

2020 Thailand Valuation Trends

Analysis and implication of Thailand DB retirement scheme



Table of Contents

Developments in Thailand		
Key Findings	7	
Introduction	8	
Key Assumptions and Experiences	9	
Discount Rate	10	
Duration	14	
Salary Increase Rate	15	
Gold Price	18	
Mortality Rate	19	
Voluntary Turnover Rate	21	
Retirement Age	22	
Impact of Assumptions	23	
Employee Benefits	26	
Prevalence	26	
Statutory Benefits	27	
Long-Term Employee Benefits	29	
Sources	30	
Contact Information	31	

Developments in Thailand

Minimum wage

- On December 6, 2019, the wage committee have approved to increase the minimum wage for unskilled workers in Thailand. It is published in the Royal Gazette on December 27, 2019 with effect from January 1, 2020 onwards.
- The minimum wage throughout the country increased by THB 5 6 per day, deriving in the range of THB 313 336 per day varied upon province of the workplace.

Minimum wage (THB)	Province
313	Narathiwat, Pattani, Yala
315	Amnat Charoen, Chaiyaphum, Chiang Rai, Chumphon, Kamphaeng Phet, Lampang, Lamphun, Mae Hong Son, Maha Sarakham, Nakhon Si Thammarat, Nong Bua Lamphu, Phichit, Phrae, Ranong, Ratchaburi, Satun, Si Sa Ket, Sing Buri, Sukhothai, Tak, Trang, Uthai Thani
320	Ang Thong, Bung Kan, Buri Ram, Chai Nat, Kanchanaburi, Loei, Nakhon Phanom, Nakhon Sawan, Nan, Phattalung, Phayao, Phetchabun, Phetchaburi, Phitsanulok, Prachuap Khiri Khan, Roi Et, Sa Kaeo, Surin, Udon Thani, Uttaradit, Yasothon
323	Chanthaburi, Kalasin, Mukdahan, Nakhon Nayok, Sakon Nakhon, Samut Songkram
324	Prachin Buri
325	Ayutthaya, Chiang Mai, Khon Kaen, Krabi, Lop Buri, Nakorn Ratchasrima, Nong Khai, Phangnga, Saraburi, Songkla, Suphan Buri, Sarat Thani, Trat, Ubon Ratchathani
330	Chachoengsao
331	Bangkok, Pathum Thani, Nakorn Pathom, Nonthaburi, Samut Prakan, Samut Sakhon
335	Rayong
336	Chonburi, Phuket

- On January 8, 2020, the wage committee have approved to revise the minimum wage rate based on skill standard for 13 groups of occupation/industry, with 64 types of occupations in total. It was published in the Royal Gazette on May 1, 2020, effective immediately.
- To attain each level of skill, the exam conducted by Office of Skill Standard and Test Development is required to be passed. The revision of rate has been made in response to the current market conditions. The revised rate starts from THB 385 in Level 1 shoes assembly skill to the maximum of THB 900 in Level 2 nutrition therapy skill.

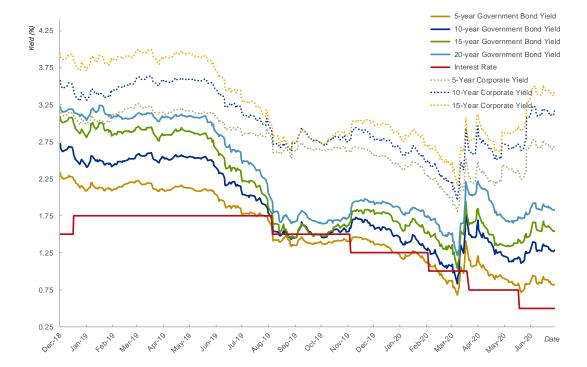
Wage rate (THB)	Level 1	Level 2	Level 3		
Services					
Thai food	440	565	-		
Thai massage	485	640	795		
Hand therapy	540	715	-		
Aromatherapy	595	790	-		
Hydrotherapy	625	825	-		
Nutrition therapy	680	900	-		
Electricity, Electronics, and Computer			•		
Microcomputer technician Building electrician Industrial electrician Air-con technician	440	550	660		
Electrician (Television)	440	550	-		
Industrial Technician		•	•		
Plan design with computer	510	585	740		
Magma welding	440	550	660		
Tik welding	505	680	855		
High-density Polyethylene pipe welding	510	-	-		
Pipe assembly	540	-	-		
Metal mold injection	530	-	-		
Constructions					
Carpenter	425	545	670		
Bricklayer	380	515	645		
Plaster	425	545	670		
Aluminum construction technician	405	525	645		
Gypsum plastering technician	440	-	-		
Concrete tile roofer	440	565	685		
Industrial Electricity and Electronics					
Lightning electrical equipment assembly	400	475	-		
Motor appliances assembly	410	490	-		
Machinery maintenance	455	540	-		

