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Feature · Data as of 2026-09-30 · Converted to yuan at purchasing-power parity

Pension systems in China, the US and Japan

At equal purchasing-power income, replacement rates are 77% in the US (Social Security + 401(k)), 55% in China and 32% in Japan

The reference income is Shenzhen's 2025 pension benefit base of ¥11,293 a month (contribution index 1.0), converted with the World Bank private-consumption PPP to 337,321 yen in Japan and $3,264 in the US. Pensions after 30 years of contributions are calculated under each country's current rules. The replacement rate is 55% for China's basic pension, 32% for Japan's Employees' Pension and 50% for US Social Security, rising to 77% with a 401(k) in the base case. The internal rate of return on total contributions, with benefits to age 90, is 3.7% for US Social Security, 2.5% for China and 1.3% for Japan.

China basic pension	Japan Employees' Pension	US Social Security	US Social Security + 401(k)
¥6,168	¥3,645	¥5,678	¥8,750
a month · replacement rate 55% · lifetime benefit from 63	a month · replacement rate 32% · lifetime benefit from 65	a month · replacement rate 50% · lifetime benefit from 67	a month · replacement rate 77% · Social Security for life from 67; 401(k) drawn 63–90 (base case)

01

Key findings

Replacement rates: at equal purchasing-power income the replacement rate is 77% in the US (Social Security plus a 401(k) in the base case), 55% in China and 32% in Japan. Counting only the mandatory Social Security benefit, the US rate is 50%, below China's.

Contribution rates: the total contribution rate is 24% in China (8% employee, 16% employer), 21.4% in the US (12.4% Social Security, 9% 401(k)) and 18.3% in Japan (shared equally).

Internal rates of return: on total contributions, with benefits paid to age 90, the IRR is 3.7% for US Social Security, 2.5% for China and 1.3% for Japan. On personal contributions alone the figures are 6.0%, 6.5% and 3.6% respectively.

Structure: the reference income is close to the national average in China and Japan (0.99x the average in Japan) but 56% of the average in the US, where the progressive Social Security formula raises the replacement rate. The Japanese estimate excludes the macroeconomic slide, so actual benefits may be lower.

Supplementary savings: investing a further ¥1,500 a month (13% of income) in SPY on top of the public pension pays ¥4,534 a month from 63 to 90 in the base case, adding about 40 percentage points to the replacement rate (28 to 58 points from the conservative to the optimistic case). It is a drawdown over a fixed period and carries market risk.

02

Basis of comparison

Incomes are aligned by purchasing power rather than market exchange rates, using the price of the same basket of household consumption in each country. Under the World Bank's 2025 private-consumption PPP, ¥3.46 in China, 103.3 yen in Japan and $1 in the US buy the same quantity of consumption. Market rates over the same period were ¥6.70 and 158.1 yen per dollar, which put China's price level at about 52% of the US level and Japan's at about 65%.

The reference income is Shenzhen's 2025 pension benefit base of ¥11,293 a month, the average contribution level (contribution index 1.0). At PPP this equals 337,321 yen a month in Japan and $3,264 a month in the US ($39,171 a year).

Country	Monthly income	National average	Relative to average
China (Shenzhen)	¥11,293	benefit base ¥11,293 (2025)	**1.00x**
Japan	337,321 yen ¥11,293	full-time workers 340,600 yen (2025, excl. bonus and overtime)	**0.99x**
United States	$3,264 ¥11,293	average wage index ÷ 12 = $5,821 (2024)	**0.56x**

Small print: the yuan equivalent at PPP. Japan's average is the scheduled monthly wage of full-time workers (June) in the MHLW Basic Survey on Wage Structure; the US average is the Social Security Administration's national average wage index.

The same purchasing-power income is close to the average wage in China and Japan but 56% of the average in the US, reflecting higher US wages relative to US prices. This matters for the results: the Social Security benefit formula gives higher replacement rates to workers earning below the average.

Common assumptions

- Contribution period: ages 33 to 63, 30 years. Benefits start at 63 in China, 65 in Japan and 67 for US Social Security; the US 401(k) and the supplementary savings are drawn from 63 to 90.
- Prices: amounts are at today's prices and wage levels; wages, contribution and benefit bases and pensions are assumed to grow with wages.
- Replacement rate = monthly pension ÷ gross monthly income before retirement.
- Internal rate of return: monthly contributions during the contribution period as outflows and monthly benefits as inflows, to age 90; calculated on total contributions (employee + employer) and on personal contributions.
- All figures are pre-tax; local-currency amounts are converted to yuan at PPP.

