Title: The (Hidden) Cost of Passive Investing. Impact of ETF Funds on Financial Market Stability

Abstract: In the last two decades passive investing had been becoming more and more popular. Nowadays assets of passive investment funds like (passive) ETFs or index funds represent significant part of the US equity market. It is at least partly the result of the influence of academic research in finance on financial markets. Since the seminal paper by Fama and French (1992) skills of fund managers have been questioned what contributed to the growth of passive investing popularity. The purpose of this paper is to show another side of passive investing and its costs in context of the whole financial market. Paper consist of both theoretical and empirical part. Theoretical part presents pretty simple model of market with two types of investors (active and passive). Model shows that the equilibrium price level increases (exponentially) with an increase of passive investors' share in market structure. Moreover inflow or outflow of money to/from the market has much more pronounced effects on the price level. It means that increase of passive investors' share potentially increases cyclical behavior of financial market and make it less stable. In the second part change in fundamental valuation in the cross-section of US stocks has been analyzed. Stocks has been divided into 10 portfolios with respect to the share of passive investment funds in their market capitalization. Results show that in the last 5 years we can observe decrease in P/E and P/BV among portfolios with low passive investors' share and increase among portfolios with high passive investors' share. We can also observe that even though capitalization of the market is growing, turnover-to-market capitalization ratio is decreasing what is also in line with prediction of the model.