

# Policy design and progress of pension system for informal workers in Thailand

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## Voluntary scheme for continuing members

- Pension benefits is considered as one of Thailand Social security since 1999
- While the scheme is mandatory for employees, those who leave employment can voluntarily continue to contribute
- There are currently close to 2 million voluntary members each month (on top of 12 million mandatory members)
- The monthly salary for voluntary members were set to be 4,800 baht per month, and has never been increased
  - This leads to a problem that is being solved....

# Thailand Social Security Pension Formula

- Defined Benefit Scheme with formula written under the scheme rules
- Current benefit formula consist of “Replacement Rate” x “Pensionable Salary”
  - Replacement starts at 20% (with 15 years of contributions) and add 1.5% for each additional year of contributions (remaining months < 12 not counted)
  - Pensionable salary = average of last 60 months of contribution
    - With each month subject to 15,000-baht cap on salary (3,300 yuan)

## Problems with Final Average Earning formula

- Averaging last 60 months is easy to understand but only fair if members follow regular career pattern with increasing salary
- Some have lower salary closer to retirement so pensionable salary decreased significantly leading to lower pension
  - Including those who continue to contribute under voluntary scheme for self-employed as they moved to informal sector close to retirement, with nominal salary set by SSO linked to past minimum wage (4,800 baht)
- Or conversely, employer could abuse the scheme to help employees by reporting a jump of salary to maximum salary in the last 60 months

## New Formula: CARE

- Career-Average Revalued Earnings would take the average of all months of salary
- Salary in each month are revalued to the present value before being used for average calculation, using actuarial concepts of “present value of salary”
- This is now a common approach around the world, and done with increasing contributory salary ceiling in the same way every year: Revaluing both benefits and contributions in line with increasing salary, and keeping pensions amount relevant to current date

# Summary of proposed change from FAE to CARE

## Final Average Earnings Scheme

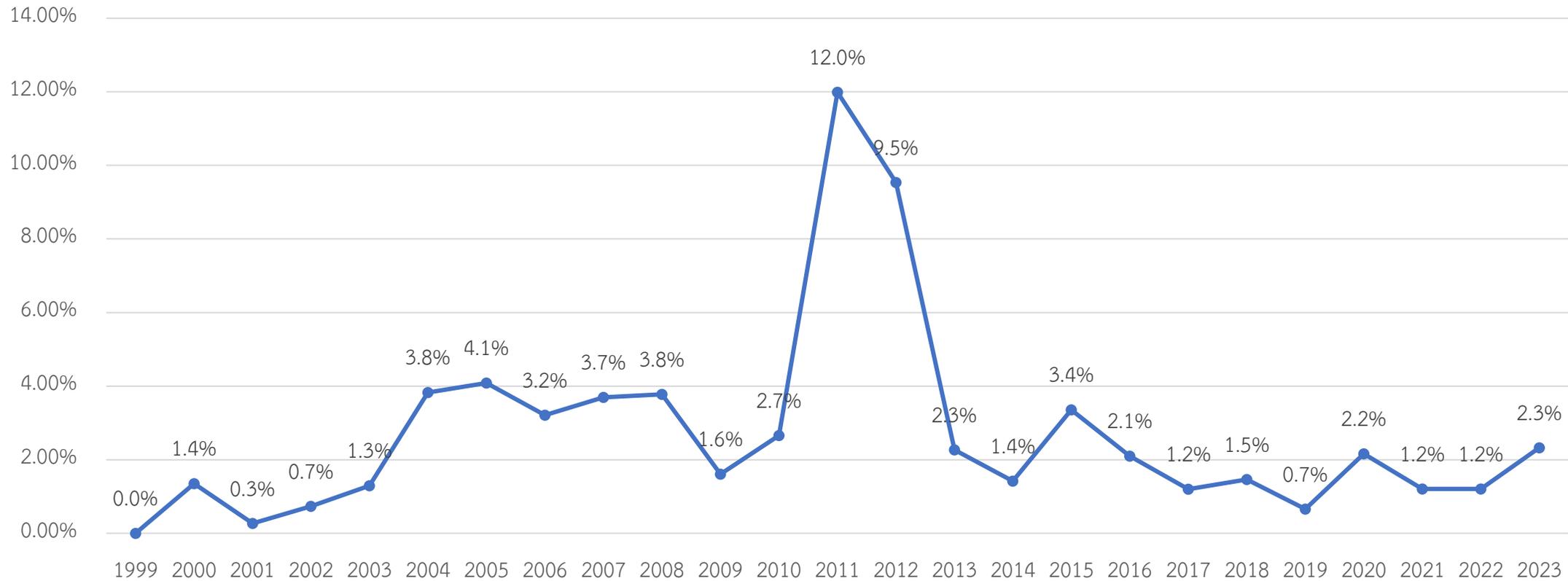
- Replacement rate: 20% + 1.5% per additional year (full year only)
- Pensionable salary from final average 60 months
- Contributory ceiling capped at 15,000 baht every year since 1999