Automotive parts turner Alloy welding Machinery maintenance Automatic lathe technique Sealer sprayer Quality control Spot welding Jewelry	Security system	440	530	-		
Alloy welding Machinery maintenance Automatic lathe technique \$440 \$530 \$-\$ Sealer sprayer Quality control Spot welding \$-\$ Sealer sprayer Quality control Spot welding \$-\$ Sealer sprayer Quality control Spot welding \$-\$ Sealer sprayer Sealer						
Machinery maintenance 440 530 - Automatic lathe technique 440 530 - Sealer sprayer Quality control Spot welding - Jewelry Lapidary Jewelry decoration - Jewell y decoration Jewel inlaid - - Mechanical and metal processing - - - Mechanical drawings 510 605 - - Mechanical and metal welding 550 660 - <td>Automotive parts turner</td> <td></td> <td></td> <td></td>	Automotive parts turner					
Automatic lathe technique Sealer sprayer Quality control Spot welding	•					
Sealer sprayer Quality control Spot welding Jewelry Lapidary Jewelry casting Jewelry decoration 465 605 Jewelry decoration 605 - Jewel inlaid Mechanical and metal processing Mechanical and metal welding 550 660 - Power transmission technique 495 595 - Hydraulic system technique 510 605 - Air condition and chiller 8 605 - Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold 4 440 535 - EDM machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 <td< td=""><td>Machinery maintenance</td><td></td><td></td><td></td></td<>	Machinery maintenance					
Quality control Spot welding Jewelry Jewelry casting 465 605 - Jewelry decoration Jewelry decoration - - Jewell inlaid Mechanical and metal processing - - Mechanical drawings 510 605 - Mechanical and metal welding 550 660 - Power transmission technique 495 595 - Hydraulic system technique 510 605 - Hydraulic system technique 510 605 - Air condition and chiller - - - Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold - - - Automatic milling machine 495 595 - EDM machine 475 570 -	Automatic lathe technique	440	530	-		
Spot welding Jewelry						
Lapidary Jewelry casting Jewelry decoration Jewelry decoration Jewel inlaid Mechanical and metal processing Mechanical and metal welding 550 660 -	-					
Lapidary Jewelry casting 465 605 - Jewelry decoration Jewelry decoration - - Jewel inlaid Mechanical and metal processing Mechanical drawings 510 605 - Mechanical and metal welding 550 660 - Power transmission technique 495 595 - Hydraulic system technique 510 605 - Hydraulic system technique 510 605 - Air condition and chiller - - - Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold - - - Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 -	Spot welding					
Jewelry casting 465 605 - Jewell inlaid Mechanical and metal processing Mechanical drawings 510 605 - Mechanical and metal welding 550 660 - Power transmission technique 495 595 - Hydraulic system technique 510 605 - Air condition and chiller - - - Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Micronditioner assembly 410 505 - Mold - - - Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel <t< td=""><td>Jewelry</td><td>T</td><td></td><td>T</td></t<>	Jewelry	T		T		
Jewelry decoration Jewel inlaid Mechanical and metal processing	Lapidary					
Jewel inlaid Jewel inlaid Jewel inlaid Jewel inlaid Mechanical and metal processing S10 605 -		465	605	_		
Mechanical and metal processing 510 605 - Mechanical drawings 510 605 - Mechanical and metal welding 550 660 - Power transmission technique 495 595 - Hydraulic system technique 510 605 - Hydraulic system technique 510 605 - Air condition and chiller - - - Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold - - - Mold - - - Multiple system welding 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel	-					
Mechanical drawings 510 605 - Mechanical and metal welding 550 660 - Power transmission technique 495 595 - Hydraulic system technique 510 605 - Hydraulic system technique 510 605 - Air condition and chiller - - - Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Michael Collection melanique 425 520 - Air conditioner assembly 410 505 - Mold - - - Michael Collection melanique 475 570 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 515 620 - <t< td=""><td></td><td></td><td></td><td></td></t<>						
Mechanical and metal welding 550 660 -		T	T	T		
Power transmission technique	Mechanical drawings	510	605	-		
Hydraulic system technique 510 605 - Air condition and chiller Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold Mold Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machin	Mechanical and metal welding	550	660	-		
Air condition and chiller Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold	Power transmission technique	495	595	-		
Pipe system welding 440 535 - Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Hydraulic system technique	510	605	-		
Large air conditioner technique 425 520 - Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold Mold Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Air condition and chiller					
Small cold room technique 425 520 - Air conditioner assembly 410 505 - Mold	Pipe system welding	440	535	-		
Air conditioner assembly 410 505 - Mold Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel St	Large air conditioner technique	425	520	-		
Mold Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Hollow container dryer machine 405 480 -	Small cold room technique	425	520	-		
Automatic milling machine 495 595 - EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Air conditioner assembly	410	505	-		
EDM machine 475 570 - Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Mold					
Wire cut EDM machine 475 570 - Mold polishing 420 505 - Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Automatic milling machine	495	595	-		
Mold polishing 420 505 - Steel Steel - - Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	EDM machine	475	570	-		
Steel Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Wire cut EDM machine	475	570	-		
Electric arc furnace annealing 515 620 - Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Mold polishing	420	505	-		
Iron flavoring 535 640 - Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Steel					
Iron casting 490 600 - Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Electric arc furnace annealing	515	620	-		
Baking iron control 470 575 - Plastic Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Iron flavoring	535	640	-		
PlasticInjection molding machine405480-Plastic bag dryer machine405480-Hollow container dryer machine405480-	Iron casting	490	600	-		
Injection molding machine 405 480 - Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Baking iron control	470	575	-		
Plastic bag dryer machine 405 480 - Hollow container dryer machine 405 480 -	Plastic					
Hollow container dryer machine 405 480 -	Injection molding machine	405	480	-		
	Plastic bag dryer machine	405	480	-		
Plastic bag dryer machine maintenance 440 515 -	Hollow container dryer machine	405	480	-		
	Plastic bag dryer machine maintenance	440	515	-		

Shoes				
Shoes cut	395	435	-	
Insole compression	405	450	-	
Shoes sewing	405	450	-	
Shoes assembly	385	415	-	

Bond yields

- During the first quarter of 2019, government bond yields declined slightly from the end of 2018 due to the influences from political instability in Thailand mainly attributed to the first election in Thailand since the military coup in 2014.
- In June 2019, there was a slight decrease in every tenor of bond yields owing to the interest rate cut signal by central bank of many countries. While the US Federal Reserve (Fed) rate cut happened from July to November as well as the local policy rate cut being the driver of the yield downturn in the second half of 2019.
- Although Thai policy rate had been reduced for the second time in November 2019, the high appreciation in Thai Baht against other main currency like US Dollar and Euro together with the high volume of long-term corporate bond issuance forced the yield to pick up slightly in November before plunged down again in December 2019.
- In 2020, the global economy is projected to slow significantly as the COVID-19 pandemic continues. In March 2020, Thai government bond yields rose rapidly due to investor's concerns after the World Health Organization (WHO) declared COVID-19 a pandemic. Bond yields declined and stabilised after the policy rate was cut from 1.00% to 0.75% in March, and again to 0.50% in May, in tandem with measures announced by the Thai government to stabilise the Thai financial markets.
- Graph below shows the movement of Thai Government bond yields from December 2018 to June 2020:



