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ABSTRACT OF DIPLOMA THESIS

Analysis of stock indices (PX, DAX, S&P 500)

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Analýza burzovních indexů (PX, DAX, S&P 500)

Abstract

This diploma thesis is focused on the economic analysis of world indices, namely PX, DAX and S&P 500. It is divided into two parts, both complementing each other as a source of information. Theoretical part examines the theory of an index, then examines indices separately, evaluating their performance, constituents, and a brief history. It also talks about the reason for investing in index funds and how a person can invest in such thing. The practical part uses technical analysis as a key factor of evaluating the past and future performance and gives advice, whether the current signal is a buy or sell. Regression analysis, the second part of the practical part, assess whether the indices are affecting each other and if so, how significant is the relationship. The output of this thesis is an outlook how selected indices behaves, their detailed performance and gives recommendation, whether there are any positive or negative signals for trading

Keywords: stock, index, regression analysis, technical analysis, charts, S&P 500, PX, DAX, forecast, market, exchange

Introduction

Indexes have vital roles in measuring economic performance and some of them are even considered as a benchmark of an economy. It is important to understand what index is, how it behaves and what are the implication of rise and fall of the value in our everyday lives. There are numerous indexes around the world, with a different number of constituents and different criteria for entering. Indexes are usually shown as long term investments, but on very rare occasion, there are analyzed from a short-term perspective.

Aim of this is to understand the future development and behavior of indexes, ranging from the smallest one in this thesis, PX, traded on Prague Stock Exchange, large European

index DAX, traded on Frankfurt Stock Exchange, all the way to the index, which serves as a benchmark of the largest world economy – Standard and Poor's 500.

Objectives

The main objective of this diploma thesis is to thoroughly evaluate selected indexes – DAX, PX, S&P 500 as a tradable instrument and closely analyze the development of said indexes. The thesis looks at the short-term development of these instruments and their possible relationship and effects between them. This is the reason, why author closely examines, whether the current state of the markets is either on rise or fall. All these objectives are achieved using methods which are described in the following chapter.

Methodology

A literature review was conducted using methods of extraction, synthesis, induction and deduction. In other words, author aimed to understand the basic phenomena and facts regarding selected indexes prior examining its current state and predict the future development.

Technical analysis served as a main part of the analytical part, and the author considers it as the most important. Using charts and application of various technical tools selected indexes showed the current recent state and showed the impact of certain events on the performance of the instrument.

Regression analysis uncovered possible relationships between selected indexes and talked about the reason for possible autocorrelation using Durbin-Watson value.

Results

PX - SELL

When it comes to final evaluation of the PX index, the result suggest against purchase. Almost all indicators are suggesting sell and, therefore, author of this thesis suggest to sell. Even though Czech economy is on the rise, the index is more or less stagnating and do not provide much opportunities for a profit.

DAX – STRONG BUY

From the time the DAX was analyzed with technical tools in this thesis, it rose by another 200 points, gaining around 1,79%. Even the values of all technical tools are working in favor of this index. This is the ideal time to put some money in the index fund, which is copying the performance of DAX index.

S&P 500 - BUY

Standards and Poor 500 Index rose by the time it was analyzed by 80 points, increasing its value by 0,52% All indicators presented are more or less suggesting to buy, only difference expression are in the crossover of moving averages which would suggest selling. However, as it was mentioned, the performance of the index is averaging almost 12% in its existence, moreover investing in this index using index funds is one of the safest types of investments there is.

Conclusion

The current situation in the markets is more than favorable for investors. The bull market seems to last a couple of months in future. Therefore, it is good idea to put some resources in the index funds, which were discussed in the chapter, all the assessment of these indexes were in line with good economic outlook except in PX, where the index is stagnating and only of three was recommended to sell. This thesis guarantees no definitive success in investing into those indexes, on the other hand, it shows if it makes sense to consider putting part of the investing resources into the indexes indirectly. This strategy and the thesis is suited to low-risk profile investors, who do not want to spend significant of their resources into transaction fees and looking for alternatives different from saving accounts.

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