## 30. GOODWILL AND INTANGIBLE ASSETS

This balance is analysed as follows:

|  | (Thousands of euros) |  |
| :---: | :---: | :---: |
|  | 2017 | 2016 |
| Goodwill - Differences arising on consolidation |  |  |
| Bank Millennium, S.A. (Poland) | 115,094 | 125,447 |
| Real estate and mortgage credit | 40,859 | 40,859 |
| Others | 20,976 | 31,354 |
|  | 176,929 | 197,660 |
| Impairment |  |  |
| Real estate and mortgage credit | $(40,859)$ | $(40,859)$ |
| Others | $(16,473)$ | $(26,870)$ |
|  | $(57,332)$ | $(67,729)$ |
|  | 119,597 | 129,931 |
| Intangible assets |  |  |
| Software | 122,124 | 101,739 |
| Other intangible assets | 56,731 | 52,509 |
|  | 178,855 | 154,248 |
| Accumulated amortization |  |  |
| Charge for the year (note 11) | $(11,897)$ | $(10,724)$ |
| Charge for the previous years | $(122,149)$ | $(111,349)$ |
|  | $(134,046)$ | $(122,073)$ |
|  | 44,809 | 32,175 |
|  | 164,406 | 162,106 |

The changes occurred in Goodwill and intangible assets balances, during 2017, are analysed as follows:

|  |  |  |  |  |  | Thousands of euros) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ransfers and |  |  |
|  | Balance on <br> 1 January | Acquisitions <br> / Charge | Disposals <br> / Charged-off | changes in perimeter | Exchange differences | Balance on 31 December |
| Goodwill - Differences ar |  |  |  |  |  |  |
| on consolidation | 197,660 | 4 | $(10,401)$ | - | $(10,334)$ | 176,929 |
| Impairment for goodwill | $(67,729)$ | (4) | 10,401 | - | - | $(57,332)$ |
|  | 129,931 | - | - | - | $(10,334)$ | 119,597 |
| Intangible assets |  |  |  |  |  |  |
| Software | 101,739 | 22,211 | $(5,829)$ | - | 4,003 | 122,124 |
| Other intangible assets | 52,509 | 1,272 | (1) | - | 2,951 | 56,731 |
|  | 154,248 | 23,483 | $(5,830)$ | - | 6,954 | 178,855 |
| Accumulated depreciat |  |  |  |  |  |  |
| Software | $(72,229)$ | $(11,060)$ | 5,828 | 275 | $(3,100)$ | $(80,286)$ |
| Other intangible assets | $(49,844)$ | (837) | - | (275) | $(2,804)$ | $(53,760)$ |
|  | $(122,073)$ | $(11,897)$ | 5,828 | - | $(5,904)$ | $(134,046)$ |
|  | 32,175 | 11,586 | (2) | - | 1,050 | 44,809 |
|  | 162,106 | 11,586 | (2) | - | $(9,284)$ | 164,406 |

The change occurred in Goodwill - Differences arising on consolidation and impairment - Disposals / Write-offs due mainly to the liquidation of the subsidiary Propaço - Sociedade Imobiliária de Paço D'Arcos, Lda, which occurred during 2017.

The changes occurred in Goodwill and intangible assets balances, during 2016, are analysed as follows:


According to the accounting policy described in note 1 b ), the recoverable amount of the Goodwill is annually assessed in the second semester of each year or whenever there are indications of eventual loss of value.

In accordance with IAS 36 the recoverable amount of goodwill resulting from the consolidation of the subsidiaries, should be the greater between its value in use (the present value of the future cash flows expected from its use) and its fair value less costs to sell. Based on these criteria, the Group made in 2017, valuations of their investments for which there is goodwill recognised considering among other factors:
(i) an estimate of future cash flows generated by each cash generating unit;
(ii) an expectation of potential changes in the amounts and timing of cash flows;
(iii) the time value of money;
(iv) a risk premium associated with the uncertainty by holding the asset; and
(v) other factors associated with the current situation of financial markets.

The valuations are based on reasonable and sustainable assumptions representing the best estimate of the Executive Committee on the economic conditions that affect each subsidiary, the budgets and the latest projections approved for those subsidiaries and their extrapolation to future periods. The assumptions made for these valuations might vary with the change in economic conditions and in the market.