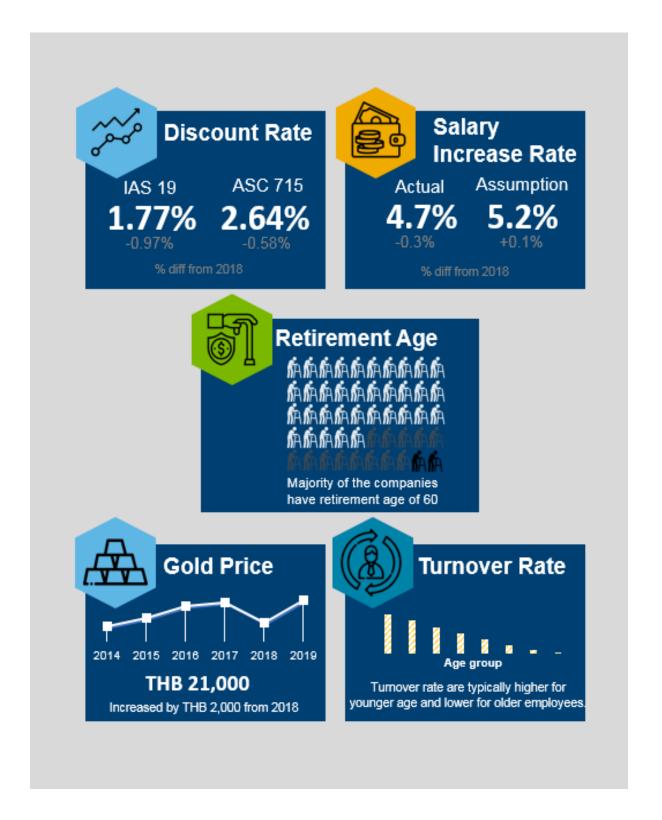
Government policy in response to COVID-19

- Contribution to social security fund has been reduced from March to May 2020.
 - Employer's contribution reduced from 5% to 4%.
 - Employee's contribution reduced from 5% to 1%.
 - Voluntary insured person's contribution reduced from THB 432 to THB 86.
- The deadline for contribution remittance by employers have been extended for 3 months after the normal deadline. Contributions that are under this extension are those with deadlines from March to May 2020.
- Effective March 1, 2020, employees are entitled to unemployment benefit of 62% of daily salary up to 90 days (subject to salary cap) from Social Security under the following circumstances:
 - 14 days guarantine from having contracted COVID-19.
 - Temporary discontinuation of business as a preventive measure upon government order.
 - This regulation is effective until August 31, 2020.
- Effective March 1, 2020, employees are entitled to additional unemployment benefit under Social Security for the following causes:
 - Resignation or end of contract, employees are entitled to 45% of daily salary, up to 90 days for each period of unemployment.
 - Termination by employer, employees are entitled to 70% of daily salary, up to 200 days for each termination.
 - This regulation is effective until February 28, 2022.

Amendments to Thai Labour Protection Act B.E. 2541 (1998)

- On April 5, 2019 the amendments to the Labour Protection Act B.E. 2541 (1998) was published in the Royal Gazette. The amendments became effective from May 5, 2019. The amendments are the followings.
 - Default on payment
 - Interest rate to be increased to 15% if employers default on: payment in-lieu of advance notice, severance pay / special severance pay, and payment where employer temporarily ceased business.
 - Change of employer
 - Employers must obtain consent from employees if there are any changes in employer (e.g.: transfer of employment, mergers and acquisitions).
 - New employer must assume all the rights and responsibilities of the previous employer.
 - Remuneration for pre-termination of contract
 - If employer terminates the employment contract before the end of contract date without prior notice, employer must pay total wages due to the employee until the end of their contract.
 - Business leave
 - Employees are entitled to minimum three days of paid business leave per year.
 - Maternity leave
 - Total number of maternity leave increased to 98 days per pregnancy which includes weekly and public holidays during leave period, as well as doctor visits for pre-natal examinations before delivery.
 - Gender equality
 - Employers must pay wages, overtime payment, payments for working on holidays, and payments for working on overtime on holidays, at the same rate for both male and female employees who take on the same work of nature, quality and quantity.
 - Statutory severance pay
 - The amounts entitled for employees with at least 20 years of service has been increased to 400 days wages (from the 300 days wages).
 - Relocation of business
 - If employer is relocating to another location, employer must announce the location and date of relocation in at the current workplace for at least 30 continuous days in advance of the relocation. Otherwise, special severance pay must be paid to employees in lieu of notice.
 - If the relocation may significantly affect the daily living of an employee, said employee needs to submit letter to inform the employer within 30 days of announcement or date of relocation. In this case, the employee will be entitled to severance pay at normal rate.

Key Findings



Introduction

Aon Thailand's *Valuation Trends* is a biennial study that examines the assumptions and experiences of retirement plans under the International Accounting Standard 19 (IAS 19), Financial Accounting Standards Board (FASB) Accounting Standards Codification 715 (ASC 715) *(formerly FASB Statements 87, 88, 106, 132 and 158)*, and Thai Accounting Standards (TAS 19).

The International Financial Reporting Standards (IFRS) and FASB requires companies to estimate the value of the employee benefit liabilities, while the IAS 19, TAS 19 and ASC 715 sets the rules of the determination of assumptions and reporting of these liabilities.

The main objective of this report is to provide a snapshot around the changes in financial and demographic assumptions used to value the liabilities and their actual experience. This study is conducted by gathering assumptions and disclosures used by over 280 employers over the 2019 financial year-end. Majority of the covered companies have financial years ending December 31, but we have also included those with financial years ending March to December 2019.

Key Assumptions and Experiences

With the future being uncertain and given the long-term nature of retirement and termination plans, assumptions are required to calculate the value of liabilities. Actuarial assumptions are a company's best estimates of the variables that will determine the cost of providing post-employment and long-term benefits. Actuarial assumptions are generally divided into:

Financial assumptions

Financial assumptions are factors that impact the amount of the future benefits paid

- Discount rate
- Price inflation
- Salary increase rate
- Plan expenses
- Social security / Retirement plan contributions (if plan is offset against contributions)
- Other compensation items that would affect future benefit levels
- Demographic assumptions

Demographic assumptions are factors from changes in demographic that influence the timing of payments in the future and the probability of benefits to be paid

- Mortality rate
- Disability rate
- Voluntary turnover rate
- Involuntary turnover rate
- Retirement rate
- Early retirement rate
- Retirement age
- Early retirement age

For this report, we have focused on the following financial and demographic assumptions:

- discount rate:
- salary increase rate;
- gold price;
- mortality rate;
- voluntary turnover rate; and
- retirement age.

