can also provide you with a copy of our new brochure, *Structured Products: Strategies for Portfolio Diversification and Risk Management.* /

* Source: UBS Investment Bank; a Select Peer Group of SEC Edgar Filings for Equity Registered Structured Products.



Diversifying a portfolio with structured products: a case study**

Client Profile

- Rodney and Grace Ellison
- Age: Late 40s
 - Children: Holden and Jane, twins, both in college
 - Current Portfolio: \$1.3 MM
 - UBS Financial Advisor: David Lark

Rodney and Grace Ellison have two major concerns: putting their twin daughters through college, without leaving the girls with burdensome student loans, while at the same time continuing their retirement savings—and doing both without taking on too much risk. They meet with their UBS Financial Advisor, David Lark, to discuss their concerns.

David understands the couple's need:

increased returns adjusted for their risk profile. Taking this into account, he develops a plan that offers Rodney and Grace several new ways to optimize their portfolio based on their updated priorities.

Working together, the Ellisons and David choose and implement a solution.

Because the Ellisons are underdiversified, David recommends that the couple add modest exposure to commodities to their portfolio by reallocating 5% from their portfolio's equity holdings to commodities. David also knows that

increased returns are important for Jane and Holden's college tuition and the Ellisons' retirement. In order to enhance potential gains, David proposes that the Ellisons invest another 5% from their equity holdings in an Enhanced Appreciation Security (EAS) note.

This structured product is linked to the S&P 500 Index and will provide tripled upside exposure (up to a 15% cap) at maturity, while maintaining the same one-to-one downside that any equity investment would.

Without taking on more downside risk, the Ellisons are able to potentially enhance their portfolio's growth opportunities. By working with their Financial Advisor, Rodney and Grace have ensured that their financial decisions are aligned with their priorities.

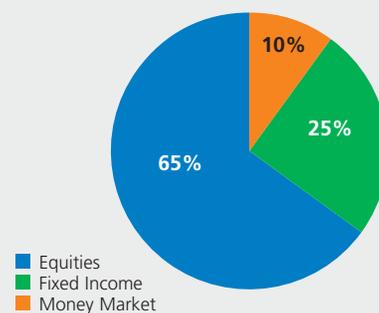
Risks

The return of Market Performance Notes is linked to the performance of the underlying investment. Investors may lose some or all of the principal amount invested. There may be little or no secondary market for the Market Performance Notes. Investors should be comfortable holding the Notes to maturity.

** This is a hypothetical illustration and is not intended to project the performance of a specific investment.

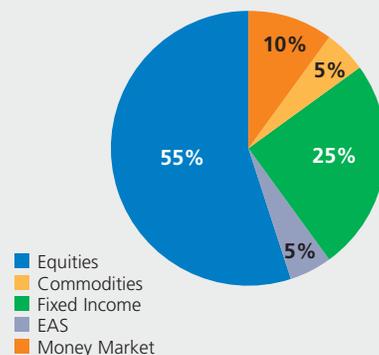
Before

Risk Profile: Moderate



After

Risk Profile: Moderate



Inflation: now it's personal

What you spend and where you spend it may result in a personal inflation rate that differs substantially from the rates reported by the government. Why?

Not a day seems to go by without a newscaster or economist discussing inflation, which they generally describe as rising but relatively low. If your reaction is one of surprise, based on your everyday spending experiences, you are not alone. Many people wonder why the cost increases they experience almost daily seem to be so different from the indices quoted by economists.

To address this conflict, UBS Wealth Management Research published a new report, *Inflation: now it's personal*, which evaluates inflation from the perspective of the individual. It introduces the concept of a "personal inflation rate" and suggests ways to analyze your personal consumption patterns to help you account for inflation in your wealth management plan.

The world's greatest robber

In recent years, inflation has been relatively benign, and investors cannot be blamed for wondering if inflation still matters. But it does. Investors should keep in mind that "an equal change in inflation at lower inflation rates has a much greater effect on purchasing power than it does at progressively higher inflation rates." A 50 basis point (0.5%) increase in inflation when it's running at a 1.5% annual rate erodes purchasing power by 4.3%. A similar increase when inflation is in the 10% annual range causes only a 1.9% decrease in purchasing power.

