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Comprehensive Family Financial Planning Program Analysis

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Abstract

Family financial planning is a comprehensive financial service, that is, through analyzing and evaluating the financial situation of clients in all aspects of life, determining their financial goal system, and finally helping them to develop a reasonable and actionable financial plan. Family financial planning generally includes the following contents: housing planning, insurance planning, car purchasing planning, investment planning, education planning, retirement planning, etc. In this paper, Mr. Liu's family is selected as the case family, and the specific needs of the case family are addressed. By analyzing the case family's financial goals and risk tolerance, a comprehensive financial planning including cash, house purchase, education and retirement is made for the case family, which provides reference for other similar families to make financial planning.

Keywords

Financial Planning; Financial Goals; Financial Plan.

1. Basic Family Information

1.1. Family Background

Mr. Liu and his wife are an ordinary post-80s couple. Mr. Liu is 35 years old and currently works in a bank in Hefei as the manager of the bank's financial accounting department, with an annual after-tax income of about ¥300,000. His wife, Ms. Wang, is 30 years old and is a university teacher in a college in Hefei, with an annual income of about ¥180,000 after tax. Both husband and wife enjoy the five insurance and one fund provided by the unit, namely: pension insurance, medical insurance, maternity insurance, unemployment insurance, work injury insurance, and housing fund, which is more typical of a middle-class family. The family has a daughter who is 10 years old and in the fourth grade of elementary school. At the same time, the couple's parents are still alive, the two negotiated to jointly bear the cost of parental support, and both parents are relatively young, healthy and not retired, Mr. and Mrs. Liu give both parents ¥1,000 per month to live. The family has an owner-occupied residence valued at about ¥1.2 million, with a down payment of ¥400,000 and a loan of ¥800,000 yet to be paid off. Mr. Liu's family cash and demand deposits total ¥100,000, there are ¥100,000 of bank financial products, about 200,000 funds in the stock and fund market accounts. Through the investment risk preference questionnaire survey, combined with the family stage, financial status and personal investment preferences, Mr. Liu is risk neutral and belongs to a stable investor.

Table 1. Table of Mr. Liu's family members

Family members	Age	Occupation
Father	Mr. Liu 35	Bank employee
Mother	Ms. Wang30	University teacher
Daughter	Liu Chang10	Student

1.2. Basic Financial Situation of the Family

(1) One set of property is about ¥1.2 million.

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(2) Cash and demand deposits of ¥100,000.

(3) The market value of stocks is ¥100,000, the market value of bond funds is ¥100,000, and the bank financial products are ¥200,000.

(4) After-tax annual income of Mr. Liu is ¥300,000, and after-tax annual income of Ms. Wang is ¥180,000.

(5) The average monthly living expenses are about ¥5000, supporting both parents are ¥1000 per month, travel expenses are ¥1000 per month, children's education expenses are ¥1000 per month, other expenses are ¥1000 per month, total is about ¥10000.

(6) The combined balance of Mr. and Mrs. Liu's provident fund account is about ¥300,000, and the balance of pension insurance account is about ¥150,000.

2. Financial Planning Objectives

Mr. Liu hopes to achieve his family's financial goals through the development of reasonable financial planning. After communication and discussion between the couple, according to the specific financial situation of the family and taking into account the principles of financial feasibility and security, the financial goals of Mr. Liu's family are mainly as follows.

(1) car purchase planning: Ms. Wang is prepared to study for a driver's license next year and is expected to purchase a car of about ¥100,000 in three years.

(2) Children's education planning: Mr. Liu's child will go to college in 9 years, and the present value of the college education fund is targeted at ¥100,000.

(3) Retirement pension planning: Mr. Liu and Ms. Wang have 25 years to go before retirement and will need a present value of ¥10,000 per month for living expenses after retirement.

(4) Insurance planning: Mr. Liu intends to equip each of the three members of his family with insurance.

(5) Investment planning: Mr. Liu's family is currently in the rising career period and hopes to invest a certain amount of assets.

3. Analysis of Mr. Liu's Family Financial Situation in 2021

3.1. Mr. Liu's Family Income Structure in 2021

Table 2. Household income structure of Mr. Liu in 2021

Family members	Age	Occupation	Physical Condition	Length of service (years)	Monthly salary (yuan)	Annual salary (yuan)	Percentage of (%)
Mr. Liu	35	Bank employees	Healthy	10	25,000	300,000	62.5%
Ms. Wang	30	State enterprise employee	Healthy	8	15,000	180,000	37.5%
Total					40,000	480,000	100%

Mr. Liu's family members are in good health, Mr. Liu has 10 years of working experience and Ms. Wang has 8 years of working experience. Mr. Liu has a monthly income of ¥25,000 and an annual salary of ¥300,000, accounting for 62.5% of the family's annual income; Ms. Wang has a monthly income of ¥15,000 and an annual salary of ¥180,000, accounting for 37.5% of the family's annual income. Mr. Liu's family belongs to a family with relatively good income.

