

Achieving Retirement Income Adequacy in the Modern Era



Sylvester J. Schieber
Syl.Schieber@gmail.com

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Overview

- The theory of lifecycle income, saving and consumption
- Practical complications in achieving retirement adequacy goals
- Comparing Mexico's situation to other countries
- Implications



Workers' Perspective on Meeting Lifetime Needs

Income during working career

Career start

Retirement age

Death age



Life-Cycle Approach to Consumption and Saving

- Basic considerations
 - Income tends to vary from period-to-period
 - Maintaining a standard of living requires relatively constant consumption levels for basic needs from period-to-period
 - Unexpected contingencies arise periodically and present special consideration
- Mechanisms for meeting consumption needs in context of working and retirement segments of life
 - Save from earnings during the working career to finance consumption during retirement
 - Insure against the unexpected contingencies which have low probability of occurring but high costs when they arise



Workers' Perspective on Meeting Lifetime Needs

**Accumulated saving plus
returns during working career**

**Consumption during
working career**

**Retirement
consumption**

Career start

Retirement age

Death age



How Much Retirement Income Is Needed to Maintain Preretirement Living Standards?

- If savings are adequate while working, then no longer need to save in retirement
- Taxes in most countries tend to be lower in retirement than when working
- Work-related expenses are eliminated
- There may be special consumption needs associated with old age
- Estimates of required replacement range from 70 to 90 percent of preretirement earnings to maintain the preretirement living standard



Workers' Perspective on Meeting Lifetime Needs

Social insurance contributions	
Accumulated saving	
Consumption during working career	Other savings or cash sources
	Employer pensions
	Mandated social insurance benefit

Career start

Retirement age

Death age



The Challenges for Accruing Adequate Retirement Resources

- Many workers do not participate in the government mandated element of the system
 - 38 percent of those employed contributed in 2010
 - 50 percent of salaried workers contributed
- Elderly receiving benefits is not random
 - 20 percent of those with primary education benefit
 - 45 percent with secondary education benefit
 - 60 percent with higher education benefit

(Villagomez, F. Alejandro, and Gabriel Dario Ramirez, 2015, "Mexico," in Rofman, Rafael, Ignacio Apella and Evelyn Vezza, eds., *Beyond Contributory Pensions: Fourteen Experiences with Coverage Expansion in Latin America* (Washington, DC: World Bank), pp. 259-291.)



Gross Pension Replacement Rates Provided through Mandatory Pillar of National Retirement Systems

	Career earnings as a multiple of mean earnings levels		
	0.5	1.0	1.5
Mexico	35.0%	25.5%	24.2%
Canada	50.1	36.7	25.1
United States	44.4	35.2	29.1

Estimates are for young workers beginning career employment in 2015 under existing systems at the end of 2014.

Source: OECD, *Pensions at a Glance*, 2015.

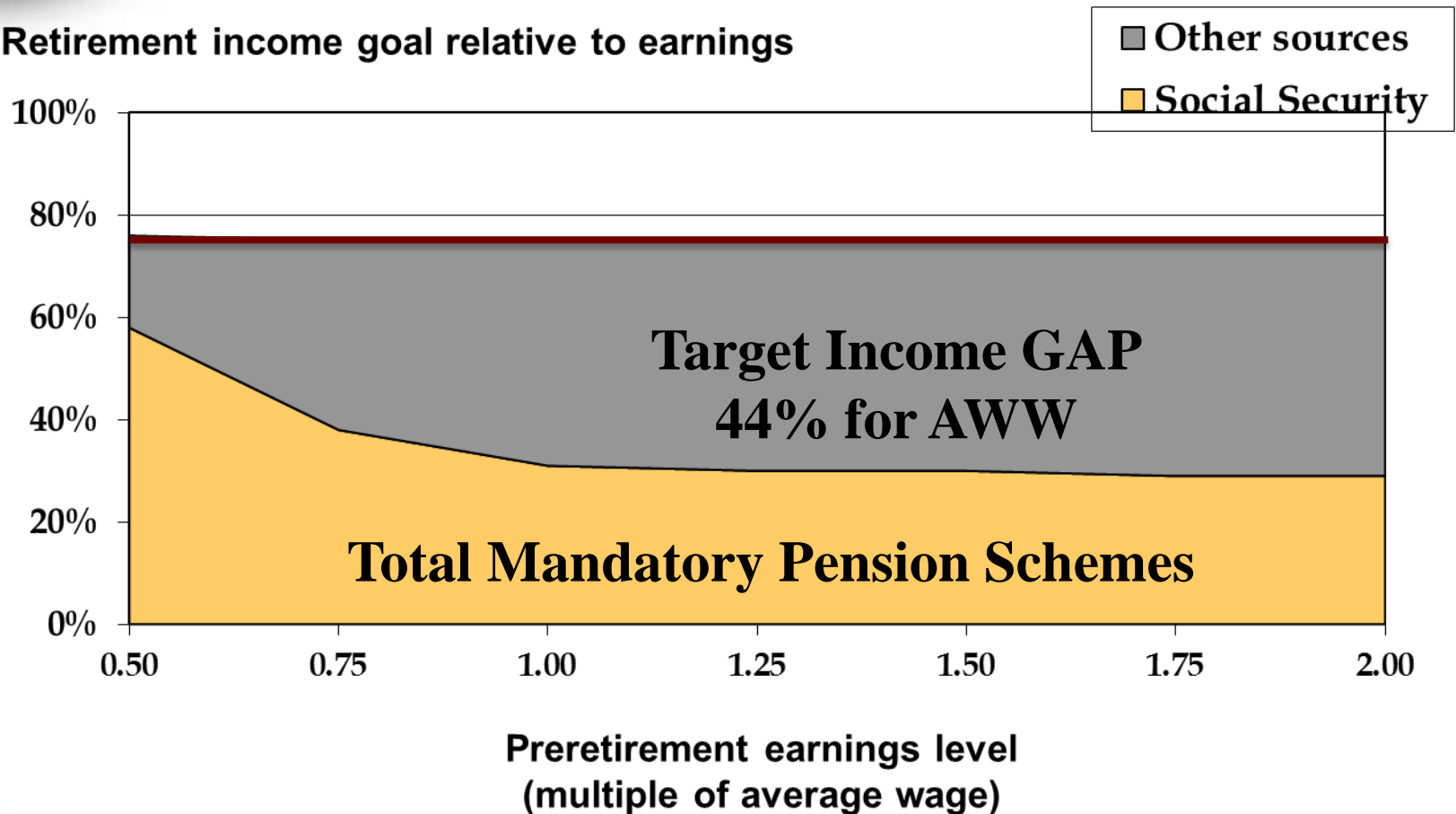
Gross Pension Replacement Rates Provided through Mandatory Pillar

