

Life Insurance and Pension Systems Research in China

Pacific Rim Actuaries Club of Toronto

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SOA Overview

- 25,000 members worldwide
- Focus on Actuarial Education and Research across current and growing practice areas:

Life / Annuity	Predictive Modeling & Analytics
Retirement / Pension	Climate Risk / Catastrophe
Finance / Investment	Socially Relevant Research
Health	Insurance Regulation Research
Risk Management	Post-Retirement Risks
Property / Casualty	Academic Knowledge Extension

- <https://www.soa.org/research/research-projects/default.aspx>

SOA Research Areas

- Experience Studies
 - Wide variety of life, health and retirement products across broad contingencies
- Practice Area Research
 - 10 volunteer committees focusing on forward looking research for the profession
- Data-Driven In-House Research
 - Internal staff focusing continuously on US Retirement, US Healthcare and CN Retirement

Growing Research Partnerships

- History of successful research partnerships that build on strengths of data access and research capability
- Tangible, helpful research output that greatly benefits SOA members, partnering association members / stakeholders and the public
- CIA: Canadian Retirement, Insurer Impairment / Insolvency, Flood Insurance
- Human Mortality Database

The Middle Market for Life Insurance in China



Background on China Market

- Traditionally, most life insurance are savings-oriented
 - Limited investment vehicles for individual investors
 - Would like to have tangible paybacks
 - Protection products hard to share experience with friends/relatives
 - Influence by distribution channels
- The life insurance business is changing
 - Emergence of protection products
 - Expansion of distribution channels
- International Section / Marketing and Distribution Section / Research Expanding Boundaries Pool

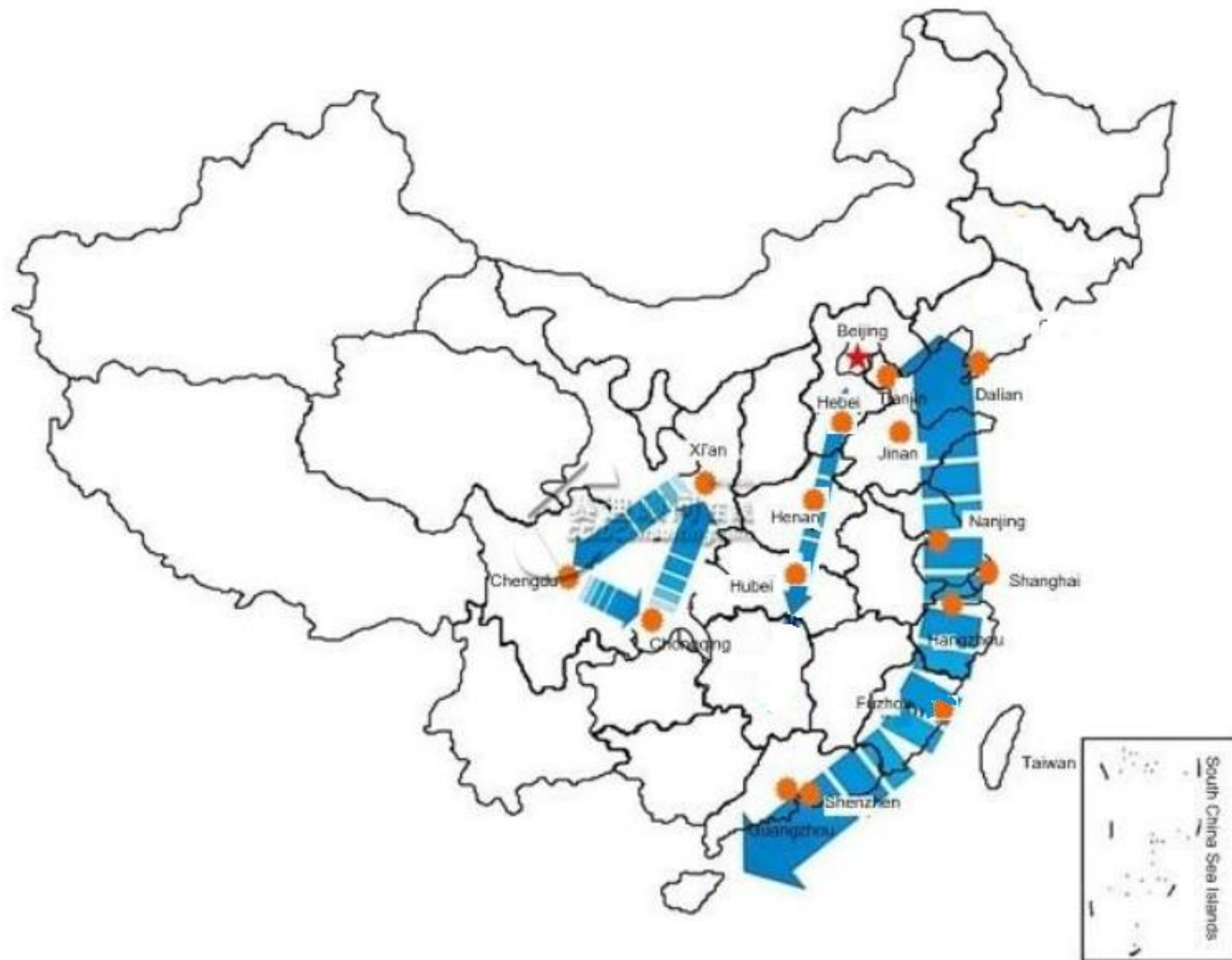
A "First of Its Kind" study in China

- Target young middle class customers
- Focus on death benefit life insurance
- Most life insurance market research a summarization the census data; Simpler segmentation employing demographics and/or life stage characteristics.
- Attitudinal and behavioral segmentation approach by using clustering analysis

Methodology

- 1,989 completed surveys across 16 cities
- 18 minute, online questionnaire
- Families selected for the study were:
 - Married couples
 - Age 25 – 50
 - At least one child, age 0 – 18
 - Annual household income between RMB 60,000 and RMB 360,000 (Roughly 10,000–60,000 USD)
- Data collected between December 6-15, 2013

Methodology



Knowledge Ownership Attitudes

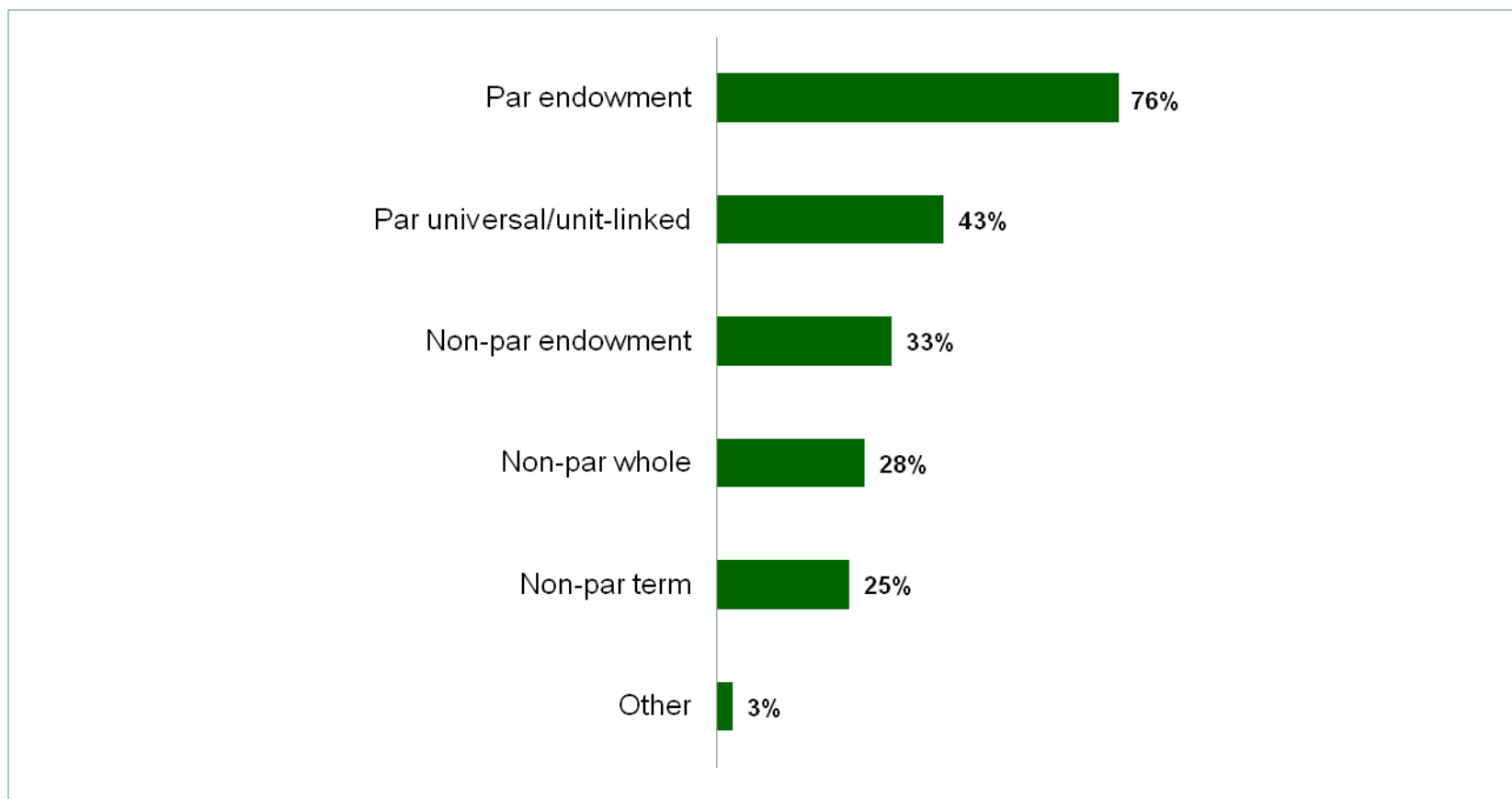


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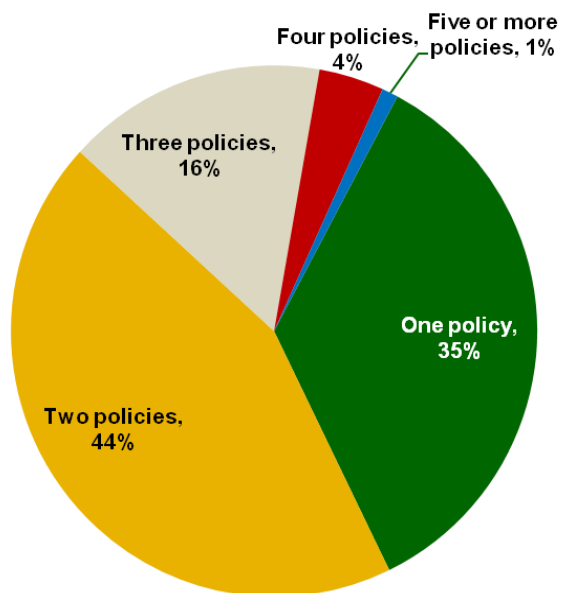
Par endowments are the most commonly-held products among consumers with individual life policies.

What type(s) of life insurance do you and your spouse have that you purchased on your own?

(Individual life insurance owners n=1,437)

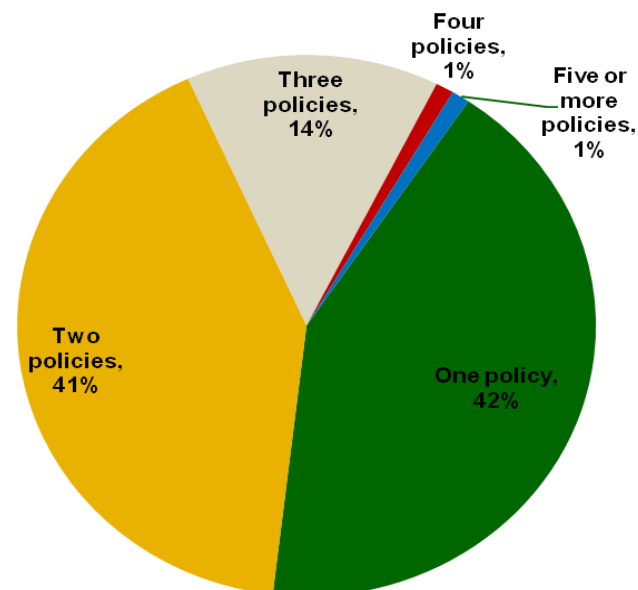


Endowment vs. death benefit life insurance ownership



How many life insurance endowment policies do you currently own?

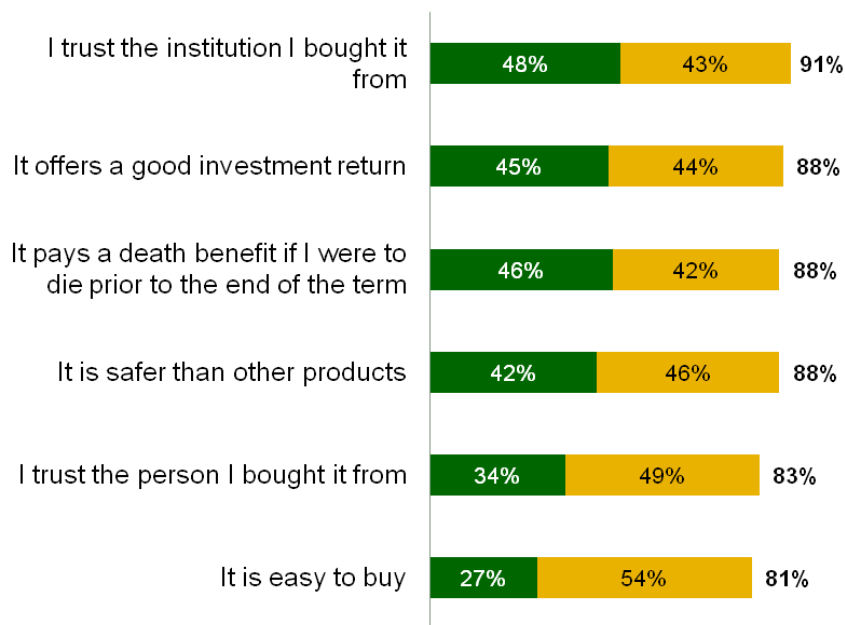
(Endowment owners n=1,237)



How many life insurance policies do you currently own other than life insurance endowment policies?