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3.2. Mr. Liu’s Family Consumption Structure in 2021

Table 3. Consumption structure of Mr. Liu's family in 2021 (Unit: Yuan)

<table>
<tr><th>Projects</th><th>Diet</th><th>Transportation</th><th>Communication</th><th>Travel</th><th>Education</th><th>Support for parents</th><th>Other</th><th>Total</th></tr>
<tr><td>Mr. Liu</td><td rowspan="2">4,000</td><td>300</td><td>250</td><td rowspan="2">1,000</td><td rowspan="2">2,000</td><td rowspan="2">1,000</td><td>500</td><td rowspan="3">10000</td></tr>
<tr><td>Ms. Wang</td><td>200</td><td>250</td><td>500</td></tr>
<tr><td>Total cost</td><td>4,000</td><td>500</td><td>500</td><td>1,000</td><td>2,000</td><td>1,000</td><td>1,000</td></tr>
</table>

3.3. Mr. Liu's Family Balance Sheet in 2021

Table 4. Mr. Liu's annual household balance sheet in 2021

Asset Projects	Amount	Liability items	Amount	Net worth items	Amount
Cash and Demand	100,000				
Liquidity assets	100,000	Consumer liabilities	0	Net current value	100,000
Bank Wealth Management Products	200,000				
Stock Investment	100,000				
Bond Fund	100,000				
Investment assets	400,000	Investment liabilities	0	Net Investment Value	400,000
Owner-occupied housing	1,200,000	Home loan for own use	765,968		
Assets for own use	1,200,000	Liabilities for own use	765,968	Net value for own use	434,032
Total Assets	1,700,000	Total liabilities	765,968	Total Net Worth	934,032

According to the asset structure of Mr. Liu's family, the liquid assets are ¥100,000 and the asset level is too high. As the family's liquid assets are mainly to meet daily life and unexpected expenses, with transactional and preventive characteristics, this asset does not have income, if too high a proportion of liquid assets will have an impact on the value-added preservation of the family's assets, usually liquid assets can keep half year's expenses can be satisfied. Mr. Liu's family's liquid assets have no policy cash value, lack of insurance protection, and the liquid assets are too high, so it is necessary to increase insurance investment.

3.4. Mr. Liu's Family Income and Expenditure Savings Table in 2021

3.4.1. Disposable Income Calculation Table for Mr. Liu in November 2021(Unit: Yuan)

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Table 5. Calculation of disposable income of Mr. Liu's family in November 2021

Projects		Mr. Wang	Ms. Wang	Total family
Job Income	Tax Rate / Tariff	25,000	15,000	4,0000
Medical Insurance	2%	359	300	659
Unemployment Insurance	0.5%	90	75	165
Old-age insurance	8%	1434	1200	2634
Housing Provident Fund	12%	2905	1,800	4705
Personal Income Tax	20%/10%	3042	663	3705
Disposable income		17170	10926	28096

Since Mr. Liu's pre-tax income exceeds the upper limit of the social security contribution base in Hefei in 2021, the three-insurance paid is calculated according to the upper limit of the social security contribution base in Hefei of ¥17,925, and Mr. Wang's pre-tax income exceeds the upper limit of the housing fund contribution base in Hefei in 2021 of ¥24,207, the housing fund paid is calculated according to the upper limit of the housing fund. After deducting ¥5,000, the part of ¥5,000 is in the range of ¥3,000-¥12,000, and the personal income tax is calculated according to the tax rate of 20% and the quick deduction of ¥3,042. Ms. Wang pays the normal contribution.

3.4.2. Mr. Liu's Family Income and Expenditure Savings Table in 2021

Table 6. Mr. Liu's family income and expenditure savings table in 2021

Revenue Items	Amount	Expenditure items	Amount	Savings Program	Amount
Salary	480,000	Household living expenses	60,000		
Year-end bonus	60,000	Children's education expenses	24,000		
Social Security Withholding	(97,956)	Parental support expenses	12,000		
Provident Fund Withholding	(56,460)	Other Expenses	24,000		
Personal Income Tax	44,460				
Job Income	341,124	Living expenses	120,000	Life Savings	221,124
Interest income	15,000	Interest expense	14,451		
Realization of capital gains	8,000				
Financial income	23,000	Financial Expenses	14,451	Financial Savings	8,549
Total revenue	364,124	Total Expenses	134,451	Total savings	229,673

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3.4.3. After-tax Cash Flow Statement of Mr. Liu's Family in 2021

Table 7. After-tax cash flow statement of Mr. Liu's family in 2021

Projects	Amount	Projects	Amount
I. Living cash flow		III. Cash flow from borrowing and lending	
Job Income	341,124	Principal amount borrowed	800,000
Living expenses	(120,000)	Interest expense	(14,451)
Living Cash Flow	221,124	Principal repayment	(25,550)
		Lending cash flow	759,999
II. Investment cash flow		IV. Securing cash flow	
Investment income	15,000	Premium Expense	
Capital gains	8,000	Secure cash flow	
Investment Cash Flow	23,000		

4. Basic Economic Scenario Assumptions

4.1. Inflation

According to the data, consumer prices (CPI) are generally stable in 2020 with a year-on-year growth of 2.5%, and CPI is expected to stabilize at 2.5% in the coming years.