	Career earnings as a multiple of mean earnings levels		
	0.5	1.0	1.5
Mexico	35.0%	25.5%	24.2%
Argentina	81.8	71.6	68.3
Brazil	97.5	69.5	62.5
Chile	39.4	32.8	32.9
Australia	79.3	44.5	32.9
United Kingdom	13.3	21.6	14.4

Source: OECD, *Pensions at a Glance*, 2015.

The Retirement Income Picture In Mexico

Retirement income goal relative to earnings



Source: OECD, Pensions at a Glance: Pension Calculator.

<http://www.oecd.org/els/socialpoliciesanddata/pensionsataglancepensioncalculator.htm>

Occupational plans play a key role

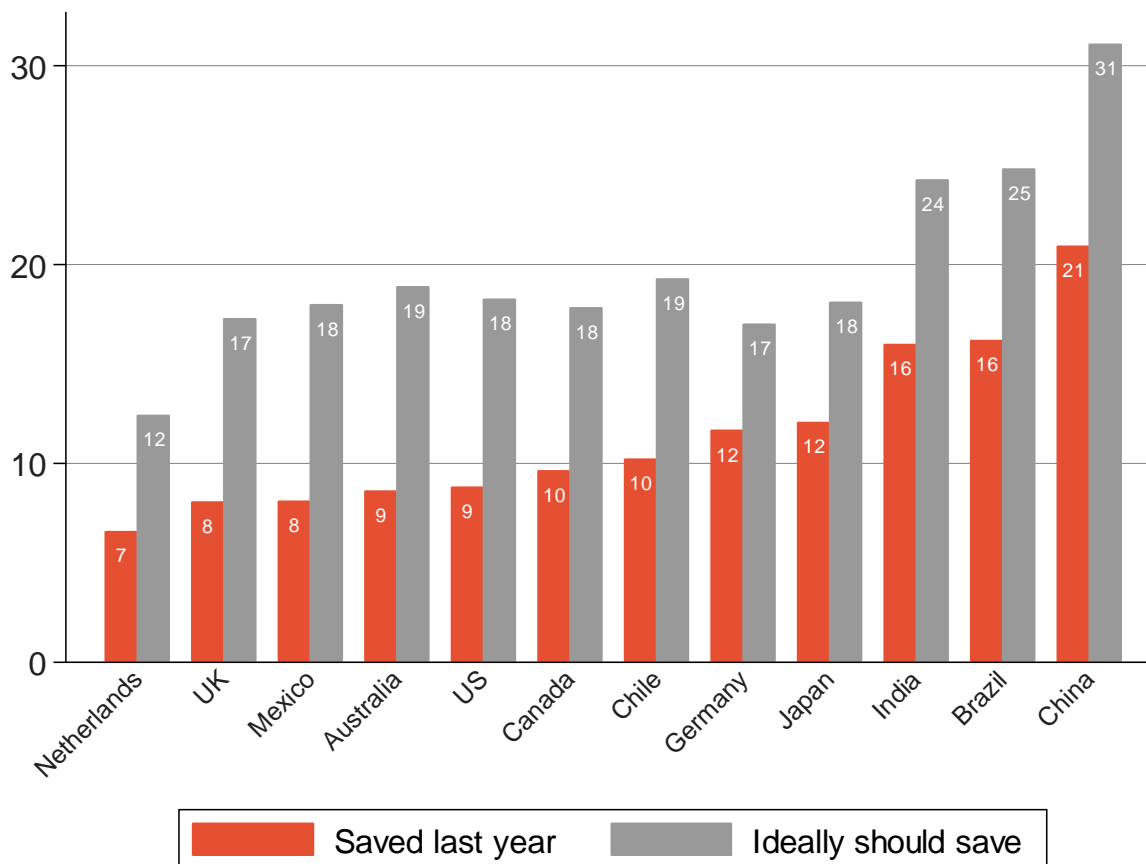
What do you think are likely to be the most important sources of income for you during your retirement? Top two sources

Brazil China Germany Japan	1st	2nd	India	1st	2nd
	Social security	Retirement plan		Retirement plan	Other savings
Australia Canada Mexico Netherlands UK US	1st	2nd	Chile	1st	2nd
	Retirement plan	Social security		Retirement plan	Working in old age

Source: Willis Towers Watson's 2013/14 Global Benefits Attitudes Survey.
 Based on employees enrolled in a retirement plan.

