Challenges of an Aging World
for the Financial Industry and Government Policy

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Mr. Vice-President, Dean, Mayor, Professors Haliassos and Maurer, Honored Guests, Faculty, and Students:

I am delighted to have the opportunity to return to Goethe University on this fine day. As always, I am pleased to have the opportunity to visit and work again with Professor Raimond Maurer, my frequent and very fine collaborator, and his excellent colleagues and students.

But most importantly, I wish to express my deep gratitude for the honorary degree from the Goethe University of Frankfurt that you have elected to bestow on me. I fell deeply privileged.

An Extraordinarily Fruitful Exchange of Ideas

From my perspective, an honorary doctorate stands for two things: the recognition of existing close intellectual and personal ties between academics, and the desire to further strengthen these ties in the future. These ties, in my case, began in 2001 when I first visited Goethe as a Metzler Visiting Professor. This wonderful award from the Metzler Bank and established in 1992 has been an invaluable reason for the long-term and strong relationship between the University of Pennsylvania, my home institution, and this fine faculty in Frankfurt. Deep and productive relations have been developed not only between professors, but also research teams, young scientists, and students with the help of this forward-looking gift.

Following on my first visit to Goethe University, I have now returned to this lovely campus many times. Over the years I have greatly enjoyed contributing to the intellectual growth of the faculty and students at the House of Finance, as well as to the betterment of finance and insurance in Germany and in the rest of the world more generally. The majority of my work has focused on ways to enhance retirement wellbeing, starting with corporate pensions, and more recently turning to Social Security and civil servant pensions. Some of this work has been inspired by German topics: for instance, we've evaluated approaches to enhance civil servant pension plans in the state of Hesse (Maurer, Mitchell and Rogalla 2009). We've also published on the implications of the EU regulatory regime on annuities and retirement saving accounts (Maurer, Mitchell, Rogalla and Siegelin 2016), how pension systems can be made more resilient in the wake of the Global Financial Crisis (Maurer, Mitchell, and Horneff 2017), and how family structure influences peoples' decisions to work, retire, and claim their retirement accounts (Hubener, Maurer and Mitchell 2015). And our new research about which we're very excited is examining the role of deferred annuities and guarantees in Riester pension plans.

In my remarks today, I was invited to offer some thoughts on how the rapidly aging world is mounting challenges for the financial industry and policymakers.

Financial Literacy

One area where both industry and policymakers must move ahead with concerted effort is the sadly neglected field of financial literacy. I began surveying workers some 15 years ago regarding three simple concepts: inflation, interest rates, and risk diversification. To my great dismay, the results from this first survey were deeply distressing: a majority of older Americans failed to grasp essential aspects of risk diversification, asset valuation, portfolio choice, and investment fees (Lusardi and Mitchell 2014). Moreover, there proved to be many subgroups in the population with particularly notable deficits, especially include women, the least educated, minorities, and those age 75+. We have now directed financial literacy surveys in over 30 countries globally, and the results are have proved to be discouraging around the world. For instance, Germany is among the better-scoring of all nations surveyed yet still only 58% scored very highly on the financial knowledge index, just below Ireland (60%) and Hungary (69%) (OECD/INFE 2016). Some of the individuals least informed about financial matters include the Russian population, as well as the rapidly growing Southeast Asian communities.

This set of findings is problematic for several reasons. For one, people who fail to understand basic economic and financial concepts will tend to make mistakes from which they cannot easily recover. In the U.S., for example, young people hold $1.4 trillion in student loans (which is $620 billion more than total credit card debt). Indeed, the typical 2016 graduate has over $37,000 in student loans, which even with low interest rates will take a while to pay off (SLH 2017).

For another, middle-aged people who lack financial knowledge fail to save enough for retirement, and when they do save, they tend to earn little on their savings. For instance we found that more financially knowledgeable investors hold more stock than their non-savvy counterparts; can anticipate earning 8 basis points per month more in excess returns; and hold portfolios with about 38% less idiosyncratic risk, as compared to their unsophisticated counterparts (Clark, Lusardi, and Mitchell 2015).

And the problems are exacerbated in retirement. Increasingly retirees must take on responsibility for their own retirement security, and in this new environment, meager knowledge can have serious and worrisome implications. For instance, the financially illiterate do a poor job planning for retirement, investing, and de-cumulating their retirement accounts (Lusardi and Mitchell 2014).

Accordingly, policymakers, plan sponsors, and the financial sector must do far more to educate consumers to make smart financial decisions so they have more options and do a better job handling their resources over the life cycle.

