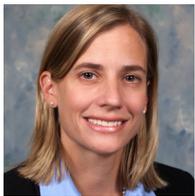


Defined Contribution Plans

This issue features an interview with **Julie Agnew, Associate Professor of Finance and Economics** at The College of William and Mary and currently a Senior Visiting Fellow at the University of New South Wales



Moderated by **Stacy L. Schaus, CFP®**
PIMCO Executive Vice President and
Defined Contribution Practice Leader

What's up down under?

In this *PIMCO DC Dialogue™*, we talk with Associate Professor Julie Agnew, who is on sabbatical in Australia, about the development of the Australian retirement system and its defined contribution plans called “superannuation schemes.” Julie shares details about the three-pillar retirement system that includes a government-funded “Age Pension,” superannuation programs, and personal savings. She discusses the size of the DC market and the different program provider choices offered to participants. Julie talks about the range of investment choice, the static balance fund defaults, and the distribution choices offered in Australia, and she underscores the power of investment defaults. Julie also points out the power of tax incentives in driving selection of distribution options. She concludes with the common concerns in Australia about the lack of financial literacy and the need for risk management.

DC Dialogue: Can you tell us about your area of study and why you’re studying in Australia?

Julie Agnew: Over the past 10 years, my work at The College of William and Mary has been dedicated primarily to studying the U.S. 401(k) system from a behavioral finance perspective, including looking at participant behavior and how individuals make decisions about saving for retirement. In studying the U.S. retirement system, I became intrigued with international systems, and this developed into a strong interest to learn more. In particular, I was attracted to the Australian retirement system because there’s a large element of choice in the decisions that people must make.

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So, I'm currently living in Australia for my sabbatical year while learning and researching the retirement system here. Research in Australia may provide insights as we continue to evolve the U.S. retirement system. There are many similarities between the U.S. and Australian systems, yet also significant differences.

DCD: Can you tell us about the structure of the retirement system in Australia?

Agnew: Many people consider Australia's retirement system as one of the best public retirement systems in the world. It has three pillars, including a means-tested "Age Pension" that is similar in some ways to Social Security in the U.S., a mandatory private superannuation savings vehicle, and a voluntary savings component. The second pillar is similar to the corporate retirement system in the U.S., and like the U.S., the superannuation component has seen a dramatic shift away from defined benefit plans to defined contribution and hybrid options.

Relative to the U.S. defined contribution plans, a significant difference in the superannuation programs—often simply referred to as "super"—is the mandatory employer contribution requirement that began in 1992. Today, unless a person is self-employed, the employer must contribute a percentage of salary for all workers aged 18 to 70 who earn over A\$450 a month. At the moment, this percentage is set at 9%. This requirement results in over 92% of workers being included in the super programs. A recent ruling has removed the age limit of 70 starting in 2013. Also starting in 2013, the required contribution will begin to increase from 9% to 12% by 2019. This employer contribution is in addition to worker pay, as opposed to being a deduction from pay.

DCD: We often hear that employers must contribute to the super programs, but they don't contribute to social security...that is, the "Age Pension" as they call it. We also hear that few retirees receive the Age Pension. Is this correct?

Agnew: That's half true. Employers do not contribute to the Age Pension. Rather, this retirement pillar is funded out of the general government revenue and, according to the last statistic I have seen, represents about 2.7% of Australia's gross domestic product (GDP).

What's not true is that few retirees receive an Age Pension; actually, over 75% of retirees receive this government money today. Yet, as mentioned, the Age Pension is means-tested, so the government looks at both a retiree's assets and income. It's not meant to replace preretirement standards of living, but to provide a very basic income, and if you qualify, you may also have access to discounts on health services and energy costs. Roughly, in inflation-adjusted dollars, it will replace about 27.7% of an average male's earnings for a single person and about 41.3% for a couple. That equates to \$19,643 for singles or \$29,614 for a couple.

Super programs will need to close most of the gap to meet retirement income needs, and given the flat rate and the means test taper, that gap is much larger for higher-income individuals. As a result, using some back-of-the-envelope calculations and assuming a target replacement rate of 80%, we estimate that supers will need to replace as much as 30% to 80% of final pay, depending on the person's preretirement income.

DCD: An income replacement objective of 40% to 60% of pay is similar to what is generally needed from U.S. DC plans. How large is the Australian system today and how well is it doing in meeting retiree income needs?

Agnew: Super assets are growing rapidly. At present, assets in these plans are estimated at AUD\$1.4 trillion, which is roughly the same in U.S. dollars at the current exchange rates and greater than Australia's annual GDP. Given the mandatory contribution requirement and the required increase in this rate, that amount is going to grow substantially in coming years.