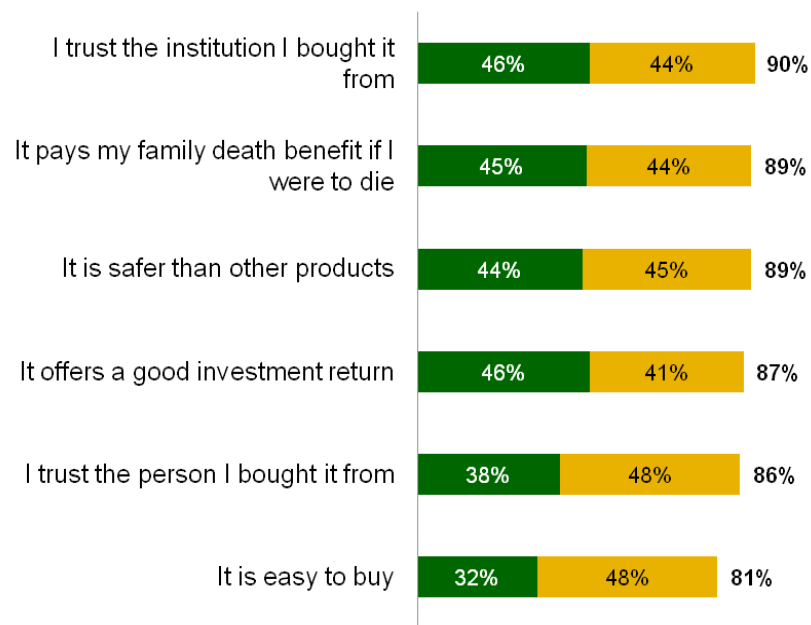
(Death benefit policy owners n=933)

Endowment vs. death benefit life insurance (2)



■ Very important ■ Somewhat important

How important is each of the following reasons for you to purchase endowment life insurance?
(Endowment owners n=1,237)



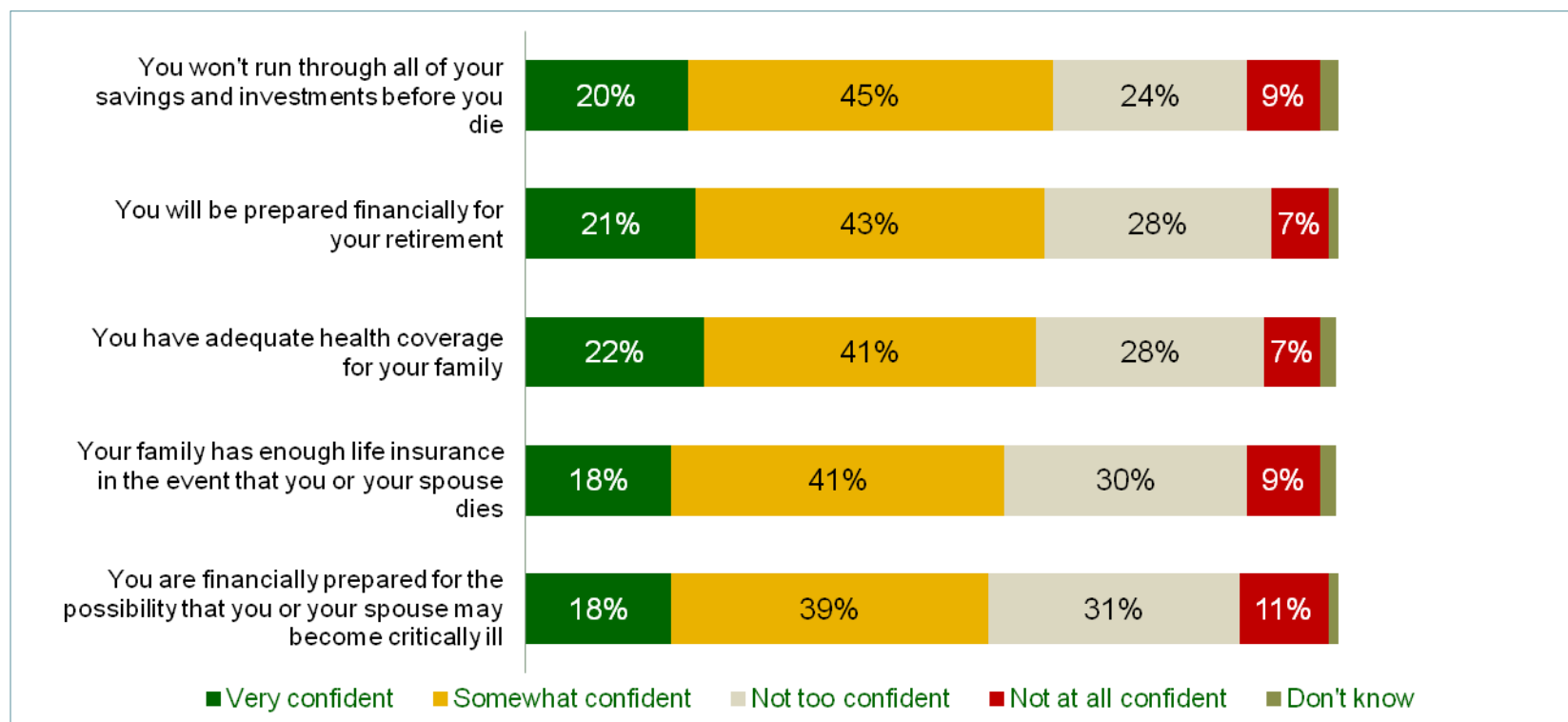
■ Very important ■ Somewhat important

How important is each of the following reasons for you to purchase death benefit life insurance?
(Death benefit owners n=931)

More than half are at least somewhat confident about retirement planning and insurance coverage for their families.

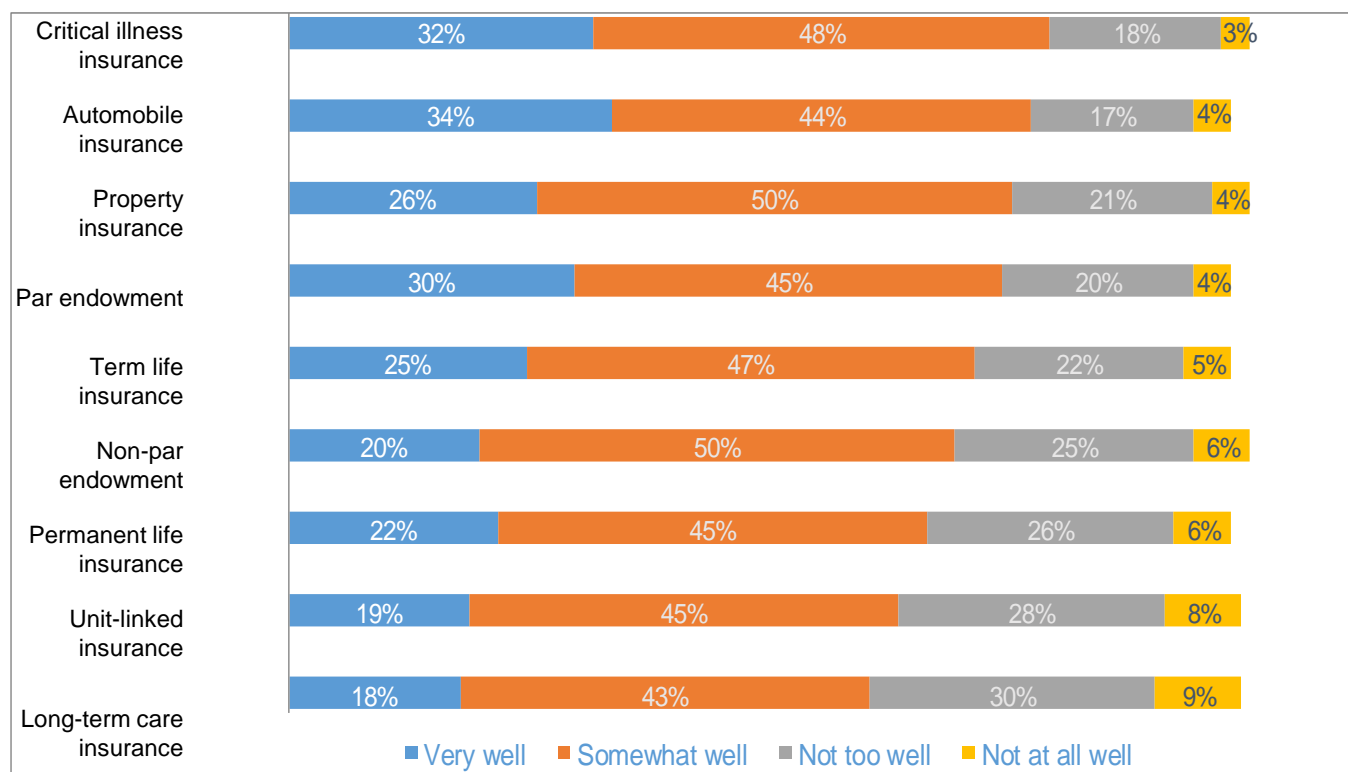
How confident are you about the following aspects related to your finances?

(Total n=1,989)



Generally high levels of knowledge about life insurance

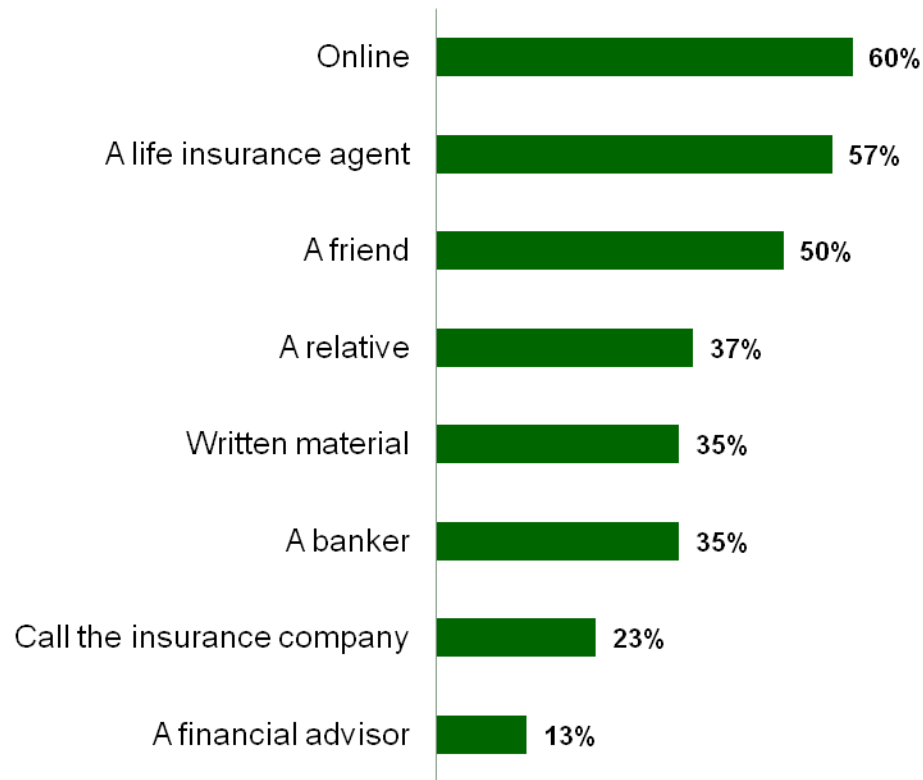
How well would you say you understand each of the following types of insurance?



Chinese consumers are most apt to rely on the internet or an agent for information on life insurance. They are also likely to rely on friends.

Where would you go to get information regarding life insurance products and costs?

(Total n=1,989)



Market Segmentation



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Segmentation process

Using K-Means clustering, this study found a set of segments in the data that can help the industry better understand and target the middle market in China.

K-means clustering --- “k-means clustering aims to partition n observations into k clusters in which each observation belongs to the cluster with the nearest mean, serving as a prototype of the cluster.”

Great examples: Code with R, Youtube tutorials

Segmentation process

The variables that produced the most distinct, actionable set of segments were:

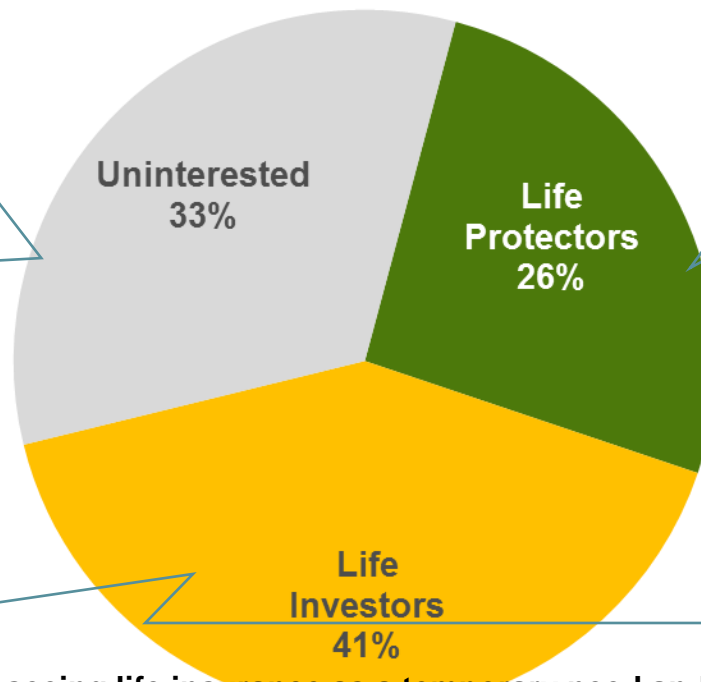
- Q39b - Life insurance serves only a temporary need until such time as the kids leave the house or the mortgage is paid off (agree or disagree)*
- Q39g - There is little need for death benefit life insurance past age 55 or so (agree or disagree)*
- Q39h - You would rather buy permanent death benefit life insurance that lasts a lifetime, even if it costs more (agree or disagree)*
- Q39i - At your age, it is more important to put money toward retirement savings than death benefit life insurance (agree or disagree)*
- Q39j - Everyone with someone depending on their income should have some form of death benefit life insurance (agree or disagree)*
- Q39m - I am likely to consider purchasing a death benefit life insurance policy to protect my family (agree or disagree)*
- Q39n - The purpose of death benefit life insurance is to provide for one's family in the event of a parent's premature death (agree or disagree)*
- Q39o - Life insurance companies are financially more secure than other financial institutions (agree or disagree)*

Through an iterative process, each respondent was assigned to the segment whose mean values for these variables most closely matched the respondent's own answers.

Three segments of middle market life insurance consumers in China

Total Respondent Breakdown by Segment
(Total n=1,989)

- Lower interested in the death benefit life insurance and a diminished belief in the premise that everyone with financial dependents should have life insurance.



- Formed based on appreciating the value of life insurance and its role throughout life.
- Most likely to consider owning a death benefit life insurance policy very important.

- Formed based on seeing life insurance as a temporary need and viewing retirement savings as more important than life insurance.