## Career-Average Revalued Earnings Scheme

- Replacement rate: 20% + 1.5% per additional year (months less than 12 also proportionally credited)
- All months of contributions are revalued and used for averaging pensionable salary
- Contributory ceiling to increase to 17,500 baht in 2026; 20,000 baht in 2029; and 23,000 baht in 2032 ... with plan for annual increase later

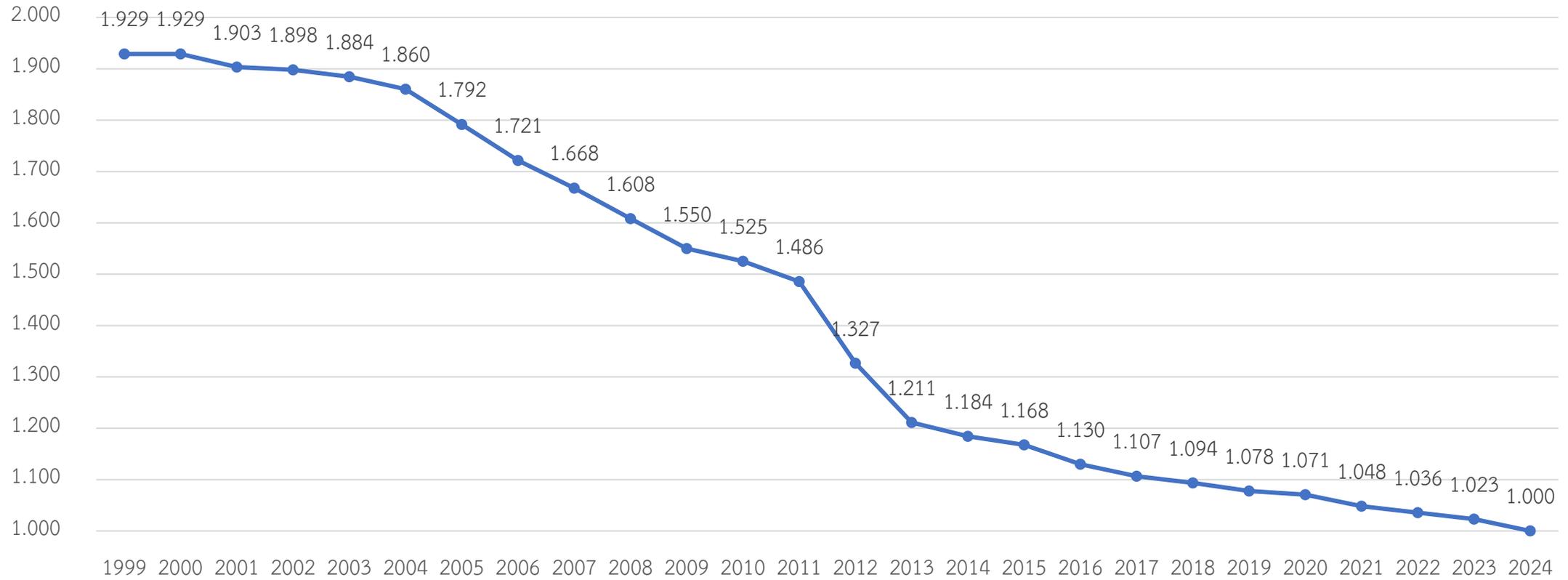
# Revalue Index are based on historical average contributory salary increase

so that benefits increase in line with contributions, ensuring neutrality to the cost of scheme