03

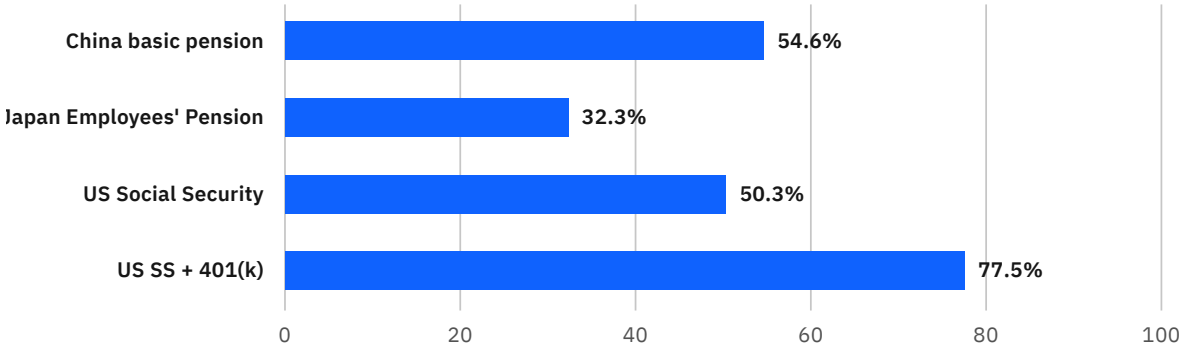
Pension estimates for the three countries

The table shows the results under each country's current rules. Contributions and benefits are calculated in local currency and converted to yuan at PPP; contributions run from 33 to 63, and IRRs are calculated to age 90.

Item	China basic pension	Japan Employees' Pension	US Social Security	US 401(k) (base case)	US
Monthly income (gross)	¥11,293	¥11,293 337,321 yen	¥11,293 $3,264	¥11,293 $3,264	¥1
Total contribution rate	24% 8% employee + 16% employer	18.3% 9.15% each	12.4% 6.2% each	9% 6% employee + 3% employer	2 SS 12.4% + 401
Employee contribution (monthly)	¥903	¥1,042 31,110 yen	¥700 $202	¥678 $196	¥
Employer contribution (monthly)	¥1,807	¥1,042 31,110 yen	¥700 $202	¥339 $98	¥
Monthly benefit	**¥6,168**	**¥3,645** 108,862 yen	**¥5,678** $1,641	**¥3,072** $888	**¥**
Replacement rate	**54.6%**	**32.3%**	**50.3%**	**27.2%** 19.1%–39.4%	**7** 69.4%–
Starting age	63	65	67	63	6 SS /
Payment type	lifetime benefit	lifetime benefit	lifetime benefit	drawdown to 90	lifetime + drawdown
IRR on total contributions	**2.5%**	**1.3%**	**3.7%**	**3.5%**	
IRR on personal contributions	6.5%	3.6%	6.0%	5.0%	

Large figures are yuan at PPP; small print is local currency. The 401(k) is the base case (S&P 500 real return of 6% a year), with the range covering 4% to 8%. IRRs are at today's wage and price levels, with benefits to age 90; "total" includes employer contributions, "personal" counts only the employee's. The 401(k) IRR is below the assumed 6% return because the balance earns nothing during the drawdown.

Replacement rate



Pension replacement rates after 30 years of contributions on the same purchasing-power income (US 401(k) in the base case).

China: a Shenzhen enterprise employee contributing on the benefit base, contribution index 1.0. The employee pays 8%, ¥903 a month; the employer pays 16%, ¥1,807. After 30 years and retirement at 63, the basic pension of ¥3,388 and the individual-account pension of ¥2,780 give **¥6,168 a month**, paid for life. Personal contributions of ¥0.33m are recovered by about age 67.

Japan: monthly pay of 337,321 yen falls in standard-remuneration grade 21 (330,000 to 350,000 yen, counted as 340,000 yen). The premium rate is 18.3%, of which the employee and the employer each pay 31,110 yen (¥1,042). After 30 years of coverage, benefits from 65 are a basic pension of 52,956 yen a month and an earnings-related pension of 55,906 yen, 108,862 yen in total, or **¥3,645**, paid for life. The basic pension is a flat-rate benefit that depends only on months of coverage; the earnings-related part equals standard remuneration × 5.481/1000 × months covered. Bonuses are excluded, as is the macroeconomic slide, which is set to reduce real benefits over the coming decades; the estimate may therefore exceed actual benefits.

US Social Security: on $3,264 a month the employee and the employer each pay 6.2%, $202 (¥700), below the annual taxable maximum of $184,500. Benefits are based on the

highest 35 years of earnings; with 30 years worked, 5 years count as zero, so average indexed monthly earnings (AIME) are $3,264 × 30/35 = $2,798. Using SSA's latest bend points (2026: $1,286 and $7,749), the primary insurance amount (PIA) is 90% × $1,286 + 32% × ($2,798 − $1,286) = **$1,641**, or ¥5,678. The full benefit is paid from 67 for life, with annual cost-of-living adjustments. Claiming at 62 pays 70% ($1,149, ¥3,975); at 65, 86.7% ($1,422, ¥4,921).