Snapshots of the three segments

“Uninterested” (33%)

- Least concerned with family’s financial security
- Lowest interest and belief in life insurance
- Much less likely to own any type of life insurance
- Lowest level of financial product knowledge
- Lower income; less educated

Snapshots of the three segments

“Life Investors” (41%)

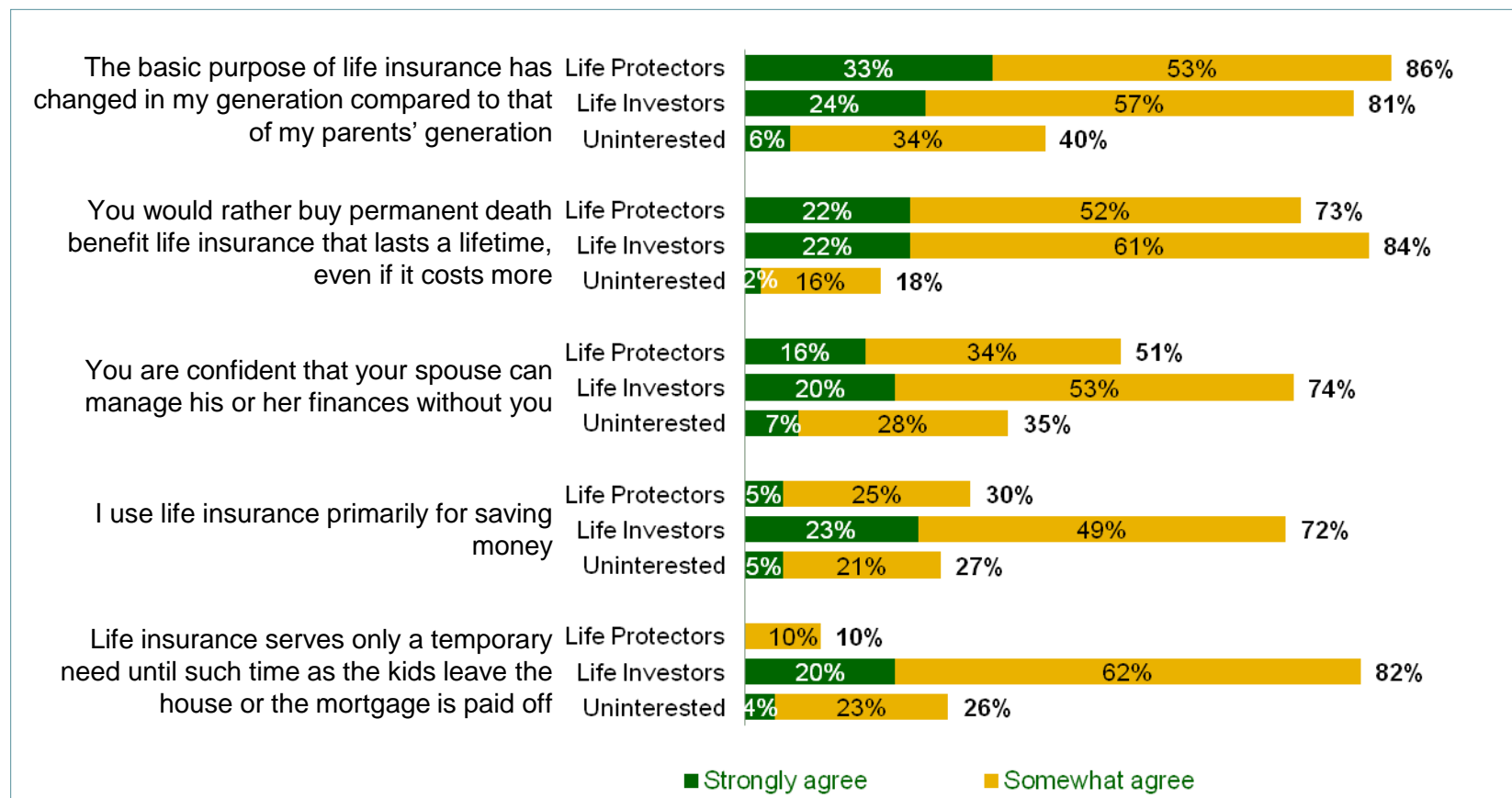
- Own more endowment and death benefit policies than the other segments
- Less likely to see life insurance as a part of their life-long planning
- Have a broad view of life insurance, but more for “temporary” needs
 - To borrow against
 - Business purposes
 - Pay for a child’s education
- Most likely to buy life insurance as a savings vehicle
- Demographically between the other two segments; more likely male

Snapshots of the three segments

“Life Protectors” (26%)

- Most appreciation for the value of life insurance throughout one’s lifetime
- Most likely to buy for security, peace of mind
- Most oriented toward the concept of death protection
- Also own endowments; have an expanded view of life insurance
- Oldest; best educated; more likely female

Life Investors are most likely to use life insurance primarily for saving money and to think it serves only a temporary need. Accordingly, they are also most confident that their spouses can manage financially without them.



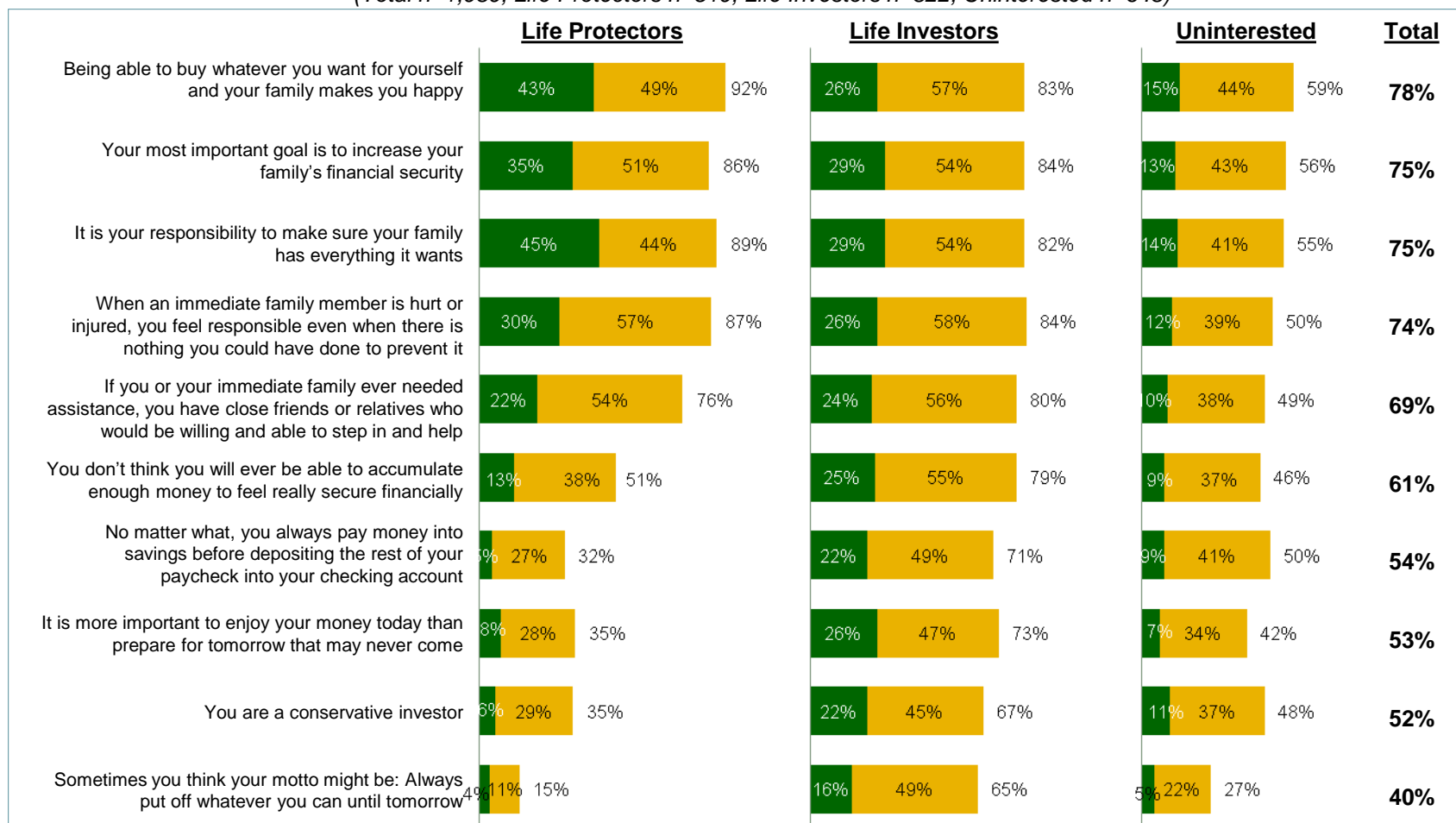
Please indicate how much you agree or disagree with each of the following statements:

(Life Protectors n=519; Life Investors n=822; Uninterested n=648)

Life Protectors prioritize financial security for their families, while Life Investors are more today-oriented.

Please indicate how much you agree or disagree with each of the following statements:

(Total n=1,989; Life Protectors n=519; Life Investors n=822; Uninterested n=648)



■ Strongly agree ■ Somewhat agree

Life Investors are most likely to have coverage through work or purchased on their own through a bank, while Life Protectors are most likely to purchase through an agent

Are either you or your spouse covered by one or more life insurance policies that were...

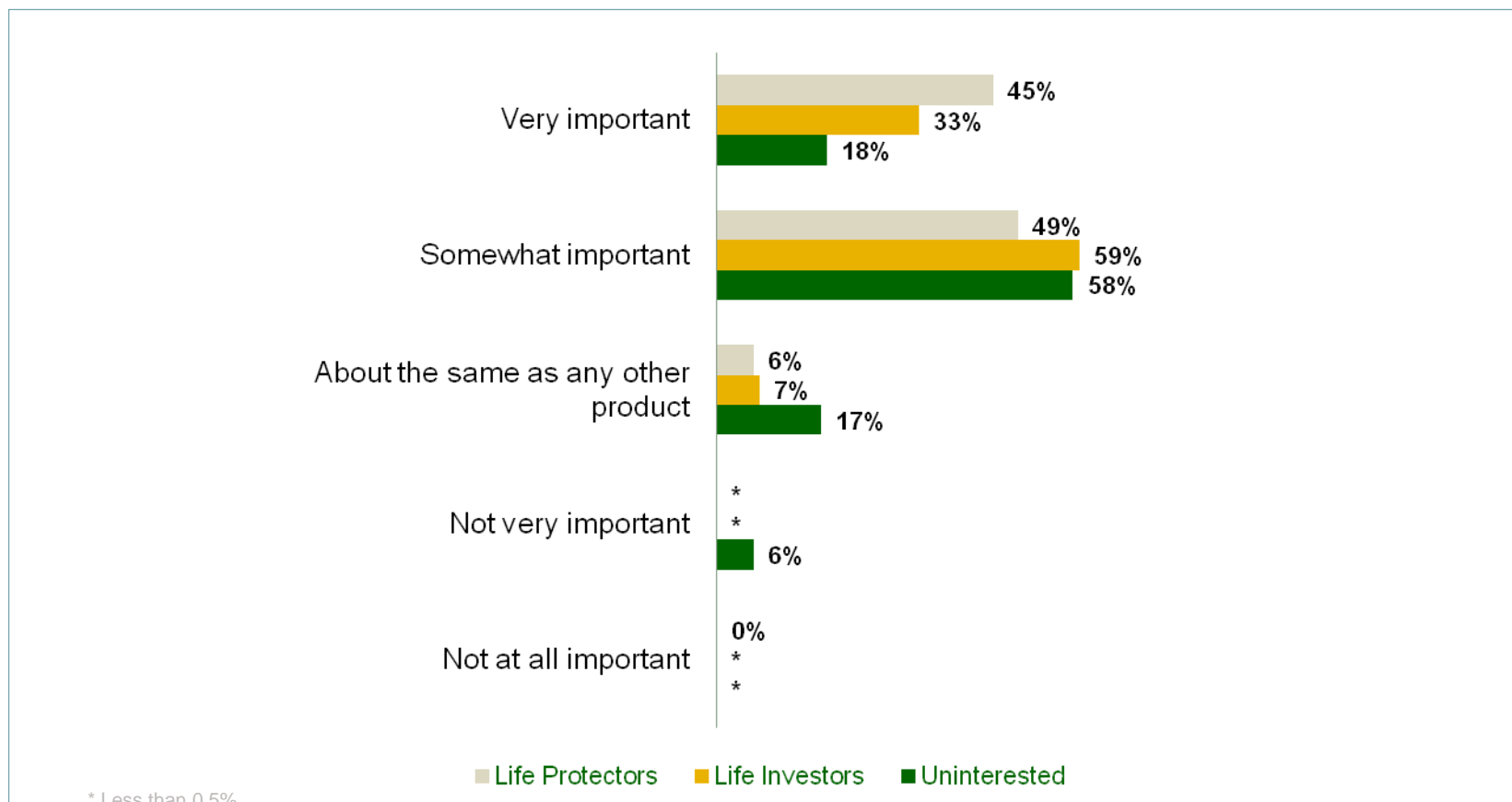
(Life Protectors n=519; Life Investors n=822; Uninterested n=648)



Life Protectors feel most strongly about the importance of owning death benefit life insurance

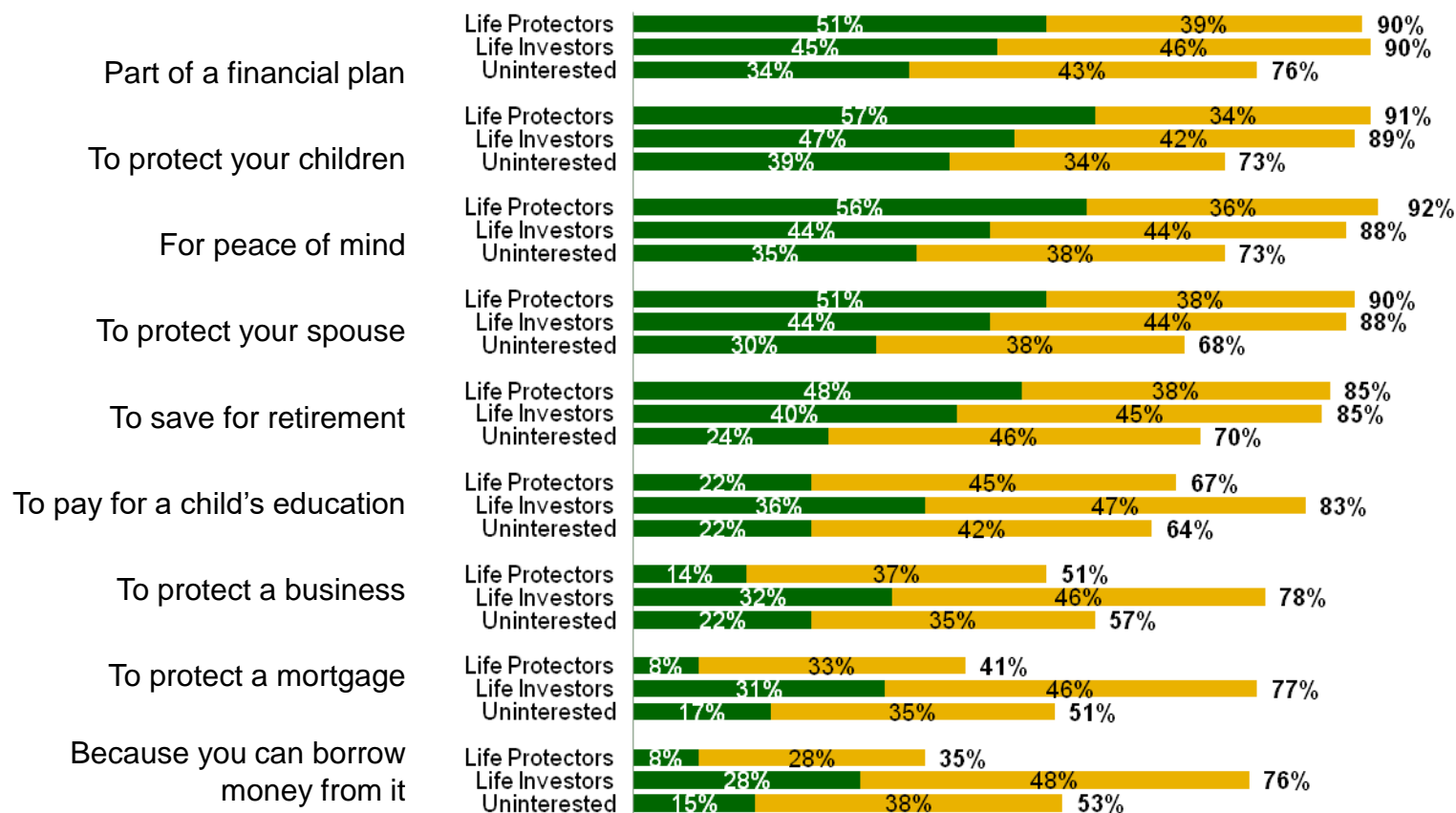
Relative to other financial products available to you, how important is it to have a death benefit life insurance policy?