Annuities and Longevity Protection

Related to this idea is a subject on which Prof. Maurer and I have worked a great deal. In particular, we have examined a range of insurance products that help people protect against outliving their assets – especially payout annuities (Maurer, Mitchell, Rogalla, and Kartashow 2013).The global trend away from defined benefit pensions has meant that retirees in many countries no longer receive retirement income checks. As a consequence, it is becoming increasingly easy for older persons to run out of money, particularly if they fail to account for the very real chances of living a very long time. In fact, Professor James Vaupel, a well-known demographer from the Max Planck Institute, has argued that most babies born since 2000 will live to age 100, and someone who will live to 200 has already been born (CBS News 2009).

Confronted with the possibility of such a long lifetime, it is clear to most experts that retirement ages must rise. This can actually be a positive development, since having the potential to remain employed longer can provide a “safety valve” in the event of capital market shocks or income fluctuations. In fact, one of our research papers shows that people who can delay retirement should optimally do so when their investment earnings are below expectations (Horneff, Maurer, and Mitchell, 2017). Moreover, delaying claiming of Social Security benefits in the U.S., and in Germany as well I understand, can enhance one’s eventual benefit payouts. We are using this insight to model ways to induce delayed claiming and additional work by offering lump sum incentives which are cost-neutral to the system (Maurer, Mitchell, Rogalla and Schimetschek 2017). Our current work is focusing closely on how defined contribution plans can incorporate deferred lifetime income annuities at a relatively low cost, thereby returning the income stream to plans traditionally focused only on accumulation.

Some may worry that encouraging delayed retirement will lead to labor market problems such as causing joblessness for younger workers. Yet economic research has demonstrated conclusively that there is not a fixed number of jobs implying that retaining older workers on the job hurts the young. Instead, it turns out that lowering the retirement age leads to higher taxes on the young, which in turn curtails job opportunities for those seeking jobs (Munnell and Wu, 2013).

Financial Decisionmaking Over the Complete Lifecycle

My work on annuities has focused not only on the decumulation phase of the life cycle. Instead, in a series of studies, we have also explored financial decisions of households over their entire work and retirement lives. The key insight here is that a host of risk factors must be incorporated when seeking to manage one's money sensibly over the lifetime.

For instance, households are exposed to labor income and health shocks, as well as capital market risk and the potential for divorce and widowhood. They must also make decisions taking into account important institutional factors such as taxes, regulation, and Social Security rules, and people differ not only with regard to their preferences but also their cognitive abilities. It turns out that these factors are highly influential for optimal household decisions regarding work, retirement, saving, portfolio allocations, and life insurance.

Forty years ago none of these critically important real-world factors could be integrated into an economic analysis of life cycle decisions. But today, by virtue of important technological advance – especially those here at Goethe University of Frankfurt in the House of Finance – it is now possible to solve such problems using new numerical approaches, high performance computer clusters, and very smart graduate students. In some of our research, for instance, we have been able to allow for realistic time allocation patterns of wives and husbands in our models (Hubener, Maurer, and Mitchell 2015). In others we have integrated quite influential benefit accrual and taxation patterns in benefit payouts (Maurer, Rogalla, Mitchell and Schimetschek 2016).

These life cycle models also prove to be quite consistent with real-world data, for instance predicting sharp consumption drops at retirement, an age-62 peak in Social Security claiming rates, and earlier claiming by wives versus husbands. Moreover, life insurance is mainly purchased on men's lives. Our results are also more consistent with wealth patterns seen in the data than earlier, less realistic models.

Our research is highly likely to be of immediate relevance to many innovators in the retirement space. For instance, so-called "Fintech Robo advisors" in the U.S. and Europe are developing new ways to make such models accessible to the broad population. While this is still an infant industry needing to gather customers, it is surely the case that the current low interest rate environment will make clear the need for low-cost providers as never before.

To Conclude

These are unique times. The human race has never before experienced such a rapid process of global aging. This is having widespread effects on many aspects of our economies and societies, including insurance and financial markets. To this end, the financial sector – including insurance, banking, and investments – will need to partner with policymakers to help design useful products for the real world.

My research collaboration with the fine Goethe University faculty and students to date on these topics has focused on this challenge. I look forward to continued fruitful research collaborations in the future.

Accordingly, I am delighted to accept this honorary doctorate award from the Goethe University. It represents an acknowledgement of the close ties that I have forged with scientists including Professor Maurer here at the House of Finance. It also serves a promise of continued close relations between our universities and our research teams in the future. Thank you very much.

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