4.2. Education Fees

Mr. Liu's child is in elementary school, the family expenses are large, in addition to school fees, but also consider a variety of interest classes, and training institutions, but also need to buy a lot of school supplies, teaching materials, so you need to prepare ¥20,000 a year.

4.3. Minimum Cash Holdings

From the perspective of maintaining necessary and reasonable expenses, Mr. Liu's family should have the cash flow to meet more than 3-6 months of expenses. Mr. Liu's family needs to spend about ¥13,800 money per month, so it should keep about ¥50,000 in cash to meet temporary needs.

4.4. Return on Investment

Assume a 3% annual return on money funds, a 10% annual return on equity funds, an 8% annual return on bond funds, a 10% average annual return on stocks, and a 2% interest rate on cash deposits.

5. Analysis of Family Financial Situation

5.1. Analysis of Household Financial Ratios

5.1.1. Net Attributable Value and Net Achievement Ratio

Net Worth = Number of years working x current annual savings = 10*229,673 =¥2,296,730

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Net worth achievement rate = actual net worth / net worth due = 934,032/2,296,730 = 40.7%, when the net worth achievement rate is larger, it means the better financial performance in the past, this result indicates that Mr. Liu's family's financial performance is average and should choose a more reasonable financial management method.

5.1.2. Break-even Point Income

Break-even point income = fixed expense burden / work income net balance ratio

Net work income balance: (work income - tax and insurance costs - transportation costs - outside food costs - decoration costs) / work income

Mr. Liu's net work income balance = (480,000 + 60,000 - 97,956 - 56,460 - 44,460 - 10,000 / (480,000 + 60,000) = 0.613

If the due savings are included in the break-even point, then:

Income at break-even point = (fixed expenditure burden + monthly due savings) / net balance of work income ratio

Scenario 1: The break-even income of Mr. Liu's family without due savings is

Break-even income = 10,000/0.613 = ¥16,313

Scenario 2: The income of Mr. Liu's family at the break-even point with due savings is

Income at break-even point = (10,000+1,000)/0.613 = ¥17,945

5.1.3. Margin of Safety Rate

Margin of safety = (current income - break-even point income)/current income

So the margin of safety rate for Mr. Liu's family = (30,344 - 17,945) / 30,344 = 40.9%

The margin of safety reflects how much of a cushion the family has to maintain basic living development when income decreases or fixed costs increase. This result reflects that Mr. Liu's family has a pretty good buffer space. Even if the income decreases or other fixed costs increase, Mr. Liu's family will not have a financial crisis in the short term, but the necessary hedging measures should still be in place.

5.1.4. Financial Freedom

Financial freedom reflects the ratio of financial income to annual expenses, how much this ratio means how much financial freedom is achieved, less than 1 means no financial freedom is achieved, greater than or equal to 1 means financial freedom is achieved, the larger this value is, the better.

Financial freedom = (current net worth * investment return rate) / current annual expenditure = (current annual savings * number of years of work * investment return rate) / current annual expenditure

So, the financial freedom of Mr. Liu's family = (229,673 * 10 * 5%) / 134,451 = 0.854

This ratio shows that the family income of Mr. Liu's family is mainly wage income, and the non-wage income is too low, which will cause problems such as high work pressure and difficulty in guaranteeing the living standard.

5.1.5. Asset Growth Rate

Asset growth rate = increase in assets / total assets at the beginning of the period = (work savings + financial savings) / total assets at the beginning of the period, so Mr. Liu's family asset growth rate = 229,673 / 1,700,000 = 13.51%, indicating that Mr. Liu's family currently has a good asset position and no other liabilities.

5.1.6. Net Worth Growth Rate

Net worth growth rate represents the rate at which an individual accumulates net worth, the higher the growth rate the faster the net worth accumulation.

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Net worth growth rate = net worth increase / beginning net worth = (work savings + financial income - financial expenses) / (assets - liabilities)

Mr. Liu's family net worth growth rate = (221,124+8,549)/934,032 = 24.6%

5.1.7. Balance Ratio

Mr. Liu's family's balance ratio = balance/income = 229,673/364,124 = 63.1%

The high balance ratio of Mr. Liu's family indicates that the family's financial situation is relatively stable, with a large portion of funds not being utilized in addition to maintaining the family's daily life. The balance ratio is too high, and the available investment funds are sufficient and are used for investment or savings, which can increase the asset size.

5.1.8. Asset-liability Ratio

Mr. Liu's family's gearing ratio = total liabilities/total assets = 765,968/1,700,000 = 45%

According to the current situation of Mr. Liu's family, the debt ratio is within a reasonable range, so even if Mr. Liu's family is under pressure to repay the debt, it has enough ability to repay the debt by realizing the assets, and the stability of the family assets is high. In order to increase the overall return on assets, we can use financial leverage to increase the return on assets by moderately increasing liabilities.

