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* Warsaw School of Economics. Economic Analyses College
** Warsaw School of Economics. World Economy College

*ANDRZEJ SŁAWIŃSKI, **DOBIESŁAW TYMOCZKO

aslawi@sgh.waw.pl, dtymoc@sgh.waw.pl

The Case for Saving for Retirement via Index Funds

Fundusze indeksowe jako racjonalna forma inwestowania oszczędności emerytalnych

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Introduction

The evolution of pension systems – from state, then capital, to individual systems – means more and more responsibility for investment decisions get shifted onto the future retirees [Birdthistle, 2016] who remain largely unaware of the related costs and risks.

As a rule, they do not know that the optimal form of saving for retirement is to invest in passively managed index funds. This unawareness is usually accompanied with the lack of sufficient offer of index funds. Such a situation inevitably leads to financial institutions taking far too large share of the investment gains on pension savings which remain under their management.

The paper makes a case for creating index funds in Poland and launching public information campaign why they are the best option for prospective pensioners. The justification for this thesis is at heart of this paper. In section 2 we start with explaining reasons for the kind of index revolution taking place in the US, where large scale shift of pension savings from actively to passively managed funds can be observed. In section 3 we demonstrate that the impact of the management fee levels on the share of financial institutions in the investment gains on pension savings, and thus on the ultimate pension levels is much greater than is commonly believed. In section 4 we present the institutional conditions that would be needed in Poland, if prospective retirees are to be able to make rational investment decision in respect of their pension savings. Section 5 contains some key concluding remarks and recommendations[1].

1. The origins of the recent index revolution

The essential starting point for any discussion on the pension system design are the Efficient Market Hypothesis (EMH) [Fama, 1965] and the findings of William Sharpe, which prove that the optimal risk-return profile is offered by the passively managed *market* portfolio – in practice an index fund [Sharpe, 1970].

The EMH leads to the conclusion that securities are efficiently priced, so in the long term investment gains from exploiting usually tiny price anomalies are insufficient to offset the associated transaction costs. This means that in the case of long-term investing, which applies to retirement savings, it is optimal to invest in a market portfolio in a cost efficient manner. This, in turn, calls for investing in passively managed index funds charging low fees. Such a conclusion is supported consistently – for more than half a century – by the empirical research, which indicates that in the case of actively managed funds their long-term *alphas* (above-average rates of return) are overwhelmingly negative [Jensen, 1968; Malkiel, Saha, 2005; French, 2008; Sharpe, 2013; Bogle, 2014].

There is substantial literature challenging the efficiency of financial markets and, therefore, implying it may be possible to predict future market moves. For example, Clifford Asness (Fama's Ph.D. student) has demonstrated so-called short-term *momentum* in the financial markets [Asness, 1997]. Yet, even such empirical evidence is not sufficient to change the reality where the scale of market inefficiencies is too small to provide an opportunity for systematic market outperformance based on short-term speculation, which is precisely what active management tries to achieve [Malkiel, 2012]. This is why all the economists who were honoured with the Nobel Prize for their contribution to portfolio theory as well as famous investors such as Warren Buffet and David Swensen have remained vocal promoters of the idea that saving for retirement is best conducted via passively managed index funds.

Warren Buffet, the living legend among investors, repeatedly underlines that passive management is the best option for the vast majority of people. At the same time, he is commonly put forward as an example by proponents of active management. Such association is however wrong, as Buffett tends to avoid short-term speculation and concentrates on long-term investments. This is fully consistent with him advocating for passive management in the case of retirement savings [Gensler, 2017].

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The conclusions of portfolio theory were put into practice in the 1970s by an American financier John Bogle, founder of Vanguard – the first passively managed fund owned directly by its clients. The passive character allowed to keep low transaction costs. Direct ownership has made it possible for fund participants to forego sharing their investment gains with narrow group of shareholders [Bogle, 2016]. Thanks to both of these elements, in the years 1983–2016 Vanguard reduced the fund's annual management fees from 0.7% to 0.1%. The fund was so successful that currently its assets under management amount to approximately USD 3.5 trillion, coming from approximately 20 million clients [*Index we trust*, 2016]. This is the undoubted success of Bogle, whose idea was to give Americans the opportunity to make cheap and effective long-term investments.

Despite the fact that Vanguard's portfolio continued to grow, Bogle did not find many followers. Contrary to empirical evidence, the fund industry's marketing has helped to maintain the widespread belief that actively managed funds provide an opportunity to consistently achieve above-average returns. Until very recently, even in the most advanced markets (such as the United States) only a small percentage of the pension savings remained invested in passively managed investment funds.

The situation has changed rapidly in recent years. In the United States a kind of index funds revolution can be observed in this area [Ellis, 2016]. A large part of Americans' pension savings has flown from actively managed funds to passively managed index funds. One of the main causes of this was the ageing of the American society and the related proliferation of pension funds. Their managers learnt gradually from their own experience that if they entrusted retirement savings to actively managed funds, they would incur costs that, in the long run, would not compensate for the rarely-achieved above-average returns[2].

