



25 July 2018

#### **EQUITIES**

| 2628 HK<br>Price (at 13:00, 24 Jul 2018 GMT) | Outperforr<br>HK\$20.1 |            |  |  |  |
|--|------------------------|------------|--|--|--|
| Valuation<br>- Appraisal Value               | HK\$                   | 43.83      |  |  |  |
| 12-month target                              | HK\$                   | 35.00      |  |  |  |
| Upside/Downside                              | %                      | +74.1      |  |  |  |
| 12-month TSR                                 | %                      | +77.3      |  |  |  |
| Volatility Index                             | I                      | _ow/Medium |  |  |  |
| GICS sector                                  |                        | Insurance  |  |  |  |
| Market cap                                   | HK\$m                  | 721,166    |  |  |  |
| Market cap                                   | US\$m                  | 91,901     |  |  |  |
| 30-day avg turnover                          | US\$m                  | 101.2      |  |  |  |
| Number shares on issue                       | m                      | 35,879     |  |  |  |

#### Investment fundamentals

| Year end 31 Dec    |     | 2017A   | 2018E   | 2019E   | 2020E   |
|--------------------|-----|---------|---------|---------|---------|
| Life Prem          | bn  | 506.9   | 545.3   | 627.1   | 706.8   |
| Life Total Rev     | bn  | 643.4   | 685.1   | 786.7   | 880.1   |
| Pretax Life Op Inc | bn  | 34.5    | 51.9    | 63.5    | 64.1    |
| PBT                | bn  | 41.7    | 59.4    | 71.3    | 72.1    |
| Reported profit    | bn  | 32.3    | 47.1    | 56.6    | 57.2    |
| EPS adj            | Rmb | 1.14    | 1.67    | 2.00    | 2.02    |
| PER adj            | Х   | 15.3    | 10.5    | 8.7     | 8.6     |
| DPS                | Rmb | 0.40    | 0.50    | 0.60    | 0.65    |
| Dividend yield     | %   | 2.3     | 2.9     | 3.4     | 3.7     |
| Total Assets       | bn  | 2,897.6 | 3,110.5 | 3,366.8 | 3,655.9 |
| Total SH Funds     | bn  | 325.3   | 352.9   | 386.6   | 417.3   |
| BV/S               | Rmb | 11.35   | 12.32   | 13.49   | 14.57   |
| ROE                | %   | 10.3    | 14.1    | 15.5    | 14.4    |
| ROA                | %   | 1.2     | 1.6     | 1.7     | 1.6     |
| P/BV               | Х   | 1.5     | 1.4     | 1.3     | 1.2     |
| Tot Embedded Val   | bn  | 734.2   | 810.1   | 922.4   | 1,046.9 |
| Implied P/EV       | Х   | 0.7     | 0.7     | 0.6     | 0.5     |

#### 2628 HK rel HSI performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period. Source: FactSet, Macquarie Research, July 2018 (all figures in Rmb unless noted, TP in HKD)

#### Analysts

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#### Hong Kong

# China Life Insurance Deep deep value

#### **Key points**

- ▶ We review our positive thesis on China Life and preview 1H18 results.
- Our bear case valuation HK\$23.30 indicates substantial downside risk is priced into the stock, we think unfairly so.
- We refresh our forecasts, reduce target price to \$35 and retain Outperform.

#### Conclusion

 China Life stock appears to be caught in a number of macro and micro crosshairs. We expect these to pass as earnings recover and new business momentum resumes. The stock is pricing in multiple severe scenarios which we deem overblown or very unlikely. We retain Outperform rating.

## **Impact**

- Pricing in an extreme scenario. Our bull case relies on an attractive view of
  the highly underpenetrated life & pensions industry. On this basis, we value
  the stock at >2x current price. By contrast, market has clearly taken a different
  view of the company's asset quality, earnings power, governance and sales
  capabilities. We take the meat cleaver to our fair valuation to understand what
  is priced in; our bear case HK\$23.20 captures some extreme scenarios and is
  15% above current price. Considering the strong balance sheet and
  conservative accounting (albeit opaque), we expect a re-rating in future.
- 1H18 preview. We are forecasting 1H18 EPS rises by 113%. This implies similar earnings growth in 2Q as 1Q (+120%), and ROE doubles YoY to 16%. No dividend is declared at mid-year. We forecast 1H18 VNB falls by 9%, due to both lower sales (-6%) and lower margins. We look for commentary on recent product regulations and implications for new business activity in 2H18.
- Unfairly depressed valuation. We consider China Life stock very cheap
  relative to fair actuarial value and considering its mid-teens ROEV profile. The
  stock is almost on par with low-growth peers in Korea and Japan. The
  company's NPAT, VNB and EV are 60-130% larger than AIA despite a lower
  market cap. We show that the company's EPS and BVPS could be 60-80%
  higher under less conservative accounting standards, which would imply that
  the stock is really trading at <6x PER and 0.7x P/B (once adjusted, refer p11).</li>

#### Earnings and target price revision

 We have allowed for current equity markets and reduced our FY18 EPS forecast by 4%. Our EPS forecasts remain 15-20% ahead of consensus. Our FY18 VNB forecast has fallen by 9% due to slower-than-expected sales growth and lower margins. We reduce our target price by 8% to HK\$35.

# Price catalyst

- 12-month price target: HK\$35.00 based on an Appraisal Value methodology.
- Catalyst: 1H18 results due on 23 August

## **Action and recommendation**

 Outperform rating. We consider China Life to be among the cheapest largecap stocks in the regional financials sector.