5.1.9. Investment to Net Assets Ratio

Mr. Liu's family's investment to net worth ratio = investment assets / net worth = 400,000 / 934,032 = 42.8%

This indicator reflects a family's ability to increase wealth through investment to achieve financial goals, and is a reflection of the family's surplus capacity. assets ratio and increase investment varieties to achieve stable income.

5.1.10. Liquidity Ratio

Liquidity ratio of Mr. Liu's family = liquid assets/average monthly expenses = 100,000/10,000 = 10

The liquidity ratio of Mr. Liu's family directly reflects the family's ability to repay its debts in the short term, and the liquidity ratio of Mr. Liu's family is relatively high. Generally speaking, the total amount of liquid assets can guarantee 3 to 6 months of expenses. Although the high liquidity ratio of Mr. Liu's family can ensure the flexibility of funds and can comfortably cope with the situation of urgent need of money in life. However, it also indicates that Mr. Liu has put a large amount of money in assets with good liquidity, and the return of these assets is relatively low, which puts pressure on the asset appreciation of Mr. Liu's family. So it is recommended to lower the liquidity ratio.

5.1.11. Debt-to-Income Ratio

Mr. Liu's household's debt-to-income ratio = annual debt/annual after-tax income = 40,000/364,124 = 11.0%

This indicator reflects the strength of spending ability, with a critical value of 40%, and reaching this value indicates that short-term solvency can be guaranteed. The ratio reflects how good the client's financial position is in a certain period of time. The ratio is less than 40%, which means that this indicator is not a problem for Mr. Liu's family and the family is not prone to financial crisis.

5.1.12. Pay-as-you-go Ratio

Mr. Liu's family's pay-as-you-go ratio = current assets/total liabilities = 100,000/765,968 = 13.1%

The pay-as-you-go ratio reflects the family's ability to use readily realizable assets to repay debts, and it is generally reasonable to keep this indicator around 0.7.

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5.2. Household Financial Situation Evaluation

The financial ratio analysis shows that Mr. Liu's family currently has no debts and can maintain basic living needs, but the main source of Mr. Liu's family income is salary income, and the investment income obtained through financial management means is still relatively small; at the same time, Mr. Liu's family has no expenditure on commercial insurance, only five insurance and one fund paid by his unit, and no provision for children's education and pension, which cannot resist the risk of accidents and lack of They are not protected against unexpected risks and lack of protective assets. Therefore, we suggest that Mr. Liu can use the funds to invest in bond funds, stocks and other financial products to make an investment portfolio to diversify income sources; Mr. Liu's annual consumption expenditure is moderate, and he can also enjoy life appropriately; as he grows older, Mr. Liu's family needs to purchase commercial insurance to provide certain protection for each family member, and needs to increase interest-earning assets and premium payments to improve risk protection The family needs to increase the level of interest-earning assets and premium payments to improve risk protection, increase non-wage income to make long-term reasonable investment financial planning and scientific asset allocation.

6. Quantitative Risk Attributes

Before allocating Mr. Liu's assets, the quantitative risk attributes are analyzed for Mr. Liu. The quantification of risk attributes is implemented from both supervisory and objective aspects, respectively. Among them, the objective quantification of risk tolerance reflects the ways in which Mr. Liu's financial planning goals can be met, while the subjective risk tolerance attitude determines which way Mr. Liu adopts to achieve his financial goals.

Table 8. Mr. Liu's risk tolerance (total score of 70)

Score	Employment Status	Family burden	Asset Position	Investment Experience	Investment Knowledge	Age
10 points	Public officials	Unmarried	Investment in real estate	Greater than or equal to 10 years	Professionally licensed	Under 25 years old is 50 points, not increased by one year to reduce one point, 75 years old and above is 0 points
8points	salaried class	Double salary without children	Self-use master debt lending	6-10 years	Finance and Economics	
6points	Commission earners	Double pay with children	Lending <50%	2-5years	Self-study with insights	
4points	Self-employed	Single salary with children	Lending >50%	Less than or equal to 1 year	Know some	
2points	Unemployed	Single salary to support three generations	No owner-occupied housing	None	A blank space	
Score	8points	6points	6points	6points	4points	35points

Risk tolerance represents the client's ability to tolerate risk under objective conditions. The main influencing factors include age, knowledge background, investment experience, and work situation, which cannot be changed in the short term and is relatively stable.

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Risk appetite refers to the degree of tolerance for risk within the risk tolerance range, and it is important to understand the actual risk appetite range of the client when designing the asset allocation plan, and the risk tolerance score table is shown in Table 9.

