RESEARCH REPORT

STRATEGY

APRIL
2020

Q1

Q2

Q3

Q4

| MOROCCO | QUARTERLY
AGR Equity Risk Premium

AN EXPECTED **ADJUSTMENT** OF
# **EQUITY RISK PREMIUM**

Attijari
Global Research

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EXECUTIVE SUMMARY IN Q1-20

The results of the various methods computed in this 16th edition are as follows :

- The **historical risk premium** posted a decrease of 2.2 points, from 6.8% in December 2019 to 4.6% in April 2020. This level is justified by the decline of the market's gross return over the last 15 years period, from 11.6% to 9.4%. At the same time, the average yield of Treasury Bills settled at 4.8% during the same period;

- The **prospective risk premium** reached 7.6% in April 2020, up 1.1 pts compared to December 2019. This result takes into account a 7.0% decline of listed companies' earnings in 2020E before recovering by +5.0% in 2021E and +7.0% in 2022E. Beyond this period, and by 2030E, the target growth rate is around 4.0% per year. This is equivalent to the long-term GDP growth level of the Moroccan economy;

- The **risk premium by the survey method** showed an increase of 0.9 pt, from 5.8% in December 2019 to 6.7% in April 2020. We note that Investors' required return toward the Equity market settled at 9.4%.

« EQUITY RISK PREMIUM » IN THE MOROCCAN STOCK MARKET : RESULTS ACCORDING TO THE DIFFERENT METHODS
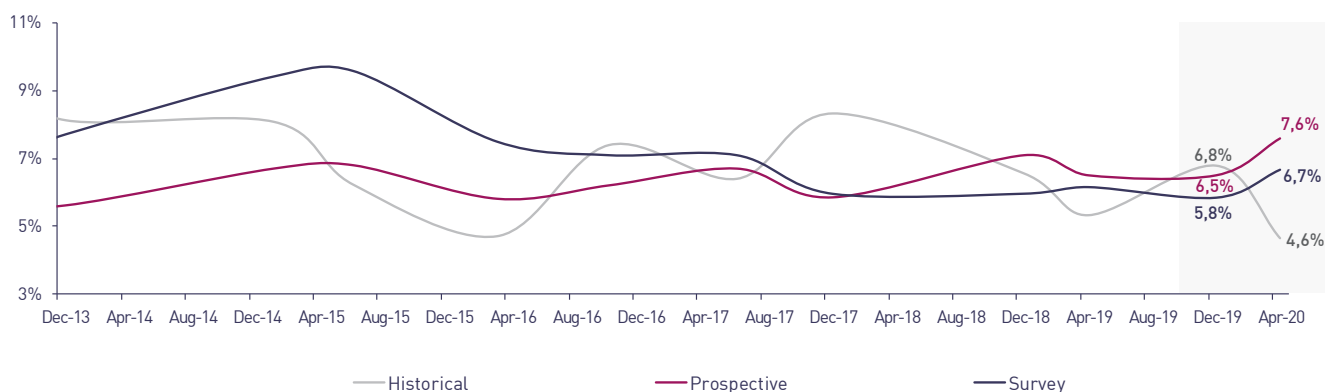
A REALISTIC CHOICE IN FAVOUR OF THE « SURVEY METHOD »

Upon the analysis of the various results and on the basis of our own vision, we maintain our choice in favour of the **survey method**. We believe this method best reflects the expectations of active investors in the Moroccan Equity market and therefor remains the most relevant.

Historical
Risk premium
4.6 %

Survey
Risk premium
6.7 %

Prospective
Risk premium
7.6 %
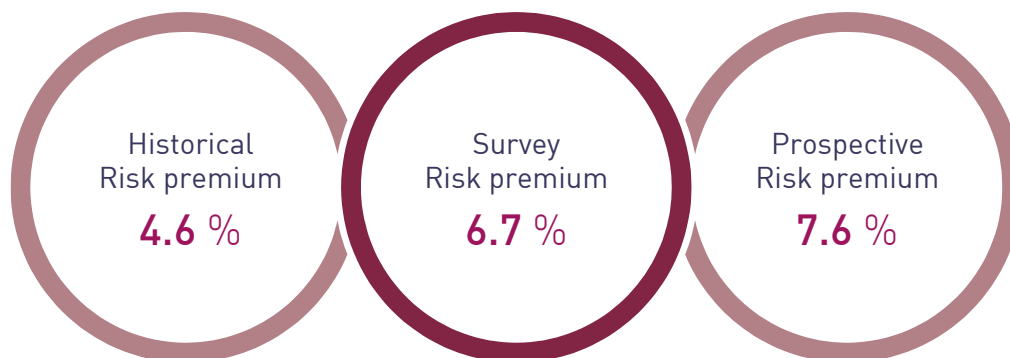
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Source : AGR Computations & Survey

HISTORICAL RISK PREMIUM

APPROACH / METHODOLOGY

This method is based on the following assumption: « For a future investment, investor will require a reward at least equivalent to the one historically observed on the market ». The principle of this process, on the basis of the historical data, consists of determining the average gross return of the stock market's index and that of the sovereign bonds, i.e. the risk free. The risk premium is then deducted from the average spread between the two yields.

COMPUTATION

Based on available data, we have calculated the historical annual gross return of the MASI index (including dividend) and the Treasury Bills over a historical period of 10 years. For a coherence challenge, the period studied for this edition is 15 years.