Employees recognize the need to save more ... but how easy is it to do so?

Considering all your savings (in total including any retirement savings) how much of your income do you think you saved last year? And what should you ideally save?



Squeezed middle saving lowest for ages 40 to 49

Australia, Brazil, Canada, Mexico, UK, US

Young saving more

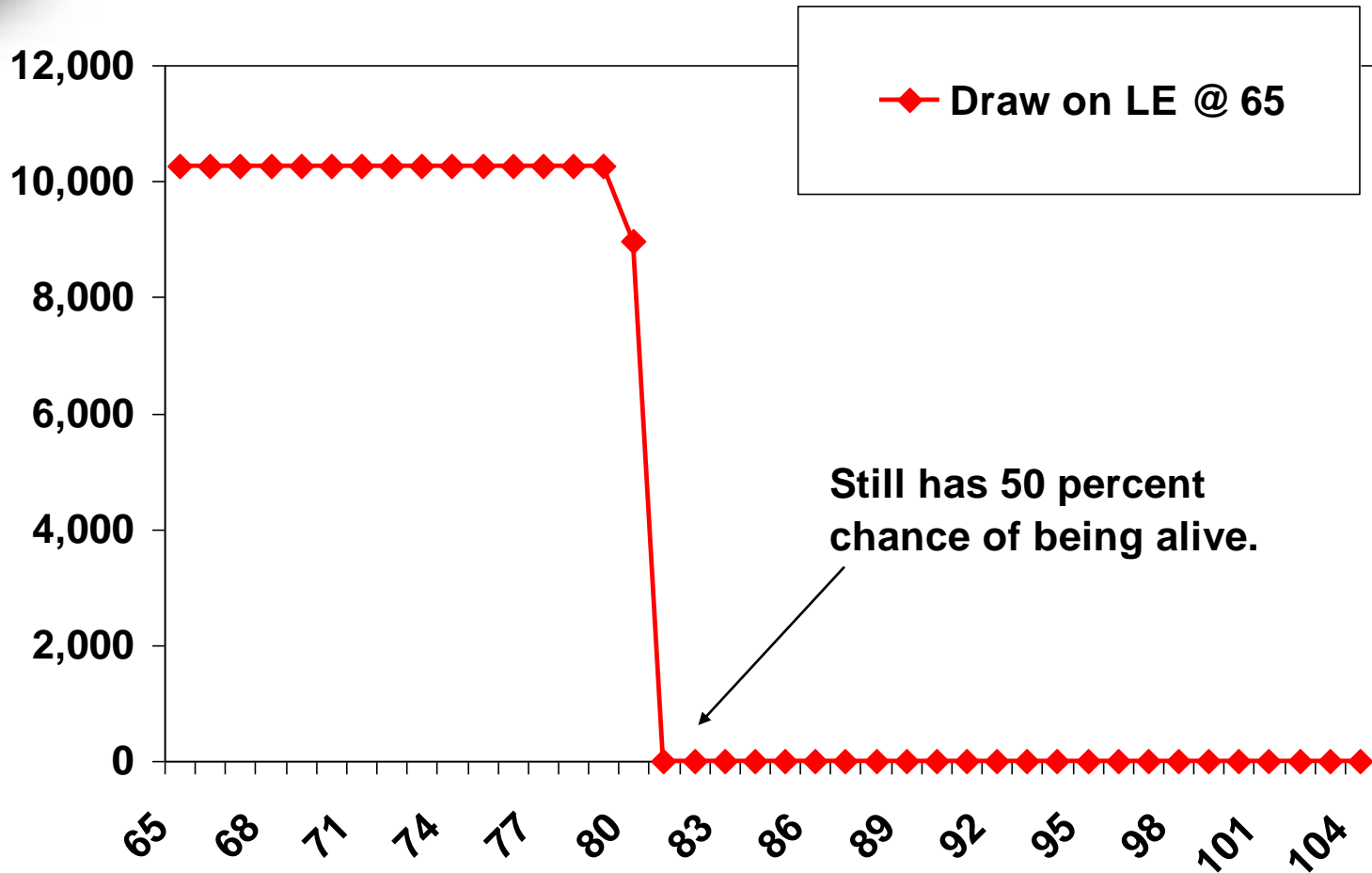
Germany, Japan, Netherlands



The Implications of the Worldwide Shift toward Defined Contribution Plans

- For systems where participation is not mandated
 - Participation tends to be lower for lower paid workers
 - Those with less education/financial capability find the process daunting
 - When to save
 - How much to save
 - How to save as much as necessary
 - What to do with the accumulating assets
 - How to secure retirement assets for retirement
- The challenges of retirement exceed those of the accumulation period

Alternative Benefit Paths for 65-Year-Old Male with Mex\$100,000 with 7 Percent Returns



Retirement Lengths for Singles (Mexico)

Table 1. Remaining Life Expectancies of Retirement Age Singles

Age	Men		Women	
62	24.41	(37)	28.81	(36)
63	23.72	(36)	27.90	(35)
64	23.03	(35)	26.99	(34)
65	22.74	(34)	26.29	(33)
66	22.06	(33)	25.38	(32)
67	21.40	(32)	24.48	(31)
68	20.74	(31)	23.58	(30)
69	20.09	(30)	22.68	(29)
70	20.04	(29)	22.15	(28)

Note: numbers in parenthesis represents 90th percentile outcomes

Source: INEGI Number of deaths according to marital status 2014 and Mortality Table, EMSSA 2009.