Today's individual worker superannuation balances are still not substantial, especially for older people. In 2010, the average account balance was around AUD\$71,645 for men, and for women it was much lower—around AUD\$40,475. For the older group, aged 60 to 64, men have about AUD\$198,000 saved, and women about AUD\$112,000. Again, keep in mind that supers did not become compulsory for all employers until 1992.

As people remain in the system longer, these should actually become quite a substantial part of peoples' retirement income. Part of the rationale for increasing the mandatory contribution rate to 12% was the recognition that 9% would not be sufficient to close the savings gap. That said, there's a common misconception that eventually the superannuation will make the Age Pension unnecessary.

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But that's highly unlikely and not at all the government's intention. Even with the increase of employer contributions to 12%, we believe you're still going to see about 75% of retirees receive the Age Pension. Now, they just might not receive the whole amount, but they are likely to receive a part of their pension. Currently, approximately two-thirds of age pensioners receive the full amount and one-third receive a part of their Age Pension. In the next 30 years or so, this is expected to reverse.

DCD: Are employees required to contribute to the super programs?

Agnew: By law, workers are not required to contribute, although some employers structure plans that do incent or require employees to defer part of their income into these plans. A majority of employees can contribute pretax amounts through "salary sacrifice," which is considered a "concessional contribution," and all can contribute after-tax amounts, which are considered "nonconcessional contributions." However, not many people do either. The statistics that I've seen report that between 75% and 80% of employees don't make an additional contribution on top of the employer contribution, and the people that are making additional contributions tend to be in the higher-wealth distribution.

One thing I've found interesting is that some employers contribute far above the 9%. For instance, many university employers contribute as much as 17%, on behalf of their employees with contracts of more than two years. And you have multiple industries, such as oil, mining, construction, banking, and finance/investment management, where employers are likely to contribute far above the requirements.

In terms of other nonconcessional contributions, individuals can often make after-tax contributions for their spouses and may be eligible to receive a tax offset if the spouse has a low enough income. In some cases, if you are a low-income worker, you may also receive a government co-contribution. In addition to adding money to a super, workers can voluntarily invest in real estate, own stock in companies, or have many other varieties of investment vehicles. These investments would be considered part of the third pillar, the voluntary savings component.

DCD: Are the voluntary savings tax advantages in a super plan similar to the advantages in the U.S.?

Agnew: Yes and no. In Australia, some voluntary nonconcessional contributions go in after-tax and then at retirement can be paid out tax-free. From this standpoint, this is like the Roth DC plans in the U.S. However, a notable difference is that superannuation earnings each year are taxed at a flat 15%, which is much lower than the tax rate if the assets were held outside the super for all but those with the lowest income. The tax rate on earnings also applies to all concessional contributions, which include employer contributions and employee salary sacrifice contributions. In addition to this tax, when the concessional contributions are made under the legal cap, the tax rate is a flat rate of 15%, regardless of income. The government sets a cap of AUD\$25,000 on concessional contributions and AUD\$150,000 on nonconcessional contributions.

DCD: My understanding is that workers in Australia cannot cash out of their DC plans prior to retirement.

Agnew: Yes, that's right. The government does a good job of controlling leakage. It may allow you to take out money prior to retirement for cases of incapacity, severe financial hardships, compassionate grants, or a terminal medical condition, but this is extremely uncommon. Or, prior to retirement, you may be able to start withdrawing some money once you hit a certain age—what's called a "transition to retirement pension"—but there are very strict rules about how you can do this.

People have many options at retirement. For example, in the superannuation funds, people can take their money out at their "preservation age," which currently varies between the ages 55 and 60 depending on the person's birthdate. By 2024, it will be age 60 for everybody.

Once they hit all the requirements, they can take their money out either as a partial lump sum or as a full lump sum, or they can buy an income stream product. Right now, about 50% of the people take it as a lump sum.

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Some researchers have written that as the superannuation balances grow more significant and the market for retirement products matures and progresses, we’ll see fewer people taking their money out as a lump sum and more placing their savings into an income stream strategy.

DCD: How are distributions taxed at retirement?

Agnew: You would think that the contributions would be taxed at distribution and thereafter, but the government has different approaches to taxation depending on how these dollars are withdrawn from the plan. At retirement age, as mentioned, you can withdraw your money either as a full or partial lump sum and/or as an income stream. If you are over age 60 and take a lump sum, the assets are not taxed at distribution, but if you keep the payout in certain accounts, then earnings going forward do not receive preferential tax treatment.

Whereas, if after age 60 you elect a phased and income stream such as an annuity or withdrawal program marketed as an “account-based pension,” the accumulated earnings are not taxed once they’re in these products. The withdrawal programs are similar to systematic withdrawal or payout funds in the U.S.; however, they do not include an inflation protection component or a guaranteed payout for life component. Rather, they are simply withdrawals of a percentage of your account balance in the super. The government tells you, based on your age, the minimum that can be withdrawn each year as a percentage of your account balance. If and when your money runs out, the income stream is gone.