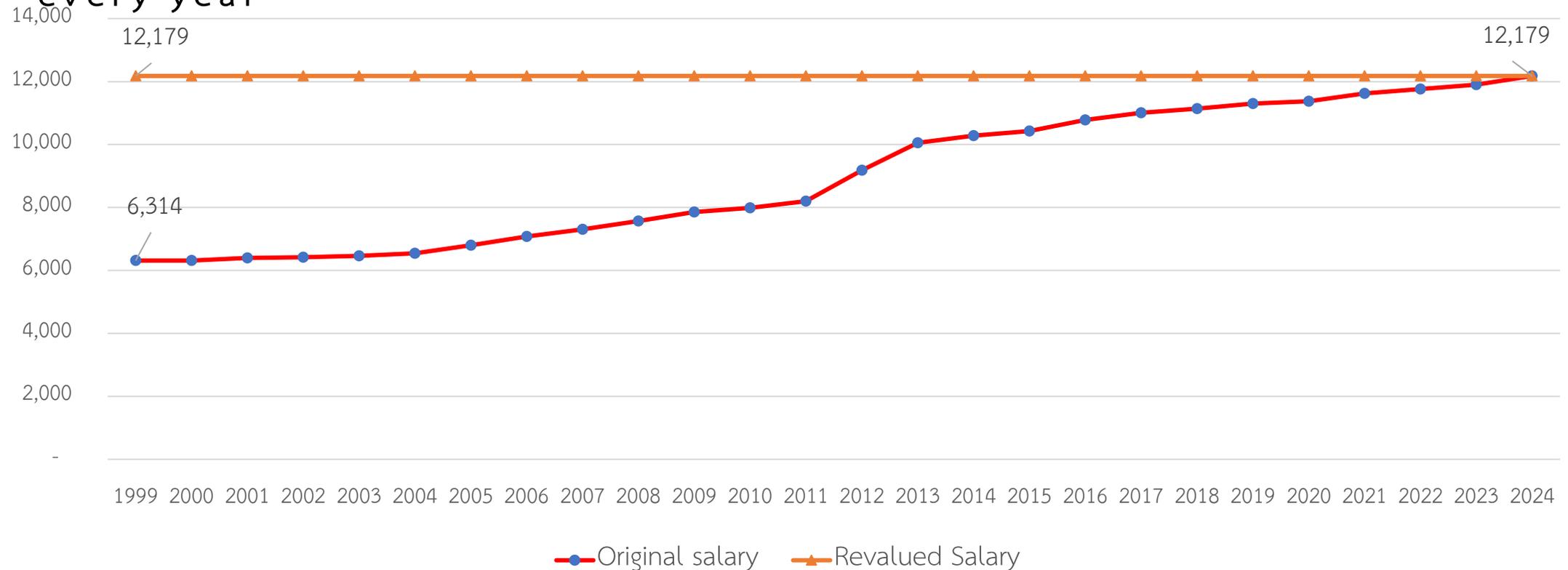
# Accumulative Revalue Index

(maximum revalue factor subject to no more than ceiling)