On the basis of the arithmetical average method and the annual average growth rate method (AAGR), we come up with the following results:

HISTORICAL RISK PREMIUM ACCORDING TO THE DIFFERENT METHODS :

15-year Gross return	MASI Index	Treasury Bills Morocco	Risk premium
Arithmetic average	11.7%	5.0%	6.7%
AAGR	9.4%	4.8%	4.6%

The arithmetic average method implies historical profitability largely above the AAGR method. This gap is mainly due to the high degree of sensitivity to extreme values of the arithmetic method. Recall that the Moroccan Equity market was characterized by extensively bullish cycles. On the other hand, the AAGR shows more modest profitability. Indeed, it allows to smooth out the extreme variations during the cycle by integrating into the calculation solely the initial and the final values.

ANALYSIS

We believe that the historical Equity Risk Premium is less relevant for the Moroccan market. In fact, to serve as a reliable indicator, the Equity Risk Premium must be observed over a long period, in statistical terms over a minimum of 30 years. The aim is to normalize stock market yields like in developed countries which have an array of data covering nearly an entire century. As a young financial market, the Casablanca Stock Exchange market doesn't reflect this case.

Source : AGR Computations

PROSPECTIVE RISK PREMIUM

APPROACH / METHODOLOGY

In the theory of efficient markets, an asset's valuation level asset reflects all the information available to the market at a particular time. By projecting this assumption on the market as a global entity, it is possible to consider that the market's valuation at a given time is the translation of investor expectations toward the discounted future cash-flows of listed companies.

For this purpose, the calculation of the prospective Equity Risk Premium is based on the market's profits outlook. Indeed, the rate level of the future earnings growth which allows to equalize the current market capitalization is equivalent to the required shareholders 'return. By deducting the cost of money over the same period, we come up with a prospective Equity Risk Premium. Recall that we consider a beta of 1.0 for the market.

COMPUTATION

Over the period 2020E-2022E, we consider an average annual growth rate of 6.0% for the Moroccan equity market. This result does not include the profit's growth of Samir given the sustainable trading suspension of the stock.

Beyond this period and by 2030E, we apply a growth rate of 4.0%. This is equivalent to the average GDP growth of the Moroccan economy over the long term horizon. This axial assumption takes into account the maturity of the largest market capitalizations in the Casablanca Stock Exchange.

Finally, a 3.0 % rate has been adopted as a perpetual growth. This is in coherence with the normative level applied to emerging economies. Finally, we used a risk free instruments (sovereign bonds) of 2.7% observed during our survey.

For this reason, our prospective Equity Risk Premium based on the assumptions hereafter comes to 7.6%.

AAGR Profits 20E-22E	AAGR Profits 22E-30E	Infinite Growth	Risk Free Rate	Beta	Ke	Equity Risk Premium
6.0%	4.0%	3.0%	2.7%	1.0	10.3%	7.6%

ANALYSIS

The results of the method remain closely linked to our main growth assumptions. This applies more particularly to the perpetual profit growth (g). Although the fact that we are quite comfortable compared to the short term forecasts, the long term assumptions appear to be more arbitrary than any outright scientific method.

As opposed to developed markets which have reached a certain level of maturity (by posting for example normative growth rates in terms of dividend), the Moroccan market is far from this case. In fact, the short degree of hindsight of the Moroccan market doesn't allow us to build a reliable forecast model on the long term. This reduces even more the relevance of this method for the case of Morocco.

RISK PREMIUM BY SURVEY METHOD

APPROACH / METHODOLOGY

This approach aims to identify the annual return required by investors toward an investment superior to 5 years in the Equity market. For this purpose, a questionnaire is sent quarterly to a representative and statistically valid sample of investors.

ADJUSTMENT OF METHOD

In this edition, we have operated two methodological adjustments :

- A slight variation of weights which goes along with the current breakdown of transaction volumes on the central market by the different investor profiles;

- An adjustment of the required return intervals which joined the Equity market performance over the past decade. Starting from March 2016 edition, the required return intervals proposed to investors are : [13% ; 14%], [11% ; 12%], [9% ; 10%], [7% ; 8%] and [5% ; 6%].

COMPUTATION

To compute a risk premium of the Moroccan Equity market we have identified four major categories of investors : (1) Institutional/UCITS, (2) Reference Actors, (3) Individuals and (4) Foreign investors. Each category has a different weighting depending on several criteria: its intervention level, influence on the market and our own vision. The category of "Reference Actors" includes investors with a deep knowledge of the Moroccan market allowing them to evaluate faithfully a realistic risk premium. For this purpose, we have applied a weight of 20.0 % for this category.

On the basis of the survey method, the Equity Risk Premium comes to 6.7%. This method corresponds to the weighted average of risk premiums calculated for each investor category.

SURVEY METHOD: RISK PREMIUM PER INVESTOR CATEGORY

	Weighting	Required Return	Risk Free	Risk Premium
Institutionals/MF/Banks	50.0%	9.6%	2.7%	6.9%
Reference actors	20.0%	9.5%	2.7%	6.8%
Individuals	10.0%	7.8%	2.7%	5.1%
Foreign investors	20.0%	9.5%	2.7%	6.8%
Equity Market	100%	9.4%	2.7%	6.7%

ANALYSIS

We believe that the survey approach appears to be the best adapted to the Moroccan market as it entails a consensus of the various actors. Moreover, it takes into account the several qualitative aspects neglected by the other methods. We note for example:

- The impact of the current regional and international political context on investors' risk aversion;

- A Moroccan market relatively limited in terms of diversification abroad;

- The lack of investment opportunities at the local level.

Source : AGR Survey

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