DCD: What is the take up rate of life annuities versus other distribution options?

Agnew: What may be of particular interest to the U.S. is that, prior to 2007, Australian life annuities offered the best tax and regulatory incentives relative to other income stream products. Once account-based pensions received equal treatment beginning as legislated in 2006/2007, the sale of life annuities in Australia all but dried up. In 2004, over \$275 million in life annuities were purchased, representing about 2,800 contracts. In 2011, only 173 contracts were sold. Furthermore, only 2% of distributions were to life annuities, while 98% were distributed via account-based pensions in 2010.

Of course, the downside of account-based pensions relative to life annuities is that you still have longevity, investment, and inflationary risk. So there is some concern and a lot of academic research going on right now into how to improve the annuity products that are available and how to increase the number of people that annuitize. Similar to the U.S., the government in Australia is concerned about longevity risk and increased reliance on the Age Pension, so they are considering how to encourage more annuitization.

While I can only speculate, Australians may be hesitant to annuitize for many of the same reasons Americans steer away from these products, including the desire to leave money to heirs and retain the ability to change their minds, and concerns about handing over a large sum of money in exchange for a meager monthly payout.

DCD: What are some of the significant differences in the choices a DC participant in Australia needs to make compared with the U.S.?

Agnew: One of the most significant differences is that Australian employees have been able to choose the super fund in which they would like to participate. Unlike the U.S. where employees typically are only offered access to their employer's DC plan, Australian workers may be offered participation in a corporate (if one exists) or public-sector plan. But they can also select a plan outside their employer, and many workers do just that. For example, they can choose any industry fund—one that a large industry would sponsor and is typically open to any investors—not just a fund in their own industry. Or they can choose a retail fund that would be similar to what your financial institution or insurance company would offer. And then there's the option of a self-managed super fund.

When we look at participation in the different types of supers, we find that the majority of workers select a retail or industry plan. Yet, when we compare by asset level, the self-managed super funds are the largest, followed by the retail and then industry plans. This reflects the usage of self-managed accounts largely by high-net-worth individuals and the self-employed. Corporate-sponsored plans are in the minority relative to the other plan types, with many employers involved only in contributing rather than offering a company-specific plan at all.

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DCD: Given so many different choices of supers, how do workers make their selection among plans?

Agnew: The Australian system is similar to the U.S. in the sense that the default bias is extremely strong here. If an individual doesn't choose a fund, then the employer will default them into one. At that point, if an asset allocation is not chosen, the super will default them into a default option. Typically, the default allocations are placed into static balanced funds. While target-date funds may become a more popular option in Australia going forward, they are not predominantly used as the defaults today. Given some super reforms that are occurring, we anticipate that target-date funds may become more prevalent in the future.

DCD: What is the investment structure of the balanced defaults in use today?

Agnew: Balanced funds tend to be heavily invested in stocks, with generally more than 50% of assets allocated to this asset class. Unfortunately, during the global financial crisis, many Australians took a fairly big hit to their superannuation balance as a result of the equity weight in the funds. Similar to the U.S., the balanced strategies also hold fixed interest or bonds, as well as cash. What's different is that they also tend to hold more inflation-sensitive assets such as property, and alternatives such as private equity.

DCD: How different are the investment offerings among super programs?

Agnew: When you compare the different types of funds and look at the average number of investment choices, they can vary widely. Regarding the public sector, industry and corporate funds, they typically offer less than 10 investment options that you can choose among. But if you choose or are defaulted into a retail fund, on average, you may have a choice of 255 different investment options.

DCD: What percentage of the assets tends to remain in the default investment?

Agnew: Generally, from 20% to two-thirds of plan assets are invested in the default investment choice, depending on the fund type. However, from a research perspective, we really would prefer to know what percentage of the workers are in the default and whether they understand what they're invested in...as well as what the super program is overall. We also want to understand general financial literacy.

To this end, two Australian superannuation experts, Hazel Bateman and Susan Thorp, and I are conducting financial literacy research in Australia as an extension of the project started by Olivia Mitchell of Wharton's Pension Research Council and Annamaria Lusardi at the Global Center for Financial Literacy. Together, Annamaria and Olivia are leading an initiative to test financial literacy in different countries around the world. In the recently fielded Australian survey, my colleagues and I added some additional questions to the base project questions in an attempt to learn more about what people know about superannuation.