Fig 1 China Life: Financial summary

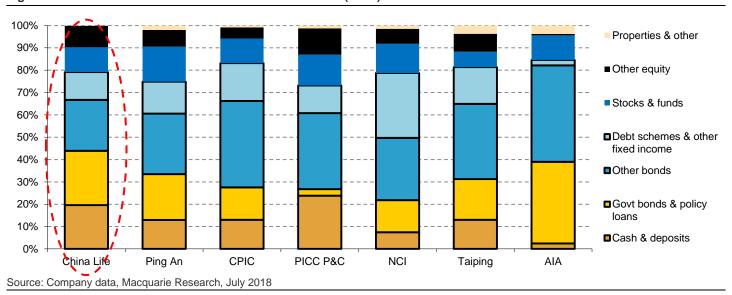
| Year ending: GWP APP 4 NEP 5 NE NE NE 7 NE 7 NE 7 NE 7 NE 8 NE 8 NE  | FY16A Dec-16 430, 498 426,230 109,147 (1,056) 6,460 540,781 880,426) 26,619) (15,881) (5,316) (4,767) (89,783) 222,794) 5,855 23,842 (4,257) (458) 19,127  0.66 -45.9% 0.24 36.4%  FY16A Dec-16                                      | PY17A Dec-17 511,966 506,910 122,727 6,225 7,493 643,355 (293,526) (172,517) (21,871) (8,076) (4,601) (108,236) (608,827) 7,143 41,671 (8,919) (499) 32,253                            | PY18E Dec-18 547,951 545,319 133,069 (378) 7,123 685,134 (307,741) (160,057) (27,380) (4,214) (2,379) (131,508) (633,280) 7,532 59,385 (11,877) (380)                         | PY19E Dec-19 630,063 627,063 147,232 4,191 786,676 (349,327) (184,700) (31,064) (4,451) (2,379) (151,215) (723,138) 7,772 71,310                | PY20E Dec-20 710,155 706,817 159,467 4,539 9,232 880,055 (388,202) (215,373) (34,835) (4,742) (2,379) (170,437) (815,968)             | BALANCE SHEET (RMB m) Year ending: Cash & deposits Government bonds Other bonds & loans Equity Investment property Accrued invmt income Investment in associates PP&E Receivables Intangibles Other assets Total assets | FY16A Dec-16 611,976 450,733 967,987 400,559 22,028 55,945 119,766 30,389 13,421 - 24,147 | FY17A<br>Dec-17<br>505,922<br>459,756<br>1,213,370<br>388,703<br>23,901<br>50,641<br>161,472<br>42,707<br>14,121 | FY18E Dec-18 573,487 521,156 1,238,601 440,614 27,093 43,547 177,619 44,842 15,553 | FY19E<br>Dec-19<br>620,406<br>563,794<br>1,339,936<br>476,662<br>29,310<br>47,136<br>195,381<br>47,084<br>16,834 | FY20E Dec-20 673,446 611,993 1,454,489 517,413 31,815 51,182 214,919 49,439 |
|--|--|--|---|---|---|---|---|--|--|--|---|
| NEP Investment income 1 Capital gains/losses Other income 2 Total revenues 5 Insurance claims (22 Increase in life reserves (12 Policyholder bonuses Inwit contract benefits Finance costs Expenses (52 Share of associates PBT Income tax Minority interests NPAT In | 426,230<br>109,147<br>(1,056)<br>6,460<br>540,781<br>880,426)<br>(26,619)<br>(15,883)<br>(5,316)<br>(4,767)<br>(89,783)<br>(22,794)<br>(222,794)<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45,9%<br>0.24<br>36,4%<br>PY16A<br>Dec-16 | 506,910<br>122,727<br>6,225<br>7,493<br>643,355<br>(293,526)<br>(172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253 | 545,319<br>133,069<br>(378)<br>7,123<br>685,134<br>(307,741)<br>(160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380) | 627,063<br>147,232<br>4,191<br>786,676<br>(349,327)<br>(184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310 | 706,817<br>159,467<br>4,539<br>9,232<br>880,055<br>(388,202)<br>(215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968) | Government bonds Other bonds & loans Equity Investment property Accrued invmt income Investment in associates PP&E Receivables Intangibles Other assets Total assets  | 450,733<br>967,987<br>400,559<br>22,028<br>55,945<br>119,766<br>30,389<br>13,421          | 459,756<br>1,213,370<br>388,703<br>23,901<br>50,641<br>161,472<br>42,707   | 521,156<br>1,238,601<br>440,614<br>27,093<br>43,547<br>177,619<br>44,842           | 563,794<br>1,339,936<br>476,662<br>29,310<br>47,136<br>195,381<br>47,084   | 611,993<br>1,454,489<br>517,413<br>31,815<br>51,182<br>214,919              |
| Investment income Capital gains/losses Other income Total revenues Insurance claims Increase in life reserves Inwit contract benefits Finance costs Expenses (income tax) Finance of associates  FBT Income tax Minority interests  Income tax Minority interests  Income tax Minority interests  Income tax Income  | 109,147<br>(1,056)<br>6,460<br>640,781<br>80,426)<br>26,619)<br>(15,883)<br>(5,316)<br>(4,767)<br>(89,783)<br>522,794)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%                           | 122,727<br>6,225<br>7,493<br>643,355<br>(293,526)<br>(172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253            | 133,069<br>(378)<br>7,123<br>685,134<br>(307,741)<br>(160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)            | 147,232<br>4,191<br>8,191<br>786,676<br>(349,327)<br>(184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310   | 159,467<br>4,539<br>9,232<br>880,055<br>(388,202)<br>(215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968)            | Other bonds & loans Equity Investment property Accrued invmt income Investment in associates PP&E Receivables Intangibles Other assets Total assets   | 967,987<br>400,559<br>22,028<br>55,945<br>119,766<br>30,389<br>13,421                     | 1,213,370<br>388,703<br>23,901<br>50,641<br>161,472<br>42,707  | 1,238,601<br>440,614<br>27,093<br>43,547<br>177,619<br>44,842                      | 1,339,936<br>476,662<br>29,310<br>47,136<br>195,381<br>47,084  | 1,454,489<br>517,413<br>31,815<br>51,182<br>214,919                         |
| Capital gains/losses Other income Total revenues Insurance claims Increase in life reserves Inwith contract benefits Finance costs Expenses Invital benefits & expenses Share of associates PBT Income tax Minority interests NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating benefits Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (Agents Bancassurance VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | (1,056)<br>6,460<br>540,781<br>80,426)<br>26,619)<br>(15,883)<br>(5,316)<br>(4,767)<br>(89,783)<br>522,794)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%                                      | 6,225<br>7,493<br>643,355<br>(293,526)<br>(172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253                       | (378)<br>7,123<br>685,134<br>(307,741)<br>(160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)                       | 4,191<br>8,191<br>786,676<br>(349,327)<br>(184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310              | 4,539<br>9,232<br>880,055<br>(388,202)<br>(215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968)                       | Equity Investment property Accrued invmt income Investment in associates PP&E Receivables Intangibles Other assets Total assets   | 400,559<br>22,028<br>55,945<br>119,766<br>30,389<br>13,421                                | 388,703<br>23,901<br>50,641<br>161,472<br>42,707   | 440,614<br>27,093<br>43,547<br>177,619<br>44,842                                   | 476,662<br>29,310<br>47,136<br>195,381<br>47,084   | 517,413<br>31,815<br>51,182<br>214,919                                      |
| Other income Total revenues Insurance claims Insurance claims Increase in life reserves Policyholder bonuses Inmt contract benefits Finance costs Expenses Interpretation of the provided reserved in the provided reserved i | 6,460<br>540,781<br>280,426)<br>(15,883)<br>(5,316)<br>(4,767)<br>522,794)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%   | 7,493<br>643,355<br>(293,526)<br>(172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253                                | 7,123<br>685,134<br>(307,741)<br>(160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)                                | 8,191<br>786,676<br>(349,327)<br>(184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310                       | 9,232<br>880,055<br>(388,202)<br>(215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968)                                | Investment property Accrued invmt income Investment in associates PP&E Receivables Intangibles Other assets Total assets  | 22,028<br>55,945<br>119,766<br>30,389<br>13,421   | 23,901<br>50,641<br>161,472<br>42,707  | 27,093<br>43,547<br>177,619<br>44,842  | 29,310<br>47,136<br>195,381<br>47,084  | 31,815<br>51,182<br>214,919   |
| Total revenues Insurance claims (21 Insurance claims (22 Insurance claims (22 Increase in life reserves (12 Policyholder bonuses Invent contract benefits Finance costs Expenses (52 Share of associates PBT Income tax Minority interests NPAT Income tax Minority interests (12 EV Analysis (13 EV Appertation of EV Appe | 540,781<br>80,426)<br>26,619)<br>(15,883)<br>(5,316)<br>(4,767)<br>(89,783)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45,9%<br>0.24<br>36,4%<br>FY16A<br>Dec-16   | 643,355<br>(293,526)<br>(172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253   | 685,134<br>(307,741)<br>(160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)   | 786,676<br>(349,327)<br>(184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310                                | 880,055<br>(388,202)<br>(215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968)   | Accrued invmt income<br>Investment in associates<br>PP&E<br>Receivables<br>Intangibles<br>Other assets  | 55,945<br>119,766<br>30,389<br>13,421   | 50,641<br>161,472<br>42,707  | 43,547<br>177,619<br>44,842  | 47,136<br>195,381<br>47,084  | 51,182<br>214,919   |
| Insurance claims Insurance claims Increase in life reserves Policyholder bonuses Invmt contract benefits Finance costs Expenses Introduction of the service  | 280,426) 26,619) (15,883) (15,316) (4,767) (89,783) 122,794) 5,855 23,842 (4,257) (458) 19,127  0.66 -45.9% 0.24 36.4%  FY16A Dec-16   | (293,526)<br>(172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253  | (307,741)<br>(160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)  | (349,327)<br>(184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310   | (388,202)<br>(215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968)  | Investment in associates PP&E Receivables Intangibles Other assets Total assets   | 119,766<br>30,389<br>13,421   | 161,472<br>42,707  | 177,619<br>44,842  | 195,381<br>47,084  | 214,919   |
| Increase in life reserves Policyholder bonuses Inwit contract benefits Finance costs Expenses (52 Share of associates PBT Income tax Minority interests NPAT  EPS growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 26,619) (15,886) (5,316) (4,767) (89,783) 522,794) 5,855 23,842 (4,257) (458) 19,127  0.66 -45.9% 0.24 36.4%  FY16A Dec-16   | (172,517)<br>(21,871)<br>(8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253   | (160,057)<br>(27,380)<br>(4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)   | (184,700)<br>(31,064)<br>(4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310  | (215,373)<br>(34,835)<br>(4,742)<br>(2,379)<br>(170,437)<br>(815,968)   | PP&E Receivables Intangibles Other assets Total assets  | 30,389<br>13,421<br>-   | 42,707   | 44,842   | 47,084   |   |
| Invmt contract benefits Finance costs Expenses (37 Total benefits & expenses (57 Share of associates PBT Income tax Minority interests  NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | (5,316)<br>(4,767)<br>(89,783)<br>(322,794)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%  | (8,076)<br>(4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253  | (4,214)<br>(2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)  | (4,451)<br>(2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310   | (4,742)<br>(2,379)<br>(170,437)<br>(815,968)  | Intangibles Other assets Total assets   | -   | 14,121<br>-  | 15,553   | 16.834   | ,   |
| Finance costs Expenses (8  Expenses (5) Share of associates  PBT Income tax Minority interests  NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments  EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | (4,767)<br>(89,783)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%  | (4,601)<br>(108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253   | (2,379)<br>(131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)   | (2,379)<br>(151,215)<br>(723,138)<br>7,772<br>71,310  | (2,379)<br>(170,437)<br>(815,968)   | Other assets Total assets   | -<br>24,147   | -  |  | . 5,00 /   | 18,279  |
| Expenses  Contail benefits & expenses Share of associates  PBT Income tax Minority interests  NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | 89,783)<br>522,794)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   | (108,236)<br>(608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253  | (131,508)<br>(633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)  | (151,215)<br>(723,138)<br>7,772<br>71,310   | (170,437)<br>(815,968)  | Total assets  | 24,147  |  | -  | -  | -   |
| Total benefits & expenses Share of associates PBT Income tax Minority interests NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 22,794)<br>5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   | (608,827)<br>7,143<br>41,671<br>(8,919)<br>(499)<br>32,253   | (633,280)<br>7,532<br>59,385<br>(11,877)<br>(380)   | (723,138)<br>7,772<br>71,310  | (815,968)   |   |   | 36,998   | 27,995   | 30,302   | 32,903  |