Retirement Lengths for Couples (Mexico)

Table 2. Life Expectancies of Retirement Age Married Couples

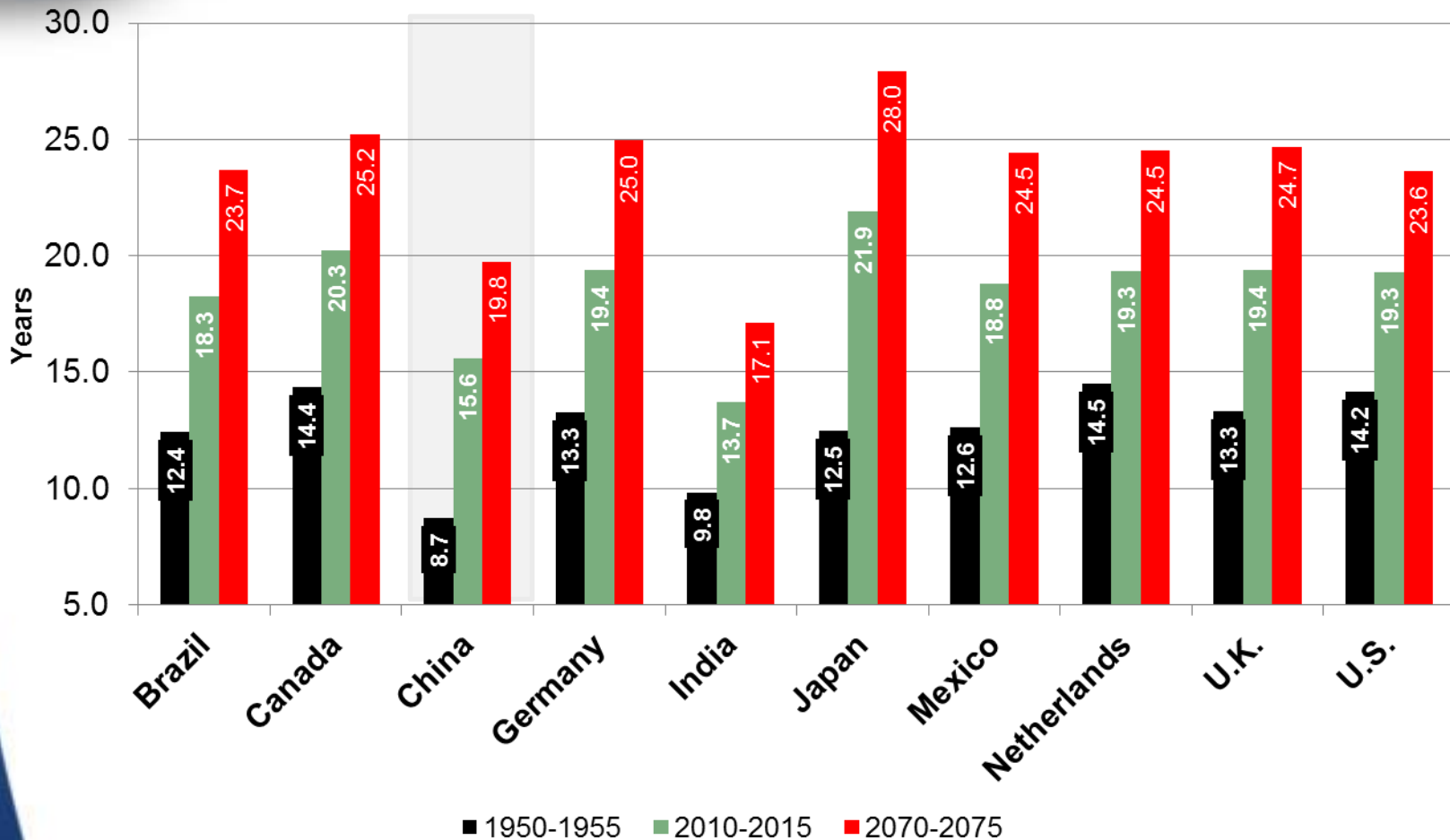
Age of husband	Age of wife	Expected years to first death		Expected years to second death		Expected length of widowhood
62	60	22.86	(32)	27.70	(34)	4.84
63	61	22.15	(31)	26.77	(33)	4.62
64	62	21.44	(30)	25.85	(32)	4.40
65	63	20.70	(29)	24.93	(31)	4.23
66	64	20.01	(28)	24.01	(30)	4.00
67	65	19.33	(27)	23.05	(29)	3.72
68	66	18.66	(26)	22.14	(28)	3.48
69	67	18.00	(25)	21.24	(27)	3.24
70	68	17.27	(24)	20.34	(26)	3.07