It is also important to note that assumptions should be:

- unbiased and mutually compatible;
- based on market expectations over projection period; and
- consistent and reflective of long-term strategy and long-term nature of the benefits.

Discount Rate

The discount rate reflects the time value of money, and is used in measurements of benefit obligations and future expenses. The accounting standard states that discount rate should reflect the estimated timing at which the benefits would be paid.

IAS19 specifies that "the discount rate used to discount post-employment benefit obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds. For currencies for which there is no deep market in such high quality corporate bonds, the market yields (at the end of the reporting period) on government bonds denominated in that currency shall be used".

As Thailand corporate bond market cannot be considered 'deep', discount rates are based on yields of long-term Thai Government Bonds.

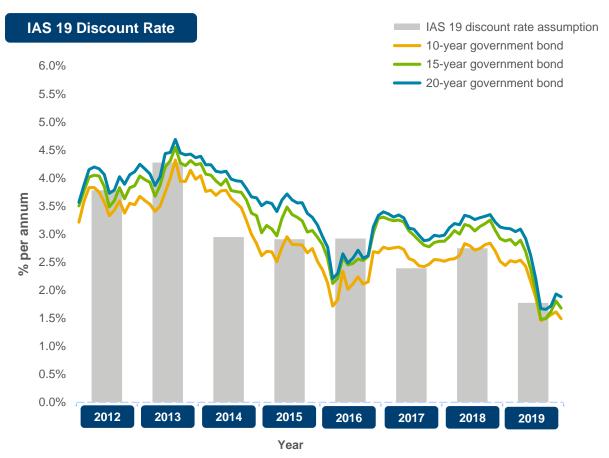


Figure 1: Illustrates an average IAS 19 discount rate assumption adopted by the studied companies, benchmarking against government bond yields of three different maturities.

In 2019, majority of studied companies have adopted an average discount rate of 1.8% for all maturity which is about 1.0% lower than previous year. The government bond yield reached its peak in the first quarter at around 2.2% and 3.1% for lower and higher ended maturity respectively and continuously declined by 0.8% towards the end of the third quarter. The yields dropped slightly again in the fourth quarter to the lowest of the year at 1.36%. Hence, assuming similar assumptions adopted, and employee demographics profile, mid-year and year-end valuation should result in roughly similar level of liabilities.

FASB ASC 715 specifies that "discount rates shall reflect the rates at which the pension benefits could be effectively settled. It is appropriate in estimating those rates to look to available information about rates implicit in current prices of annuity contracts that could be used to effect settlement of the obligation. In making those estimates, employers may also look to rates of return on high-quality fixed-income investments currently available and expected to be available during the period to maturity of the pension benefits".

Discount rates for FASB ASC 715 are based on yield of long-term Thai Government Bonds, plus a credit spread for high-quality fixed-income investments.

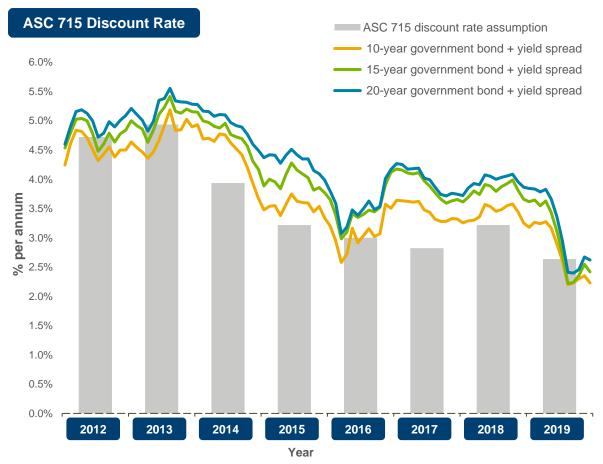


Figure 2: Illustrates an average ASC 715 discount rate assumption adopted by the studies companies, benchmarking against the total of government bond yields of three different maturities and its corporate risk spread.

Similar to adopted IAS19 discount rate, seven-year downward trend with a slight pickup in 2018 of ASC715 discount rate assumption used is observed with a decrease of 0.6% from 2018 to 2019.

The difference between IAS19 and ASC715 year-end discount rate, known as the yield spread, increased by approximately about 0.4% from 2018. Expansion in the spread could be encouraged by the anticipation of a slowdown in economic growth in the country.

While market movements of government bond yields impact discount rates similarly, the difference in discount rate experience from year to year are dependent upon the timing of the valuation and company's employee demographic profile at valuation date.

Variations in economic activity are determined by the fluctuations in the business cycle over many months or years. Hence, business cycle is one of the key determinants of changes in bond yields. The fluctuations shown in the government bond yield could possibly be dictated by international influences or the economic upturn or downturn within Thailand.

During the first quarter of 2019, government bond yields declined slightly from the end of 2018 due to the influences from political instability in Thailand mainly attributed to the first election in Thailand since the military coup in 2014.

In June 2019, there was a slight decrease in every tenor of bond yields owing to the interest rate cut signal by central bank of many countries. While the US Federal Reserve (Fed) rate cut happened from July to November as well as the local policy rate cut being the driver of the yield downturn in the second half of 2019.

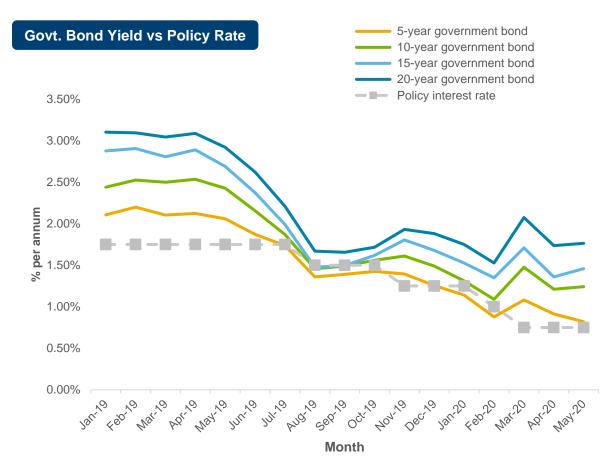


Figure 3: Illustrates different tenor of government bond rate comparing to policy interest rate

Although Thai policy rate had been reduced for the second time in November 2019, the high appreciation in Thai Baht against other main currency like US Dollar and Euro together with the high volume of long-term corporate bond issuance forced the yield to pick up slightly in November before plunged down again in December 2019.