Another factor contributing to the increasing popularity of low-cost index funds was also the recent unprecedented decline in interest rates. The US Treasury long-term yields fell from 6% to less than 3% which is most probably a permanent change [Summers, 2014]. Pension funds, investing a large proportion of their assets in the bond market, have increasingly begun to take into account that the average fee in actively managed funds is over 1% (i.e. consuming one third of the annual expected yield) while in the case of index funds is often less than 0.1%.

2. The long-term cost of investing in actively managed funds

The public discussion remains dominated by weighing up the future rates of return. Prospective retirees generally do not pay attention to the level of management fees. However, if the fees were expressed as a percentage of the expected rates of

[2] See: www.spindices.com for evidence of how small is the percentage of the market outperforming funds.

returns achieved by the funds (e.g. in a 10-year horizon), the future retirees would become aware of the actual costs to them, as they would see how much of their savings is taken away by the institutions they have entrusted with [Ellis, 2012].

Future retirees are usually not aware of how large the impact of the pension funds' fees is and what it means for their expected returns from retirement savings. In fact, the management fee that is paid to the investment fund is nothing else than interest paid to it. Therefore, in order to estimate the total income taken over by fund managers throughout the contribution period, a compound interest has to be applied [Edesess et al., 2014].

Sharpe estimated that given the fact that actively managed funds in the US charge on average 1.12% and passively managed funds charge 0.06%, the expected standard of living of pensioners who put their retirement savings in index funds would be 20% higher [Sharpe, 2013] when compared to an active fund retiree. Bogle, as a practitioner, extended Sharpe's analysis. To the title of his article – not at all accidentally almost the same as the title of Sharpe's paper – he added "All-In". This is because he supplemented the analysis of these elements of managing costs, which are difficult to obtain precise data on, and thus are usually omitted in academic research: such as transaction costs, distribution charges, and cash drag. This allowed Bogle to conclude that over 40 years of pension investment, an actively managed fund takes advantage of above 60% of the investment income from the retirement savings under its management [Bogle, 2014].

The awareness of the large impact of management fees on the share of financial institutions in pension investment gains has grown only recently. The latest report – issued by the British Financial Conduct Authority (FCA) – informs that during 20 years, actively managed mutual funds in the UK took more than 30% of the investment incomes from retirement savings under their management [FCA, 2016].

Empirical research shows that as soon as future retirees become aware of the significance of this impact they shift their choices towards index funds [Fisch, Wilkinson-Ryan, 2014].

3. Pension system in Poland

So far in Poland the public debate over managing savings for retirement has been, to a large extent, inconsistent with financial theory and empirical research. It stipulated the common belief that the most important driver of prospective pension level is the expected rate of return on the pension investments. This contradicts the main conclusion of portfolio theory, which argues that in the long run the passively managed index funds combined with risk free investments offer the best risk-return profile – as reflected in the textbook Capital Market Line [Sharpe, 1970].

Without prejudging the changes in the Polish pension system, we outline below the two characteristics it should fulfil. First, future pensioners should be aware that low cost, passively managed index funds are the rational investment choice for an inexperienced investor. Secondly, conditions should be created for such investment alternative to be exploited. Currently none of the two conditions are fulfilled in Poland. There is no public campaign spreading the awareness of the merits of investing pension savings into index funds. There are also practically no such low cost funds.

Waiting for index funds to be created by the private sector may turn to be a wishful thinking, as creation of such investment vehicles may be against the interests of the fund industry. In such a situation, a state institution, e.g. Bank Gospodarstwa Krajowego (BGK), may be best placed to create at least the first index fund for retirement savings.

Such a move would not be unprecedented. Examples include the National Employment Savings Trust (NEST) created by the UK government, which manages mainly employee pension plans of small- and medium-sized companies. Being a passively managed fund (especially for shares), it charges low management fees of 0.5% [NEST, 2016]. Such a level was possible as NEST's equity was initially funded by a loan from the British government (rather than from more expensive contributions from shareholders). This significantly reduces fees as they are not stuffed with dividends paid to shareholders.

It is possible to imagine that BGK might create a group of funds offering portfolios with a bond-to-equity ratio adjusted to the number of years left until retirement. Another issue for consideration would be to what extent such funds should diversify their assets internationally [Walden, 2015].

As regards voluntary retirement savings (the so-called third pillar), it would be desirable to reduce the variety of programmes offered in Poland. Wide offer makes it more difficult for the prospective retiree to decide, which of the third-pillar products such as Individual Retirement Accounts (IRA), Individual Retirement Security Accounts (IRSA) and Employee Pension Schemes (EPS) is most suitable for them.

We argue that Employee Pension Schemes (EPS) are the best product, because of their scalability potential. While IRA and IRSA require an individual to act (even if it's merely to set up an account or file for tax return) which, by the very nature, hinders the growth in popularity of such products, in the case of EPS it is the employer who can decide.