Inflation is also hard to measure and even harder to predict, and no one is immune from its effects. The government publishes a number of indices that measure inflation. However, these indicators, which measure the price changes of a variety of items, reflect the averaged consumption choices of a representative sample of the overall population. Any particular individual, whose spending patterns may differ widely from that used in an index, therefore has a unique current inflation rate. Each measure also employs a different methodology to arrive at a conclusion, leading to different inflation numbers from different indices. This report states, "There is often a serious disconnect between what the inflation statistics say, and what individuals believe about inflation."

After studying the consumer price index (CPI), GDP deflator, the personal consumption expenditure index (PCE) and other measures of inflation, we are left with two questions. First, which index, if any, reflects an individual's exposure to inflation? Second, can investors determine a "personal inflation rate" to use when developing their wealth management and investment plans?

No national measure can ever provide a complete picture of an individual's inflation risk, as this report says, "A national inflation rate would reflect neither regional cost differences between an investor in Wichita and an investor in San Francisco, nor the different spending experiences of a healthy college student in Boston and a 65-year-old heart transplant patient in Boca Raton." On the bright side, however, it is possible to narrow down the key factors that influence an individual's personal inflation rate.

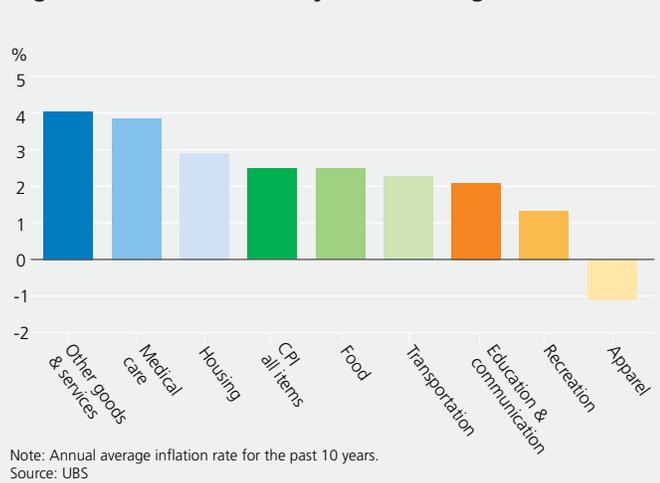
Current personal inflation rates

Figure 1 shows the nine categories that make up the CPI and the 10-year average annual inflation rate. Personal inflation "arises from the fact that every good and service has its own inflation or deflation rate" and individuals have their own unique spending patterns for these goods and services. A married, elderly couple may spend more for healthcare and less for recreation than a married couple with two small children. It is this unique combination of goods and services—as well as when and where we purchase them—that determines our personal inflation rate.

There are limits on how much we can minimize our personal inflation rates. We can control our spending in some of these categories, and have little or no control over others, which are essential. For example, we may be able to reduce our recreational spending, but not our medical care spending.

Determining future personal inflation rates

Estimating your future personal inflation rates is more than an economic exercise. It can help you answer the critical question of how much you need to save today, and what kind of returns you have to earn to be sure you have the resources to cover future expenses, without compromising any part of your lifestyle.

Figure 1: Inflation rates by CPI subcategories

Every good and service has its own inflation or deflation rate.

A macroeconomic inflation forecast, such as the CPI, can be used as a starting point for personal planning. However, investors must analyze not only their current consumption patterns, but also future spending to assess whether or not they face higher inflation risks. Incorporating a future inflation estimate that is closely aligned with personal circumstances and prospects may help drive current savings, investment selections and future income withdrawal rates.

Personal inflation driver

The report identifies four factors as the main drivers of differences in personal inflation rates: age, family status (size of the household), socioeconomic status (income before taxes) and housing status (location and tenure).

Of these, age and family status are likely to produce higher individual inflation risks. Age is strongly correlated with deteriorating health and greater expenditures on healthcare. Family status, primarily the presence and number of college-age children, increases exposure to higher education costs. Location can have an impact on cost of living, but can be potentially controlled by moving.

Finally, socioeconomic status can affect inflation risk. Less affluent individuals whose income is not adjusted for inflation bear the greatest effects of inflation, while high income levels or affluence provide substantial, but not complete, inflation protection.

Age and family status have the most impact

While several factors impact differences in personal effective inflation rates, the analysis shows that age and

family status appear to have the greatest effect. Paying for healthcare, long-term care or medicine becomes increasingly important at a time of life when many individuals no longer work, may be dependent on income with little or no cost-of-living adjustment mechanism, or have an asset base that may be severely impacted by out-of-pocket expenses. Investors should therefore consider their health prospects and payment abilities early in their financial planning. Paying for a child's education may also expose a family to a much higher rate of personal inflation, but there are planning techniques to help parents prepare for this financial challenge.