In 2020, the global economy is projected to slow significantly as the COVID-19 pandemic continues. In March 2020, Thai Government bond yields rise rapidly due to investor's concerns after the World Health Organization (WHO) declared COVID-19 a pandemic. Bond yields declined and stabilized after the policy rate was cut from 1.00% to 0.75% in March, and again to 0.50% in May, in tandem with measures announced by the Thai government to stabilize the Thai financial markets.

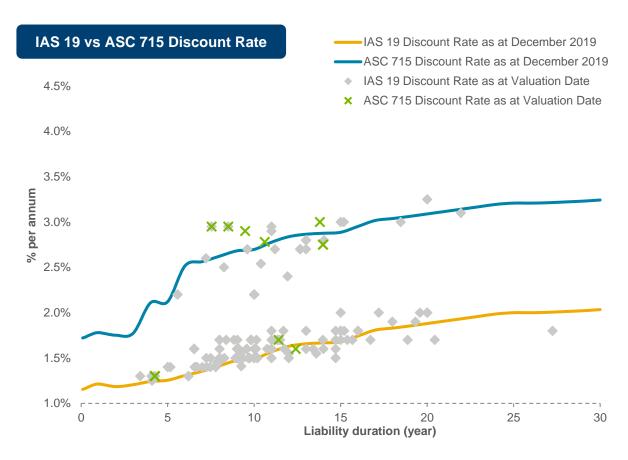


Figure 4: Illustrates discount rates adopted by the studied companies across different duration, referencing upon the discount rate as at December 31, 2019.

As plan liabilities are highly dependent on discount rate, movement of discount rate will significantly impact the calculated liabilities. Majority of the adopted discount rate ranges within 0.5% of the year-end bond yields. Majority of the studied companies' adopted discount rates are in +0.5% range of the December 31, 2019's bond yields. The rates which lied further away from the 0.5% range are the ones where the valuations were performed before December 31, 2019 or the company's financial year ends were not in December.

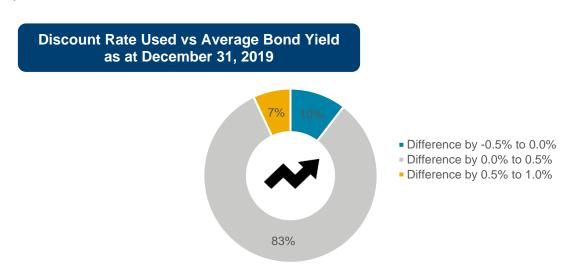


Figure 5: Illustrates studied company's percentage different between adopted discount rate and the average bond yield as of December 31, 2019

Duration

Since the liabilities are highly dependent on discount rate, it is crucial to select a discount rate and valuation timing that encapsulate the full spectrum of the company's employee demographic in order to obtain the most accurate liability. Scheme liabilities duration is key to select discount rate when valuation is performed.

Duration is the average expected time of accrued benefit which is expected to be paid. It is highly dependent on the timing and amount of future expected payments. The term of government bond is generally derived from the liability plan's duration. Consequently, the corresponding discount rate to government bond term is adopted for the valuation accordingly.

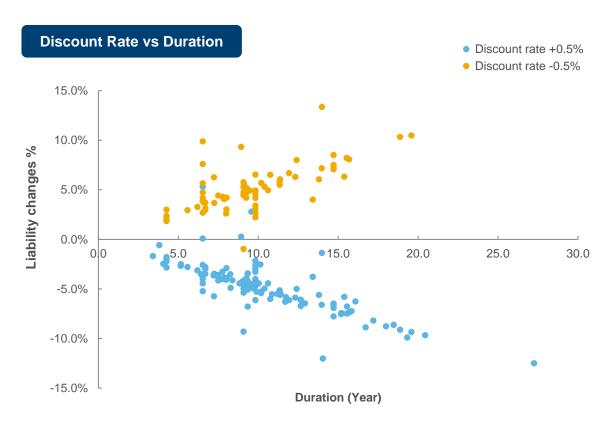


Figure 6: Captures the movement of studied company's discount rate to changes in liabilities across different duration.

The impact of changes in discount rate for each studied company is shown in Figure 6, comparing the estimated impact to the liabilities and plan duration. There is an inverse relationship between a company's liabilities and discount rate. Hence, a decrease in discount rate will result in liability's increase, and vice versa. The impact to liabilities varies depending on the plan benefit, duration and employee demographic profiles.

Salary Increase Rate

Since most retirement benefits in Thailand are paid in form of lump-sum payment which is calculated based on employee's last salary when leaving employment, the long-term salary increase assumption is one of the crucial determinants in calculating the cost of benefits. A higher salary increase rate adopted would bring about greater expected benefit payout, which in turn led to larger liabilities.

In order to obtain accurate estimation of salary increase, the following factors might be taken into consideration:

- Annual and projected long-term inflation increases
- Level of seniority
- Merit or promotional increases
- Business strategy and productivity's improvement
- Industry trend and market benchmarking
- Other company specific factors such as: company downsizing, over-performed year, natural disaster, merger & acquisitions, changes in company strategy

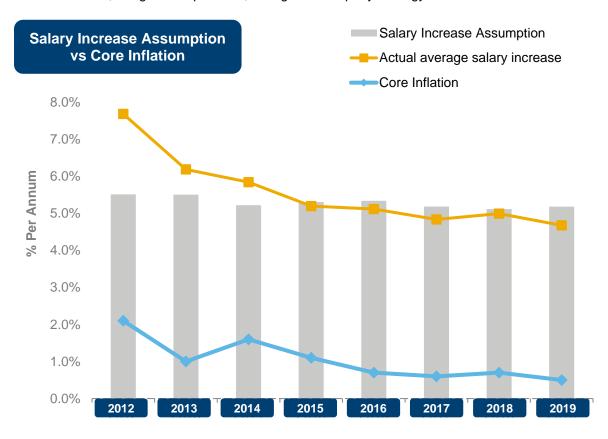


Figure 7: Demonstrates the movement of core inflation, average salary increase assumption and studied company's average salary increase over years.