(Death benefit owners: Life Protectors n=298; Life Investors n=433; Uninterested n=202)



While Life Investors are most likely to attribute their life insurance ownership to a financial plan, Life Protectors are highly concerned with protecting family members and enhancing peace of mind

To what extent are each of the following reasons why you own life insurance?
(Individual life insurance owners: Life Protectors n=440; Life Investors n=577; Uninterested n=357)

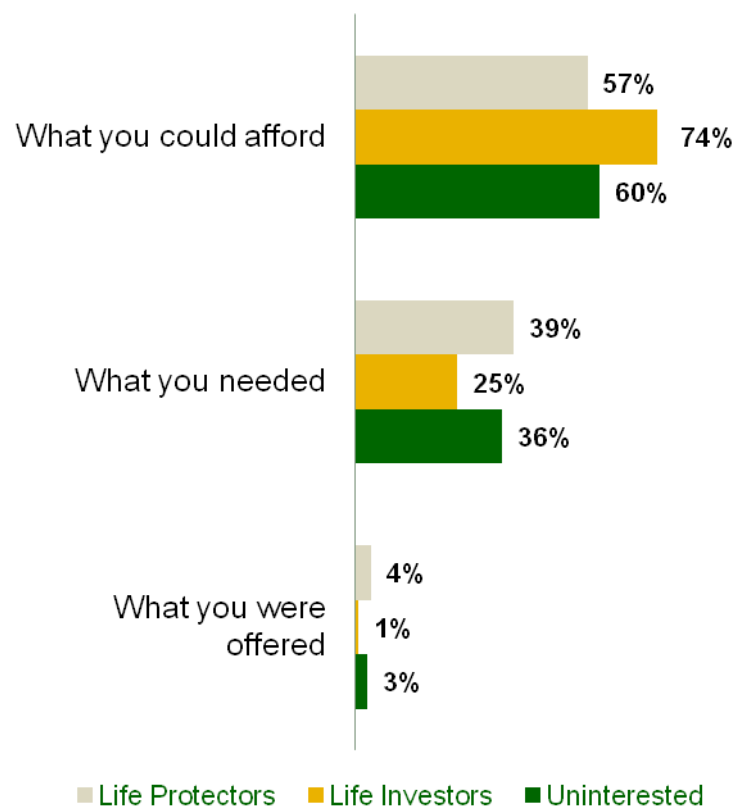


■ Major reason ■ Minor reason

Life Investors are most likely to purchase based on affordability

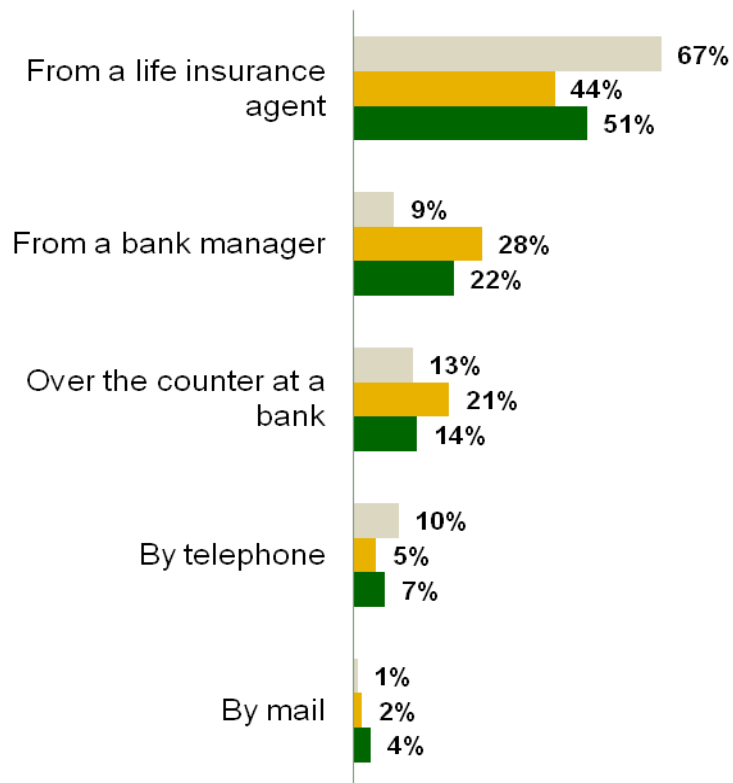
Thinking about the last time you purchased life insurance, was the amount you purchased based primarily on...

(Individual life insurance owners: Life Protectors n=448; Life Investors n=585; Uninterested n=404)



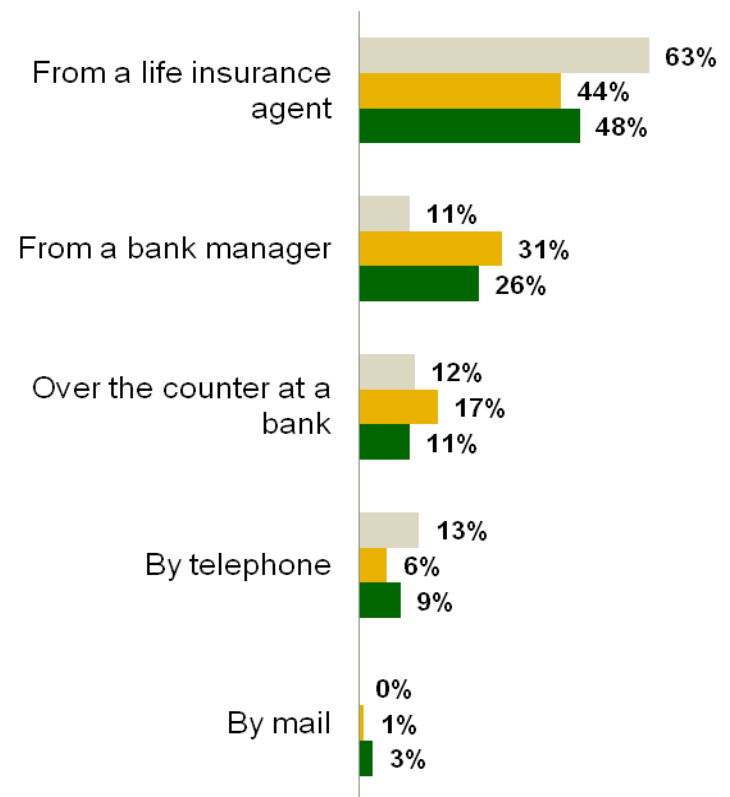
Life Investors are more likely than Life Protectors to buy insurance at bank. Life Protectors often consult a life insurance agent

How did you purchase the most recent life insurance endowment policy you bought?



■ Life Protectors ■ Life Investors ■ Uninterested

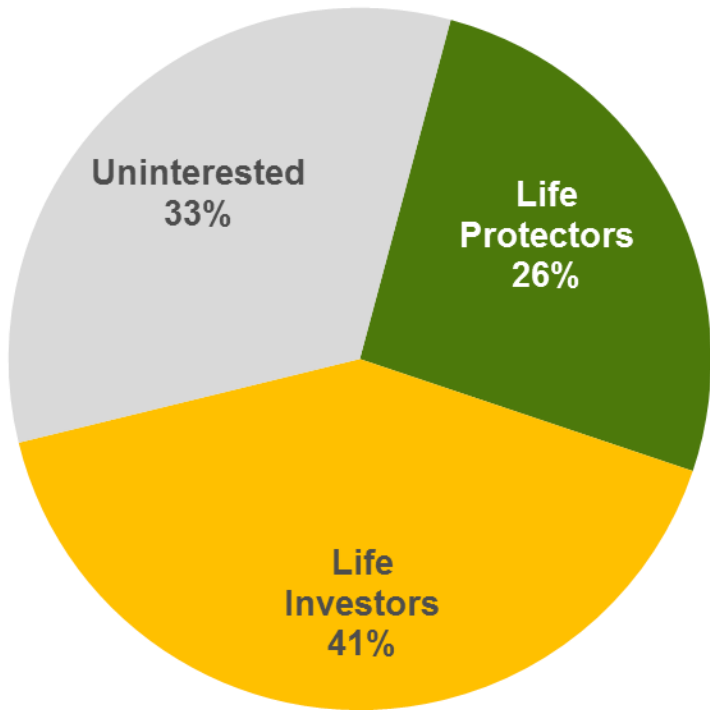
How did you purchase your most recent death benefit life insurance policy?



■ Life Protectors ■ Life Investors ■ Uninterested

Report usage

Total Respondent Breakdown by Segment
(Total n=1,989)



- Optimizing marketing / distribution focus
- Differentiation in product design
- Spur additional segmentation within segments

<http://www.soa.org/Files/Research/Projects/research-2014-changing-middle-market-white.pdf>

Retirement Risks and Opportunities in China

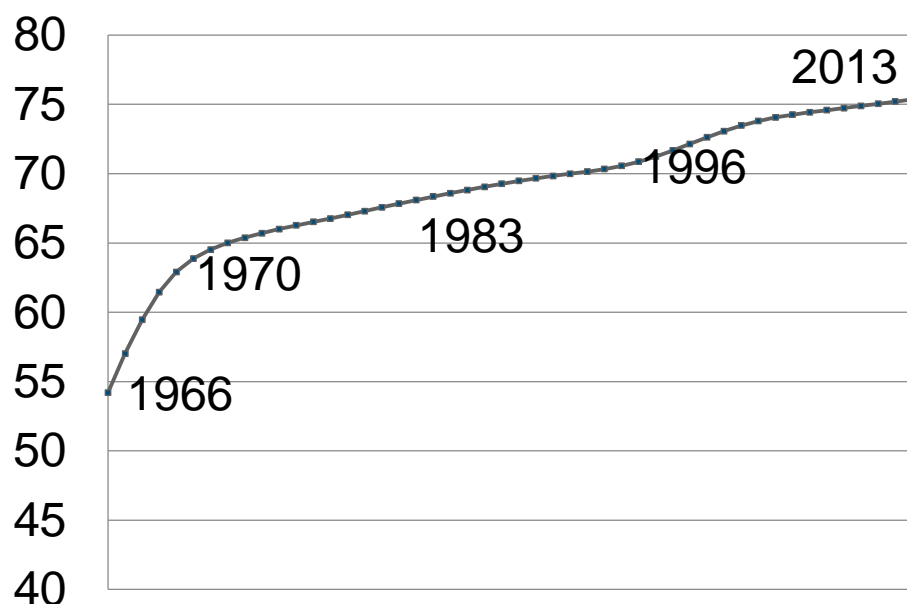


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Level Setting:

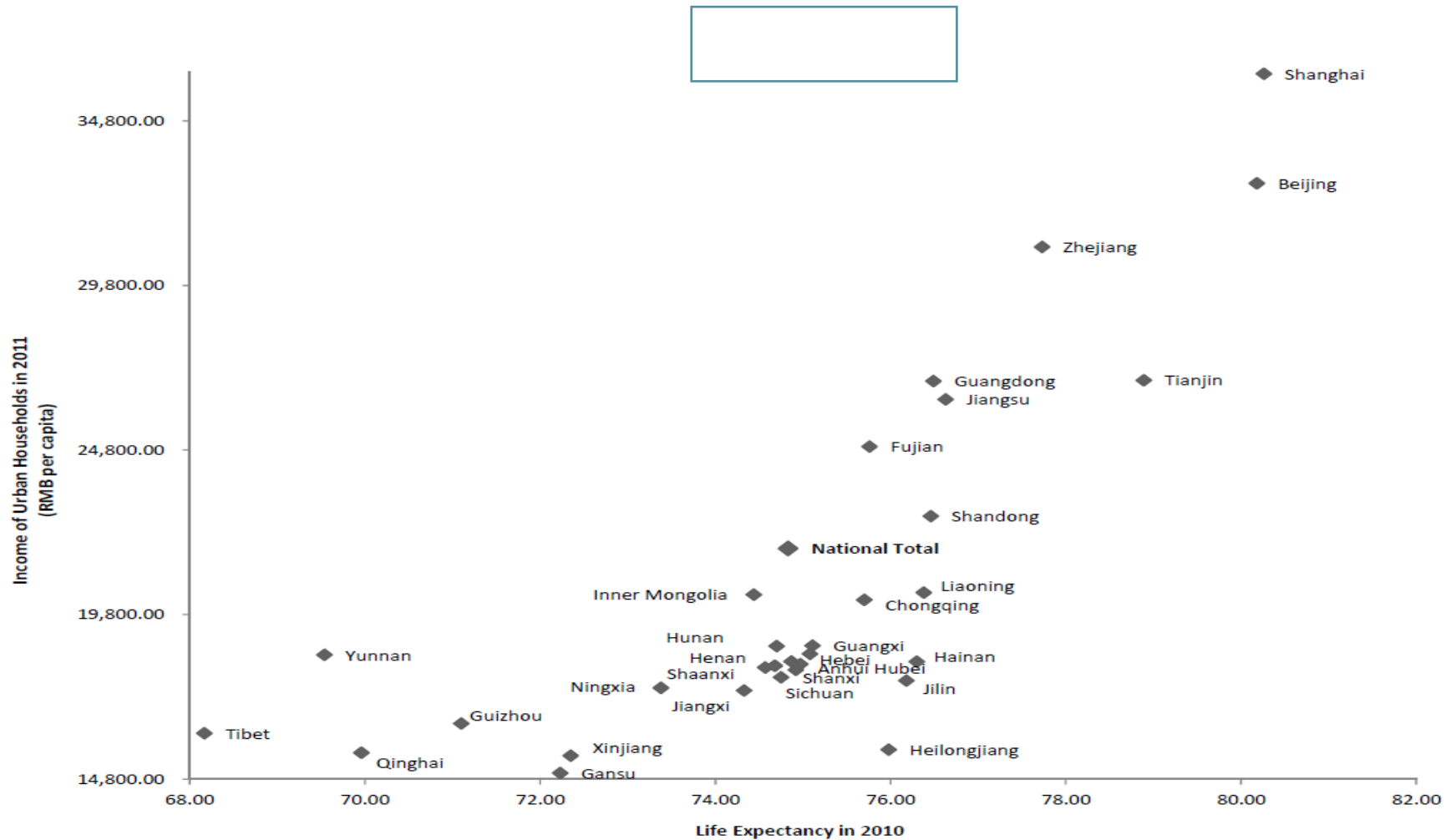
The aging and *changing* population of China

**Average Life Expectancy
over time**



- Burden on funds available
- Reliance on pension
- Decreased fertility
- Decreased marriage
- Family support reduced
- One child policy changes

Differences by region and income levels



Existing Retirement Systems



China's Three Pillar System

Voluntary/rural

- New voluntary plan to fulfill retirement needs of rural
- Funding: 55 RMB/month
- After age 60, residents receive 100 to 500 RMB a month
- Sustainable; contribution inflows retiree payments