| Share of associates PBT Income tax Minority interests NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | 5,855<br>23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16  | 7,143<br>41,671<br>(8,919)<br>(499)<br>32,253  | 7,532<br>59,385<br>(11,877)<br>(380)  | 7,772<br>71,310   |   | P. 1.2022   | 2,696,951   | 2,897,591  | 3,110,507  | 3,366,845  | 3,655,878   |
| PBT Income tax Minority interests NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Cyperating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | 23,842<br>(4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   | 41,671<br>(8,919)<br>(499)<br><b>32,253</b>  | 59,385<br>(11,877)<br>(380)   | 71,310  | 8,021   | Insurance liabilities Investment liabilities  | 1,847,986<br>195,706  | 2,025,133<br>232,500   | 2,186,492<br>241,486   | 2,374,568<br>257,243   | 2,592,621<br>275,672  |
| Income tax Minority interests  NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | (4,257)<br>(458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   | (8,919)<br>(499)<br><b>32,253</b>  | (11,877)<br>(380)   |   | 72,108  | Repurchased assets  | 81,088  | 87,309   | 87,309   | 87,309   | 87,309  |
| Minority interests  NPAT  EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | (458)<br>19,127<br>0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16  | (499)<br><b>32,253</b><br>1.13   | (380)   | (14, 262)   | (14,422)  | Borrowings  | 54,168  | 18,794   | 18,014   | 18,014   | 18,014  |
| EPS - growth YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit 1 Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 0.66<br>-45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   | 1.13   | 47.400  | (456)   | (461)   | Payables  | 126,763   | 128,730  | 138,443  | 150,066  | 163,550   |
| - grow th YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | -45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   |  | 47,128  | 56,592  | 57,225  | Tax liabilities   | 8,982   | 11,069   | 11,904   | 12,904   | 14,063  |
| - grow th YoY DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | -45.9%<br>0.24<br>36.4%<br>FY16A<br>Dec-16   |  |   |   |   | Other liabilities   | 74,610  | 68,746   | 73,933   | 80,140   | 87,341  |
| DPS declared Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 0.24<br>36.4%<br><b>FY16A</b><br>Dec-16  | 71.2%  | 1.67  | 2.00  | 2.02  | Total liabilities   | 2,389,303   | 2,572,281  | 2,757,581  | 2,980,244  | 3,238,569   |
| Payout ratio  EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit 1 Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 36.4%<br>FY16A<br>Dec-16   |  | 47.6%   | 20.1%   | 1.1%  | NET ASSETS  | 307,648   | 325,310  | 352,926  | 386,602  | 417,309   |
| EV ANALYSIS (RMB m) Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit 1 Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | FY16A<br>Dec-16  | 0.40<br>35.4%  | 0.50<br>30.0%   | 0.60<br>30.0%   | 0.65<br>32.0%   | Share capital   | 28,265  | 28,265   | 28,265   | 28,265   | 28,265  |
| Period ending: Opening EV  Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | Dec-16   | 33.476   | 30.076  | 30.078  | 32.076  | Reserves  | 152,798   | 153,466  | 157,235  | 162,835  | 167,835   |
| Period ending: Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | Dec-16   | FY17A  | FY18E   | FY19E   | FY20E   | Retained earnings   | 122,558   | 139,202  | 162,684  | 190,320  | 215,584   |
| Opening EV Expected return on EV Value of new business (VNB) Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances Total EV profit Thareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   |  | Dec-17   | Dec-18  | Dec-19  | Dec-20  | Equity attributable to SH's   | 303,621   | 320,933  | 348,184  | 381,420  | 411,683   |
| Value of new business (VNB) Operating experience Chg in op. assumptions EV operating profit Investment experience Other variances Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 560,277  | 652,057  | 734,172   | 810,054   | 922,444   | Non-controlling interests   | 4,027   | 4,377  | 4,742  | 5,182  | 5,626   |
| Operating experience Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | 52,168   | 52,472   | 59,694  | 66,919  | 76,055  | Total equity  | 307,648   | 325,310  | 352,926  | 386,602  | 417,309   |
| Chg in op. assumptions  EV operating profit Investment experience Other variances  Total EV profit Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) 5 Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 49,311   | 60,117   | 58,950  | 62,955  | 69,190  |   |   |  |  |  |   |
| EV operating profit Investment experience Other variances  Total EV profit 1 Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | (1,792)  | 529  | -   | -   |   | Shares o/s (closing, mn)  | 28,265  | 28,265   | 28,265   | 28,265   | 28,265  |
| Investment experience Other variances  Total EV profit 1 Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | -  | (5,926)  | (3,791)   | (3,346)   | (3,803)   | Shares o/s (wtd avg, mn)  | 28,265  | 28,265   | 28,265   | 28,265   | 28,265  |
| Other variances  Total EV profit Shareholder dividend Impact of FX  Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | <b>99,687</b> (45,002)   | <b>107,192</b> (15,829)  | <b>114,853</b> (27,666)   | 126,528   | 141,442   | C-ROSS (RMB m)  | FY16A   | FY17A  | FY18E  | FY19E  | FY20E   |
| Total EV profit Shareholder dividend Impact of FX Closing EV (as reported) Adjustments EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 48,701   | (13,629)   | (27,000)  |   |   | Year ending:  | Dec-16  | Dec-17   | Dec-18   | Dec-19   | Dec-20  |
| Shareholder dividend ('Impact of FX  Closing EV (as reported) Adjustments (!Impact of EV (adjusted basis) Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | 103,386  | 89,738   | 87,188  | 126,528   | 141,442   | Available capital   | 677,768   | 706,623  | 736,556  | 801,135  | 867,814   |
| Closing EV (as reported) Adjustments (3 EV (adjusted basis) 5 Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | (12,257)   | (7,164)  | (11,306)  | (14,138)  | (16,978)  | Capital requirement   | 228,080   | 254,503  | 273,706  | 296,684  | 323,342   |
| Adjustments (5 EV (adjusted basis) 5 Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 651  | (459)  | - '-  | - '-  | -   |   |   |  |  |  |   |
| EV (adjusted basis) 5 Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | 652,057  | 734,172  | 810,054   | 922,444   | 1,046,909   | Core Tier-1 ratio   | 277%  | 275%   | 266%   | 267%   | 266%  |
| Operating ROEV Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents  | (53,520)   | (62,440)   | (68,894)  | (78,452)  | (89,038)  | Comprehensive ratio   | 297%  | 278%   | 269%   | 270%   | 268%  |
| Reported ROEV VNB growth Agents Bancassurance VNB margin (as % APE) Agents   | 598,537  | 671,732  | 741,160   | 843,992   | 957,871   | DDEMUM (DMD )   | EV/101  | E)//=4   | EV40E  | EV40E  | E1/00E  |
| VNB growth<br>Agents<br>Bancassurance<br>VNB margin (as % APE)<br>Agents   | 17.8%  | 16.4%  | 15.6%   | 15.6%   | 15.3%<br>15.3%  | PREMIUM (RMB m)   | FY16A   | FY17A  | FY18E  | FY19E  | FY20E<br>Dec-20   |
| Agents<br>Bancassurance<br>VNB margin (as % APE)<br>Agents   | 18.5%<br><b>54.5%</b>  | 13.8%<br><b>21.9%</b>  | 11.9%<br><b>-1.9%</b>   | 15.6%<br><b>6.8%</b>  | 9.9%  | Year ending: <u>GWP composition:</u>  | Dec-16  | Dec-17   | Dec-18   | Dec-19   | Dec-20  |
| Bancassurance<br>VNB margin (as % APE)<br>Agents   | 60.6%  | 14.8%  | -3.0%   | 6.3%  | 10.6%   | Regular - renewal   | 223,502   | 288,106  | 367,418  | 434,572  | 502,328   |
| VNB margin (as % APE)<br>Agents  | 13.2%  | 150.4%   | 4.0%  | 9.7%  | 4.9%  | Regular - 1st year  | 93,945  | 113,121  | 113,640  | 122,101  | 129,239   |
|  | 34.9%  | 36.1%  | 35.8%   | 35.1%   | 36.1%   | Single premium  | 72,991  | 63,671   | 17,473   | 17,876   | 18,235  |
| Bancassurance  | 56.5%  | 53.3%  | 54.0%   | 53.8%   | 56.0%   | A&H   | 40,060  | 47,068   | 49,419   | 55,515   | 60,354  |
|  | 10.4%  | 23.5%  | 24.0%   | 24.0%   | 24.0%   | Total GWP   | 430,498   | 511,966  | 547,951  | 630,063  | 710,155   |
|  |  |  |   |   |   | - growth YoY  | 18.3%   | 18.9%  | 7.0%   | 15.0%  | 12.7%   |
| KEY METRICO  | EV40A  | E)/47A   | EVANE   | E)/40E  | EV00E   | New business APE by channel:  | 00.055  | 00.700   | 05.545   | 404.040  | 400.040   |
|  | FY16A<br>Dec-16  | FY17A<br>Dec-17  | FY18E<br>Dec-18   | FY19E<br>Dec-19   | FY20E<br>Dec-20   | Agents - growth YoY   | 82,055<br>52.3%   | 99,732<br>21.5%  | 95,515<br>-4.2%  | 101,943<br>6.7%  | 108,319<br>6.3%   |
| Year ending:<br>Invmt income yield   | 4.61%  | 4.91%  | 4.98%   | 5.02%   | 5.01%   | Bancassurance   | 25,201  | 27,826   | 28,326   | 31,086   | 32,602  |
| Gross invmt return   | 2.43%  | 4.55%  | 4.35%   | 4.56%   | 4.56%   | - growth YoY  | 18.2%   | 10.4%  | 1.8%   | 9.7%   | 4.9%  |
| Claims & benefits ratio  | 79.2%  | 77.1%  | 72.9%   | 72.4%   | 73.1%   | Group   | 20,098  | 22,126   | 22,698   | 24,542   | 26,505  |
| Acquisition cost ratio   | 9.6%   | 10.1%  | 12.0%   | 12.0%   | 12.1%   | New business APE  | 141,304   | 166,556  | 164,807  | 179,403  | 191,416   |
| Admin cost ratio   | 7.0%   | 6.8%   | 7.2%  | 7.2%  | 7.3%  | - growth YoY  | 38.4%   | 17.9%  | -1.1%  | 8.9%   | 6.7%  |
| Total expense ratio  | 16.6%  | 16.8%  | 19.2%   | 19.2%   | 19.4%   |   |   |  |  |  |   |
| PBT margin   | 4.4%   | 6.5%   | 8.7%  | 9.1%  | 8.2%  | INTERIMS (RMB m)  | 1H17A   | 2H17A  | 1H18E  | 2H18E  | 1H19E   |
| Effective tax rate   | 17.9%  | 21.4%  | 20.0%   | 20.0%   | 20.0%   | 6M ending:  | Jun-17  | Dec-17   | Jun-18   | Dec-18   | Jun-19  |
| NPAT as % reserves<br>ROA  | 1.1%<br>0.7%   | 1.6%<br>1.1%   | 2.1%<br>1.6%  | 2.3%<br>1.7%  | 2.2%<br>1.6%  | GWP<br>NEP  | 345,967<br>336,270  | 165,999<br>170,640   | 353,290<br>351,701   | 194,661<br>193,618   | 408,864<br>407,042  |
| Sub debt / equity  | 0.7%<br>17.6%  | 1.1%<br>5.6%   | 1.6%<br>5.2%  | 4.7%  | 4.4%  | Investment income   | 336,270<br>57,701   | 170,640<br>65,026  | 63,009   | 70,060   | 71,424  |
| Dupont:  | 070  | 0.070  | J.Z /U  | 7.1 /0  | 7.77  | Capital gains/losses  | (1,069)   | 7,294  | (2,372)  | 1,994  | 2,033   |
| NPAT margin  | 4.4%   | 6.3%   | 8.6%  | 9.0%  | 8.1%  | Other income  | 3,263   | 4,230  | 4,593  | 2,531  | 5,315   |
| GWP / Assets   | 16.0%  | 17.7%  | 17.6%   | 18.7%   | 19.4%   | Total revenues  | 396,165   | 247,190  | 416,931  | 268,203  | 485,814   |
| Leverage (A / E)   | 8.8x   | 8.9x   | 8.8x  | 8.7x  | 8.8x  | Insurance claims  | (196,435)   | (97,091)   | (195,347)  | (112,394)  | (223,119  |
| Reported ROE   | 6.2%   | 10.4%  | 14.1%   | 15.7%   | 14.6%   | Increase in liabilities   | (118,903)   | (53,614)   | (85,900)   | (74,157)   | (113,059)   |
| Per share data:  | 40 = 1   | 44.05  | 40.00   | 40.40   | 4,  | Policyholder bonuses  | (8,076)   | (13,795)   | (18,486)   | (8,894)  | (19,967)  |
| BVPS<br>NTA DS   | 10.74  | 11.35  | 12.32   | 13.49   | 14.57   | Invmt contract benefits   | (4,015)   | (4,061)  | (2,107)  | (2,107)  | (2,226)   |
| NTAPS<br>EVPS  | 10.74<br>21.18   | 11.35<br>23.77   | 12.32<br>26.22  | 13.49<br>29.86  | 14.57<br>33.89  | Finance costs Expenses  | (2,507)<br>(53,965)   | (2,094)<br>(54,271)  | (1,190)<br>(84,790)  | (1,190)<br>(46,719)  | (1,190)<br>(98,127)   |
| VNB per share  | 1.46   | 1.79   | 1.76  | 1.88  | 2.06  | Total benefits & expenses   | (383,901)   | (224,926)  | (387,820)  | (245,460)  | (457,687)   |
| Valuation at current price HK\$20.1:   | 10   | 0  | 0   |   | 00  | Share of associates   | 3,665   | 3,478  | 3,777  | 3,755  | 3,893   |
| PER  | 27.4x  | 16.3x  | 10.5x   | 8.7x  | 8.6x  | PBT   | 15,929  | 25,742   | 32,887   | 26,498   | 32,020  |
| Dividend yield   | 1.3%   | 2.2%   | 2.9%  | 3.4%  | 3.7%  | Income tax  | (3,437)   | (5,482)  | (6,577)  | (5,300)  | (6,404  |
| P/B  | 1.69x  | 1.62x  | 1.42x   | 1.30x   | 1.20x   | Minority interests  | (250)   | (249)  | (210)  | (170)  | (205  |
| P / NTA  | 1.69x  | 1.62x  | 1.42x   | 1.30x   | 1.20x   | NPAT  | 12,242  | 20,011   | 26,099   | 21,028   | 25,411  |
| P / EV (reported basis)  | 0.78x  | 0.71x  | 0.61x   | 0.54x   | 0.47x   | 500   |   | <u>.</u>   |  |  | _   |
| P / EV (adjusted basis)  | 0.85x  | 0.77x  | 0.67x   | 0.59x   | 0.52x   | EPS   | 0.43  | 0.71   | 0.92   | 0.74   | 0.90  |
| VNB multiple   | -2.1x  | -3.0x  | -5.0x   | -6.6x   | -8.0x   | - growth YoY<br>DPS declared  | 17.8%   | 129.2%   | 113.2%   | 5.1%<br>0.50   | -2.6%   |
|  |  |  |   |   |   | DES DECIAIED  | -   | 0.40   | -  | 0.50   | -   |
| Courses Company data Maran   |  |  |   |   |   |   |   |  |  |  |   |
| Source: Company data, Maco   |  |  | 1.1.0040  |   |   |   |   |  |  |  |   |