The "cost of living extremely well"

Living well is the best revenge, right? Affluence is often assumed to mitigate inflation risks, but maybe not. The CPI and other measures do not monitor data for the inflation of luxury items, but Forbes annually produces a "Cost of Living Extremely Well" (CLEW) Index. The CLEW measures the annual change in price for a basket of high-end goods and services, such as filet mignon and a year at a top-flight prep school. According to the CLEW Index, since 1980 the cost of an affluent lifestyle has risen almost twice as much as the CPI!

This, according to the report, "clearly supports the notion that affluent lifestyle choices may increase inflation exposure risk." Why? Firms that sell luxury goods and services have more latitude to set—and increase—prices than firms who sell to a lower-income clientele because the very affluent are less likely to switch to cheaper substitutes when prices rise. On the other hand, less affluent customers are likely to shop for lower prices, or do without, when faced with price increases.

Conclusions

One of the most important things to consider, the report concludes, is that the national inflation measures are exercises in averaging and the entire point of *Inflation: now it's personal* is to help investors realize they are anything but average. For every inflation factor, personal situations may create differentials that are not accounted for in the data, but are real for the investors facing them. For example, having children later in life or caring for aging parents are situations that may not be reflected in the Consumer Expenditure Survey,* but are becoming more common and affecting investor finances accordingly. To receive a copy of *Inflation: now it's personal*, please contact your Financial Advisor. /

* The Consumer Expenditure Survey (CES) is conducted annually by the Bureau of Labor Statistics and provides the best snapshot of U.S. consumers' spending habits.

Providing a compass for investors

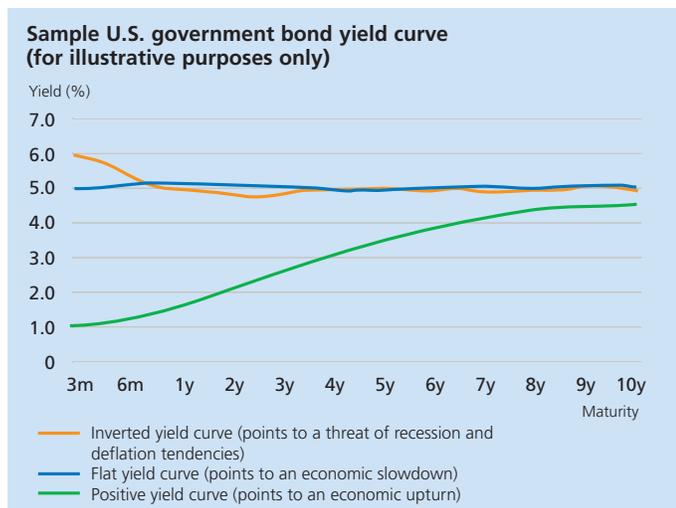
Understanding how yield curves work may allow investors to better comprehend how interest rates and the economy are likely to perform.

Readers of the financial papers may have stumbled over sentences like “The yield curve is flattening” in recent months. What does it mean when financial professionals point to the yield curve and its shape to describe or predict the future of markets, particularly bond markets? Simply put, a yield curve shows the relationship between yields and maturity dates for a set of similar bonds. Investors who are familiar with bond trading know that bonds from the same issuer, say a government that issues many different types of bonds, will offer different rates of interest, depending on the maturity, or the length of time until it is redeemed.

Imagine that a U.S. government bond with three months to run might offer 1%, a five-year bond 3.6% and a ten-year bond 4.5%. Taken together, this information can be used to plot a yield curve for the U.S. government bond (see chart below). In graph form, the points are entered as coordinates, where the y axis is the yield and

the x axis is the time to maturity. By linking these points together, it is possible to draw a yield curve. In the real world, however, a yield curve graph is made up of many more bonds and generally refers to an entire category of bonds, such as corporates or governments. The more information that is available, the more accurately the yield curve will reflect the temperature of the market.