US 401(k): the employee defers 6% of pay ($196, ¥678) and the employer matches 50 cents per dollar up to 6% of pay, i.e. 3% ($98, ¥339), the most common formula in Vanguard's How America Saves 2026. Everything is invested in an S&P 500 index fund from 33 to 63 and then drawn down evenly to 90. At real returns of 4%, 6% and 8% a year this pays ¥2,157, **¥3,072** and ¥4,447 a month. Contributions are tax-deferred and withdrawals are taxed as income; the employer match is often subject to a vesting period. Participation in a 401(k) is voluntary; Social Security is mandatory.

Composition of the US total: the US total combines two different components. Social Security is mandatory and pays ¥5,678 a month for life from 67, a replacement rate of 50%. The 401(k) is voluntary and is drawn from 63 to 90, paying ¥3,072 a month in the base case, a replacement rate of 27% (19%–39% from the conservative to the optimistic case), depending on market returns. Social Security accounts for 65% of the US total; on its own it pays ¥490 a month less than China's basic pension.

04

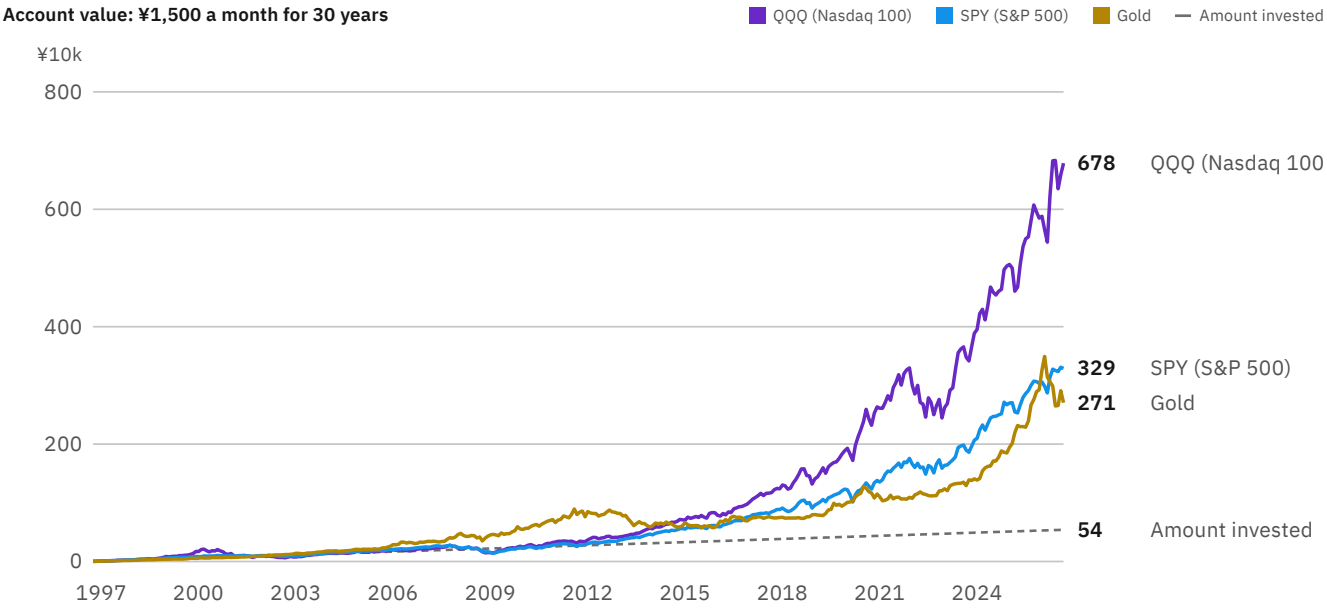
Supplementary savings: historical backtests of five assets

This section and the next discuss supplementary savings outside the public pension. Supplementary savings differ from public pensions in contributions, payment period and risk, and the two are not compared directly here. The assumption is ¥1,500 a month (13% of the reference income) invested separately in five assets: gold, SPY (S&P 500), QQQ (Nasdaq 100), BTC, and BTC and ETH in equal parts. Backtest method: purchases on the first trading day of each month at that day's exchange rate, valued in yuan. Figures are nominal, before inflation, fees and tax.