Note: numbers in parenthesis represents 90th percentile outcomes

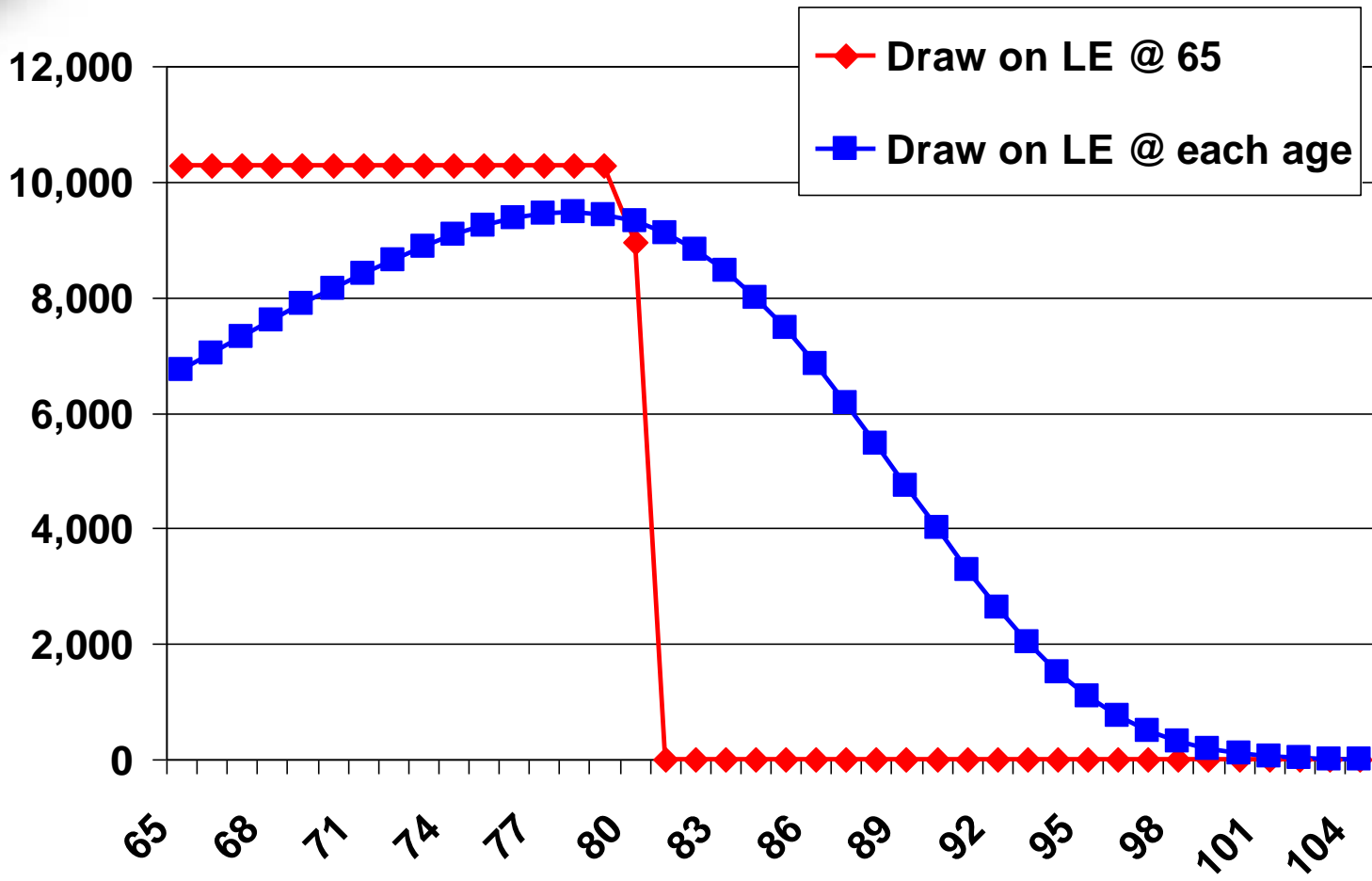
Source: INEGI Number of deaths according to marital status 2014 and Mortality Table, EMSSA 2009.