Table 9. Mr. Liu's risk tolerance attitude score table (Mr. Liu's total score: 40 points)

Score	Primary Factors	Past Investment Performance	Money-losing mental state	Major investments in the current period	Principal Loss Tolerance
10 points	Earn short and shallow price difference	Only earn and never lose	Learning Experience	Futures	0 points for not tolerating any loss, 2 points for every 1% increase
8 points	Long-term profitability	Earn more and lose less	Life as usual	Stock	
6 points	Annual Cash Earnings	Both profit and loss are even	Little emotional impact	Real Estate	
4 points	Anti-inflation guarantee	Earn less and lose more	Big emotional impact	Bonds	
2 points	Guaranteed capital and interest	Only earn and never lose	Hard to sleep	Deposits	
Score	4 points	6 points	6 points	2 points	22 points

Higher scores of risk tolerance and risk tolerance indicate higher risk tolerance. According to the risk test score table in Appendix I, Mr. Liu's risk appetite is 40 points, which is a steady medium attitude, and his risk tolerance score is 70 points, which is a medium-high risk tolerance, Mr. Liu's maximum tolerable loss ratio is 20%, which means that he is averse to loss and cannot afford larger losses. However, Mr. Liu's family risk tolerance attitude shows that Mr. Liu is averse to risk, and the economic loss will cause psychological unhappiness to Mr. Liu, and it is Mr. Liu's pursuit to maintain safety and preserve the value against inflation.

7. Mr. Liu's Family Financial Goals Implementation Plan

7.1. Car Purchase Plan

Mr. Liu prepares to buy Ms. Wang a small car with a target present value of ¥100,000 in 3 years, which is a short period of time, so he can allocate ¥70,000 of his current assets other than pension and housing fund, cash and demand deposit of ¥100,000 to this target. Interest rate calculated at 5%, the final value of the purchase of a car after 5 years: then FV = (3%, 3,-100,000) = ¥109,270, ¥70,000 of the entire investment at 6% pay rate can be accumulated at that time: FV = (6%,3,70,000) = ¥83,370. Funding gap = ¥109,270 - 83,370 = ¥25,900, the monthly savings that should be prepared for the car purchase goal: PMT = (6%/12,3 * 12,25,900) = -1,812, then the monthly savings should be ¥1,812 for the preparation of the car purchase.

7.2. Education Planning for Children

Mr. Liu's child 9 years later to college, college education gold present value target ¥100,000, assuming tuition growth rate of 3%, 9 years later when the demand: FV = 100,000 * FVIF (3%,9) = ¥130,480, Mr. Wang can use the remaining liquid assets ¥30,000 whole investment at 5% expected rate of return by then can accumulate amount: FV = 30,000 * FVIF (5%,9)=¥46,590, the capital shortfall = 130,480 - 46,590 = ¥83,890. The monthly target savings amount that should be set aside for children's education is 83,890 = PMT*FVIFA (5%/9,9*12), PMT = ¥634.

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Therefore, Mr. Liu and Ms. Wang need to save ¥100,000 for the present value of their daughter's education fund for college in 10 years, and currently need to save ¥634 per month for education.

7.3. Retirement Retirement Planning

Mr. Liu and Ms. Wang are 25 years away from retirement and will need a present value of ¥10,000 per month for living expenses after retirement. The basic pension provides 20% of the standard of living in the area = 6,140 * 20% * 2 = ¥2,456, and the portion of the pension that needs to be funded from a personal pension account or self-funded pension = 10,000 - 2,456 = ¥7,544. The cost of living grows at 3% for 25 years, and the final value of the monthly cost of living to be provided for when you first retire is FV=7,544*FVIF (3%,25)= ¥15,795. The discount rate i= (1+5%)/ (1+3%)-1=1.94%, has assumed that the couple has 25 years of life left after retirement, then the whole pension needed when just retired: PV= 15, 795*PVIFA (1.94%/12,25*12) =¥3,761,180. Have assumed that the personal pension account investment return rate is 6%, there are 25 years to prepare, the current pension account balance is ¥150,000, the contribution rate is 8%, the monthly contribution amount is 15,085.05 * 8% + 10,000 * 8% = ¥2,007, just after retirement can accumulate: FV = 150,000 * FVIF (6%,25) + 2,007 * FVIFA (6%/12,25*12) =¥1,967,814.

Retirement funding gap = 3,761,180 - 1,967,814 = ¥1,793,366. The accumulated amount of the basic pension and personal pension account alone is not enough to prepare for retirement needs. Monthly pension savings that should be prepared by yourself: ¥1,793,366=PMT*FVIFA (5%/12,25*12), PMT=¥3,000.

So, Mr. Liu and Ms. Wang need to save ¥3,000 per month so that they will be able to maintain their own living expenses and live happily and securely in their old age after 25 years of retirement without increasing the burden on their daughter and achieving their retirement goals.

7.4. Insurance Planning

Table 10. Four major types of protection insurance

Type of insurance	Counteracting Risk	Applicable people	Main Uses
Accident Insurance	Accidental death/accidental disability	All people	Direct coverage in the event of disability or death due to accidental bodily injury
Critical Illness Insurance (Fixed Benefit)	Major illness, loss of financial income after illness	People other than the elderly group	Covering large medical expenses, follow-up rehabilitation care costs, and compensating for loss of family income
Medical Insurance (Indemnity reimbursement type)	Diseases	All People	Reimbursement of medical expenses when seeking medical treatment due to accident or illness
Life Insurance (Death Benefit Type)	Death/Total Disability	Family breadwinner	When the breadwinner of the family dies unexpectedly, the insurance money is used to support parents, children, daily living expenses of the family, mortgage repayment, car loan, etc.