Asset	Period	Invested	Final value	Multiple	Annualised return	Max drawdown
QQQ · 30 years	from 1996-10 · 360 months	¥0.54m	**¥6.78m**	12.6x	13.9%	-71.0%
SPY · 30 years	from 1996-10 · 360 months	¥0.54m	**¥3.29m**	6.1x	10.3%	-49.6%
Gold · 30 years	from 1996-10 · 360 months	¥0.54m	**¥2.70m**	5.0x	9.3%	-36.6%
BTC · 12 years of data	from 2014-10 · 144 months	¥0.22m	**¥11.83m**	54.8x	61.3%	-74.3%

Annualised return is the money-weighted return (XIRR). Before QQQ listed in 1999-03 the Nasdaq 100 index is used (excluding dividends); thereafter SPY and QQQ reinvest dividends. Gold uses the World Bank's monthly average London price before December 2004 and the GLD ETF afterwards. Reliable daily data are unavailable for BTC before 2014 and for ETH before 2017, so no 30-year backtest is possible for crypto-assets.

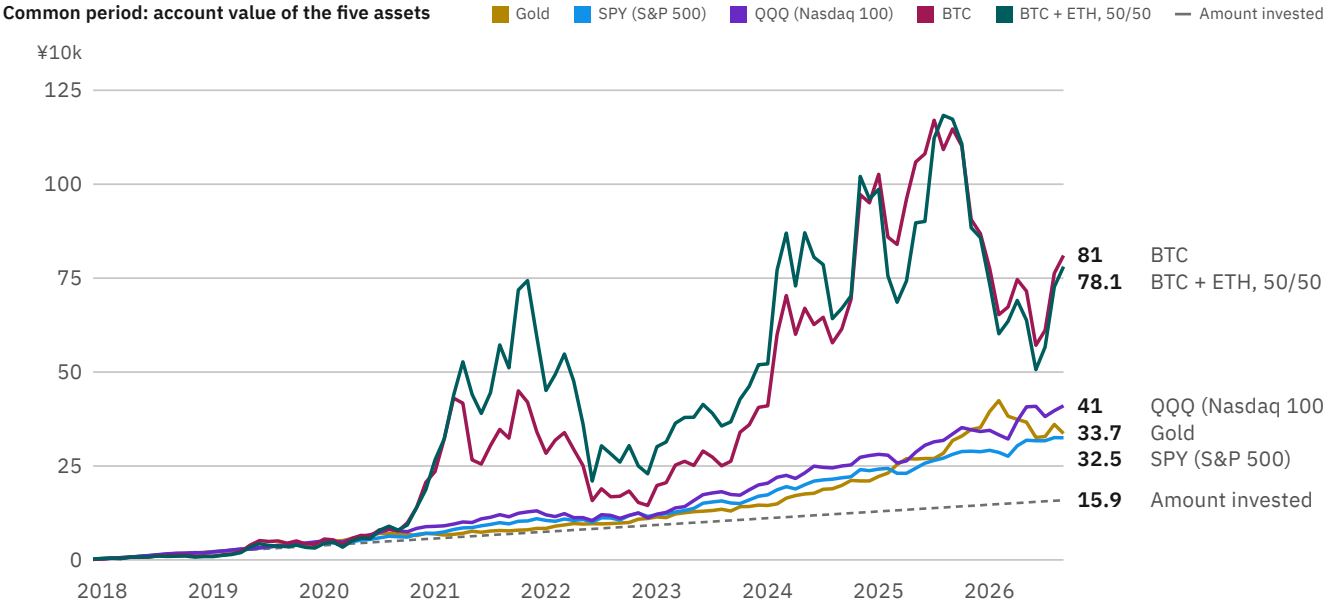
Account value: ¥1,500 a month for 30 years



Oct 1996 to Sep 2026, in units of ¥10k, nominal.

Over 30 years the final value was 12.6x the amount invested for QQQ, 6.1x for SPY and 5.0x for gold. The QQQ result includes a deep drawdown after the 2000 technology bubble: by Sep 2002 the account was 71% below its peak and at one point 43% below the amount invested. The gold backtest starts from a low price level: the price continued to fall after the start, reaching a monthly average of $256 an ounce in Jul 1999, the lowest since 1979, so early purchases accumulated units at low prices. After US inflation, the median real annualised return across the 301 rolling 30-year windows since gold was floated in 1971 is 1.3%; the most recent window exceeds 98% of them.

Common period: account value of the five assets



Dec 2017 (start of the ETH data) to Sep 2026, ¥1,500 a month, in units of ¥10k, nominal. Public pensions have no market value and are not shown.

Common period (106 months, ¥0.16m invested)	Final value	Multiple	Annualised return	Largest loss vs invested	Max drawdown
Gold	**¥0.34m**	2.1x	16.4%	-2.3%	-23.2%
SPY (S&P 500)	**¥0.32m**	2.0x	15.6%	-4.4%	-12.2%
QQQ (Nasdaq 100)	**¥0.41m**	2.6x	20.6%	-4.0%	-19.9%
BTC	**¥0.81m**	5.1x	35.3%	-50.6%	-67.8%
BTC + ETH, 50/50	**¥0.78m**	4.9x	34.5%	-59.7%	-71.8%

Largest loss vs invested is the deepest fall of the account value below the cumulative amount invested; max drawdown is the deepest fall from a previous peak.