	2012	2013	2014	2015	2016	2017	2018	2019
Salary Assumption	5.5%	5.5%	5.2%	5.3%	5.3%	5.2%	5.1%	5.2%
Average Salary Increase	7.7%	6.2%	5.8%	5.2%	5.1%	4.8%	5.0%	4.7%
Core Inflation	2.1%	1.0%	1.6%	1.1%	0.7%	0.6%	0.7%	0.5%
Headline Inflation	3.0%	2.2%	1.9%	-0.9%	0.2%	0.7%	1.1%	0.7%

The long-term salary increase assumption has increased slightly from 5.1% per annum in 2018 to 5.2% per annum in 2019, which is about the same level as the assumption adopted in 2017. The five-year average of salary increase assumption has dropped marginally from 5.3% in 2017 to 5.2% in 2019.

Compared to the end of 2018, the headline inflation has dropped as a consequence of the decrease in domestic oil price, together with the appreciation in Thai Baht currency that contributed to the cheaper price in imported oil. Although draught and lower food supply drove up fresh food price throughout the year, a plummet in domestic oil price has dominated the direction of the inflation.

Similarly, the core inflation declined slightly in 2019 due to the effect of higher tobacco price in 2019, which was influenced by an increase in excise tax on tobacco. This slowdown can also be attributed to the reduced demand-pull inflationary pressures given the gradual pace of domestic economic recovery. Compared to 2018, the overall core inflation trend remained mostly unchanged.

Inflation for the year 2020 is expected to be negative due to the decline in crude oil prices, before increasing back to 0.3% in 2021.

Nevertheless, salary increase assumptions should be reflective of all future salary increase in the long-term, and should not be influenced by any short-term fluctuations. In the case of the current business impacts due to COVID-19, special treatment may be considered by setting separate short-term and longer-term salary increase assumptions.

3% 13% ■ 2% to 4% ■ 4% to 6% ■ 6% to 8% ■ 8% Or More

Figure 8: Illustrates distribution of studied company's actual salary increase in 2019

The median salary increase assumption over the year 2019 was 5.5% per annum, which is quite comparable to the average salary of 5.2% per annum.

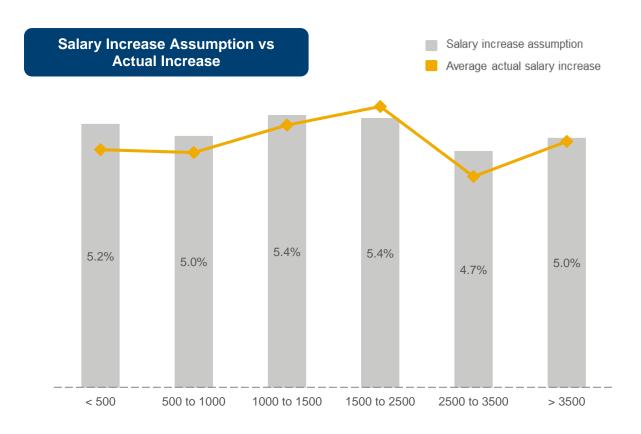


Figure 9: Illustrates salary increase adopted by studied companies, categorizing by employee headcount.

The 2019 salary increase assumptions adopted by studied companies are slightly higher than actual salary increases. However, actual salary increase rates are seemingly greater in organisations with approximate headcount of around 1,500 to 2,500, at around 5.6% comparing to 5.4% of salary increase assumption rate, and subsequently decrease as the employee headcounts increase.

Gold Price

In Thailand, long service awards are typically provided in terms of cash benefit or gold. Hence, it is crucial to understand the movement of market gold price.

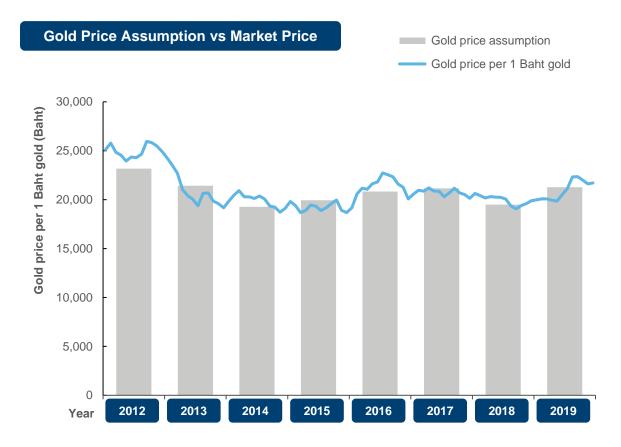


Figure 10: Illustrates the studied company gold price assumption and market gold price movement over years.

Market price for gold has been fluctuating between THB 19,000 to THB 23,000 with the average of THB 20,000 over the past three years.

Market gold price might be domestically influenced by local perspective on inflation or financial market, supply and demand for gold or Thai Baht's appreciation toward the US Dollar. Additionally, the political risk between countries could possibly be another factor which indirectly impacted the movement of gold price. However, the assumption adopted for gold price should not be influenced by such short-term fluctuations, but should be dependent on the actual price as at the valuation date. As a result, changes in gold price assumption from 2018 to 2019 are rather minimal.

In 2020, as the global economy is impacted by the COVID-19 pandemic, gold prices have risen steadily, reaching up to THB 26,000 by end of June 2020.

Mortality Rate

As the population of employees under employer-sponsored retirement plan in Thailand is relatively small, it is a common practice to adopt age-standardized mortality rate which derived from standard published tables.

Thailand Mortality Ordinary 2017 (TMO2017) is the most recent mortality investigation, compiled by the Office of Insurance Commission (OIC), on policyholders of life insurance companies in Thailand. It represents the probability of death of the total population at each age.