Urban employee pensions

- Pay-as-you go pension with [similar to 401k]
- Funding: 28% of salary, with 20% from employer and 8% employee
- Replacement Rate: designed to provide 70% of employee's final salary, but has dropped to around 45%
- Likely not sustainable: doesn't support rapid economic development & increased living standards

The public service employee retirement pension

- Equivalent to traditional DB systems in the U.S.
- Funding: Entirely by the government from general revenue
- Replacement Rate: 90% after retirement
- Likely not sustainable: Government has proposed legislation to establish additional 401(k)-like DC systems to ease burden

Pension Differences

- Province
- Urban or rural
- Industry type
- Job level



System Considerations

- Developing laws and implementation
- Lack of tax uniformity
- Benefits dependent on location and industry
- Hukou system constraints
- Technology
- Less transparency

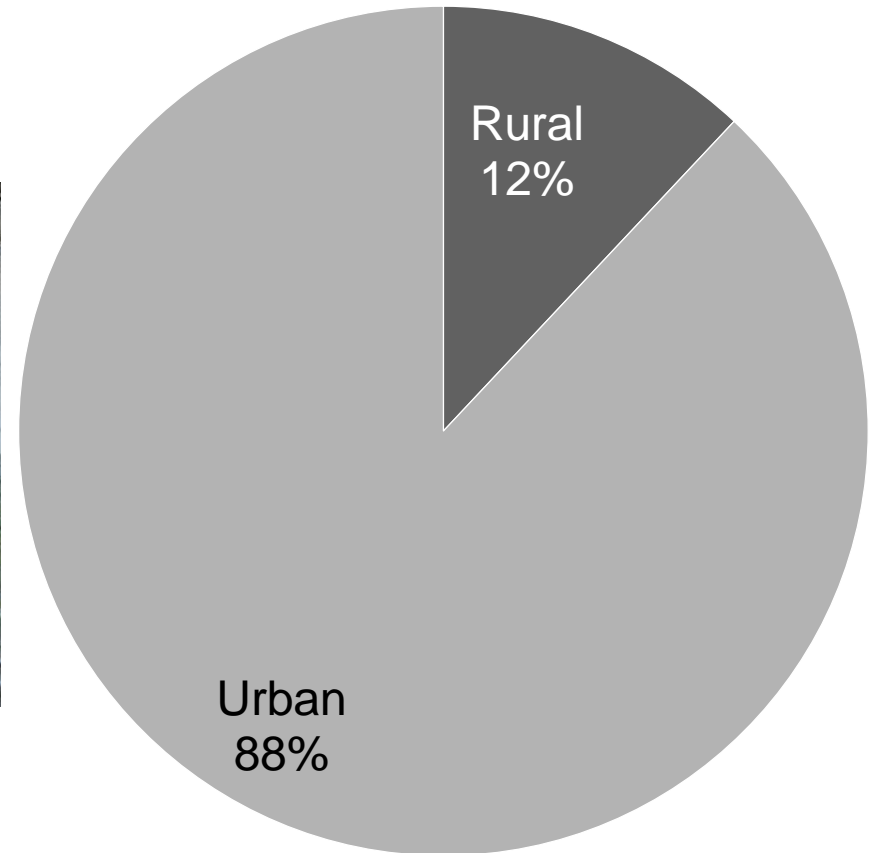


From Macro to Micro: About the SOA / LIMRA Study

- LIMRA and the Society of Actuaries
- 2,000 + China consumers
- Retirement perspectives
- Retirement planning behavior



Sample Reach





Tier Coverage

Online coverage= 1,500

Offline coverage= 500



Key

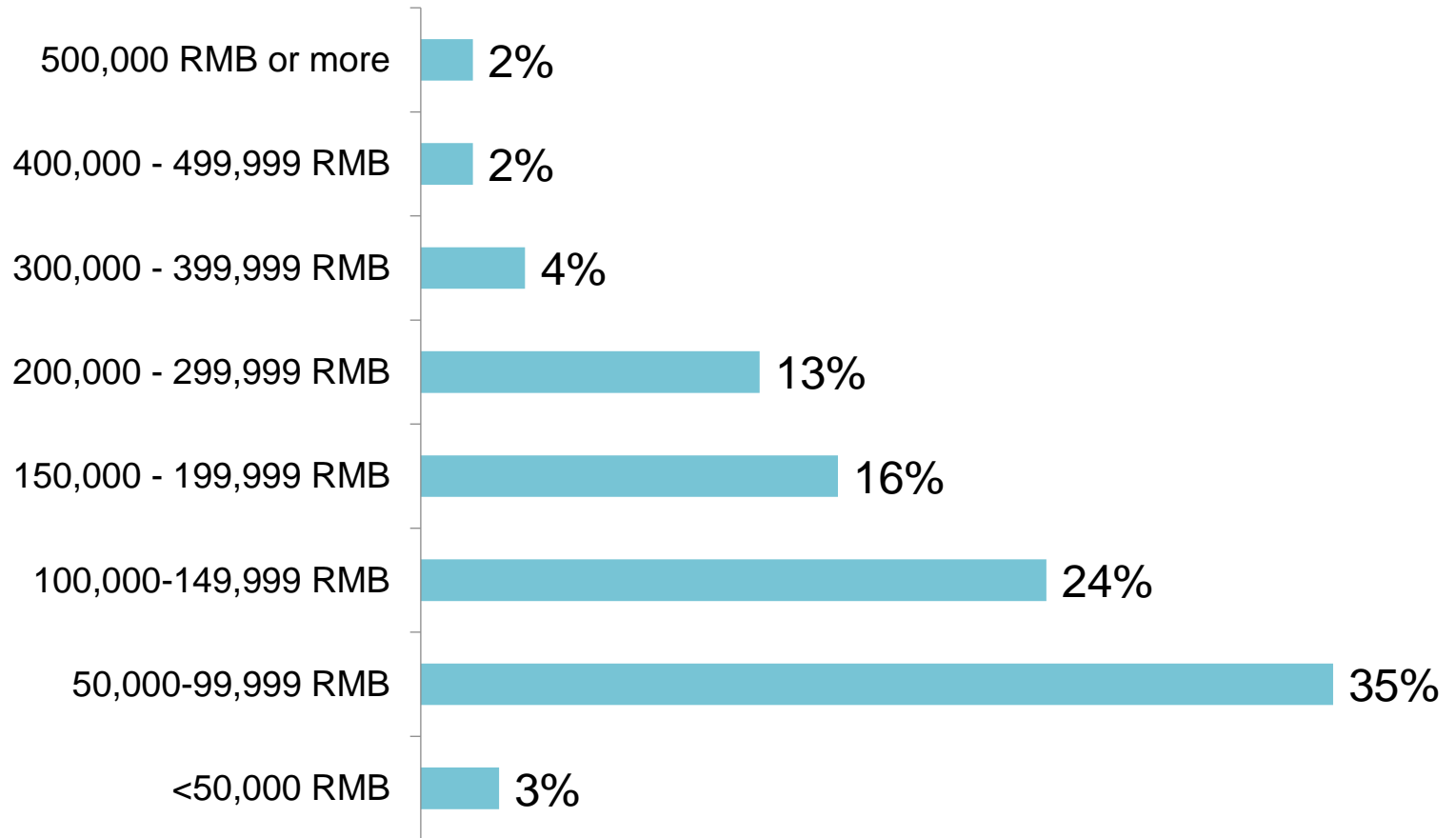
-  Tier I (4)
-  Tier II (16)
- Tier III (7)**

Sample

	Tier I	Tier II	Tier III	East	North	South	Midwest
Rural	25%	5%	-	11%	11%	13%	13%
Urban	75%	95%	100%	89%	89%	87%	87%

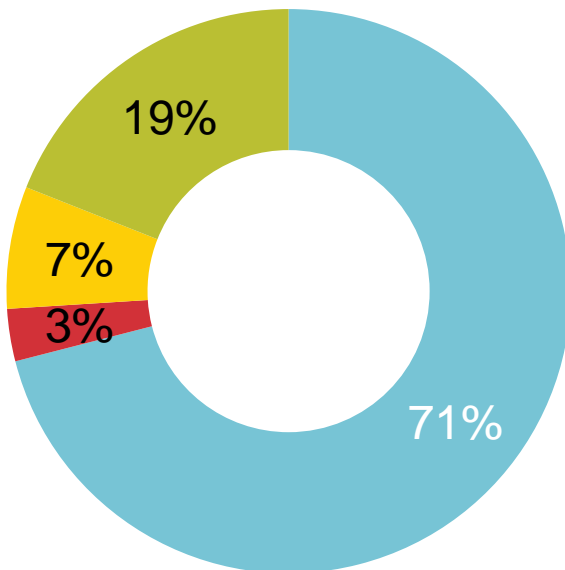


Income of Participants

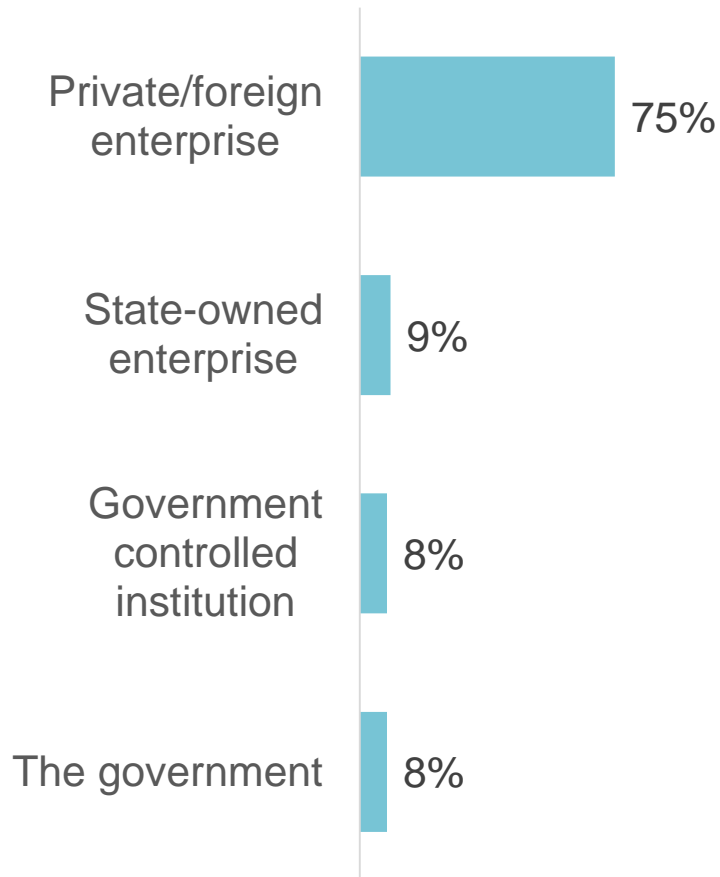


Working Status of Sample

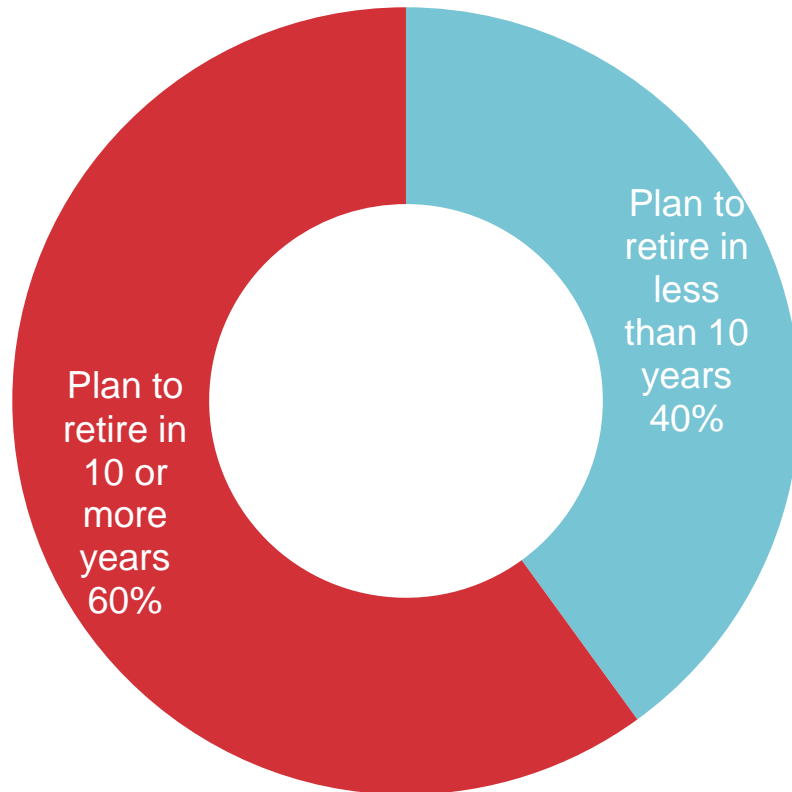
- Working for pay
- Self-employed
- Retired and working part time for pay
- Retired and not working for pay



Employer



Of those still working...



Hukou status

85%

- Urban Residence Hukou

14%

- Agricultural Hukou

1%

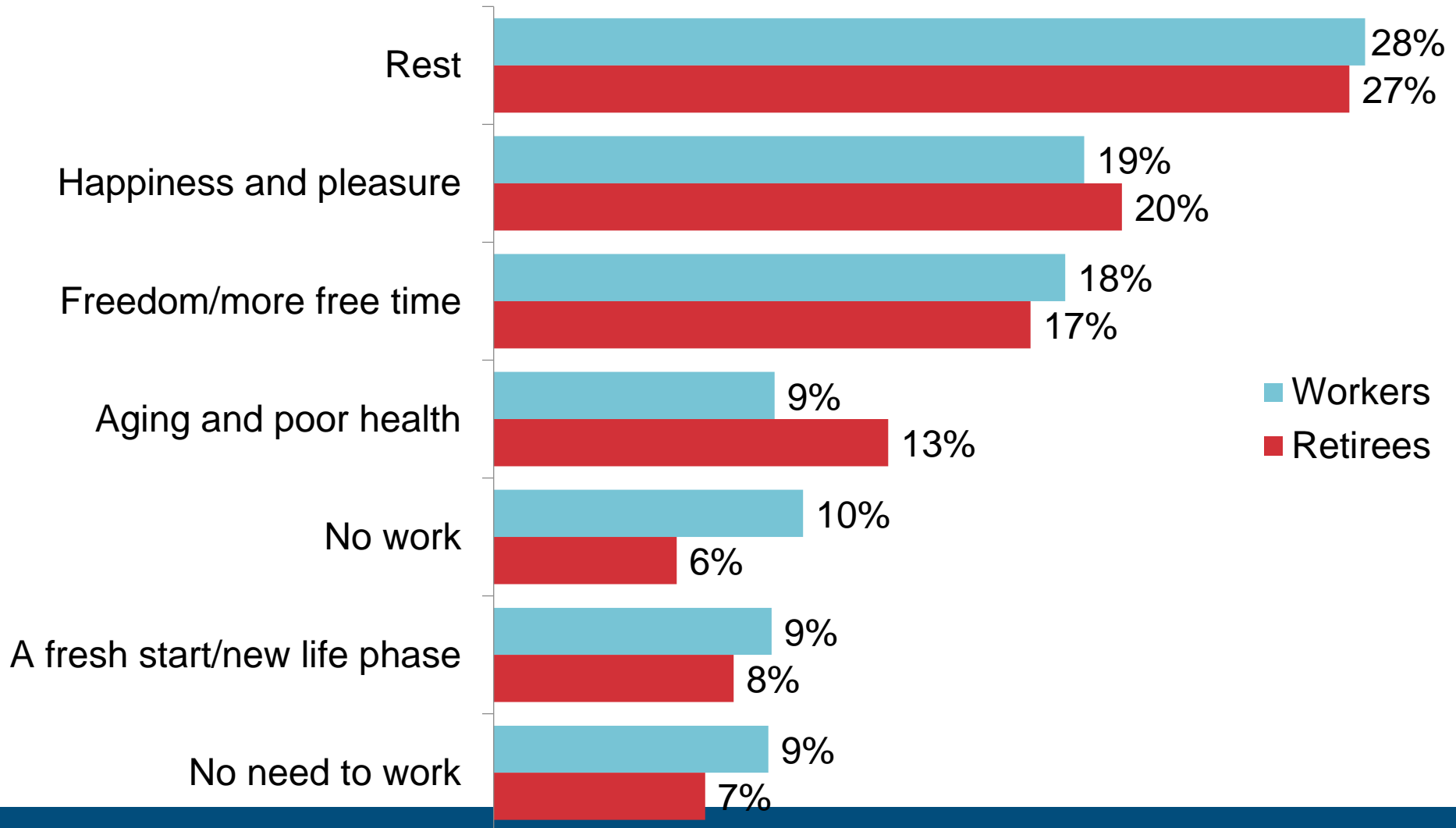
- Unified residence Hukou



What does retirement mean to you?