Increased life expectancy

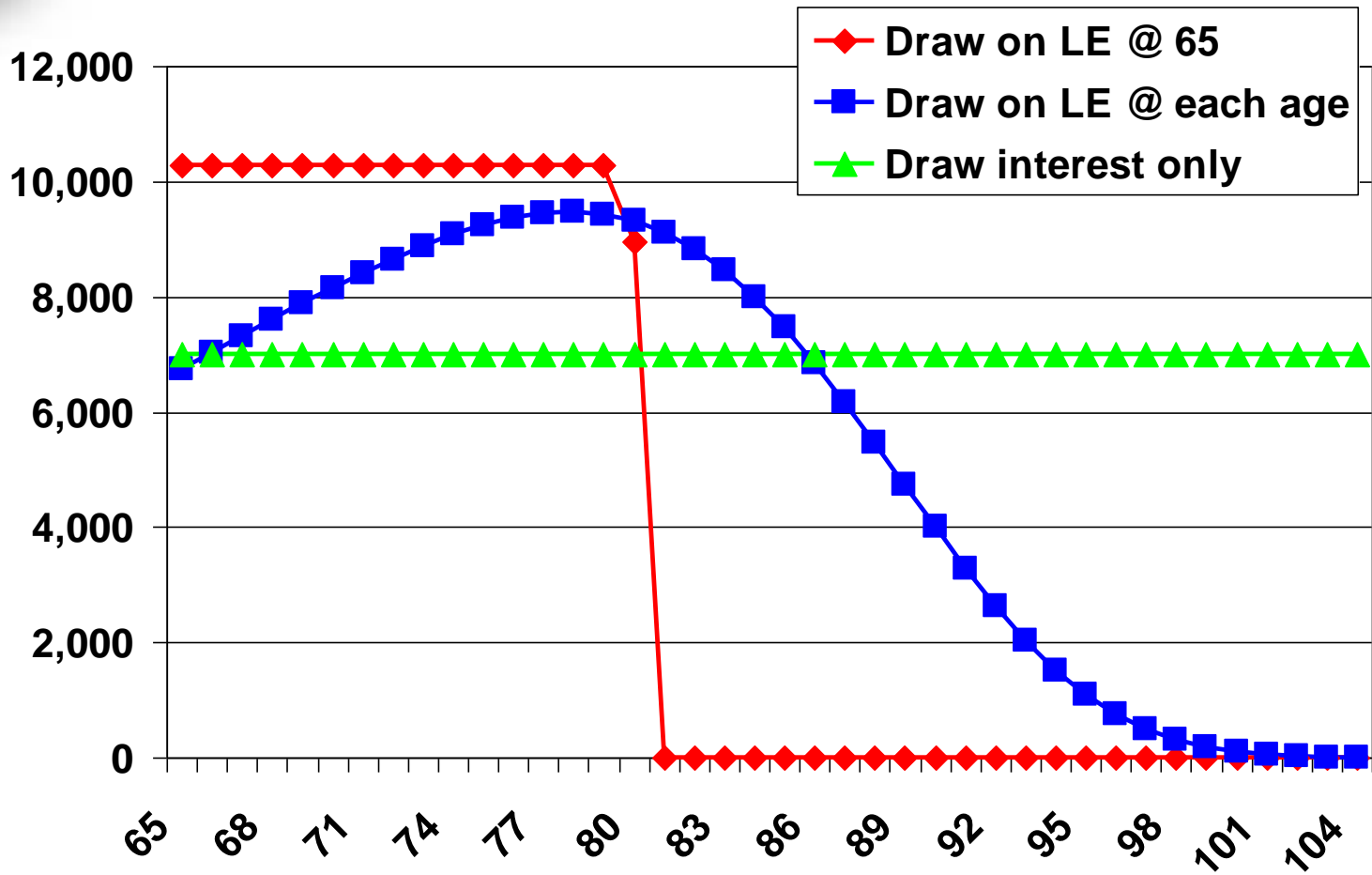
Life expectancy at age 65



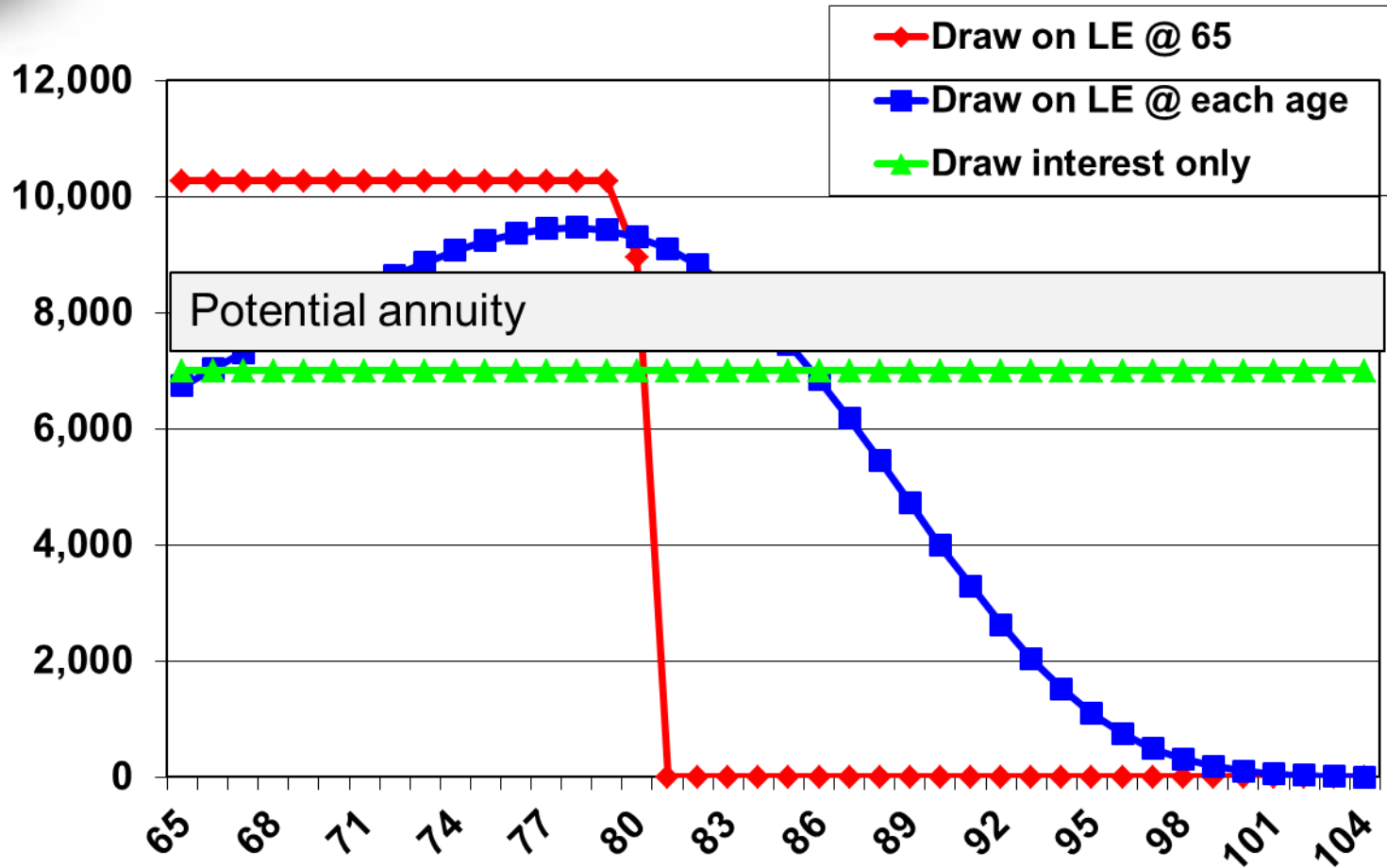
Alternative Benefit Paths for 65-Year-Old Male with Mex\$100,000 with 7 Percent Returns