In the common period since Dec 2017, BTC and BTC + ETH had the highest final values (5.1x and 4.9x the amount invested) and the deepest drawdowns (-67.8% and -71.8%). SPY's maximum drawdown over the same period was -12.2% and gold's -23.2%. All results assume uninterrupted contributions and no withdrawals.

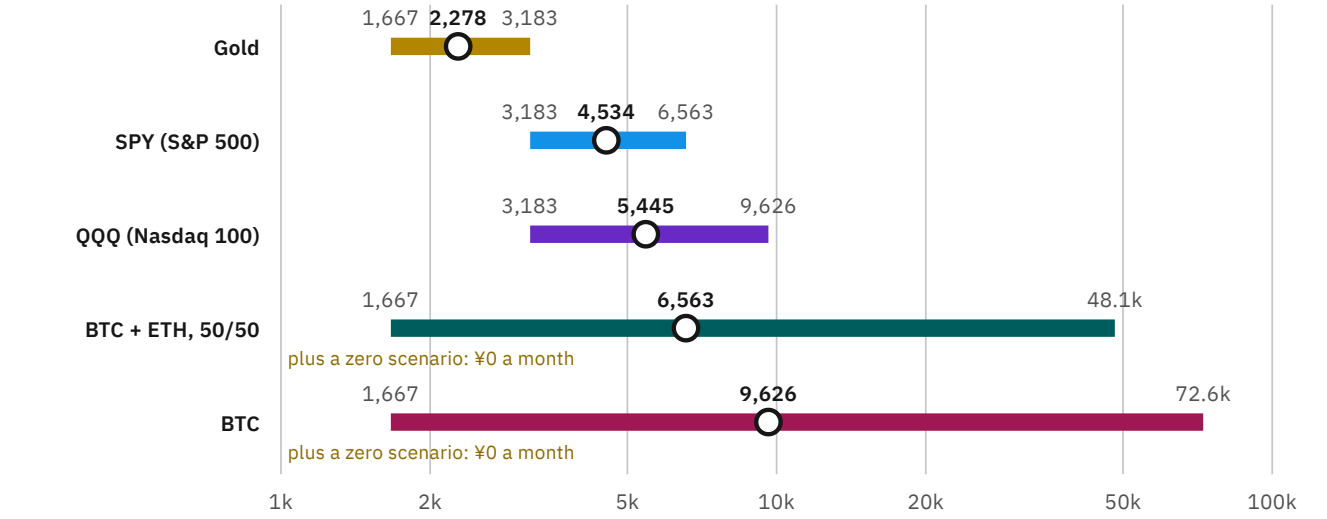
05

Supplementary savings: 30-year scenarios

The scenarios use the same contribution: ¥1,500 a month, 13% of the reference income, invested for 30 years from age 33, with the balance drawn down evenly from 63 to 90 (324 months). Payments stop when the balance is exhausted; this is not a lifetime benefit. Each asset has conservative, base and optimistic real returns after inflation and fees, and the crypto-assets also have a zero scenario. **Additional replacement rate** = monthly payout ÷ the reference income of ¥11,293.

Gold · base case	SPY (S&P 500) · base case	QQQ (Nasdaq 100) · base case	BTC + ETH, 50/50 · base case	BTC · base case
+20.2 pp	+40.1 pp	+48.2 pp	+58.1 pp	+85.2 pp
¥2,278 a month; conservative 14.8 pp · optimistic 28.2 pp	¥4,534 a month; conservative 28.2 pp · optimistic 58.1 pp	¥5,445 a month; conservative 28.2 pp · optimistic 85.2 pp	¥6,563 a month; conservative 14.8 pp · optimistic 426.1 pp; zero scenario	¥9,626 a month; conservative 14.8 pp · optimistic 642.7 pp; zero scenario

¥1,500 a month: monthly payout from 63 to 90



Scenario ranges (log scale, yuan at today's prices). Each bar runs from the conservative to the optimistic case; the dot marks the base case.