# Stress testing for investment and credit risks

Macro concerns in China are at elevated levels. Market concerns include trade tensions, PBOC
tinkering with monetary policy, deleveraging in the real economy and rising incidence of credit defaults.
This has led to a significant decline in equity values and some increase in lower-quality corporate credit
spreads in recent months.

- In this environment, it is not surprising that financial stocks have been weak. Market has assigned some
  degree of impairments and write-offs to insurance assets. In this section, we assess what is a
  reasonable level of investment shocks to include in a bear case scenario.
- We have segmented China Life's investment assets into homogenous risk categories and considered each of these separately. Fig 2 shows this breakdown.

Fig 2 China insurers: Asset allocation of insurance funds (FY17)



#### Starting with debt investments

- The chart above shows that 60% of China Life's assets were held in fixed-income assets as at FY17. Another 20% is held in cash, a very high allocation globally.
- For fixed income, we segment our analysis between bonds and other fixed income assets (often referred to as "non-standard").
- Plain vanilla bonds comprise 43% of total invested assets. We note the following about China Life's bond portfolio as at FY17:
  - ⇒ 47% of bonds are issued by the government. This is the highest allocation to government bonds among domestic peers.
  - ⇒ Of the remaining 53% in non-government bonds, which are issued by corporates (mostly SOEs) and financial institutions (again mostly SOEs), 99.9% had credit ratings of AA/A-2 or above (sic). It is not clear what the breakdown is between AA and below-AA.
- The expectation of rising defaults has increased credit spreads YTD by ~65bps for lower-rated corporate bonds. Credit spreads on financial bonds have actually compressed YTD. While the impact of wider credit spreads is net negative, we doubt this is a material impact YTD.
- Non-standard credit assets comprise all interest-earning assets except cash, deposits, policy loans and bonds. This comprised 12% of total investment assets as at FY17, the lowest among domestic peers.
- Not only is this allocation to non-standard credit relatively low, we also note the implied yield on these
  assets is not high (we calculate 4.8% in FY17 down from 5.5% in FY16).
- · Overall, we do not consider these allocations aggressive in absolute terms nor relative to peers.

#### **Turning to equity investments**

- Equity-related assets comprised 21% of invested assets at FY17. This includes stakes in associates (6%), even though these are equity accounted rather than marked-to-market.
- Whilst 20% is at the top end of our comfort range for equities allocation, we do not consider it excessive
  considering (i) the portfolio is very long-dated; and, (ii) the company has sufficient surplus capital
  available to support the incremental capital requirements of holding equities.
- The sensitivity of China Life's EV and solvency to declines in equity values is not high (i.e., 10% decline in equity values equates to 3.5% of EV and 10ppts of solvency).
- The SHCOMP has fallen by 14% YTD. We use this index as a proxy for all of China Life's equity-related investments, both listed and unlisted.

### Allowing for shocks to asset values

- Overall we have allowed for the following impacts on China Life's insurance funds:
  - ⇒ A sharp spike in corporate credit spreads: we assume prices of corporate and financial bonds (i.e., non-Government) fall by 5%. For a 7Y average duration, this implies spreads widen by ~80bps.
  - ⇒ Non-standard credit assets (i.e., debt schemes, trust products, WMPs) experience 10% defaults.
  - ⇒ Values of all equity-related assets (i.e., direct securities, funds, WMPs) are 30% lower and all property values are also 30% lower.
- Based on China Life's asset allocation, this implies a "haircut" to total investment assets of almost 7%. We believe this scenario would represent a material adverse outcome.
- As discussed above, we believe **China Life's balance sheet and asset allocation is more defensive than many appreciate**. However, this requires some adjustment to the reported traditional metrics.
- At FY17, insurance funds were at Rmb2.75tn. This compared with shareholders' equity (i.e., on PRC GAAP basis) of only Rmb325bn, implying leverage of 8.5x. However, this comparison is flawed for at least two reasons we can see:
  - ⇒ The participating fund in the life company shares at least 60% of the profits (and losses) with policyholders, and we estimate this par fund represents over half of the total insurance funds;
  - ⇒ A comparison with shareholders' equity is flawed as it does not consider residual margin. RM is booked as a liability despite being an economic asset available to shareholders. RM is therefore included as solvency capital.
- The real measure of leverage should adjust for par share and RM (or correspondingly, VIF). This reduces the leverage ratio to only 2.2x (i.e., adjusted investment assets to EV), which is low versus domestic and global peers.
- Based on these inputs, we estimate an impact (net of par share) of Rmb110bn (HK\$4.51 per share),
  which equates to 15% of EV. This would erase 44ppts from the Group solvency ratio; this would reduce
  core Group solvency to a still-healthy 233%. Fig 3 sets out our calculation. We allow for this in our bear
  case described later.