Alternative Benefit Paths for 65-Year-Old Male with Mex\$100,000 with 7 Percent Returns



Alternative Benefit Paths for 65-Year-Old Male with Mex\$100,000 with 7 Percent Returns



Retirement security in focus

Retirement security has become a more important issue for me over the last two or three years

47%

Australia

58%

Brazil

57%

Canada

54%

Chile

46%

China

53%

Germany

66%

India

29%

Japan

51%

Mexico

41%

Netherlands

46%

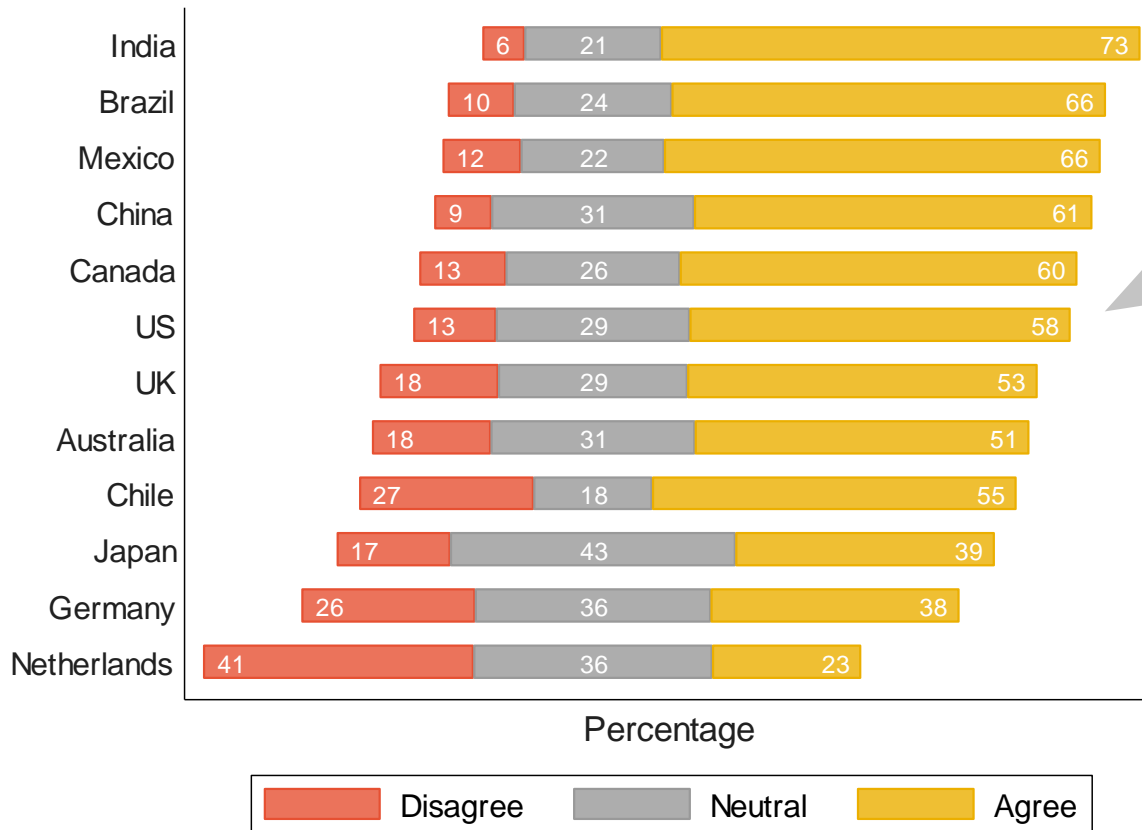
UK

56%

US

Large numbers willing to pay for retirement benefits

I would be willing to pay a higher amount out of my pay each month for a larger, more generous retirement benefit