Asset real return: conservative / base / optimistic	Conservative	Base	Optimistic	Additional replacement rate (base) conservative–optimistic	Balance at 63 (base)
Gold 0% / 2% / 4%	¥1,667	**¥2,278**	¥3,183	**+20.2 pp** 14.8–28.2	¥0.74m
SPY (S&P 500) 4% / 6% / 8%	¥3,183	**¥4,534**	¥6,563	**+40.1 pp** 28.2–58.1	¥1.47m
QQQ (Nasdaq 100) 4% / 7% / 10%	¥3,183	**¥5,445**	¥9,626	**+48.2 pp** 28.2–85.2	¥1.76m
BTC + ETH, 50/50 0% / 8% / 18%, plus a zero scenario	¥1,667	**¥6,563**	¥48,118	**+58.1 pp** 14.8–426.1; 0 if zero	¥2.13m
BTC 0% / 10% / 20%, plus a zero scenario	¥1,667	**¥9,626**	¥72,575	**+85.2 pp** 14.8–642.7; 0 if zero	¥3.12m

Amounts are monthly payouts from 63 to 90 in today's yuan; the balance earns nothing during the drawdown.

Scenario assumptions: SPY 4% / 6% / 8%, close to the S&P 500's real return of 6%–7% a year over the past century; QQQ 4% / 7% / 10%, with a wider range given its sector concentration; BTC 0% / 10% / 20%, plus a zero scenario; BTC and ETH in equal parts 0% / 8% / 18%, plus a zero scenario. Gold 0% / 2% / 4%: after US inflation it has returned 4.7% a year since it was floated in 1971 and 0.9% from the 1980 peak; the middle half of its 301 rolling 30-year windows lies between 0.7% and 2.8%. The scenario returns are judgements, not forecasts.

> In the base case, ¥1,500 a month adds about 20 percentage points to the replacement rate in gold, 40 in SPY, 48 in QQQ, 58 in BTC + ETH and 85 in BTC. In the conservative case the five assets add 15 to 28 points; BTC and BTC + ETH also have a zero scenario that adds nothing. All are drawdowns over the fixed period from 63 to 90.

06

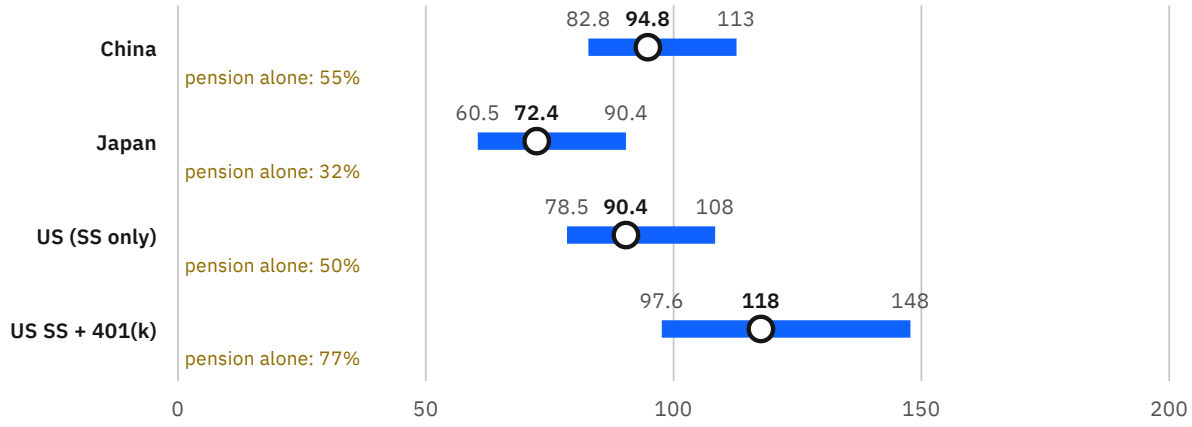
Combining public pensions with supplementary savings

This section adds the supplementary savings to each country's pension, using the base case of ¥1,500 a month in SPY (about 40 percentage points) as the example; the ranges follow SPY's conservative and optimistic cases. The US 401(k) and the supplementary savings share the same return scenarios and therefore move together.

Pension	Pension replacement rate	Added (SPY, base)	Total (base)	Total range	Total monthly income (base)
China basic pension	54.6%	+40.1 pp	**94.8%**	82.8%–112.7%	¥10,701
Japan Employees' Pension	32.3%	+40.1 pp	**72.4%**	60.5%–90.4%	¥8,178
US Social Security (excl. 401(k))	50.3%	+40.1 pp	**90.4%**	78.5%–108.4%	¥10,212
US Social Security + 401(k)	77.5% 69.4%–89.7%	+40.1 pp	**117.6%**	97.6%–147.8%	¥13,283

Total = pension replacement rate + additional replacement rate from supplementary savings, applicable from 63 to 90 only; after 90 only the lifetime public benefit remains. The US Social Security + 401(k) figure includes the 401(k) base case.

Pension + supplementary savings (SPY): total replacement rate



Each bar runs from the conservative to the optimistic case; the dot marks the base case. Applies from 63 to 90.