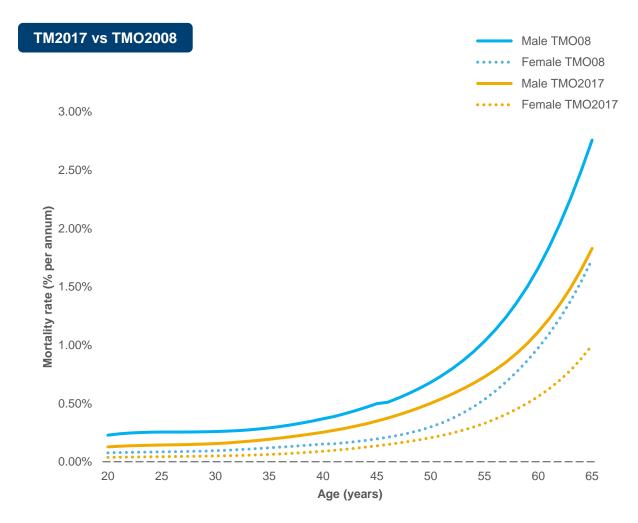


Figure 11: Illustrates mortality rate per annum for TM2008 and TMO2017

Effective September 1, 2017, the OIC published the most recent Thailand Mortality table, TMO2017. With the longer life expectancies reflected in TMO2017, majority of companies have approximately 2% – 3% increase on their Statutory Severance Pay plans after adopting the new rates. For other long-term benefit plans, it could be more depending on the plan design and employee demographics.

Loss Arising From Changing Mortality Table

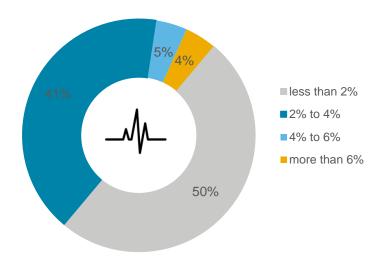


Figure 12: Illustrates number of studied companies with different percentage increases in actuarial loss arising from adopting TMO2017 to defined benefit obligation.

After adopting TMO2017, about 90% of the survey companies have recognised actuarial loss of between 0% to 4% in other comprehensive income (OCI) under the Statutory Severance Pay plan (SSP). Most of the companies that see an increase of more than 4% provides other long-term benefits on top of SSP.

Voluntary Turnover Rate

Voluntary turnover rates reflect the rate at which employees voluntarily resign from service.

Estimates of future voluntary turnover rate will normally take into account business strategy, time to retirement, level of seniority, economic situation and other company-specific factors.

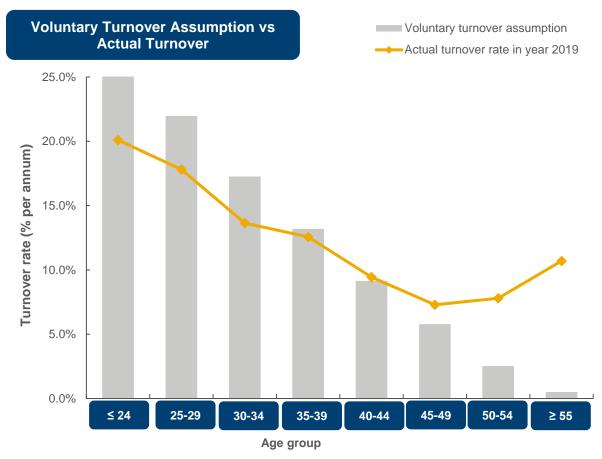


Figure 13: Illustrates actual turnover rate per annum of surveyed companies, together with its average adopted assumption across different age group.

Voluntary turnover rate differs from company to company but are typically higher for younger ages and lower for older employees.

There is a slight increase in turnover experience for employees in the older age group with a larger variance between actual rate and assumption adopted rate. As the proportion of older-age-employee is generally smaller; a resignation of one employee would pose higher impact as compared to a resignation of younger-age-employee.

The recent sluggish economy because of the COVID-19 pandemic has changed employee behavior. The signal of job insecurity among the globe reduced resignation decisions of employees as many layoffs incurred and less positions made available in the market. Therefore, voluntary turnover rates are expected to be slightly lower in the upcoming year.

Retirement Age

Although the mandatory retirement age for Thailand public sector is set at 60 years, the mandatory retirement age for private sector has just been set in 2017.

The amendments to the Labour Protection (No.6) B.E 2560 (2017) regarding retirement age is legally effective on September 1, 2017. In cases where the employer has not prescribed a retirement age in an employment contract or work policy, the retirement age is set at age 60 and the statutory severance benefit must be paid to the retiree.

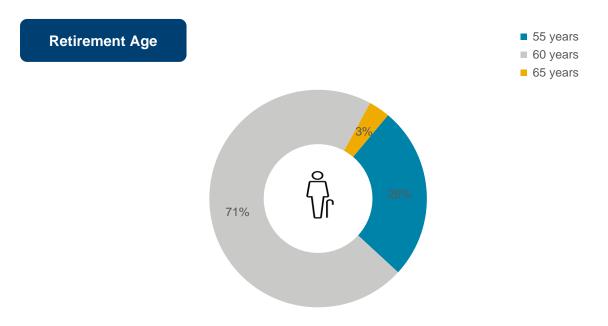


Figure 14: Distribution of retirement age of companies studied.

Majority of companies have a retirement age of 60 years for all employees. Only 2.8% of companies have a retirement age of 65 years.

Around 10% of companies have separate rates for different employee categories, which ranges from 50 years to 65 years. Companies whose retirement age is set at 65 years should be aware that employees who opt to retire at 60 years are entitled to the full severance payment benefit.

Impact of Assumptions

Assumptions play an important role in determining the cost of providing post-employment and long-term benefits. As such, as assumptions change, liabilities will be affected accordingly.

By using a company with typical employee profile, average assumptions as presented in the preceding pages and the plan description below, the demonstration of how changes in each assumption would impact retirement costs is gauged in the percentage scale of the following pages.

Average term to obligation: 11 years
 Discount rate: 1.96%
 Normal retirement age: 60 years

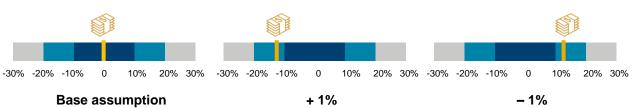
Retirement benefit: Statutory Severance Pay

Death benefit: None

Involuntary turnover benefit: Statutory Severance Pay

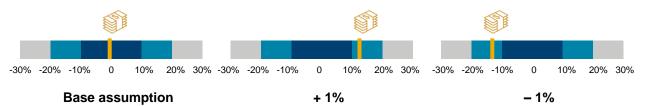
Voluntary turnover benefit: None

Discount Rate



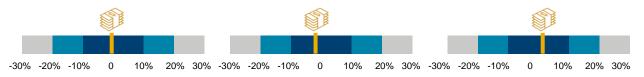
Changes in discount rate will have a discounting impact on expected payments. As a result, an increase in discount rate will result in some drop-in liabilities, while a decrease in discount rate will result in a rise in liabilities.