Mr. Liu's family is in the growth period, his career and income capacity are on the rise, while the pressure of responsibility and risk are increasing day by day. Mr. Liu and Ms. Wang's family income source depends entirely on salary income, and Mr. Liu is the main pillar of the family to bear the main part, Mr. Liu can bring long-term stable cash flow to the family when he is safe and sound, but once Mr. Liu happens to be at risk, the cash flow will not be enough to cover normal family expenses. Although Ms. Wang also has a certain annual income, it is not nearly enough to support the family's current normal expenses. In view of the current family situation, Mr. Liu and Ms. Wang should properly allocate term life insurance, critical illness insurance, medical insurance, accident insurance and other commercial insurance, while the child is only 10 years old, you can also consider some children's insurance for the child. For Mr. Liu's family, the following four major types of protection insurance are to be considered first.

Adding up the monthly savings amount for each financial goal, we can calculate that in order to reach the above four goals, the monthly savings amount required = ¥634 (children's education) + ¥1,812 (car purchase) + ¥3,000 (retirement) = ¥5,446. The amount that can be used to buy insurance in the next year is: (341,124 (disposable income) - 12,000 (living expenses) - 5,446 (required savings) *12) * 12 + 15,000 (interest income) + 8,000 (capital gains) = 288,772 Since Mr. Liu's annual income is ¥364,124, according to According to the "Double Ten Principle", the premium should not exceed 10% of the family's annual income, so the premium for the next year can be designed to be about ¥36,000.

7.4.1. Mr. Liu's Insurance Planning

Table 11. Mr. Liu's insurance plan

Insured	Insurance Type	Product Name	Coverage amount	Guarantee time	Payment time	Annual Premium	Protection focus
Mr. Liu (36 years old)	Critical Illness Insurance	Health with e-Policy	500,000	Lifetime	30 years	10,750	Critical illness: 500,000 3 claims Minor illness: 150,000 2 claims Death: 500,000
		China Life	500,000	To 70 years old	30 years	3,250	Critical illness: 500,000
	Term Life Insurance	Gorgeous barley fixed life	1.5 million	20 years	20 years	2,385	Death/Total Disability: 1.5 million
	Accident Insurance	Asia Pacific Million Awareness Comprehensive Accident Insurance	1 million	1 year	1 year	299	Accidental death/disability: 1 million Accidental medical treatment 50,000 Sudden death 500,000
	Medical Insurance	Ping An eLife Insurance	2 million	1 year	1 year	418	Hospitalization: 2 million Critical illness hospitalization: 4 million
	Total premium: 17,102						

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Mr. Liu is the backbone of the family, if he unfortunately falls, the whole family will lose the source of income. Therefore, Mr. Liu is the key protection target and should be allocated with a high enough amount of insurance coverage with both term and whole life coverage as a priority.

Analysis:

Critical illness coverage: ¥1 million (until age 70), 500,000 (for life)

Sickness death: 150+500=¥2 million

Accidental death: 1.5+100+50=¥3 million

Medical coverage: ¥2 million (4 million for critical illness)

This plan combines a term critical illness and a lifetime multi-pay critical illness to give Mr. Liu 1 million critical illness coverage until age 70, and two additional critical illness coverages of ¥500,000 each to life after the first critical illness payout. In this way, not only do you have a high enough coverage before the age of 70, but you can also achieve up to 3 critical illness payouts, giving you enough security. Mr. Liu has ¥1 million accident insurance and ¥1.5 million fixed life, if unfortunately met with an accident, the claim money can be used to repay the mortgage and maintain the family operation, to reduce the burden of the other half, social security can only solve the most basic medical expenses reimbursement, the scope of reimbursement does not include some good effect, side effects of imported drugs, special drugs, only rely on social security, will greatly reduce the quality of medical treatment, affect the body recovery, therefore, Mr. Liu was provided with a medical insurance of ¥2 million.

7.4.2. Ms. Wang's Insurance Planning

Ms. Wang is a university teacher with a stable job and good benefits. Ms. Wang wants to buy insurance to choose a big brand as much as possible, and she wants to be covered for life, so that she will feel more secure.

Table 12. Ms. Wang's insurance plan

Insured	Insurance Type	Product Name	Coverage amount	Guarantee time	Payment time	Annual Premium	Protection focus
Ms. Wang (34 years old)	Critical Illness Insurance	Hong Kang Life	500,000	Lifetime	30 year	8,150	Critical illness: 500,000, 3 times Minor illness: 150,000, 2 times Death: 500,000
	Term Life Insurance	Xinhua Insurance NCI	1 million	To 60 years old	20 year	1,550	Death/Total Disability: 1 million
	Accident Insurance	Life insurance million accident	1 million	1 year	1 year	300	Accidental death/disability: 1 million Accidental medical treatment 50,000 Sudden death 500,000
	Medical Insurance	Ping An eLife Insurance	2 million	1 year	1 year	299	Hospitalization: 2 million Critical illness hospitalization: 4 million
	Total premium: 10,299						

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Analysis.