Fig 3 China Life: Assigning a haircut to investment assets

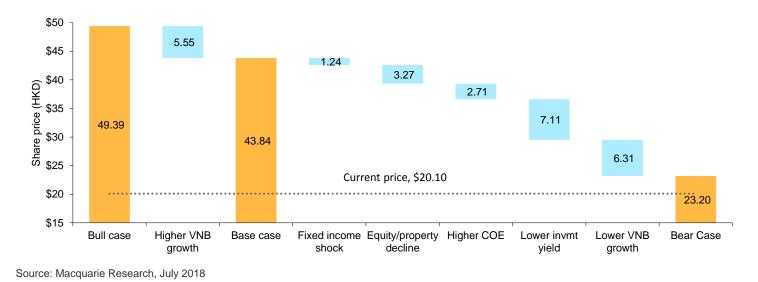
| Rmb mn                             | Invmt assets (Insurance funds) | Adjusted for par share | Shock % (pre tax) | Impact (post tax) | Impact<br>as % EV | Solvency ppts |
|------------------------------------|--------------------------------|------------------------|-------------------|-------------------|-------------------|---------------|
| Cash & deposits                    | 540,504                        | 323,323                | 0%                | =                 | 0.0%              | 0%            |
| Govt bonds & policy loans          | 669,193                        | 400,303                | 0%                | -                 | 0.0%              | 0%            |
| Other bonds                        | 627,370                        | 375,285                | -5%               | (14,636)          | -2.0%             | -6%           |
| Debt schemes & other fixed income  | 341,993                        | 204,576                | -10%              | (15,957)          | -2.2%             | -6%           |
| Stocks & funds                     | 306,337                        | 183,247                | -30%              | (42,880)          | -5.8%             | -17%          |
| Other equity                       | 264,663                        | 158,318                | -30%              | (37,046)          | -5.0%             | -15%          |
| Properties & other                 | 3,064                          | 1,833                  | -30%              | (429)             | -0.1%             | 0%            |
| TOTAL                              | 2,753,124                      | 1,646,884              | -6.7%             | (110,948)         | -15.1%            | -44%          |
| Source: Macquarie Research, July 2 | 018                            |                        |                   |                   |                   |               |

# What does a bear case scenario look like?

 Our fair value of China Life is HK\$43.84 per share. This relies on our base case forecasts for future VNB with appropriate discount rates and risk allowances.

- Given the substantial upside from current stock price, as well as the pullback in the stock YTD, it is
  timely to investigate what market may be pricing in at current levels. We have undertaken this exercise
  at a granular level.
- Our first step is to assign a realistic haircut to insurance funds to reflect adverse market moves and credit risk (refer previous section).
- We have also considered changes in the operating outlook for the core life business. In short, we assume the following in our bear case:
  - ⇒ FY18 VNB falls by 20% due to the high base set in FY17 and disruption to product development caused by CIRC Document 134 and Document 19 (refer later in this report).
  - ⇒ From FY19-20, we assume VNB remains flat.
  - ⇒ In FY21, we assume a one-off VNB decline of 20% due to disruption in the agency channel. The company has recruited aggressively in recent years and one of our chief concerns is that the company is unable to successfully convert sufficient numbers of rookie agents into high-producing agents. This one-off VNB decline reflects a scenario where agent turnover remains high. Disruption from alternative channels may also present a threat, albeit we think low likelihood at this stage.
  - ⇒ From FY22 onwards, we assume VNB grows at only 3%pa.
  - ⇒ We assume a risk discount rate 200bps higher at 13% (vs 11% in our base case) reflecting a higher cost of equity for Chinese financial companies.
  - ⇒ Long-term investment returns are 100bps lower at 4.0%pa (gross blended pre-tax basis).
- Whilst our base case assumes 10Y CAGR in VNB of 7%, our bear case implies zero growth in VNB over the next decade; our bull case allows for 13% 10Y CAGR.
- In aggregate, our bear case scenario produces a valuation of HK\$23.20. Fig 4 sets out the detail of this calculation relative to our base case. The stock offers 145% upside to our bull case and also 15% upside to our bear case. Given we consider the bear case of relatively low likelihood, we conclude that the risk-reward is very attractive at present.

Fig 4 China Life: Assessing bull and bear case scenarios (HK\$ per share)



# Reserving becomes a strong tailwind

China Life's earnings have been hit hard by movements in sovereign bond yields in recent years. Over
the period FY15-17, the company has set aside over Rmb33bn due to lower reserve discount rates, as
required under China GAAP. This compares with Rmb111bn PBT reported, implying that profits would
have been 30% higher if not for reserving impacts.

Over the past year, as rates have moved back in line with the long-run average (Fig 7), reserving rates are also migrating back towards long-run levels and we expect reserves to be largely written back to the P&L over the FY18-20 period. This implies a significant boost to consensus forecasts.

Fig 5 China Life: Impact of changes in reserve assumptions

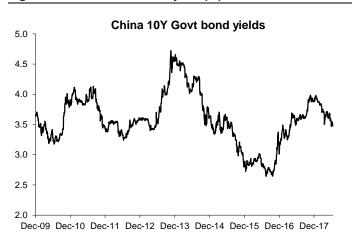
PBT impact of reserve movements (RMB bn)

(5)

(10)

3Q15 4Q15 1Q16 2Q16 3Q16 4Q16 1Q17 2Q17 3Q17 4Q17 1Q18

Fig 6 China 10Y Govt bond yield (%)

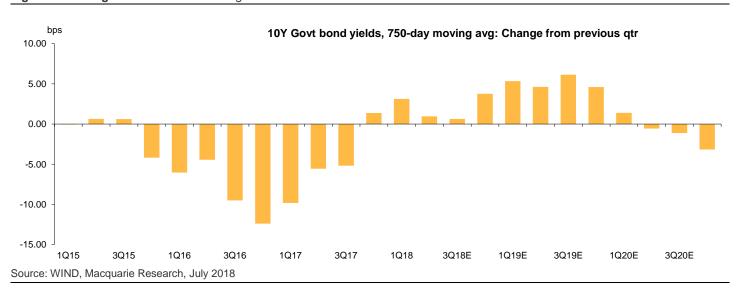


Source: Company data, Macquarie Research, July 2018

Source: WIND, Macquarie Research, July 2018

- On our estimates, assuming the yield curve were to remain at current levels, the earnings boost from normalising reserve rates will continue until 1Q20. Fig 8 summarises our calculations.
- If we were to assume that spot yields fall linearly by 85bps over the next 12 months, reserve write-backs would cease in 2Q19.

Fig 7 Reserving interest rates... Earnings headwinds have now become tailwinds



# The regulator remains active and constructive

Further to Document 134 issued in June 2017, the regulator has continued to tighten regulations of product features, sales behaviour and solvency and risk management of insurance companies. We believe much of this is focused on the smaller end of the market, where strategies and capabilities generally lag well behind that of the majors. However, whilst we believe the majors operate at a higher standard than the industry overall, they are not immune from these regulation changes. We discuss some of the recent changes below.

#### **Document 19: Further product regulations**

- CBIRC issued <u>Document 19</u> in May 2018 to tighten the regulation of product design. The document
  focused on 5 key areas, namely product terms, product responsibility, product pricing, actuarial
  assumptions and product declarations. Within these 5 key areas, it listed 52 specific areas of
  inappropriate conduct which the companies were required to self-assess, report and rectify.
- We have included a translation of this regulation in the Appendix. Of the 52 inappropriate conducts mentioned, we believe the following 3 have the widest impact on the current product offerings:
- #9 "The important interpretations in the articles do not meet the usual understanding of consumers. For example, the responsibility for cancer in situ is not included in the definition of cancer".
  - ⇒ In our view, most critical illness (CI) products will have to alter the cancer definition. This likely increases the number of cancer claims covered.
- #39 "The split of dividends between shareholders and consumers used in the illustration material is higher than the split of dividends given to consumers in the actual practice, exaggerating dividends and misleading consumers."
  - ⇒ This does not alter the product itself as the underlying benefits are unchanged. However, we expect this to reduce illustrative returns by as much as 30%, which makes saving products less attractive at the point of sale.
- #52 "Through business extension, continue to sell discontinued insurance products in disguise."
  - ⇒ It is not clear how prevalent this is, but where there is smoke there is fire.