Definitions of Retirement



“Lucky”

Retired from the government and working part time during retirement, from Chongqing
[Household income: 150,000-199,000 RMB]



“On one side, it means a relaxed living pace. On the other side, it upsets me. Anyway it is a new beginning and I need to do plan”

44 year old working man from Beijing
[Household income: 150,000 to 199,999 RMB]



Rely on children to take care of me

54 year old female worker from Shanghai rural area

[Household income: 70,000 to 79,999 RMB]



Retirement means that I can get pension without work. Though pension is not much, but I can work with less pressure.

65 year old male retired from a firm, Shenyang
[Household income: 90,000 to 99,999 RMB]

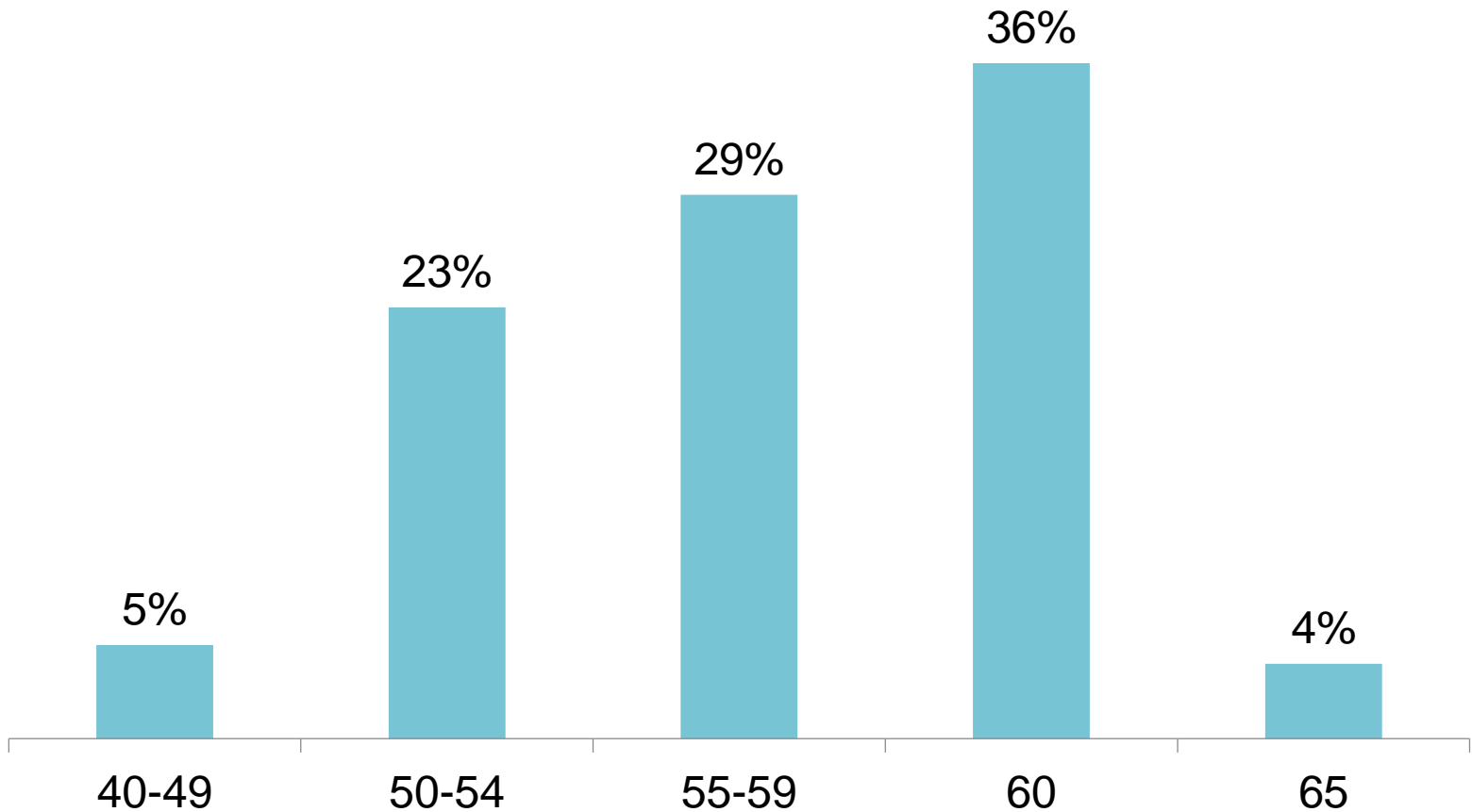


...hope to retire

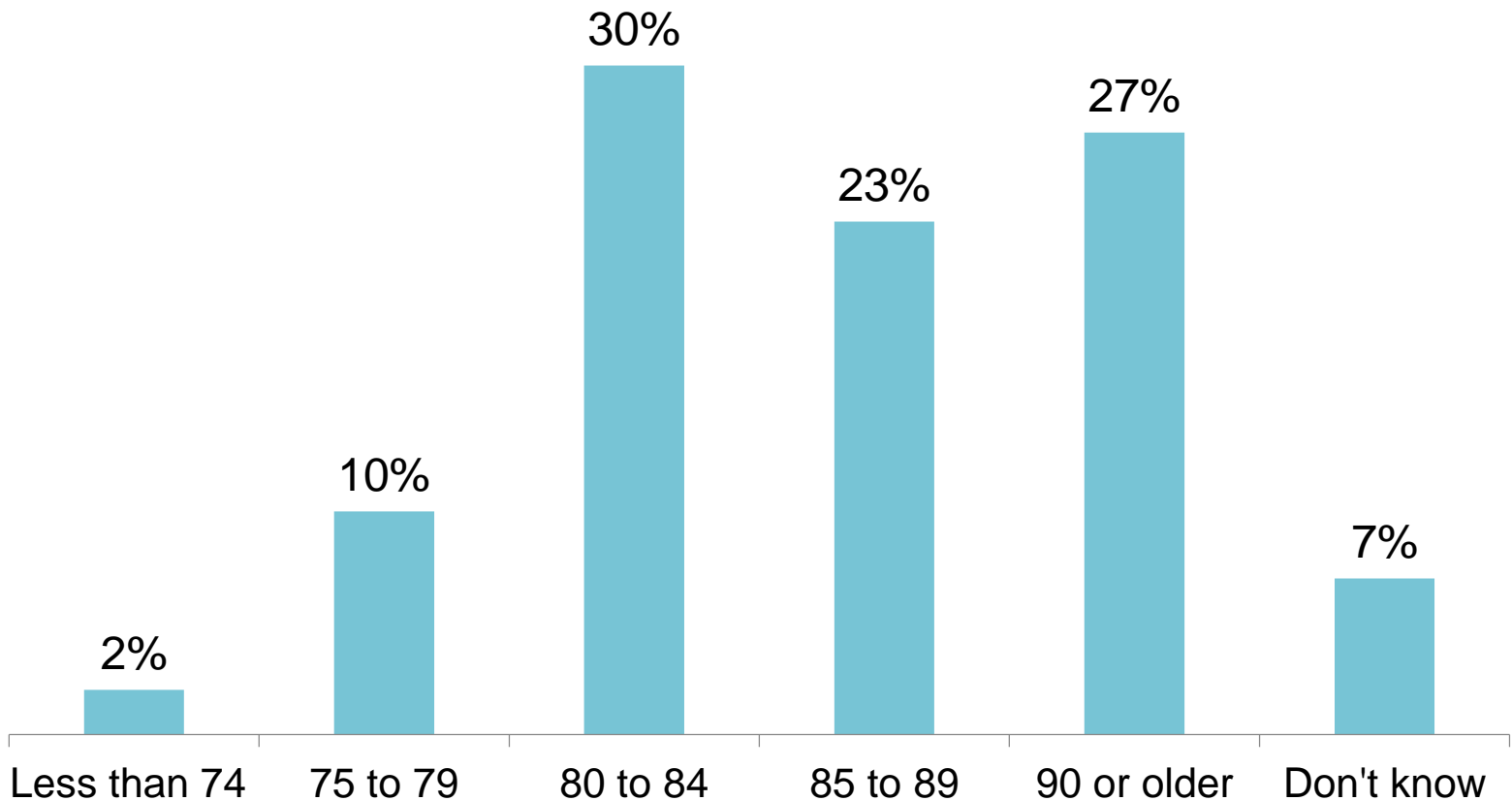
47 year old female worker from Beijing



At what age do you expect to retire?



Perceived life expectancy of China's consumers



Mandatory Retirement

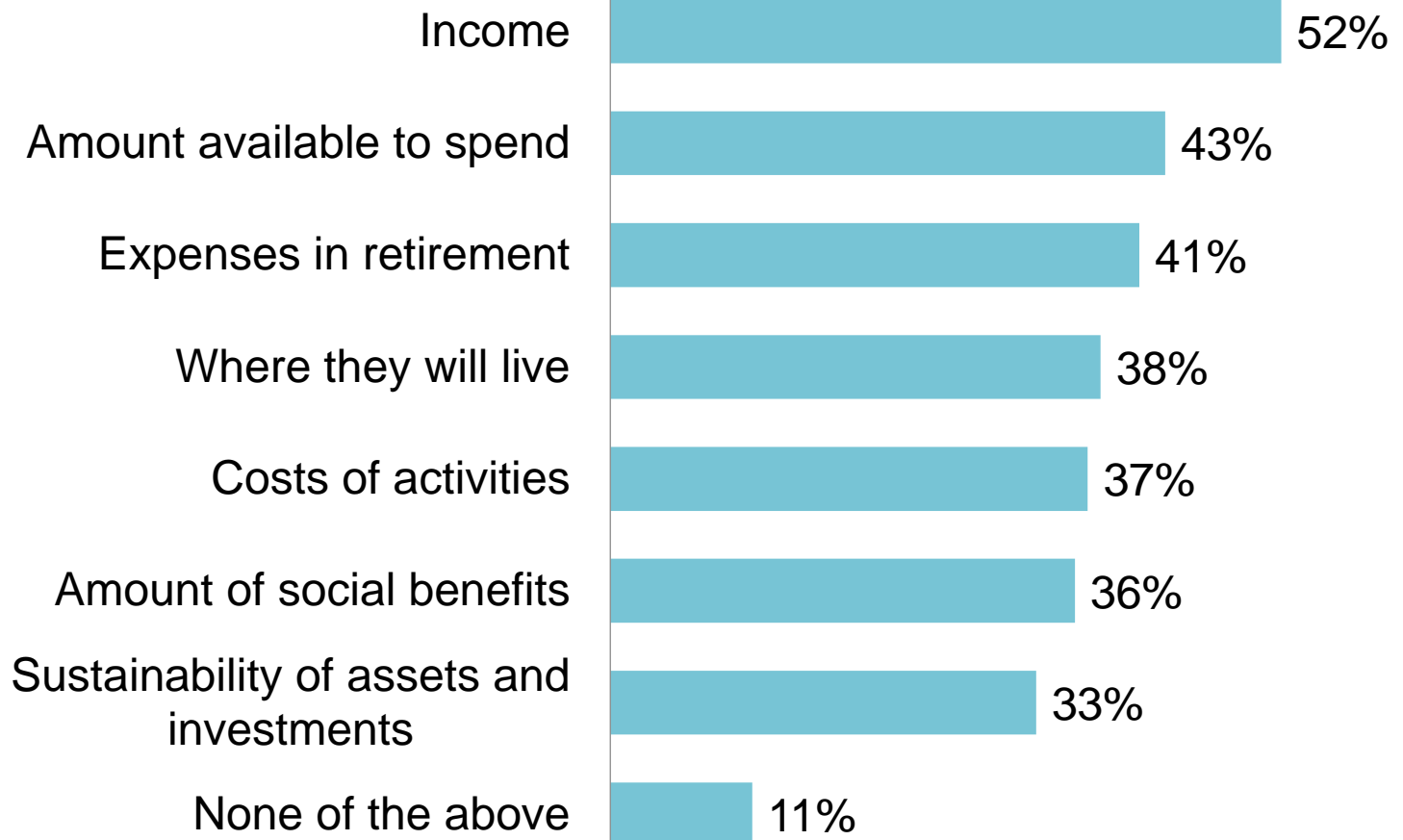
	Retiring in less than 10 years	Retiring in 10 or more years	Retired
Yes totally mandatory	52%	54%	48%
Not mandatory, but offered financial incentives	15%	19%	19%
Not mandatory, my decision	33%	28%	32%