## BANK MILLENNIUM, S.A. (POLAND)

The estimated cash flows of the business were projected based on current operating results and assuming the business plan and projections approved by the Executive Committee up to 2022. After that date, perpetuity was considered based on the average longterm expected rate of return for this activity in the Polish market. Additionally it was taken into consideration the market performance of the Bank Millennium, S.A. in the Polish capital market and the direct percentage of shareholding. Based on this analysis and the expectations of future development, the Group concluded for the absence of impairment indicators related to the goodwill of this participation.

The business plan of Bank Millennium, S.A. comprises a five-year period, from 2018 to 2022, considering, along this period, a compound annual growth rate of $6.1 \%$ for Total Assets and of $9.6 \%$ for Total Equity, while considering a ROE evolution from $8.9 \%$ in 2018 to $9.2 \%$ by the end of the period.

The exchange rate EUR/PLN considered was 4.1756 at the end of 2017 (December 2017 average: 4.2020 ).
The Cost of Equity considered was $9.625 \%$ for the period 2018-2022 and in perpetuity. The annual growth rate in perpetuity (g) was 2.6\%.

## REAL ESTATE AND MORTGAGE CREDIT

Considering the changes made in management of the real estate and mortgage credit over the past few years, the Executive Committee analysed this business as a whole.

The estimated cash flows of the business were projected based on current operating results and assuming the business plan and projections approved by the Executive Committee for real estate business and a set of assumptions related to the estimated future evolution of the businesses of mortgage credit originated in real estate agents network and real estate promotion.

The Real estate and mortgage business comprises the current Banco de Investimento Imobiliário operations plus the income associated with other portfolios booked in Banco Comercial Português.

The business plan and estimates for Real estate and mortgage business comprises a five-year period, from 2018 to 2022, considering, along this period, a compound annual growth rate of $-4.3 \%$ for total assets and of $1.1 \%$ for the allocated capital.

As a consequence of the impairment test made at the end of 2016, it was recognised during 2016 an impairment loss of Euros $40,859,000$ corresponding to $100.0 \%$ of the goodwill associated. As at 31 December 2017 and 2016, the goodwill associated with the real estate and mortgage credit is totally impaired.

## 31. INCOME TAX

The deferred income tax assets and liabilities are analysed as follows:

| (Thousands of euros) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  | 2016 |  |  |
|  | Assets | Liabilities | Net | Assets | Liabilities | Net |
| Deferred taxes not depending on the future profits (a) |  |  |  |  |  |  |
| Impairment losses | 976,535 | - | 976,535 | 927,675 | - | 927,675 |
| Employee benefits | 838,769 | - | 838,769 | 789,000 | - | 789,000 |
|  | 1,815,304 | - | 1,815,304 | 1,716,675 | - | 1,716,675 |

Deferred taxes depending

| Impairment losses | 1,001,097 | $(50,303)$ | 950,794 | 928,645 | $(50,303)$ | 878,342 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tax losses carried forward | 321,774 | - | 321,774 | 494,785 | - | 494,785 |
| Employee benefits | 32,026 | $(1,804)$ | 30,222 | 60,083 | $(27,248)$ | 32,835 |
| Financial assets available for sale | 33,531 | $(26,461)$ | 7,070 | 60,828 | $(5,458)$ | 55,370 |
| Derivatives | - | $(6,821)$ | $(6,821)$ | - | $(7,444)$ | $(7,444)$ |
| Intangible assets | 39 | - | 39 | 39 | - | 39 |
| Other tangible assets | 9,827 | $(3,409)$ | 6,418 | 8,289 | $(3,547)$ | 4,742 |
| Others | 26,344 | $(19,407)$ | 6,937 | 34,258 | $(27,366)$ | 6,892 |
|  | 1,424,638 | $(108,205)$ | 1,316,433 | 1,586,927 | $(121,366)$ | 1,465,561 |
| Total deferred taxes | 3,239,942 | $(108,205)$ | 3,131,737 | 3,303,602 | $(121,366)$ | 3,182,236 |
| Offset between deferred tax assets and deferred tax liabilities | $(102,175)$ | 102,175 | - | $(118,677)$ | 118,677 | - |
| Net deferred taxes | 3,137,767 | $(6,030)$ | 3,131,737 | 3,184,925 | $(2,689)$ | 3,182,236 |

(a) Special Regime applicable to deferred tax assets