# Average revalued salary each year = current salary

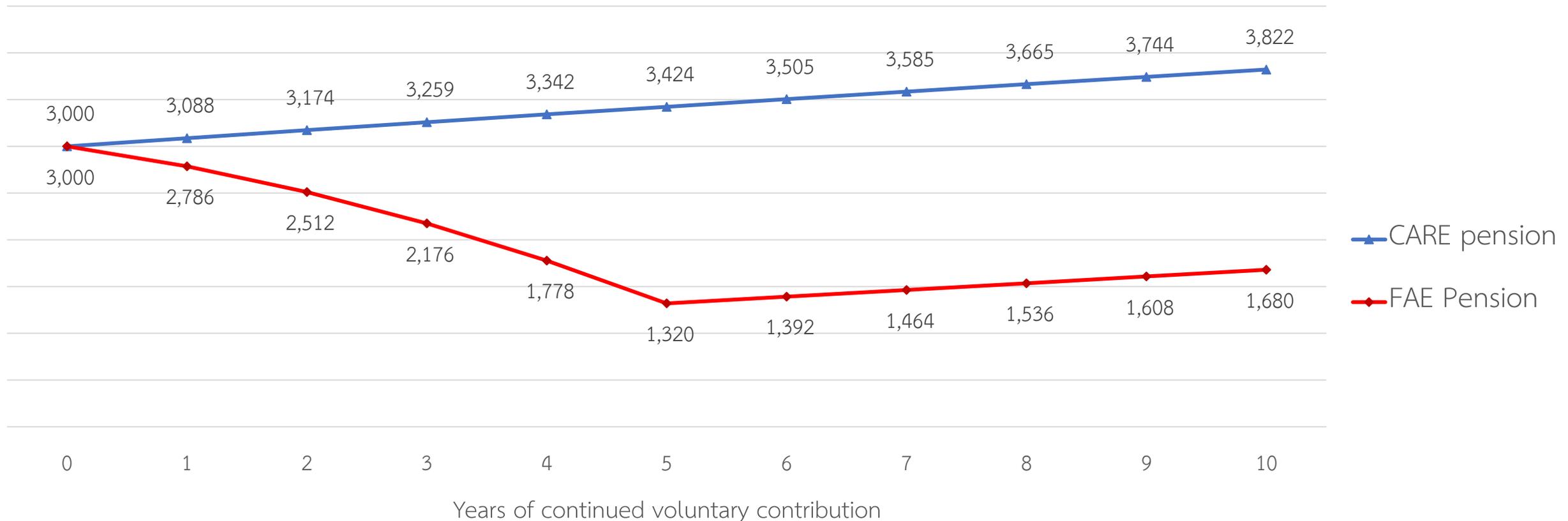
Representing a member who has an 'average' salary of the scheme every year



# Problem solved: a shift in decision for voluntary members

- Example of a member of salary of 15,000 baht per month (cap) for 15 years
- Then leave employment and must choose whether to contribute at 4,800 baht

Comparing effect to monthly pension, if member continues to contribute voluntarily



## General results:

A change from FAE to CARE with ceiling increase would

- ✓ Members with reduced salary close to retirement -> increase pension (from longer averaging period)
- ✓ Members with deferred retirement-> increase pension (from revaluation)
- Members with salary over 15,000 baht -> reduce future pension (as FAE + ceiling increase are too generous)
- Members with high jump in salary close to retirement-> reduce pension (from longer averaging period)

## Special consideration due to ceiling increase for the first time

- While CARE is a common formula around the world including, it is not easy to implement for Thailand as the contributory ceiling will be increased for the first time
- Normally, ceiling are increased in line with CARE indexation, so pensions are automatically fair compared to contributions
- Transitional rules need to be implemented for the change to be accepted

# Transitional Rules

- **All members:** permanent rule to increase replacement rate from contribution months less than a year (proportion of 1.5% accrual rate) to offset slight lower revaluation index
- **Current Pensioners:** Increase pension from next month if CARE formula is higher than FAE (otherwise maintain FAE pension amount)
- **Close to retirement:** For 5 years (2026 – 2030), if individual's FAE > CARE, pension amount will be based on a weighted formula
  - 2026: 100% FAE
  - 2027: 80% FAE + 20% CARE
  - 2028: 60% FAE + 40% CARE
  - 2029: 40% FAE + 60% CARE
  - 2030: 20% FAE + 80% CARE