Readiness and Risk Management

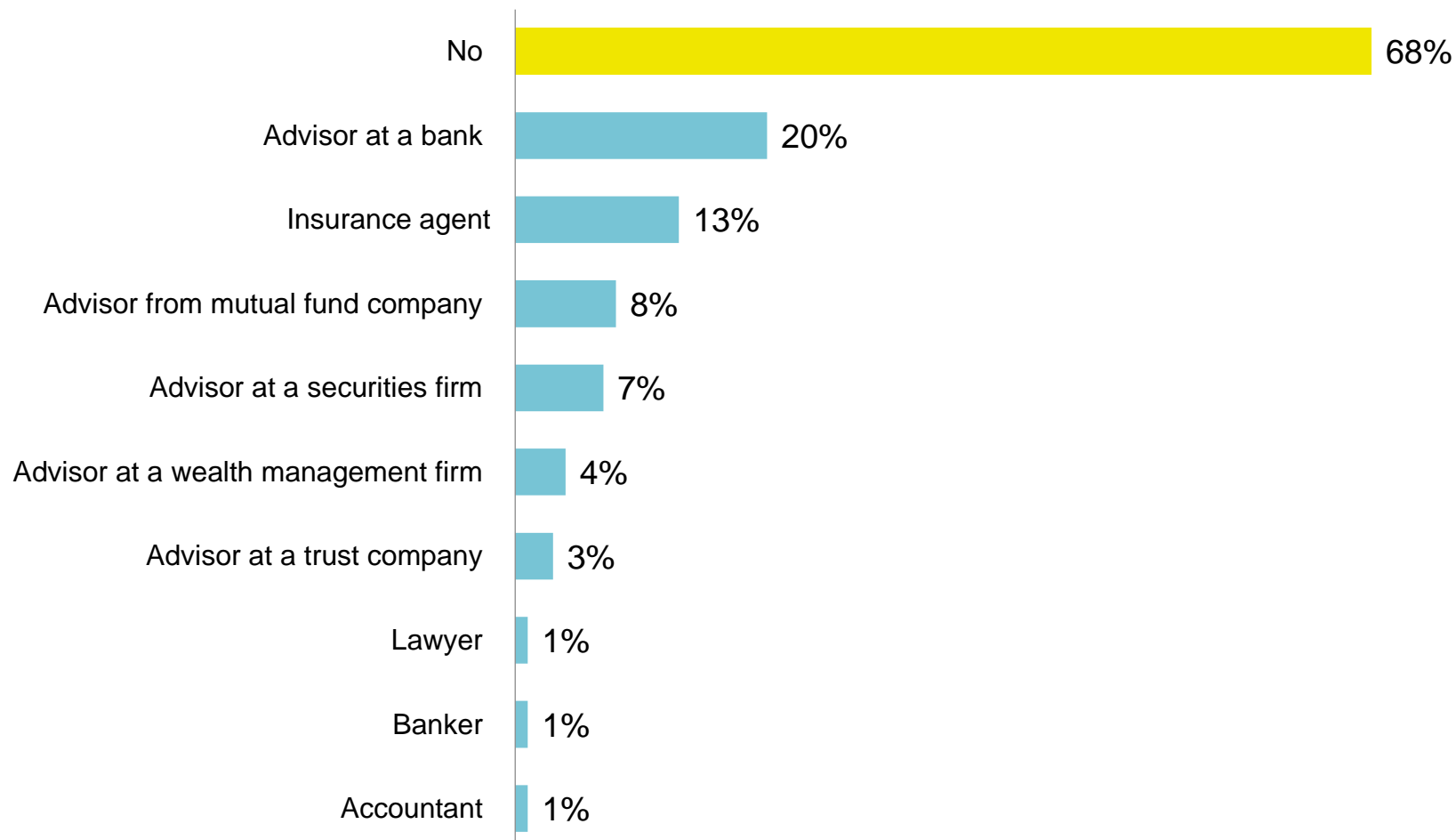


Retirement Planning Activities

Percentage of Consumers who Have Determined...



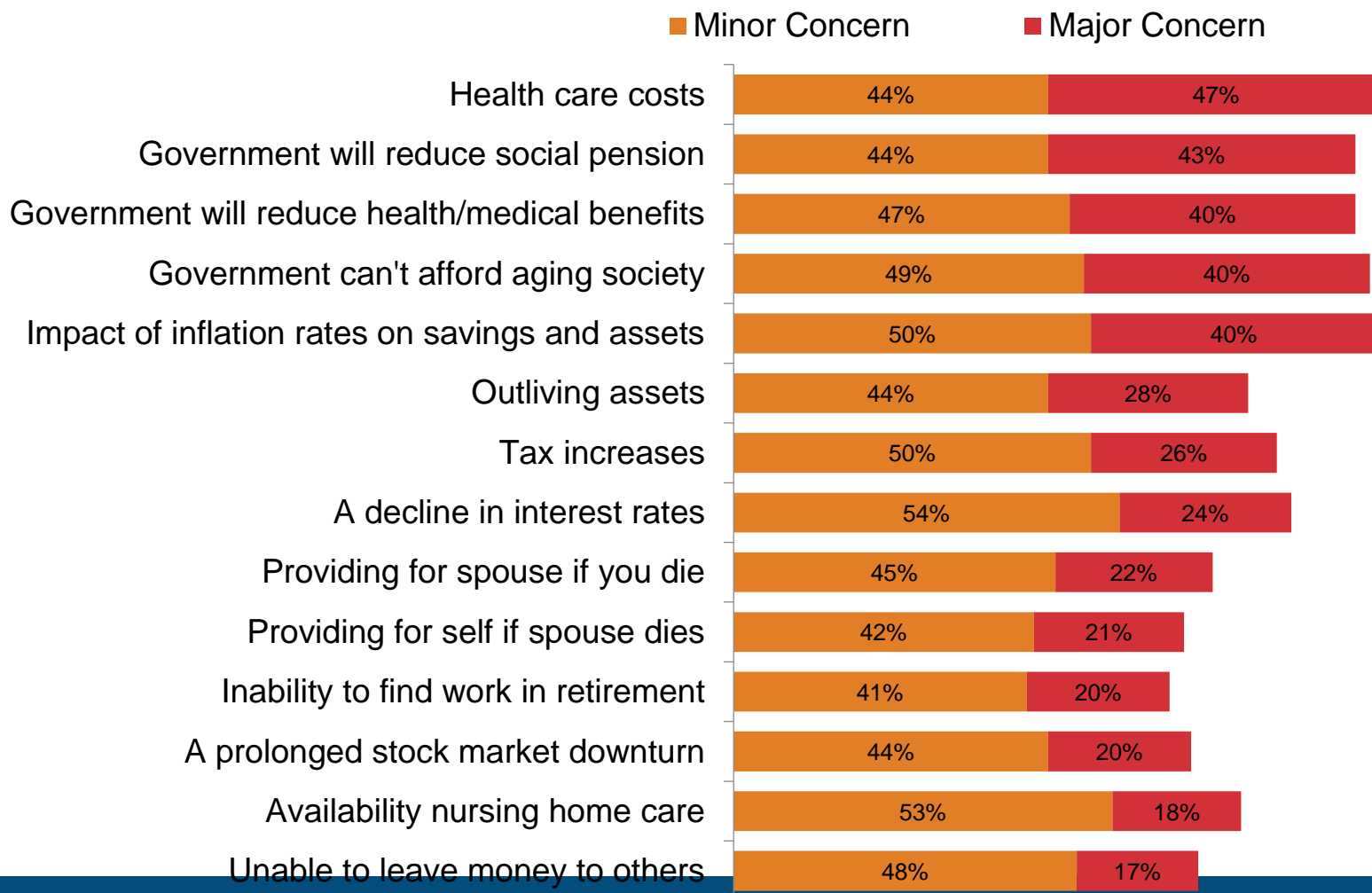
Financial Professionals used for retirement planning