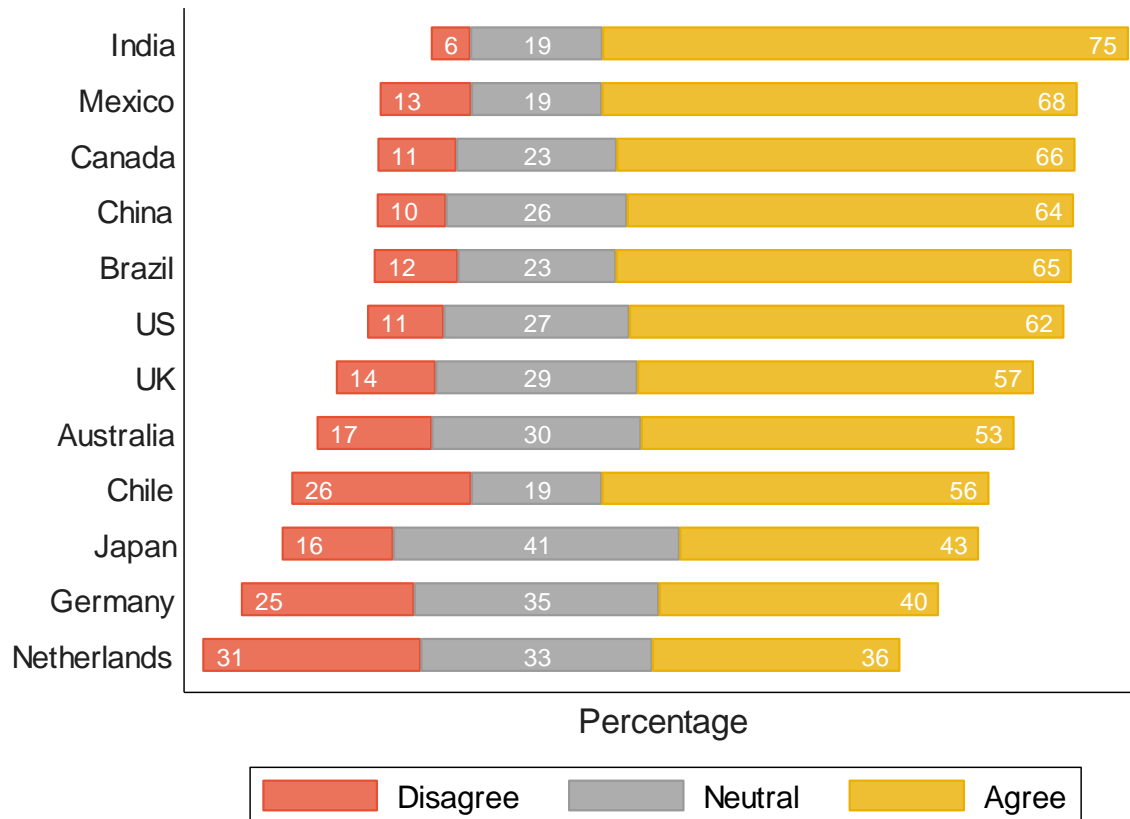


High income salary employees more likely to report a desire for generous retirement benefits

Source: Willis Towers Watson's 2013/14 Global Benefits Attitudes Survey. Based on employees enrolled in a retirement plan.

Large numbers willing to pay for retirement guarantees

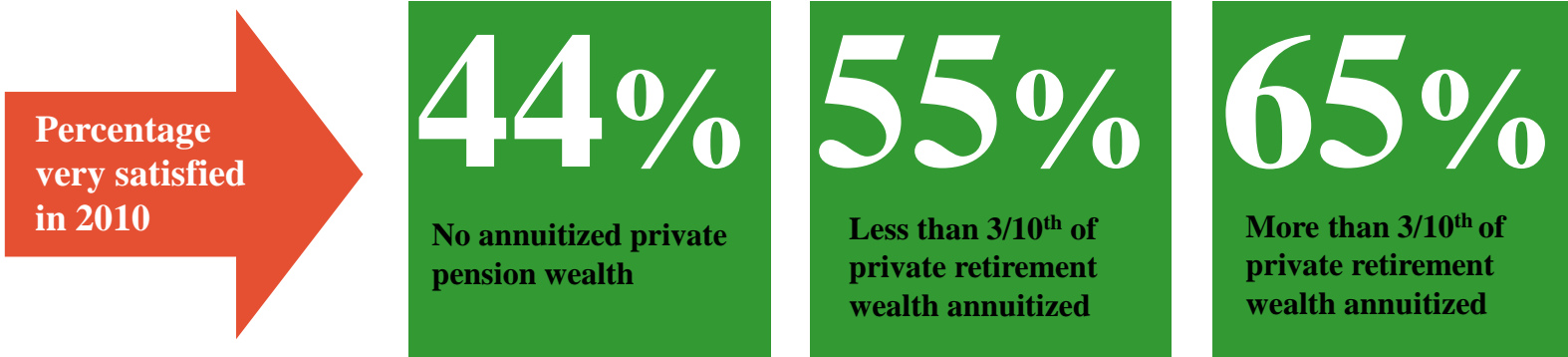
I would be willing to pay a higher amount out of my pay each month to ensure I have a guaranteed retirement benefit



Source: Willis Towers Watson's 2013/14 Global Benefits Attitudes Survey.
Based on employees enrolled in a retirement plan.

Annuities boost retiree satisfaction...

All in all would you say that your retirement has turned out to be very satisfying, moderately satisfying or not satisfying at all?



Nyce and Quade (2012)

Satisfaction for those with annuities persists

Satisfaction rates 10 years into retirement **grow by 3%** for those who enter retirement with **some annuity income** but **drop by 11%** for those with **no annuity income**

Panis (2003)



General Observations

- The retrenchment of national pension systems
 - The reductions in pension generosity puts greater responsibility on other forms of retirement saving
 - The shift toward defined contribution systems places greater responsibility on workers
 - The shift toward lump sum distributions places greater burden on retirees often not capable of making necessary decisions
- The shift to supplemental defined contribution plans is exacerbating the national pension shifts
- Workers' appetite for more security appears to be increasing
- Challenge for retirement plan designers is to reconcile these diverging trends in retirement security plans



Questions and Comments