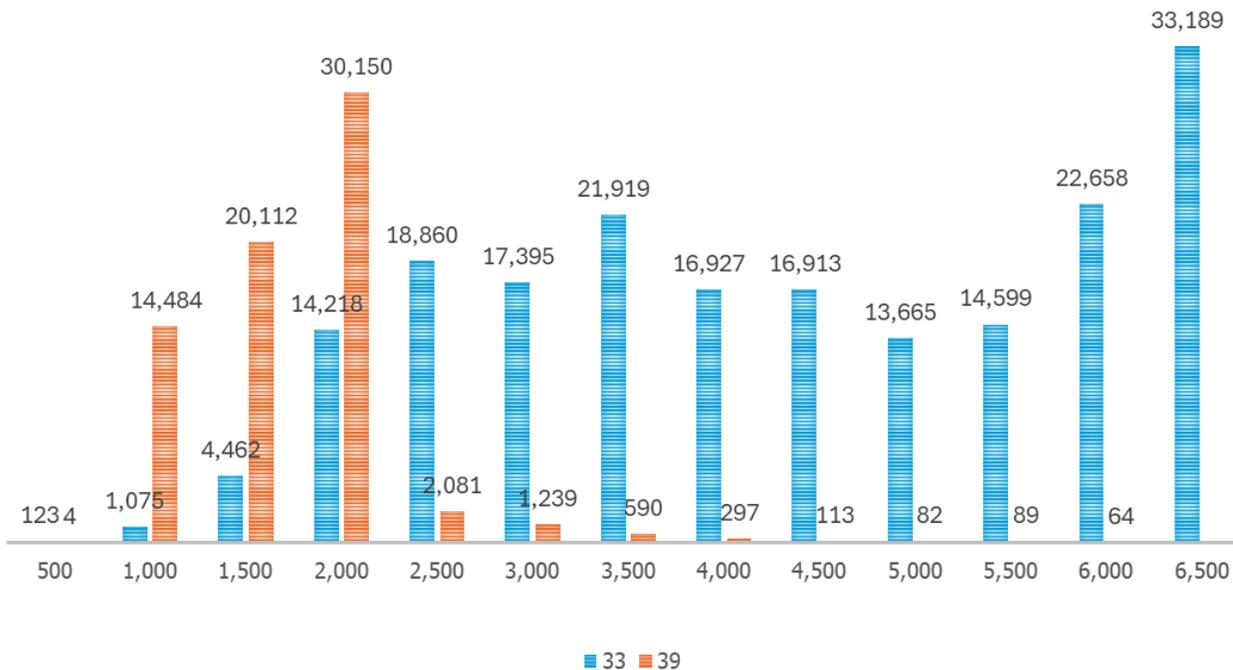
Overall impact to the  
sustainability

# Assessing overall financial impact

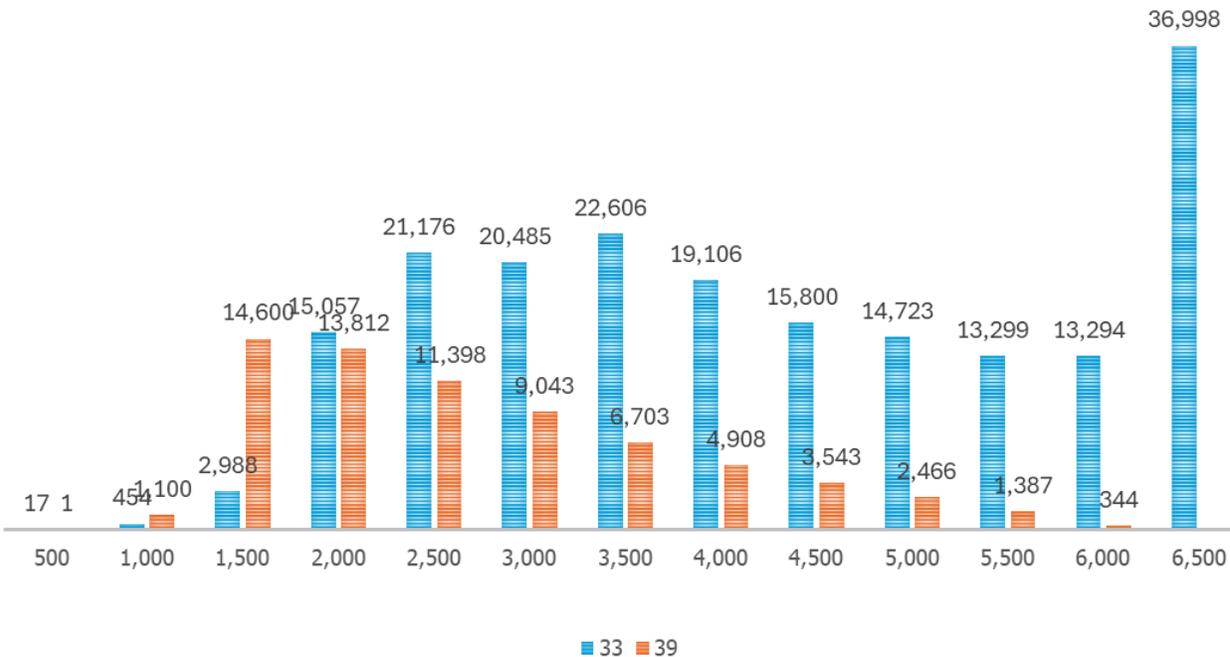
- Cannot be modelled under typical actuarial valuation model (with group-based demographic assumptions, turning values into average and losing information on individual characteristics)
- Need to factor in costs of transitions
- So, valuation had to be done on individual members based on salary data history and assumptions!
- This took a lot of resources, so had to be limited to shorter projection period (and longer period would lose significance as assumptions on salaries will not be correct)