#### Consultation on amended rules for insurance agencies and agents

- Earlier in July, CBIRC proposed new <u>draft regulations for insurance agencies and agents</u> that would affect the industry's 8m insurance agents. The draft contains 123 proposals.
- Among the more relevant proposals for the tied agent channel appear to be references to professional and ethical training requirements. No mention was made of education qualifications for new recruits.
- We note several references to mis-selling and withholding information from policyholders. There is specific mention of 10 focus areas regarding misconduct of agents:
  - ⇒ Defraud the insurer, the insured, or the beneficiary;
  - ⇒ Concealing important information related to the insurance contract;
  - ⇒ Obstructing the insured to disclose truthful information;
  - ⇒ Give or promise to give additional benefits (outside the insurance contracts) to policyholders.
  - ⇒ Use improper means (power etc) to force, induce the insured to enter into an insurance contract;
  - ⇒ Forge or arbitrarily change the insurance contract, or provide false proof materials;
  - ⇒ Misappropriation, interception or encroachment of insurance premiums;
  - ⇒ Use business to obtain illegitimate interests for other institutions or individuals;
  - ⇒ Collude with the insured or the beneficiary to defraud the insurance company;
  - ⇒ Leak trade secrets to the insured and others.
- We note insurance companies will be held liable for any illegal behaviour by its tied agents.
- Agents will also be formally prohibited from using commission to compensate policyholders. "Dialling down" commission is not uncommon in other life markets.

# Resetting earnings forecasts

 We have refreshed our earnings model ahead of 1H18 results due next month. Our FY18 EPS falls by 4% to reflect weaker equity markets in 1H18. We have also allowed for this experience item in our EV forecasts.

- Despite this change, we are forecasting FY18 EPS rises by 48%. This forecast considers an underlying
  amortisation rate of residual margin of ~8%pa (lower than Ping An due to longer average duration book,
  in our opinion), reasonable reserve writebacks (as discussed earlier) and the impact of a weaker stock
  market YTD.
- Fig 9 sets out our basic RM calculations for China Life. Explanation of the inputs into this model were
  set out in our recent research report entitled "<u>Earnings recovery to boost confidence</u>". It is our
  expectation that IFRS17 will one day require the company to provide greater insight into earnings
  drivers such as this type of disclosure.

Fig 8 China Life: Simple residual margin (RM) model

| Rmb m                | 2016     | 2017     | 2018     | 2019     | 2020     |
|----------------------|----------|----------|----------|----------|----------|
| Opening RM balance   | 438,117  | 515,374  | 607,941  | 706,138  | 810,177  |
| Unwind               | 21,906   | 27,287   | 30,397   | 35,307   | 40,509   |
| Released to P&L      | (28,478) | (35,473) | (39,516) | (45,899) | (52,662) |
| New business         | 83,829   | 100,753  | 107,317  | 114,631  | 126,188  |
| Closing RM           | 515,374  | 607,941  | 706,138  | 810,177  | 924,213  |
| Growth % yoy         |          | 18%      | 16%      | 15%      | 14%      |
| Assumptions          |          |          |          |          |          |
| VNB                  | 49,311   | 60,117   | 63,127   | 67,430   | 74,228   |
| New RM as % VNB      | 170%     | 170%     | 170%     | 170%     | 170%     |
| Unwind rate %        | 5.0%     | 5.0%     | 5.0%     | 5.0%     | 5.0%     |
| Release rate %       | 6.5%     | 6.5%     | 6.5%     | 6.5%     | 6.5%     |
| Growth in RM release |          | 25%      | 11%      | 16%      | 15%      |

Source: Company data, Macquarie Research, July 2018

- We have also reduced our FY18-19 VNB forecasts by 9-12% to reflect weaker-than-expected 1H18. We
  are forecasting 1H18 VNB falls by 9%. This is composed of sales APE down 6% and lower margins in
  1H18 caused by a number of moving parts, including:
  - ⇒ Strong take-up in selling annuity savings product (盛世臻品) during March and April, where we estimate margins are low in the 10-15% range;
  - ⇒ Substantial reduction in single-pay business, where margins can often be zero;
  - ⇒ Success in the planner channel. Planner numbers rose by 45% last year to 339k. While these sales are booked under "bancassurance" (as the planners target market to bank customers), we understand the products and margins are similar to the higher-quality agent channel.
- The changes to our key forecasts are summarised in Fig 10 below.

Fig 9 China Life: Changes to our key forecasts

| RMB mn                | FY18e   | FY18e    | FY18e    | FY18e | FY19e   | FY19e    | FY19e    | FY19e |
|-----------------------|---------|----------|----------|-------|---------|----------|----------|-------|
|                       | Current | Previous | Δ        | Δ %   | Current | Previous | Δ        | Δ %   |
| GWP                   | 547.951 | 537.736  | 10.215   | 2%    | 630.063 | 619.410  | 10.654   | 2%    |
| NPAT                  | 47,128  | 49,305   | (2,177)  | -4%   | 56,592  | 57,095   | (503)    | -1%   |
| EPS                   | 1.67    | 1.74     | (80.0)   | -4%   | 2.00    | 2.02     | (0.02)   | -1%   |
| DPS                   | 0.50    | 0.52     | (0.02)   | -4%   | 0.60    | 0.61     | (0.01)   | -1%   |
| Embedded value        | 810,054 | 844,730  | (34,677) | -4%   | 922,444 | 967,902  | (45,458) | -5%   |
| Value of new business | 58,950  | 64,857   | (5,907)  | -9%   | 62,955  | 71,559   | (8,603)  | -12%  |
| New business (APE)    | 164,807 | 173,460  | (8,654)  | -5%   | 179,403 | 192,088  | (12,685) | -7%   |
| VNB margin            | 35.8%   | 37.4%    | -1.6%    |       | 35.1%   | 37.3%    | -2.2%    |       |

Source: Company data, Macquarie Research, July 2018

# Valuation and target price

## Refreshing our fair valuation

We value China Life using an actuarial appraisal value methodology. This relies on traditional embedded value metrics disclosed by the company with adjustment where appropriate (e.g., lifting cost of equity to 11%). Our adjustments currently reduce our valuation by 11%.

- Our approach explicitly present-values our 10-year VNB forecasts using a conservative risk discount rate of 15%.
- Fig 11 sets out our current fair valuation of HK\$43.83 per share. This has fallen by 18% in this report. We have therefore reduced our target price by 8% to HK\$35.
- Our target price is lower than fair value to reflect the lack of transparency in the company's accounting
  and core business drivers (eg. quality of business, source of profits). We believe more insightful
  financial disclosures (such as those provided by major peer Ping An) could address this shortcoming.
- We believe current levels reflect very poor market confidence in the company's financials and overall strategy. However, looking ahead, we expect confidence can improve with the ongoing earnings recovery and (possibly) better financial disclosures in future.

Fig 10 China Life: Actuarial appraisal valuation

| Key assumptions Risk free rate        | 4.0%      | LONG-TERN<br>(RMB mn) | Year | VNB            | VNB growth                              | NPV o  |
|---------------------------------------|-----------|-----------------------|------|----------------|---|--------|
| Beta                                  | 1.40      | (                     |      | reported basis | % YoY                                   | VNE    |
| Equity risk premium                   | 8.0%      |                       |      |                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |        |
| Risk discount rate (New business)     | 15.2%     | 0                     | 2018 | 58,950         | -1.9%                                   | 58,950 |
| Mid-stage growth                      | 3.0%      | 1                     | 2019 | 62,955         | 6.8%                                    | 54,649 |
| Terminal growth                       | 2.0%      | 2                     | 2020 | 69,190         | 9.9%                                    | 52,136 |
| HKD CNY                               | 0.871     | 3                     | 2021 | 73,431         | 6.1%                                    | 48,031 |
|                                       |           | 4                     | 2022 | 77,937         | 6.1%                                    | 44,252 |
| VALUATION                             |           | 5                     | 2023 | 82,725         | 6.1%                                    | 40,773 |
| Valuation date                        | 31-Dec-18 | 6                     | 2024 | 87,812         | 6.1%                                    | 37,570 |
| EV (Reported basis, FY18E)            | 810,054   | 7                     | 2025 | 93,218         | 6.2%                                    | 34,621 |
| Adjustments - inforce                 | (68,894)  | 8                     | 2026 | 98,964         | 6.2%                                    | 31,905 |
| EV (Adjusted basis, FY18E)            | 741,160   | 9                     | 2027 | 105,070        | 6.2%                                    | 29,404 |
|                                       |           | 10                    | 2028 | 111,560        | 6.2%                                    | 27,101 |
| Value of future business (see across) | 400,441   |                       |      |                |   |        |
| Implied new business multiple         | 6.8x      |                       |      |                |   |        |
| Adjustments - 1Y new business         | (9,318)   |                       |      |                |   |        |
| Adjustments - Capitalised value       | (63,294)  |                       |      |                |   |        |
| Value of future business              | 337,147   |                       |      |                |   |        |
| VALUATION (RMB mn)                    | 1,078,307 |                       |      |                |   |        |
| No. shares (FY18E, mn)                | 28,265    |                       |      |                |   |        |
| Valuation per share (RMB)             | 38.15     |                       |      |                |   |        |
| Upside/(downside)                     | 61.4%     |                       |      |                |   |        |
| Valuation per share (HK\$)            | \$ 43.83  |                       |      |                |   |        |
| Upside/(downside)                     | 121.1%    |                       |      |                |   |        |
| Implied P/EV (Reported, FY18E)        | 1.33x     |                       |      |                |   |        |
| Implied P/EV (Adjusted, FY18E)        | 1.45x     |                       |      |                |   |        |
| Implied NBM (Reported, FY18E)         | 4.6x      |                       |      |                |   |        |
| Implied NBM (Adjusted, FY18E)         | 6.8x      |                       |      |                |   |        |
| Implied PBR (FY18E)                   | 3.10x     |                       |      |                |   |        |
| Implied PER (FY18E)                   | 22.9x     |                       |      |                |   |        |

### **Historic valuation multiples**

· The stock has declined sharply YTD. As discussed, we attribute this largely to macro concerns and weak markets generally as well as a slower-than-expected start to the year for Life new business.