Salary Increase Rate



Increases in salary increase rates will impact future benefits, and thus increasing current liabilities. Similarly, a decrease in salary increase rate will result in some drop-in liabilities.

Mortality Rate



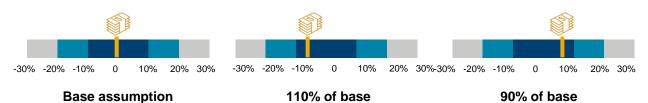
Base assumption

Set-forward 1 year

Set-back 1 year

Changes in mortality rates will have an impact on the probability of payments being made. As people live longer, liabilities increase when rates are set-back. Likewise, liabilities decrease when rates are set-forward.

Voluntary Turnover Rate



Changes in voluntary turnover rates will have an impact on the probability of payments being made. As a result, an increase in voluntary turnover rate will result in a reduction in liabilities, while a decrease in salary increase rate will result in an increase in liabilities.

Employee Benefits

Prevalence

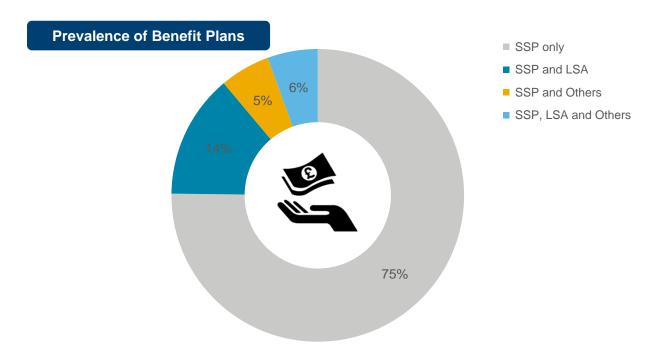


Figure 15: Illustrates prevalence of benefit plans of companies studied.

In addition to the statutory severance pay benefits, about 20% of companies provide long service award benefits while 11% of companies provide defined benefit retirement benefits on top of severance pay.

Statutory Benefits

Severance Pay

In Thailand, all companies are required to provide severance pay benefits to all employees.

On August 15, 2017, the cabinet approved in-principal the amendments to the Labour Protection Act B.E. 2541 (1998) to increase the severance payment compensation for employees who have 20 or more years of service. This is published in the Royal Gazette on April 4, 2019 and effective May 5, 2019.

The amount entitled for employees with at least 20 years of service will be increased from current 300 days to 400 days of last drawn salaries.

The accounting impact from such amendment is the incurrence of "past service cost" which is a one-time cost recognised in the statement of profit and loss. The magnitude of the change will result in an increase of a maximum of 33.33% when compared to liability before the changes, depending on the employee demographics. In addition, the change to severance pay benefits will result in an increase in future projected expenses.

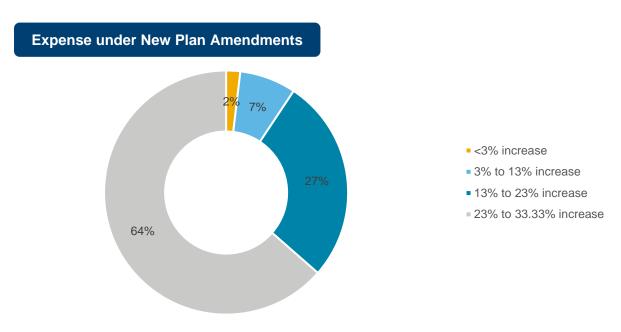


Figure 16: Illustrates percentage of company's expense increase comparing to liability under new plan amendment

Under Section 118, Chapter 11 of the Labour Protection Act B.E. 2541 (1998) of Thailand (amended May 2019), an employer is required to pay severance pay to an employee who is terminated from employment as follows:

Service	Benefit
120 days but less than 1 year	30 days wage
1 year but less than 3 years	90 days wage
3 years but less than 6 years	180 days wage
6 years but less than 10 years	240 days wage
10 years but less than 20 years	300 days wage
20 years and more	400 days wage

Termination of employment covers:

- Retirement;
- Retrenchment; and
- Termination without cause.

Long-Term Employee Benefits

Employee benefits covered under IAS 19 and TAS 19, and may require a valuation are split into the following categories:

- Post-employment, such as:
 - Lump sum benefits, based on
 - · Employee's years of service;
 - Employee's final salary or average salary; and/or
 - Fixed amount
 - Death benefits (not covered by insurance)
 - Disability benefits (not covered by insurance)
 - Post-employment medical benefits
 - · Medical benefit and outpatient costs
 - Provided after leaving service
 - For retired employees and/or their family
- Termination benefits
- Other long-term benefits, such as:
 - Long service awards
 - Long service leave
 - Bonuses payable more than 12 months after period in which service are rendered
 - Annual leave accumulated and payable more than 12 months after period in which service are rendered

Sources

- Aon: Salary Increase Survey Thailand
- Baker McKenzie: Minimum Wage Increment Expected from January 2020
- Bank of Thailand: Monetary Policy Report
- Fiscal Policy Office Thailand
- Ministry of Labour Thailand
- Office of Insurance Commission Thailand
- Royal Gazette of Thailand
- Social Security Office Thailand
- Thai Bond Market Association
- Thailand Gold Traders Association

Contact Information

Retirement and Investment Thailand

Retirement.SEA@aon.com +662.305.4700

Surendran Ramanathan

Actuary, Southeast Asia Practice Leader, Retirement and Investment

Xiulin Loo

Thailand and Indochina Practice Leader, Retirement and Investment

Ajjima Jenakom

Senior Consultant, Retirement and Investment

Nathawan Jirasaengchotti

Consultant, Retirement and Investment

Suvimol Sthavorn

Consultant, Retirement and Investment

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

For further information on our capabilities and to learn how we empower results for clients, please visit http://aon.mediaroom.com.

Copyright 2020 Aon Inc.

The information contained herein and the statements expressed are of a general nature and are not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information and use sources we consider reliable, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation. Aon reserves all rights to the content of this document.

2020 Valuation Trends 32