A yield curve is important because it shows at a glance what effect economic and market events are having on bond yields, from short-dated money market investments at the short end to long-dated bonds at the long end. Just like share prices, yields and therefore the yield curve, are constantly moving. It is this dynamic movement that provides information that investors can use in thinking about the markets. Economists distinguish between three basic kinds of curve. Typically, the curve climbs looking from left to right, as bonds with longer to run generally offer higher rates than short-dated paper. If the line is horizontal, it is called a flat yield curve. Here, yields are consistent across all bonds, irrespective of when they are due to be redeemed. The inverted curve, where short-term interest rates are higher than those at the long end, which would show a curve that trends down when looking left to right, is quite rare.



The yield curve allows investors to assess the state of the economy, but also provides ways to evaluate other investments.

Theories abound

Just what factors cause changes in the form of the yield curve are hotly disputed. The oldest theory is the expectations theory developed 110 years ago by the economist Irving Fisher. It suggests that the shape of the curve depends on investors’ views of interest rate trends. If investors believe that the economy is booming and inflation is rising, they will demand a higher rate of interest on long-term bonds to make up for the money that they will lose from inflation over time. This leads to a rising yield curve. At the same time, a rising curve will reflect investors’ anticipation that the Federal Reserve



Unlike confusing freeway interchanges, yield curves can provide easily understandable road maps for investors.

will hike key rates in order to keep a lid on inflation. Today's long-term rates therefore indicate what tomorrow's short-term rates will be. In a nutshell, the expectations theory suggests that if investors expect the Federal Reserve to raise interest rates, the yield curve will point upwards, but if they expect rate cuts, then it will point downwards.

However, if the expectations theory was the only determinant of the shape of the yield curve, we would find that the average was flat, as periods of interest rate tightening and loosening even each other out. But in general, long-term yields are higher than those at the short end. This is often explained using the liquidity preference theory developed by the Nobel prize-winning economist John R. Hicks. This says that investors prefer short-dated, liquid assets to long-dated ones. Anyone wanting to entice investors into buying bonds with long maturities must therefore pay a risk premium, in the form of a higher rate of interest. A further theory—market segmentation theory—suggests that different investors prefer different maturities. The short-term money market attracts different groups of investors and borrowers from the medium- to long-term capital markets, and the markets move virtually independently of one another. For instance, long-dated bonds are attractive to pension funds, as they match their long-term obligations to pay pensions to their plan participants. Investing in long-dated bonds gives them a good degree of confidence that the pension plan will be able to meet its commitments.

Investors can use yield curves

None of these theories holds true all the time, but it is equally demonstrable that yields across the various maturities are not wholly independent of one another. A combination of the various theories is therefore the most likely explanation of what drives yield curves.

There are three ways in which investors can use yield curves. The first way is to evaluate other investments. For example, let's imagine that an investor will receive \$100,000 in three years when a bond is repaid. But he wants to know the net present value of the bond today. In order to calculate the net present value, he needs to discount the interest on the payment, and the rate to use can be found on the yield curve. For this three-year investment, he needs to apply the yield on three-year maturities. By deducting interest at this rate, he arrives at the value of the payment in today's terms.

The yield curve acts as a leading indicator for interest-rate trends, and hence indirectly for economic growth and inflation. When the economy is booming, inflation tends to rise, and the Federal Reserve seeks to stop it from overheating by hiking short-term interest rates. If the market has confidence in the Federal Reserve, it expects the economy and inflation to cool, and the yield curve inverts. Often, but not always, an inverted yield curve can be a precursor of recession—most recently in 2000. Under this scenario, investors are anticipating lower interest rates and want to acquire long-dated bonds at any cost, which pushes down yields. Conversely, a yield curve that is normal—with a positive slope—during a soft patch often signals economic recovery.

Finally, speculative bond investors try to anticipate changes in the yield curve to make a profit. If someone believes that short-term yields are set to fall sharply, then long-term bonds are attractive. On the other hand, they should invest in short-dated paper if they believe short-term rates are going to rise faster than the market is anticipating and the yield curve will flatten. Those looking to minimize interest rate risk should choose bonds with a maturity matching their investment horizon as closely as possible. /

Achim Peijan is responsible for interest rate strategy at UBS Wealth Management Research.

Change is constant. Whether it's life's major milestones, unexpected personal events or new market fluctuations, these are moments that can impact the performance of your portfolio. This is why meeting periodically with your Financial Advisor for a review is an important part of managing your wealth.

Even when nothing seems to change, it is still critical to keep an ongoing dialogue with your Financial Advisor to help keep your financial life running smoothly. It may also be the key to help ensuring you stay on track in pursuing your objectives and addressing your needs.



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