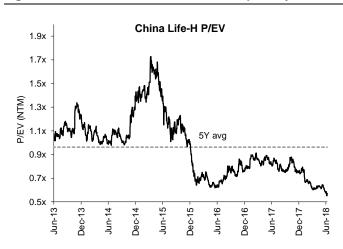
• On NTM basis, the stock is currently trading at 0.57x P/EV. The Figs below show that this compares with a long-run average of 1.8x and a 5Y average of 0.96x.

China Life-H: Long-term P/EV history



Source: Bloomberg, Macquarie Research, July 2018

China Life-H: Historical P/EV over past 5 years Fig 12



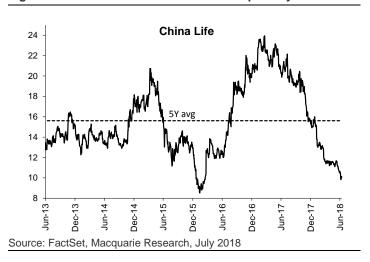
Source: Bloomberg, Macquarie Research, July 2018

 PER is also a relevant metric, albeit prone to substantial variability. On NTM FactSet consensus basis, the stock is currently trading at 10.1x PER. The Figs below show that this compares with a long-run average of 19.0x and a 5Y average of 15.6x.

China Life-H: Long-term PER history Fig 13



China Life-H: Historical PER over past 5 years Fig 14



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#### Very cheap versus peers

 As discussed above, China Life is trading cheaply vs history, and also considering a sustainable ROEV in the 15-16% range. The table overleaf shows how this compares with domestic peers.

- After many years of de-rating, China Life is now almost on par with Korean and Japanese life companies which currently average 0.5x P/EV. This is despite China offering structurally far superior growth and ROEV.
- Alternatively, China Life's current market cap of US\$91bn is 15% lower than AIA Group (1299 HK, HK\$69.25, Neutral, TP: HK\$66.00) at US\$107bn. This is despite China Life enjoying earnings 60% higher (FY18E NPAT in USD terms), and EV and VNB more than double that of AIA. While we recognise there are a number of qualitative differences between Chinese SOEs and private MNCs such as AIA, this gap magnitude is hard to justify, in our view.

#### Conservative accounting standards mask true valuation

- Separately, it is also instructive to consider alternative accounting standards. We believe China Life's
  earnings and book value would be substantially higher if it reported under HKFRS. PRC GAAP is a
  conservative accounting standard.
- To illustrate this point, Fig 15 compares the financial history of AIA's China subsidiary reported by AIA Group (under the China segment) vs PRC GAAP (annual CBIRC reports). This analysis would suggest that the profits and BVPS of China Life could be 60-80% higher under HKFRS accounting standards.
- Whilst normally this could be described as a structural disadvantage, IFRS 17 (to be implemented in 2021) may address or even close this differential, triggering a market reassessment of earnings power and fundamentals.
- Considering all of the above, if we were to reconstruct the company's earnings under HKFRS,
   China Life stock would currently be trading at 5.4x forward PER for a double digit EPS growth outlook. Or alternatively, this adjustment implies just 0.7x P/B for sustainable ROE of 14-15%.
- This is significantly more attractive than the domestic banks and a rare combination amongst Asian financials.

Fig 15 AIA China: Comparing OPAT to PRC GAAP

|   | 2010  | 2011   | 2012  | 2013  | 2014   | 2015   | 2016   | 2017   | 8Y agg  |
|---|-------|--------|-------|-------|--------|--------|--------|--------|---------|
| PROFIT                                    |       |        |       |       |        |        |        |        |         |
| OPAT as per AIA disclosure (US\$m)        | 69    | 119    | 151   | 205   | 283    | 356    | 469    | 639    |         |
| Assumed avg USDCNY                        | 6.79  | 6.49   | 6.32  | 6.16  | 6.15   | 6.26   | 6.60   | 6.78   |         |
| OPAT as per AIA disclosure (RMB mn)       | 469   | 772    | 954   | 1,263 | 1,740  | 2,229  | 3,095  | 4,332  | 14,855  |
| NPAT under PRC GAAP (RMB mn)              | 184   | 580    | 298   | 987   | 1,551  | 3,068  | 518    | 1,990  | 9,177   |
| AIA disclosure vs PRC GAAP (x)            | 2.55  | 1.33   | 3.20  | 1.28  | 1.12   | 0.73   | 5.97   | 2.18   | 1.62    |
| NET ASSETS                                |       |        |       |       |        |        |        |        |         |
| Net assets as per AIA disclosure (US\$m)  | 758   | 850    | 1,076 | 1,127 | 2,264  | 3,059  | 3,608  | 3,126  |         |
| Net assets as per AIA disclosure (RMB mn) | 5,147 | 5,517  | 6,800 | 6,942 | 13,924 | 19,149 | 23,813 | 21,194 | 102,486 |
| Net assets under PRC GAAP (RMB mn)        | 1,635 | 2,202  | 3,583 | 4,988 | 8,527  | 12,272 | 12,225 | 11,041 | 56,473  |
| AIA disclosure vs PRC GAAP                | 3.15  | 2.51   | 1.90  | 1.39  | 1.63   | 1.56   | 1.95   | 1.92   | 1.81    |
| ROE                                       |       |        |       |       |        |        |        |        |         |
| Based on AIA disclosure                   |       | 14.8%  | 15.7% | 18.6% | 16.7%  | 13.4%  | 14.1%  | 19.0%  | 16.0%   |
| Based on PRC GAAP                         |       | 30.2%  | 10.3% | 23.0% | 23.0%  | 29.5%  | 4.2%   | 17.1%  | 19.6%   |
| AIA disclosure vs PRC GAAP                |       | -15.4% | 5.4%  | -4.4% | -6.3%  | -16.1% | 9.8%   | 1.9%   | -3.6%   |

Source: Company data, Macquarie Research, July 2018

# Appendix: CBIRC Document 19

In May 2018, CBIRC published Document 19 entitled "Organising the special inspection of life insurance product features". Below is the English translation of this regulation.

#### First, the product terms design

- (1) The text of the clause is lengthy and hard for consumers to understand.
- (2) The clauses for exempting the insurer's liability are not consistent, or lack of legal basis and rationality.
- (3) In the clauses, the insured and the beneficiary definition is not rigorous, and there could be misleading risks.
- (4) The insurance amount is not standardized in the insurance clause, and is inconsistent with the concept stipulated in the Insurance Law.
- (5) The time limit for the payment of insurance benefits in the insurance clause is inconsistent with the Insurance Law.
- 6) The agreement on the refund of the cash value of the insurance policy in the insurance clause is inconsistent with the Insurance Law.
- (7) In the product clauses, the court that has jurisdiction is inconsistent with the allowed ones under Civil Procedure Law.
- (8) The scope of "social medical insurance" in the insurance clause is inconsistent with the Social Insurance Law.
- (9) The important interpretations in the articles do not meet the usual understanding of consumers. For example, the responsibility for cancer in situ is not included in the definition of "cancer".
- (10) The application materials for the death claims, requires irrational materials such as cremation certificates and funeral certificates.
- (11) For life insurance products, after the insured's death, will not pay the sum assured in full, rather it pays the survival bonus to the policy beneficiary according to the terms and conditions. This brings in additional conditions for paying out the death benefit.
- (12) Individual companies use other non-insurance financial products such as "insurance + trust" as selling points, and combine insurance products with other financial products such as trusts, bank wealth management, funds, etc., to confuse the concept of insurance products.
- (13) The product cooling-off period is not clear, and it is not stated in the terms or the cooling-off period does not meet the regulatory requirements.

#### Second, product responsibility design

- (14) The annuity insurance products are short-term. Through the rapid return of the survival benefit, the premiums paid by the consumers are quickly returned, and the long-term annuity insurance is actually made into short-term products.
- (15) The design of annuity insurance products is alienated. At the end of the first year, the cash value exceeds the premiums already paid. At the same time, the clauses are designed with flexible addition and reduction of insurance functions, and can withdraw from the universal-type insurance without any charge.
- (16) The design of par products is alienated. The product terms include concepts such as account management and guaranteed interest rates, which are similar to universal products.
- (17) The design of medical insurance products is alienated, the sum assured is lower than the premium, and it seriously deviates from the insurance protection property, and also provides insurance fund investment value-added services.
- (18) Critical illness insurance products, which treat thyroid malignant tumors separately, the responsibility design is unreasonable, set a lower insurance amount, and disguise the reduction of the coverage of products.
- (19) Investment-linked products if surrender during cooling-off period, then only returns the account value. This practice does not differ for whether the policyholder chooses to transfer the insurance premium into the investment account during the cooling-off period or not.

(20) The agreement on the proportion of policy loans is not clear, and there is no agreement to not exceed 80% of the cash value.

- (21) The term of the long-term insurance product stipulates that the company reserves the right to adjust the risk premium. The company can adjust the rate unilaterally and is unfair to consumers.
- (22) In the terms of the medical/CI products, it unreasonably ask the insured person to survive for a certain period of time before paying out the claims.
- (23) Insurance products has a long waiting period, or extend the waiting period by adjusting the insurance amount, or during the waiting period, the premium will not be refund in full upon a risk accident.