# Distribution of pensions under FAE vs CARE for new pensioners retiring in 2026

## FAE Pension Distribution



## CARE Pension Distribution



Blue = retiring as employee; orange = voluntary contribution

# Average pension increase by 3% overall in 10 year-cohorts

Year Retire	New pensioners	CARE pension	FAE pension	Increase	total annual increase (million)	*NPV of increase
2025	161,307	3,601	3,413	5.52%	364	5,339
2026	179,666	3,641	3,417	6.56%	484	7,084
2027	203,564	3,769	3,588	5.06%	444	6,502
2028	225,018	3,915	3,781	3.55%	363	5,315
2029	246,376	4,166	4,060	2.61%	313	4,586
2030	259,607	4,420	4,316	2.39%	322	4,717
2031	273,047	4,730	4,598	2.87%	433	6,343
2032	286,697	5,028	4,905	2.50%	422	6,189
2033	300,557	5,238	5,134	2.03%	375	5,497
2034	314,627	5,672	5,531	2.54%	531	7,779

\*Net Expected Present Value of pensions paid for life from age 57 (average 27.5 years based on mortality table) discount at 5% based on rate of investment return

<b>Total</b>	<b>4,673,680</b>	<b>6,784</b>	<b>6,646</b>	<b>5.035%</b>	<b>6,273</b>	<b>*7,573</b>
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## Transition cost for those close to retirement

Year of Retirement	Affected new pensioners	CARE Monthly reduction	Conditional FAE%	Amount Compensated	Total annual compensation (million)	Total NPV of compensation
2025	54,020	459	100%	459	297	4,358
2026	63,198	482	100%	482	365	5,355
2027	75,517	511	80%	409	296	4,341
2028	110,091	426	60%	256	203	2,970
2029	130,648	463	40%	185	116	1,702
2030	139,544	492	20%	98	33	483
รวม	573,017	694	20% - 100%			

## Transition cost for current pensioners

Group	Pensioners	FAE pension	CARE pension	Increase	Total annual increase (million)	NPV of increase (million)
Employees – Increase	382,222	3,569	3,341	<u>6.82%</u>	1,045	12,431
Employees – Not increase	245,894	3,012	3,012	-	-	-
Voluntary members – Increase	165,317	1,511	2,285	<u>51.25%</u>	1,536	18,264
Voluntary members – Not increase	9,351	1,747	1,747	-	-	-
<b>Total</b>	<b>805,783</b>	<b>10,039</b>	<b>10,385</b>	<b>26.4%</b>	<b>2,581</b>	<b>30,695</b>

## Overall cost to the scheme

- Total increase in cost of 109,255 million baht or approximately 4.3% pension fund assets, including transitional costs
- A small increase in cost, mostly short-term, but also enhancing public trust and done with increase in contributory ceiling
- A key step towards overall “sustainability”
- Future changes on financial sustainability including increasing retirement age and contribution rate can be more easily accepted when people believe that the pension scheme is “fair” and valuable