In China and Japan the public pension does not vary with markets, so the whole range comes from the supplementary savings. If the savings were held in crypto-assets and the zero scenario occurred, the combined replacement rate would fall back to the public pension alone (55% in China, 32% in Japan).

Japan's public replacement rate is the lowest (32%), so supplementary savings form the largest share of its combination: about 55% of the total in the base case.

The US combination of Social Security, 401(k) and supplementary savings reaches 118% in the base case, above pre-tax income, corresponding to a total saving rate of 34.7% of income (12.4% Social Security, 9% 401(k), 13.3% supplementary). The Social Security trust fund is projected to be depleted in 2032, after which 78% of scheduled benefits would be payable without legislative change.

07

Risks and limitations

PPP versus market exchange rates
This report converts at PPP. At market exchange rates the US monthly income is worth ¥21,866, the US pension total ¥16,942 and Japan's Employees' Pension ¥4,611. For spending in China the market-rate figures are the more relevant; for spending locally the purchasing-power figures in the text apply. PPP is itself an estimate and is revised annually: China's value moved from 4.01 in 2021 to 3.46 in 2025.

Pension rules may change
Retirement is decades away. China may change contribution rates, the benefit formula and Shenzhen's benefit base. Japan's macroeconomic slide will continue to reduce real benefits and is not modelled here. The 2026 Social Security Trustees Report projects depletion of the retirement trust fund in 2032, after which 78% of scheduled benefits would be payable. 401(k) matching and vesting are set by employers and may also change.

Market drawdowns
Over the past 30 years the maximum drawdown of a monthly plan was -71.0% for QQQ, -49.6% for SPY and -36.6% for gold, and -74.3% for BTC since its data begin. The backtests assume uninterrupted contributions; stopping or selling during a decline would produce materially different results.

Gold generates no cash flow
Gold pays no dividend or interest; its return comes entirely from price changes. An investor who bought in January 1980 saw the nominal price return to the purchase level only in 2006, and in real terms in 2025; the real annualised return to date is 0.9%.

Price risk of crypto-assets
BTC and ETH generate no cash flow, and their prices depend on market consensus. Changes in technology, regulation or market confidence could reduce account values sharply or to zero.

Regulation and access in mainland China
In mainland China, the business of virtual-currency trading platforms is classified as illegal financial activity; holding coins is not illegal, but trading channels and fund transfers have no legal protection. SPY and QQQ are listed in the US; mainland investors usually gain exposure through QDII funds or cross-border ETFs, which are subject to quotas, possible premiums and higher fees, and personal overseas investment is limited by foreign-exchange quotas. Gold is available through legal channels such as bank gold accounts and exchange-listed gold ETFs. The Japanese and US pensions apply only to people employed in those countries.

Tax
All figures are pre-tax. 401(k) contributions are tax-deferred and withdrawals are taxed as income; up to

Drawdown assumptions
From 63 the 401(k) and supplementary balances are assumed to earn nothing and are drawn down evenly to 90. In

Basis of the internal rates of return
IRRs are calculated to age 90; for lifetime benefits a longer life raises the return. Public-pension contributions and

85% of Social Security benefits may be taxable depending on total income; Japan taxes public pensions after a dedicated deduction; China exempts basic pensions from individual income tax. The backtests reinvest dividends in full, before withholding tax and trading costs.	practice the balance remains invested and the outcome could be higher or lower. Nothing is paid after 90; the public pensions are lifetime benefits, so a longer life raises the total received.	benefits are assumed to grow with wages, so their IRRs are returns relative to wage growth; with sustained real wage growth, the return measured against prices would be correspondingly higher. 401(k) and supplementary returns are real returns after inflation, so the two kinds of IRR rest on different bases. The IRR on personal contributions attributes the entire benefit to the employee's contributions and makes no deduction for the employer's share.

08

Methodology and data sources

Common basis: contributions or monthly investing for 30 years (360 months) from age 33, at today's prices and wages; wages, contribution and benefit bases and pensions are assumed to grow with wages. Replacement rate = monthly pension ÷ gross monthly income before retirement. Internal rate of return: monthly contributions as outflows during the contribution period and monthly benefits as inflows during the payment period, to age 90, discounted monthly and annualised; "total" includes employer contributions and "personal" counts only the employee's. Total contribution rate = employee plus employer contributions ÷ gross income. Additional replacement rate of supplementary savings = monthly payout from 63 to 90 ÷ ¥11,293.

Income and PPP: China's income is Shenzhen's 2025 pension benefit base of ¥11,293 (Shenzhen HRSS). World Bank private-consumption PPP, PA.NUS.PRVT.PP (local currency per international $), latest year available for all three, 2025: China 3.4596, Japan 103.337, US 1 (API, updated 2026-07-13). Japan's income = 11,293 ÷ 3.4596 × 103.337 = 337,321 yen; the US = 11,293 ÷ 3.4596 = $3,264. Pensions convert to yuan as local amount ÷ local PPP × 3.4596. Japan's average is the scheduled monthly wage of full-time workers, both sexes (June), 340,600 yen, in the MHLW 2025 Basic Survey on Wage Structure; the US average is the SSA national average wage index for 2024, $69,846.57, ÷ 12.