#### Third, the product pricing rate

- (24) For reimbursement medical insurance, in order to pursue marketing gimmicks, blindly set a high payment limit, when there is little empirical data and pricing basis. Introduce "lifetime payment limit" "renewable" type of long-term product concepts in the short-term health insurance, which exaggerates product functions and disrupts market order.
- (25) The product's expense rate or initial cost is set to zero or significantly deviates from the actual cost level, and the product rate determination is untrue and unreasonable.
- (26) Some products adjust the product pricing rate or pricing process to make the product flat rate to confuse the difference between insurance products and bank deposits.
- (27) The pricing of reimbursement medical insurance products does not distinguish between social security and non-social security.
- (28) For short-term medical products, the rate fluctuation range exceeds the benchmark rate by more than 30%.
- (29) The company has a floating rate for life insurance products, long-term health insurance products, and short-term group health insurance products.
- (30) The product rate is determined without consideration of the waiting period factor.

#### Fourth, product actuarial assumptions

- (31) Violating the general actuarial principle to increase or decrease the cash value of the product.
- (32) Using unreasonable assumptions or profit test factor to achieve positive profitability for new business value.
- (33) The universal product does not manage the account or determine the crediting rates according to the regulations. The actual crediting rate has nothing to do with the underlying investment performance.
- (34) Change of CI definitions is used as a parameter to adjust CI products.
- (35) The company has determined the product as long term product, but the surrender rate of the profit test has assumed that it has exceeded 60% in the previous five years.
- (36) The expected duration of the insurance product and the surrender rate assumption in the profit test are inconsistent.
- (37) The universal product only allows for single pay, and consumers are not allowed to add premiums, which is contrary to the flexible features of universal products.
- (38) By deliberately adjusting the investment arrangement for unit linked products, the return can be fixed for a certain period of time, and the product is "guaranteed" when the sales promotion is made, misleading the consumers. This is contradicted to the unit-linked product, where the policyholder is supposed to take on investment risks.
- (39) The split of dividends between shareholders and consumers used in the illustration material is higher than the split of dividends given to consumers in the actual practice, exaggerating dividends and misleading consumers.

#### Fifth, product declarations

- (40) There are problems such as underreporting, and lack of information in product filing.
- (41) The actual material submitted is less than the required list of material by CIRC.
- (42) The chief actuary did not sign, the short-term product rate floating management measures or board decisions on short-term and long-term products.
- (43) For the unit-linked products, the investment account establishment and other matters are not reported in accordance with the regulations.
- (44) A product material is attached to other product's filing materials and is not separately presented as required.
- (45) The solvency indicator of the product does not use the CROSS standard.
- (46) There is no product code information in the reported material to CIRC.
- (47) The date of submission in the product materials is inconsistent with the date of system upload.
- (48) The products that have been changed for record, the old products before the change are continued to be in use, or the products newly developed by some companies still use the names of products that have been discontinued.
- (49) Reporting a variety of homogenized products with similar contents and similar names, the products have no differentiation features.
- (50) For products, which have been filed for one year but did not meet the minimum scale of premium and number of policies, a cessation report is not filed. Or the product is resold immediately after the cessation.
- (51) The "zombie" products with low quality and low market acceptance and effectiveness are not cleaned up.
- (52) Through business extension, continue to sell the discontinued insurance products in disguise.

## Companies mentioned:

AIA Group (1299 HK, HK\$69.25, Neutral, TP: HK\$66.00)

Ping An Insurance (2318 HK, HK\$73.35, Outperform, TP: HK\$105.00)

China Pacific Insurance (2601 HK, HK\$30.55, Outperform, TP: HK\$52.00)

PICC Property and Casualty (2328 HK, HK\$8.64, Outperform, TP: HK\$11.00)

New China Life Insurance (1336 HK, HK\$36.60, Outperform, TP: HK\$50.00)

China Taiping Insurance (966 HK, HK\$28.30, Outperform, TP: HK\$35.00)

# **Macquarie Quant View**

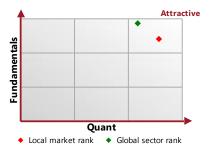
The quant model currently holds a reasonably positive view on China Life Insurance. The strongest style exposure is Valuations, indicating this stock is under-priced in the market relative to its peers. The weakest style exposure is Price Momentum, indicating this stock has had weak medium to long term returns which often persist into the future.

## 68/246

#### Global rank in Insurance

% of BUY recommendations 62% (13/21)

Number of Price Target downgrades 2 Number of Price Target upgrades 2

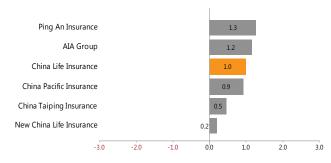


Displays where the company's ranked based on the fundamental consensus Price Target and Macquarie's Quantitative Alpha model.

Two rankings: Local market (Hong Kong) and Global sector (Insurance)

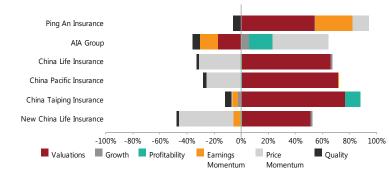
## **Macquarie Alpha Model ranking**

A list of comparable companies and their Macquarie Alpha model score (higher is better).



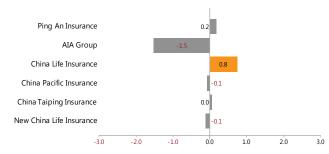
#### **Factors driving the Alpha Model**

For the comparable firms this chart shows the key underlying styles and their contribution to the current overall Alpha score.



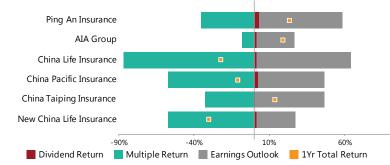
## **Macquarie Earnings Sentiment Indicator**

The Macquarie Sentiment Indicator is an enhanced earnings revisions signal that favours analysts who have more timely and higher conviction revisions. Current score shown below.



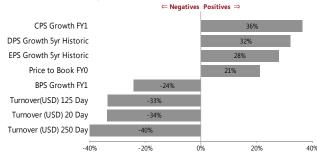
#### **Drivers of Stock Return**

Breakdown of 1 year total return (local currency) into returns from dividends, changes in forward earnings estimates and the resulting change in earnings multiple.



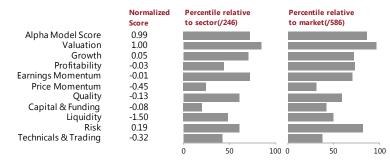
#### What drove this Company in the last 5 years

Which factor score has had the greatest correlation with the company's returns over the last 5 years.



#### How it looks on the Alpha model

A more granular view of the underlying style scores that drive the alpha (higher is better) and the percentile rank relative to the sector and market.



Source (all charts): FactSet, Thomson Reuters, and Macquarie Research. For more details on the Macquarie Alpha model or for more customised analysis and screens, please contact the Macquarie Global Quantitative/Custom Products Group (<a href="mailto:cpg@macquarie.com">cpg@macquarie.com</a>)

#### Important disclosures:

#### **Recommendation definitions**

#### Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return Neutral – return within 3% of benchmark return Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield, which is currently around 9%.

#### Macquarie - Asia/Europe

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

#### Macquarie - South Africa

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

#### Macquarie - Canada

Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return

#### Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return

Neutral (Hold) – return within 5% of Russell 3000 index return

Underperform (Sell)- return >5% below Russell 3000 index return

#### Volatility index definition\*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

**High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

**Medium** – stock should be expected to move up or down at least 30–40% in a year.

**Low-medium** – stock should be expected to move up or down at least 25–30% in a year.

**Low** – stock should be expected to move up or down at least 15–25% in a year.

\* Applicable to Asia/Australian/NZ/Canada stocks only

Recommendations – 12 months

**Note:** Quant recommendations may differ from Fundamental Analyst recommendations

#### Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa\*
ROA = adjusted ebit / average total assets
ROA Banks/Insurance = adjusted net profit /average

ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation \*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

#### Recommendation proportions - For quarter ending 30 June 2018

|              | AU/NZ  | Asia   | RSA    | USA    | CA     | EUR    |   |
|--------------|--------|--------|--------|--------|--------|--------|---|
| Outperform   | 52.87% | 61.26% | 48.86% | 47.54% | 69.86% | 46.61% | (for global coverage by Macquarie, 3.51% of stocks followed are investment banking clients) |
| Neutral      | 34.10% | 27.25% | 36.36% | 46.72% | 21.92% | 43.22% | (for global coverage by Macquarie, 2.10% of stocks followed are investment banking clients) |
| Underperform | 13.03% | 11.49% | 14.77% | 5.74%  | 8.22%  | 10.17% | (for global coverage by Macquarie, 0.00% of stocks followed are investment banking clients) |

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| Date        | Stock Code (BBG code) | Recommendation | Target Price |
|-------------|-----------------------|----------------|--------------|
| 31-Jan-2018 | 2628 HK               | Outperform     | HK\$38.00    |
| 18-Apr-2017 | 2628 HK               | Outperform     | HK\$34.00    |
| 14-Mar-2017 | 2628 HK               | Outperform     | HK\$32.00    |
| 22-Apr-2016 | 2628 HK               | Outperform     | HK\$31.00    |
| 17-Feb-2016 | 2628 HK               | Outperform     | HK\$34.00    |
| 27-Aug-2015 | 2628 HK               | Outperform     | HK\$38.00    |

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