It was fascinating to us that, while the default option tends to be the balanced option, when we asked people if this means that it is invested exclusively in perceived "safe" assets such as saving accounts, cash management accounts, and term deposits, only 38% of the people got it correct that this wasn't the case. Thirty-five percent didn't know. So it appears to me that Australians share similar financial literacy issues with the U.S. in terms of people who don't understand their options or their assets. And I think this is something we must address.

DCD: Do you anticipate that default investment structures will change, given the losses in 2008 and people's lack of financial literacy?

Agnew: Default investments are in the process of changing, but the catalyst has been the varied fee structures, not the market downturn. As a result of all the variation, the government would like there to be a low-cost diversified option, a "MySuper" product, that is available to all Australians in all the different types of supers, with the exception of self-managed superannuation funds.

The legislation has passed and each fund will be able to offer one of these approved defaults by July 1, 2013. By October 1, 2013, employers will be required to make their mandatory contributions to a fund offering a MySuper product, and all default balances will need to be transferred to the MySuper product by 2017. With respect to costs, currently, we have found that the fees in the retail supers are the highest, yet they remain popular because of the breadth of investment choice and services.

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We have also found that public-sector funds offer the lower costs. I have seen fees ranging from 0.4% to nearly 2.5% of assets for balances of AUD \$50,000. The MySuper legislation restricts the types of fees that can be charged to consumers.

What's more, there have been provisions that there can be a lifecycle or target-date type of fund. With the cost limits, it may be challenging to offer a more sophisticated target-date or other asset allocation as the default. Right now, we do not see the target-date strategies offered in the way they are in the U.S., where the asset allocation changes over time. Rather, we may see a series of balanced strategies coupled with automated transfers between funds; for instance, when you hit a birthday milestone, your assets would transfer into another fund that had slightly less risk. That's how they transitioned the rebalancing. We believe there's a lot of room for improvement of the product that's currently being offered in that space.

DCD: In terms of risk management, does the government require that risk be conveyed in a certain way?

Agnew: My co-authors on the financial literacy project, Susan and Hazel, with some other Australian researchers are actually working now to try and discover the best way to present the risks associated with different asset classes. They want to find the presentation format that might lead people to make more consistent decisions.

In an experiment, they gave people nine different types of risk descriptions related to three portfolios that they could invest their super balances in. For example, they provided range descriptions such as "There's a nine in 10 chance of the return being between -14% and 25% each year," and frequency descriptions such as "On average, positive returns occur 14 years out of every 20." When they experimented with presenting the risk associated with the various portfolio choices in several different ways, they found one method was better than others, as they could determine from the participants' choices whether they were making sound decisions. In the risk understanding studies, the range presentations actually resulted in the least number of mistakes as opposed to the return frequency presentations, where you either showed how many negative outcomes there were or how many positive outcomes.

The superannuation fund regulator, the Australian Prudential Regulation Authority (APRA), recently required funds as of the end of June to display to consumers the risk in a consistent format. Interestingly, they are making funds report the frequency of negative returns over a set number of years. So that's counter to the new research that has come out.

However, this movement is acknowledging that how information is presented to plan participants is important and that more work is needed in this area.

DCD: As you think about the U.S. DC system, have you learned things in Australia that you believe may help improve plans?

Agnew: While there are important differences between the two systems, the U.S. and Australia can learn a lot from each other, as both countries are grappling with many of the same issues. Both countries are concerned with low financial literacy and with managing the retirement income risks of investment, inflation, and longevity. If both countries keep an eye on how the systems are changing and how the legislative changes affect people's behavior, then perhaps we can improve both of our systems more rapidly. For instance, Australia has learned a lot from the U.S. about automatic programs. Perhaps the U.S. will gain insights on distribution options, risk presentation, and tax incentives from Australia.

DCD: We can certainly learn more from one another. Thank you for bringing us up to speed on the Australian retirement system.

Agnew: It's been a great adventure studying in Australia. It's a pleasure to share what I've observed.

The U.S. and Australia can learn a lot from each other, as both countries are grappling with many of the same issues.

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As of June 30, 2012 our:

- Clients include more than two-thirds the Fortune 100
- Investment professionals on staff exceed 600
- Global presence includes offices in 12 locations
- Total assets under management exceed \$1.4 trillion
- DC assets under management over \$190 billion

Our PIMCO DC Practice is dedicated to promoting effective DC plan design and innovative retirement solutions. We are among the largest managers of assets in defined contribution plans, offering investment management for stable value, fixed-income, inflation protection, equity and asset allocation strategies such as target-date solutions. We also provide analytic modeling, plus can help plan sponsors identify DC consultant resources. Our team is pleased to support our clients and the broader retirement community by sharing ideas and developments for DC plans in the hopes of fostering a more secure financial future for workers. If you have any questions about the PIMCO DC Practice, please contact your PIMCO representative or email us at pimcodcpractice@pimco.com.

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