At market exchange rates (2026-10-01: $1 = ¥6.6987 = 158.14 yen): Japan's income is ¥14,289 and the US income ¥21,866; monthly pensions are China ¥6,168, Japan ¥4,611, US Social Security ¥10,994, 401(k) base case ¥5,948, US total ¥16,942. The text uses PPP throughout.

China basic pension: Shenzhen basic pension insurance for enterprise employees, employee 8%, employer 16%; contribution base = benefit base × contribution index 1.0. Basic pension = (benefit base + benefit base × index) ÷ 2 × years × 1% = ¥3,388; individual-account pension = balance ÷ 117 (payout months at 63) = ¥2,780, with account interest assumed to track wages. 63 is the statutory retirement age for men born after 1999 under the gradual increase.

Japan Employees' Pension: monthly pay of 337,321 yen falls in grade 21 of the premium table (FY2026), pay 330,000 to 350,000 yen, standard monthly remuneration 340,000 yen. Premium 18.3%, split evenly. Basic pension = 847,300 yen (full amount, fiscal 2026) × 360 ÷ 480; earnings-related part = 340,000 × 5.481/1000 × 360. The basic pension counts only months between 20 and 60; months from 60 to 63 come back through the transitional addition, giving almost the same result as 360/480. No bonuses; the macroeconomic slide is not modelled. Paid from 65. Sources: Japan Pension Service, basic pension, employees' pension, calculation figures, amounts from April 2026.

US Social Security: OASDI tax 6.2% each for employee and employer; 2026 taxable maximum $184,500 (SSA). AIME = monthly pay × 30 ÷ 35 (top 35 years, 5 of them zero). PIA = 90% of the first $1,286 + 32% of the part from $1,286 to $7,749 + 15% above $7,749, using SSA's latest published bend points (2026; bend points, PIA formula). Full retirement age 67; claiming early reduces benefits by 5/9 of 1% a month for the first 36

months and 5/12 of 1% thereafter: 70% at 62, 86.7% at 65 (SSA). Trust fund: 2026 Trustees Report.

US 401(k): employee defers 6% of pay; employer matches 50% up to 6% of pay, i.e. 3%, for a total contribution rate of 9%; the most common formula in Vanguard-administered plans (How America Saves 2026, p. 22). All in an S&P 500 index fund at 4% / 6% / 8% real, drawn down evenly from 63 to 90. Pre-tax; vesting ignored. The IRR of the US total combines both benefit streams: 401(k) from 63 to 90, Social Security from 67 to 90.

Gold: before 2004-12 the backtest uses the World Bank Pink Sheet monthly average London price, rescaled to GLD at the splice month; after that, daily closes of GLD (net of its 0.40% fee). Long-run real returns divide the same monthly series by US CPI-U (FRED CPIAUCSL; the missing October 2025 value is interpolated), data to 2026-08; 30-year rolling windows start in August 1971. Sources: World Bank Commodity Markets, FRED CPIAUCSL.

Backtests: purchases of ¥1,500 on the first trading day of each month at that day's USD/CNY (8.28 before 2001). SPY and QQQ reinvest dividends; before QQQ listed on 1999-03-10 the Nasdaq 100 price index (^NDX) is used, rescaled at the listing date. BTC and ETH in dollars. Data from Yahoo Finance as of 2026-09-30. No trading costs, fund fees or tax.

Scenarios: monthly amounts rise with inflation so that they always equal today's money, for 360 months (paid at the start of each month). The balance at 63 is drawn down evenly over 324 months and earns nothing.

This report presents estimates and research based on public data and stated assumptions. It is intended for a general audience, does not address any individual's financial circumstances and does not constitute investment advice. Past returns are not indicative of future results, and investments carry risk.

Data as of 2026-09-30 · 世界银行（居民消费购买力平价 PA.NUS.PRVT.PP、Pink Sheet 金价）； 雅虎财经（行情与汇率）； 深圳市人社局（计发基数）； 日本年金機構（厚生年金）； 厚生労働省賃金構造基本統計調査； 美国社会保障署（折点、平均工资指数、应税上限、受托人报告）； Vanguard How America Saves 2026（401(k) 配比）； FRED（美国 CPI）

Financials come straight from SEC EDGAR filings. Market data is delayed; every report names its sources.

Ratings are our research opinions for all readers, not personal buy or sell advice. Investing carries risk. The call is yours.