Critical illness coverage: ¥500,000 (lifetime coverage)

Sickness death: 50+1=¥1.5 million

Accidental death: 500+100+1=¥2.5 million

Medical protection: ¥ 2 million (4 million for critical illness)

Ms. Wang chose Taiping, Pacific, PICC and PICC major brand products for this plan, and chose lifetime coverage for critical illness, while configuring 2 million commercial medical insurance as a supplement to employee medical insurance, as well as 1 million term life insurance.

7.4.3. Children's Insurance Planning

Many people's awareness of insurance is born after the birth of a child, so in the planning of insurance for children must also be configured in all aspects. Mr. Liu's child wants a better educational environment, and needs to plan for his child's education, because elementary school and junior high school are nine-year compulsory education, so it costs almost nothing to go to school and the expenses are small, but all the education expenses needed at high school and college need to be borne by parents. Since Mr. Wang has already done the planning of his child's college education fund, we focus on the allocation of the child's high school education fund here.

Table 13. Children's Insurance Planning

Insured	Insurance Type	Product Name	Coverage amount	Guarantee time	Payment time	Annual Premium	Protection focus
Liu Chang (10 years old)	Critical Illness Insurance	Centennial HealthCare Signature Edition	500,000	To 70 years old	30 years	1,500	Serious: 500,000 Medium Illness: 250,000 Minor illness: 150,000 Extra 150,000 for children's special illness
	Accident Insurance	Cathay Munchkin Insurance	200,000	1 year	1 year	59	Accidental death/disability: 200,000 Accidental Medical 20,000
	Medical Insurance	Good health insurance for people	2 million	1 year	1 year	166	Hospitalization: 2 million Critical illness hospitalization: 4 million
	Education Grants	Universal Coverage - Education Fund	30,000	3 year	3 year	4,800	The child will receive to 70 years ¥10,000 per year for education between the ages of 15 and 17
	Total premium: 6,525						

Analysis:

Critical illness coverage: ¥500,000 (until age 70)

Accidental death: ¥200,000

Medical coverage: ¥2 million (4 million for critical illness)

Education fund: ¥30,000 (15 to 17 years old)

In summary, Mr. Liu's family insurance target planning premiums totaling 17,102 + 10,299 + 6,525 = ¥33,926, accounting for about 33,926/364,124 = 9.3% of Mr. Liu's annual family income, the amount of protection should be 5 to 10 times the annual income, with the family's annual work income of ¥364,124, the amount of protection is 182 With the above insurance allocation plan, Mr. Liu's family can save ¥288,772 - ¥33,926 = ¥254,846 a year.

7.5. Investment Planning

According to the above plan, Mr. Liu's family has a total of 5,446*12 (target savings) + 288,772 (planned annual balance) + 100,000 (financial products) + 100,000 (stocks) + 100,000 (funds) = ¥654,124 of savings available for investment allocation, as Mr. Liu's risk appetite belongs to a steady attitude and his risk tolerance is medium to high risk tolerance, according to the risk matrix in Appendix II combined with the analysis of the family's financial situation, the recommended asset allocation portfolio is recommended: funds account for about 30%, bonds account for about 30%, stocks account for about 20%, and financial products account for about 20%, and the specific portfolio analysis is shown below.

The liquidity ratio of Mr. Liu's family is too high. Since Mr. and Mrs. Liu have stable jobs and guaranteed income, the liquidity ratio can be controlled at 6 times. The current average monthly expenditure of Mr. Liu's family is 10,000 + 33,926/12 = ¥12,827, so it is recommended that Mr. Wang's family allocates liquid assets of ¥76,962 (emergency reserve) in the form of cash, various types of bank savings and money market funds, which can not only maintain the liquidity of funds, but also obtain a certain amount of income, and can avoid the hardship caused by various reasons This will not only maintain the liquidity of the funds, but also can obtain a certain amount of income, and can avoid the temporary interruption of income due to various reasons brought about by the hardship of life, in case of unexpected events need to use the money can quickly realize the emergency prepared. Therefore, Mr. Liu allocated ¥100,000 to earn income in the balance of the treasure, as you can use, according to the daily interest, the current balance of the treasure earnings of about 2.25% annualized, than the bank's call interest 0.35% or a lot higher.

For Mr. Liu's family, an appropriate allocation to some stocks is also beneficial as a way to manage family finances. The combination of stable and risky pairing is more likely to result in strong asset appreciation. In terms of the amount of capital allocated to stocks, it is recommended that Mr. Liu maintain a capital investment of about ¥150,000. In the direction of investment selection, as Mr. Liu is prudent in risk appetite, medium risk tolerance and aversion to loss, cannot afford large losses, it is recommended to choose the industry's leading stocks, top-performing stocks mainly, with an annualized return of about 15%.