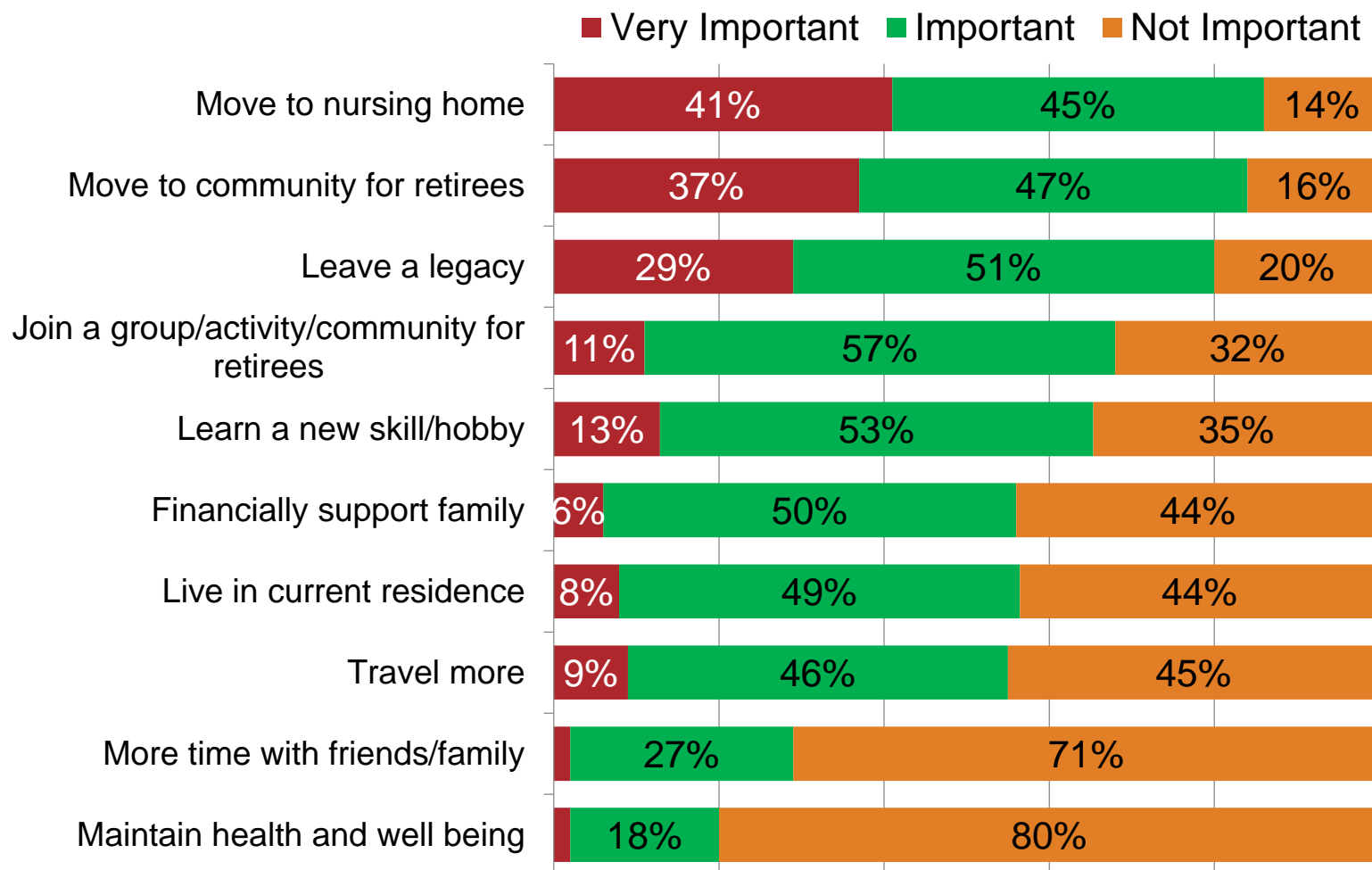
Retirement Concerns



Concerns during retirement



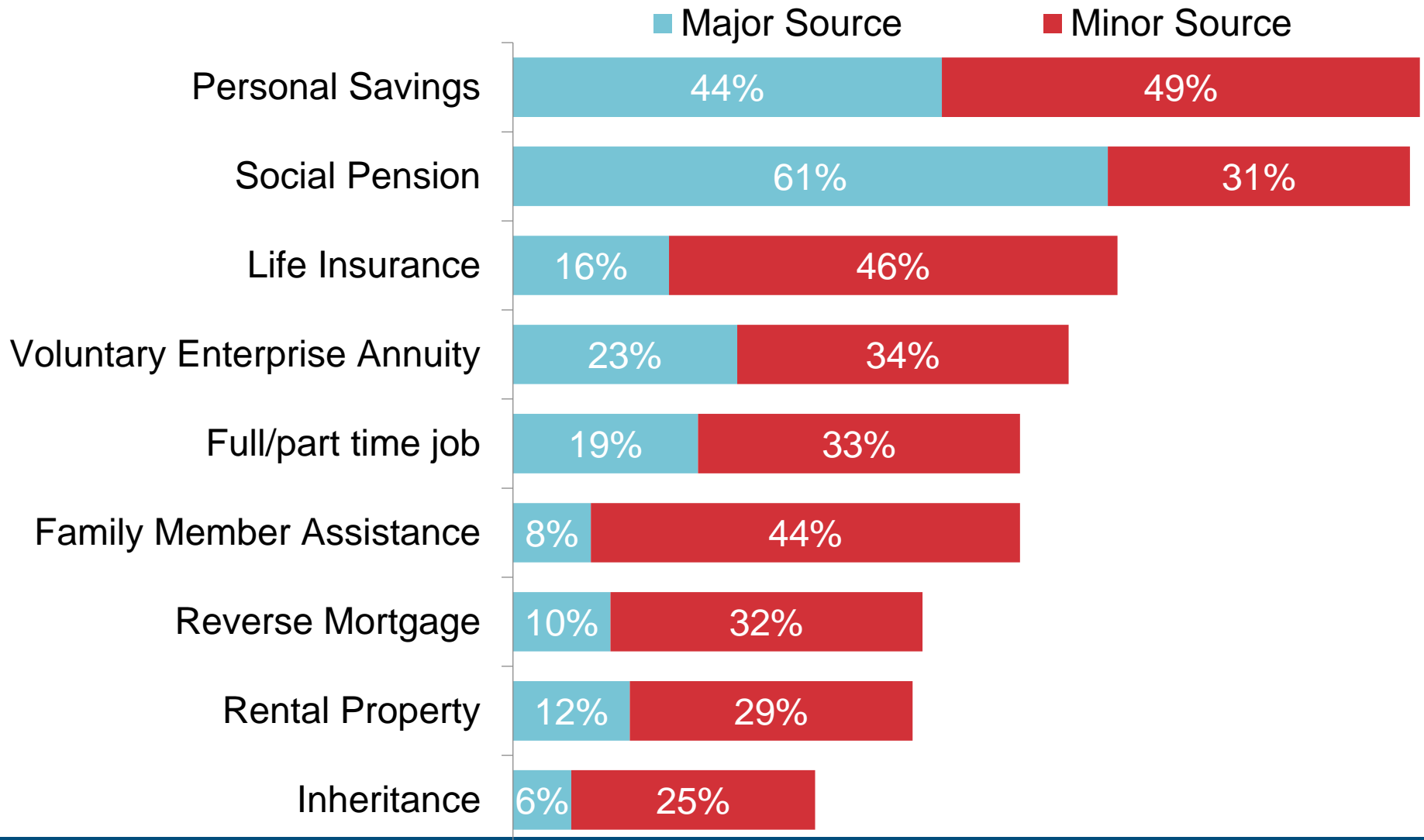
Hopes and Aspirations



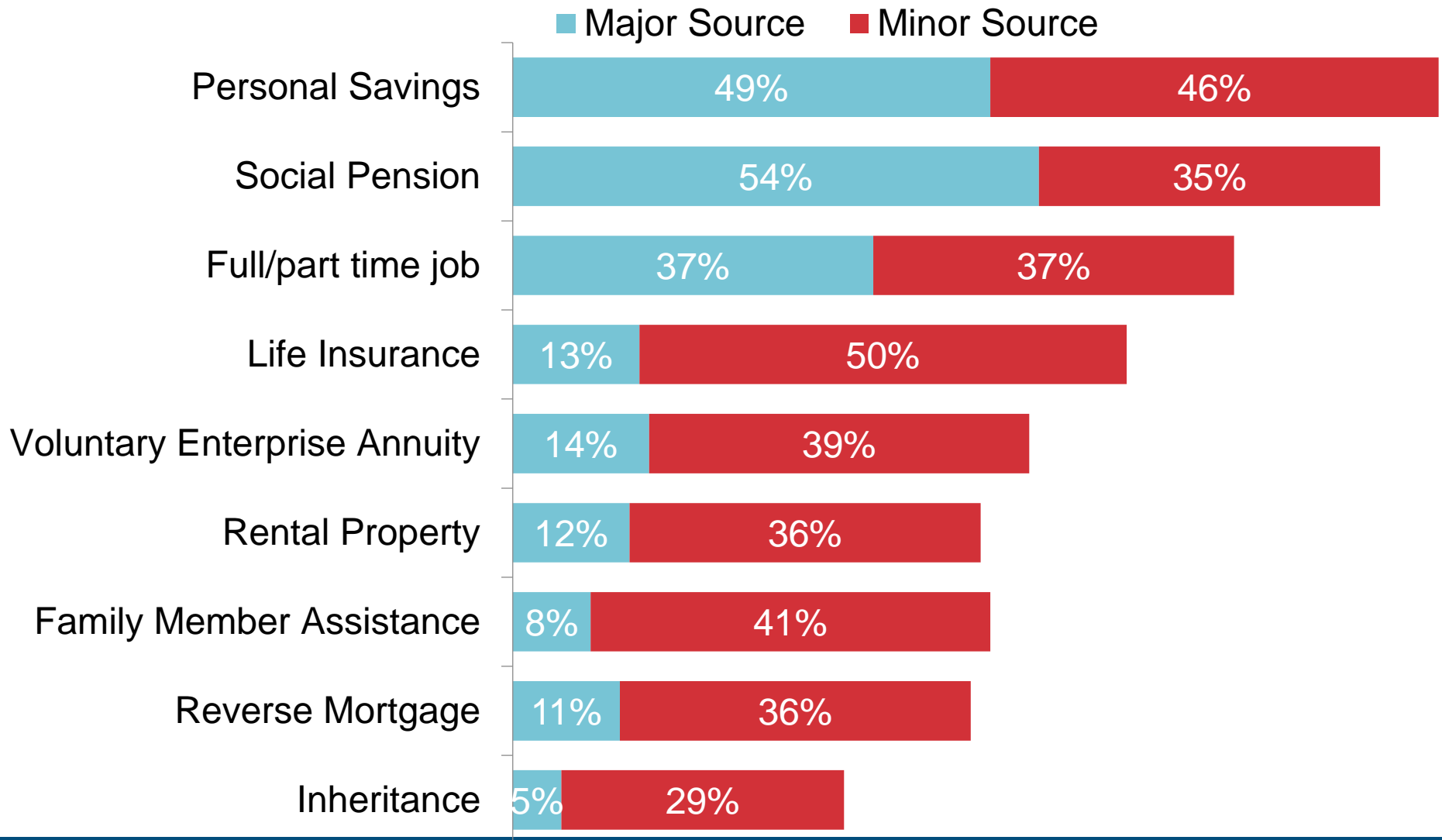
Income Sources and Planning Activities



Income Sources - Retirees



Income Sources - Workers



Retirement Savings

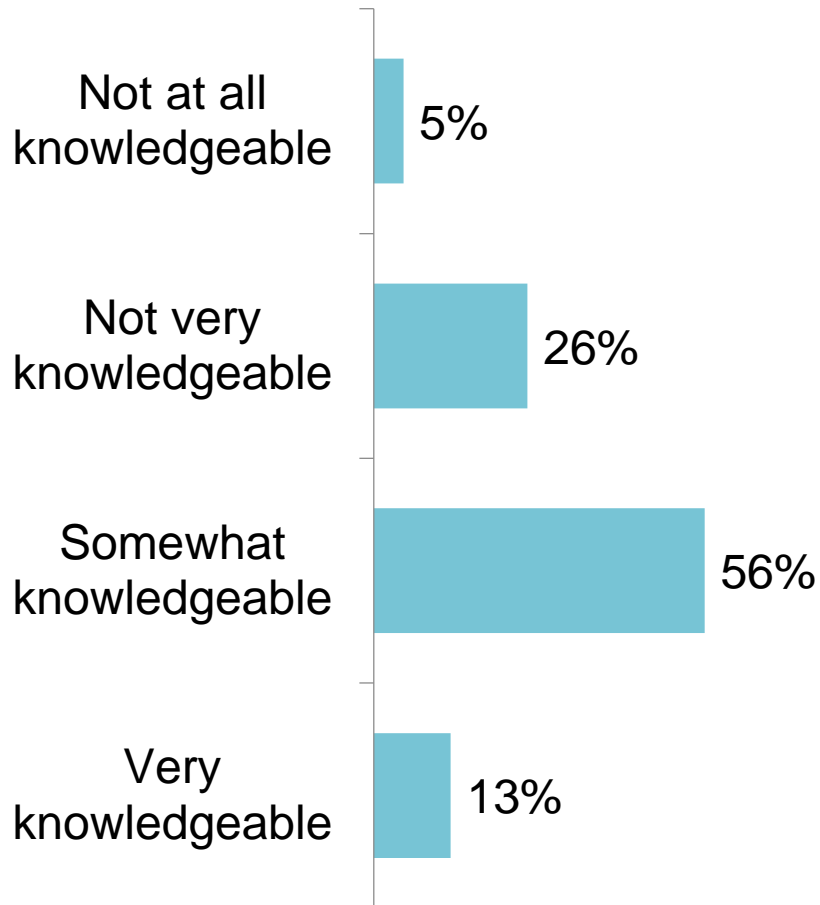


4%	• None
9%	• Less than 50,000 yuan
18%	• 50,000 to 100,000 yuan
23%	• 100,000 to 249,999 yuan
24%	• 250,000 to 499,999 yuan
13%	• 500,000 to 999,999 yuan
8%	• 1 million or more yuan
1%	• Don't know

Retirement Awareness



Financial Knowledge



Employers not a desired source of more information

I would like my employer to make available more comprehensive information and advice on retirement savings and planning.

Strongly agree

1%

Somewhat agree 3%

Neither agree nor disagree

19%

Somewhat disagree 42%

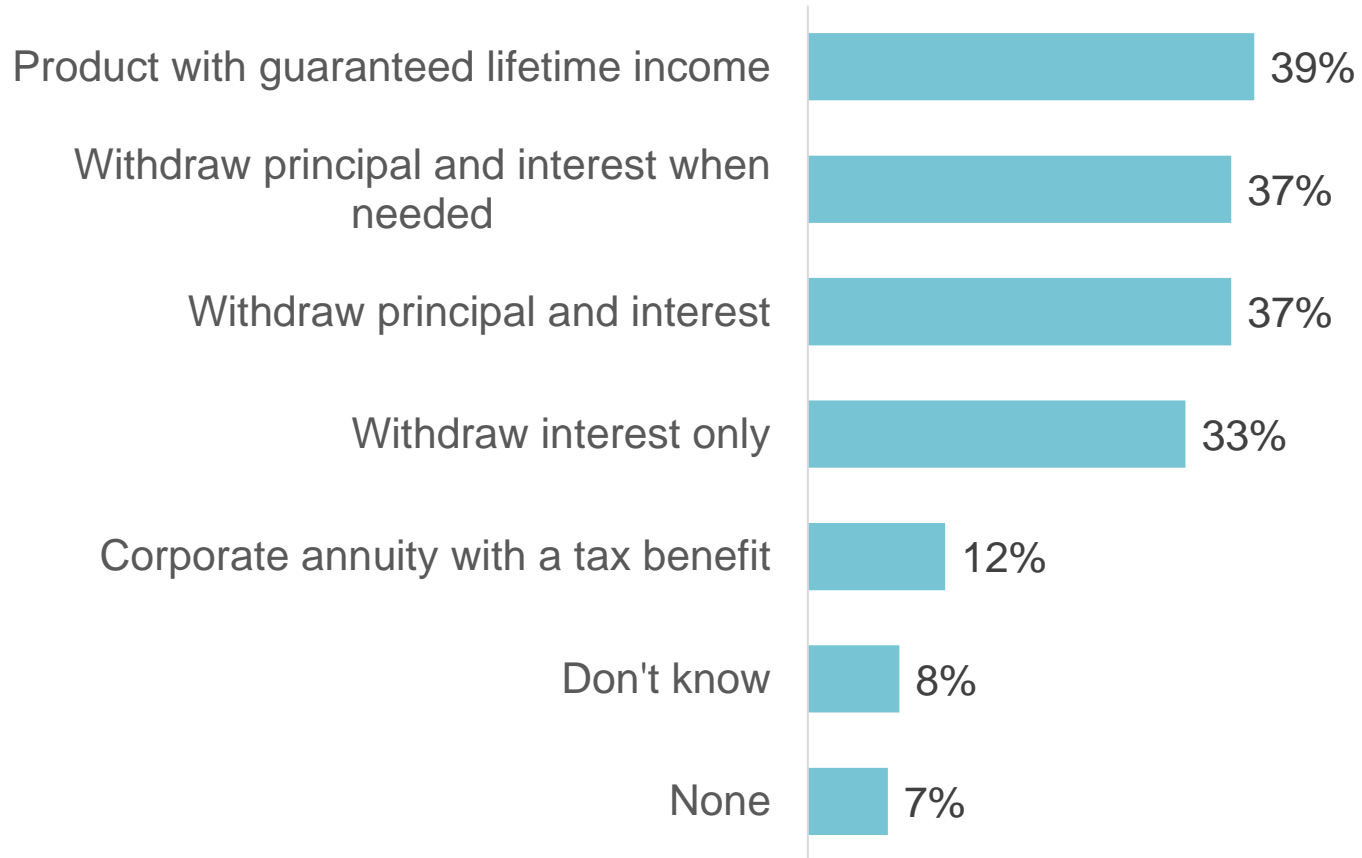
Strongly Disagree 36%



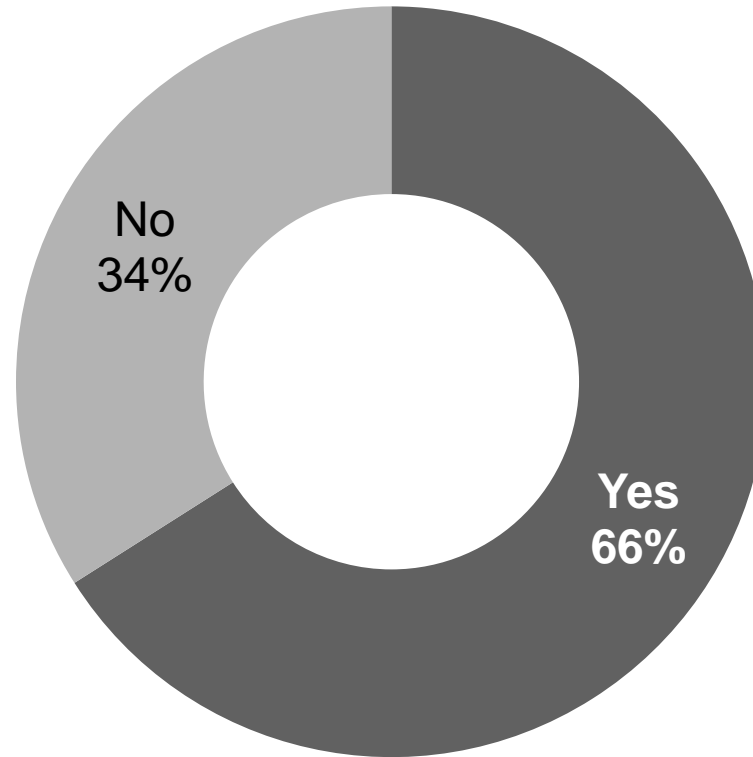
Annuities



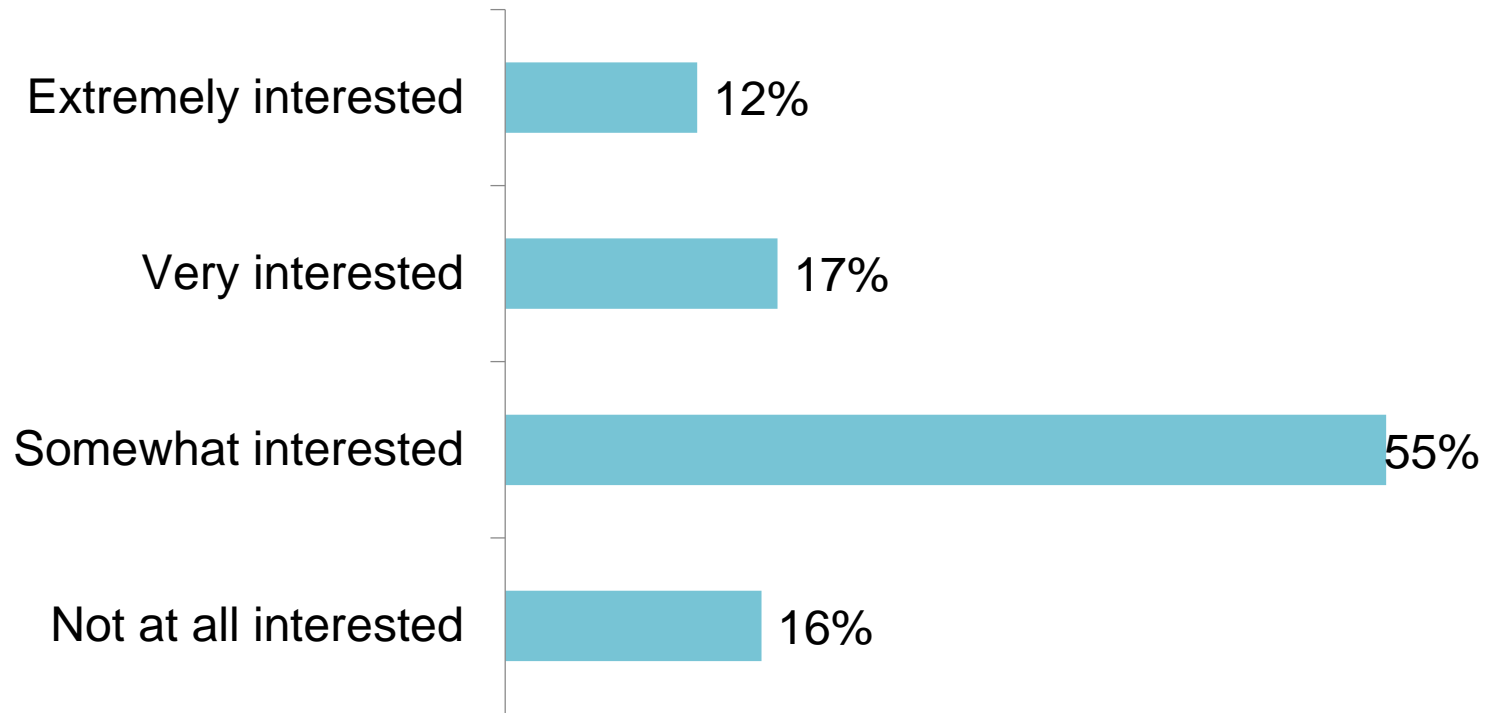
Plans to generate income from retirement savings



Interested in Annuities



Tax Deferred Annuities



Summary



- People are concerned about retirement risks
 - Lack retirement preparation
 - Increase consistency of implementation
- Financial institutions opportunity for developing advice relationship with consumers
- More could benefit from an advisor
- Employers for information and advice?
- Interest in and plans for:
 - Annuities
 - Guaranteed income

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