The question of who should manage the EPS is purely rhetorical at this point. While in the UK nearly half the assets under management of employee pension funds are managed passively [Investment Association, 2016], Poland is the only country in the EU, alongside Liechtenstein, that has virtually no passively managed equity funds on offer. Hence, at least in the beginning, these would have to be passively managed funds created by BGK or other public institution or a private company encouraged by some incentive. Last, but not least, there is a track record of successful passive management by public institution in Poland. We refer to the Demographic Reserve Fund, where the equity part of its investment portfolio was invested passively with very good results [Nagel, 2012].

We strongly believe that to motivate companies to set up EPS schemes, a model programme available to any company that would like to create such a scheme [Blass, Tymoczko, 2003] needs to be developed. Another solution stimulating the popularity in a number of countries is the principle of default participation in an EPS for each employee. This means an employee needs to take action – declare their withdrawal from the programme – in order not to participate. International evidence confirms that most people would not opt out.

An undoubted impetus for saving for retirement could be also achieved by granting some tax exemption for contributions paid to the EPS. Income tax relief for contributions to institutions similar to a Polish EPS exists, among others, in the US, Iceland, Japan, the Netherlands, Sweden, and the UK [OECD, 2016]. The most effective fiscal incentive would be to exempt EPS contributions, since tax benefits appear immediately rather than deferred for several decades, as in the case of exemption from the tax on pension receivables. Up front exemption makes the benefits more tangible for the prospective retiree and largely mitigates the related regulatory risk.

Conclusions

The development of the capital market has brought a number of benefits to the Polish economy. The Warsaw Stock Exchange became an allocation mechanism directing funds to the most effective and promising companies. Investment funds offer an alternative form of investing households' savings. However, the domestic mutual funds are exclusively actively managed and tend to charge the highest fees in the EU [Cremers et al., 2016]. Hence, the Polish capital market should be complemented by passively managed index funds, which would offer future retirees cost-efficient and, therefore, the most rational way of investing their retirement savings.

If such a change were to materialize, there would be a need to decide on the asset structure of passively managed pension funds, e.g. on appropriate mix between domestic and international stocks [Walden, 2015] and on ways enabling such funds to play a constructive role in corporate governance [Fichtner, Heemskerk, Garcia-Bernardo, 2017; Appel, Gormley, Keim, 2016].

Alas, up until recently the domestic publications on passively managed funds [Miziołek, 2013] have been rarely quoted and the voices highlighting the necessity to manage retirement savings by index funds [Sławiński, Tymoczko, 2013] were simply ignored. The difference between reality and the views promoted by the financial sector is highlighted by the scale of closet indexing in Poland (i.e. a close to index tracking strategy of funds which continue to charge high management fee characteristic for actively managed funds) which is a veritable elephant in the room of discussions on managing retirement savings.

Mutual fund industry keeps convincing public opinion that the low liquidity of the domestic capital market creates many opportunities for achieving above-average rates of return. In reality the scale of closet indexing in Poland [Miziołek, 2015], the largest across the European Union [Cremers et al., 2016], shows the opposite. Mutual funds in Poland are far more likely to resort to closet indexing – in response to the difficulties and risks involved in active management on illiquid markets – rather than trying to capitalize on potential opportunities.

Some hope can be derived from a clear signals that the large scale of closet indexing in the EU countries raises increasing concerns of the European Securities and Markets Authority [ESMA, 2016]. At the same time, there is a growing pressure from investors themselves to eliminate such unethical behaviour, including a movement taking place in Scandinavian countries to file lawsuits against investment funds. The growing awareness of the magnitude of closet investing should relatively quickly result in a similar index revolution in Europe as has recently occurred in the US.

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Fundusze indeksowe jako racjonalna forma inwestowania oszczędności emerytalnych

Zmiany zachodzące w systemach emerytalnych powodują, że coraz większa część odpowiedzialności za podejmowane decyzje jest przenoszona na przyszłych emerytów, którzy z reguły nie są świadomi ryzyka i kosztów związanych z inwestowaniem. Konieczne jest zatem, by zacząć ich informować o tym, że najlepszym dla nich rozwiązaniem jest lokowanie w funduszach indeksowych. Każda inna decyzja oznacza nieświadomą zgodę na zbyt duży udział funduszy inwestycyjnych w dochodach z lokowania powierzanych im oszczędności emerytalnych.

The Case for Saving for Retirement via Index Funds

The ongoing reforms of the pension systems tend to shift the consequences of the investment decisions onto the prospective retirees who usually remain unaware of the factual costs and risks associated with long-term investing. It is therefore necessary that they should be taught that saving for retirement via index funds is the most rational decision for their pension plans. The prospective retirees should be informed that deviating from investing in inexpensive index funds means *de facto* their (typically unconscious) consent to share a large portion of their investment gains with actively managed funds charging much higher fees.