Treasury bonds are debt obligations in the form of funds raised by the state from the community based on its credit, and are a type of bond with a high credit rating. The benefits of treasury bond investment are stability and safety, and the disadvantage is that the return is average, but higher than banks. Mr. Liu is recommended to allocate ¥150,000 to purchase treasury bonds with relatively high credit ratings, such as some electronic savings treasury bonds issued by the Ministry of Finance, with a coupon rate of 4.27% per annum for a 5-year term.

Fund investment on the investor's professionalism and investment experience needs are not high, are the funds to professional managers to allocate investment, investors even without much investment knowledge can also obtain the benefits of the fund, but the fund requires fees, increasing the cost, and therefore need to be held for a long time. Mr. Liu is recommended to allocate the remaining ¥100,000 to buy index funds, from the market performance, for index funds, no matter when you buy, as long as you insist on holding for a long time (usually 3 to 5

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years), it is relatively easy to get 10% return. The remaining ¥150,000 to buy short-term bank wealth management within one year, the interest rate of about 4.2%, the above portfolio allocation scheme is shown in the table below.

Table 14. Portfolio Allocation

Category	Investment amount	Percentage of	Expected rate of return
Balance	100,000	15.4%	2.25%
Funds	150,000	23.1%	10%
Bank Wealth Management Products	150,000	23.1%	4%
Stock	100,000	15.4%	15%
National Debt	150,000	23.1%	4.27%

8. Mr. Liu's Family Financial Situation and Evaluation after Financial Management in 2022

8.1. Mr. Liu's Family Financial Situation after Adjustment

8.1.1. Mr. Liu's Family Balance Sheet in 2022

Table 15. Liu's family assets and liabilities in 2022

Asset Projects	Amount	Liability items	Amount	Net worth items	Amount
Money-based Funds	100,000				
Liquidity assets	100,000	Consumer liabilities	0	Net liquidity	100,000
Bank Wealth Management Products	150,000				
Stock Investment	100,000				
Index Funds	150,000				
Treasury Investment	150,000				
Investment assets	550,000	Investment liabilities	0	Net Investment Value	550,000
Owner-occupied housing	1,200,000	Home loan for own use	765,968		
Self-use cars	100,000				
Assets for own use	1,300,000	Liabilities for own use	765,968	Net value for own use	534,032
Total Assets	1,950,000	Total liabilities	769,568	Total Net Worth	1,180,432

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8.1.2. Mr. Liu's Family Income and Expenditure Savings Table in 2022

Table 16. Mr. Liu's family income and expenditure savings table in 2022

Revenue Items	Amount	Expenditure items	Amount	Savings Program	Amount
Salary	480,000	Household living expenses	60,000		
Year-end bonus	60,000	Children's education expenses	24,000		
Social Security Withholding	(97,956)	Parental support expenses	12,000		
Provident Fund Withholding	(56,460)	Other Expenses	24,000		
Personal Income Tax	44,460				
Job Income	341,124	Living expenses	120,000	Life Savings	221,124
Interest income	45,305	Interest expense	16,000		
Realization of capital gains	15,000	Protection Premiums	33,926		
Financial income	60,305	Financial Expenses	49,926	Financial Savings	(10,379)
Total revenue	401,429	Total Expenses	169,926	Total savings	231,503

8.1.3. Mr. Liu's Family 2022 after-tax Cash Flow Statement

Table 17. Mr. Liu's family 2022 After-tax Cash Flow Statement

Projects	Amount	Projects	Amount
I. Living cash flow		III. Cash flow from borrowing and lending	
Job Income	341,124	Principal amount borrowed	800,000
Living expenses	(120,000)	Interest expense	(14,451)
Living Cash Flow	221,124	Principal repayment	(25,550)
		Lending cash flow	759,999
II. Investment cash flow		IV. Securing cash flow	
Investment income	45,305	Premium Expense	33,926
Capital gains	15,000	Secure cash flow	
Investment Cash Flow	60,305		

8.2. Adjusted Household Financial Situation Evaluation

From the adjusted balance sheet, it can be seen that Mr. Liu's family financial investment has become diversified, and on the basis of the previous bank financial products, stocks and bond funds, the investment of money funds, index funds and treasury bonds has been added, and the investment use is more extensive, so the assets are also presented more diversified, and the total net value has been significantly increased from the previous ¥934,032; from the adjusted income and expenditure savings statement and The adjusted income and expenditure statement and cash flow statement show that the interest income and capital gains from

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investment products are more than before, and the financial management income has increased from ¥23,000 before to ¥60,305, while a new premium expense has been added to equip family members with corresponding protection and enhance the risk resistance of the whole family. Comprehensive above can be obtained, Mr. Liu's family's income and expenditure structure bef ore financial management is single, the family has good saving ability, liquid assets have not be en more fully utilized, and the family has less protection. Through proper financial planning fo r Mr. Wang's family, all assets are fully utilized. Since Mr. Liu's family is in the growth period, its various development potentials are great, so appropriate adjustments can be made in the futu re as wealth increases. Through the specific design of retirement goal, education fund goal, car buying goal and insurance planning goal as well as the asset investment portfolio and product allocation, the fund allocation becomes more reasonable, the asset distribution of Mr. Liu's fam ily is more reasonable and the life protection is improved.

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