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Index Providers in the Global Financial Market

Abstract: Index providers are important participants of the contemporary global financial market. This group comprises of diverse entities – e.g. stock exchanges, financial institutions (particularly banks and asset management companies), analytical and research companies as well as financial data providers. The role of index providers increases primarily along with systematically growing importance of index investment instruments. Their decisions significantly affect the allocation of capital, mainly on a microeconomic and macroeconomic scale.

Keywords: financial indexes, index providers, international financial market

JEL: G15, G29

1. Introduction

Among the participants of international financial market, it is financial institutions that are the dominant players. These are the entities which – as defined by the European System of National and Regional Accounts (ESA 2010) – are primarily engaged in financial intermediation and auxiliary financial activities. Undoubtedly, entities dealing with financial intermediation play a key role in global financial markets. Still, activities aimed at facilitating financial intermediation, carried out by auxiliary financial entities, are becoming increasingly important – especially in the context of a dynamic development of financial services in recent years.

In a really diverse group of financial auxiliaries, one can observe, inter alia, a growing position of the entities whose main objective is to create, calculate and administer financial indexes. Index industry, which comprises of these institutions, is currently undergoing an unprecedented period of development. Both the reasons for and potential outcomes of this process are closely linked to the structural changes that have occurred in recent years in the international financial market, particularly in the asset management market. The aim of this article is to present the author's taxonomy of entities belonging to the group of index providers, identification of the most important reasons that led to their expansion and the characterization of selected effects of a growing role of index providers on the allocation of capital in the global financial market.

2. Index providers – taxonomy

Index providers are a diverse group of entities, the main objective of which is to develop, construct and maintain indexes as well as to calculate their values occasionally. In the global financial market, a special role is played by the providers of financial indexes. These indexes are synthetic statistical indicators whose original and basic aim (though not, any longer, the sole one²) is to reflect the situation in a particular financial market or in its segment³.

¹ A detailed description of the activities falling within the competence of index providers is beyond the scope of this article. It can be found e.g. in: Broby (2007).

² Financial indexes are currently used not only as a source of information about market prices. They are also blueprints for investment strategies and they are used as contract referents, which allows parties to achieve more efficient coordination (in particular in long-term contracts) and construct more sophisticated and precise investing instruments and derivatives (Verstein, 2013: 6-14).

³ The providers of other types of indexes (e.g. real estate indexes, commodity indexes) are relatively less important in the global financial market. However, due to (inter alia) an increasing role of financialisation and a growth of passive investing, e.g. in commodity markets, the position of these index providers is also systematically growing.

In the subject literature, it is difficult to find a taxonomy of these entities⁴, which impedes the analysis of their activities, including their impact on the shape of the contemporary financial market. The classification of index providers presented below is an original proposal, the starting point of which is the criterion of their origin. Based on that, one can distinguish the three main categories of index providers: trading platforms, financial institutions and other entities.

The group of index providers that are operators of trading platforms for financial instruments (or entities associated with them) encompasses mainly stock exchanges. These institutions – as the entities organising securities trading – used to be and still are the most natural institutions responsible for providing investors with synthetic information on the prices of securities in stock exchange trading. It is no accident that in everyday use the most commonly applied phrase is still the "stock exchange index" (i.e. the index created by stock exchange) instead of the "financial index" term, even though the vast majority of indexes are currently constructed by entities other than stock exchanges. Still, stock exchanges as index providers continue to play an important role. This is due to the fact that a significant portion of the most popular and most recognised equity indexes – especially national ones – are indexes developed by them (e.g. FTSE 100, DAX or CAC40 in Europe). From a formal point of view, all index-related activities are dealt with either by the specialised departments of these institutions engaged in information services (as is, for example, in the case of Warsaw Stock Exchange), or by index companies being part of a stock exchange group (e.g. FTSE Russell owned by London Stock Exchange or STOXX belonging to Deutsche Boerse Group) (http://www. ftserussell.com/; https://www.stoxx.com/).

Stock exchanges, despite their long experience in providing indexes (mainly equity indexes)⁵ and the possession of well-known and widely respected "index brands" in their portfolio (usually relatively small), are steadily losing their position to other players from index industry. This is mainly due to the fact that over the last few decades the role of financial market indexes has increased significantly and the trend is showing a growing dynamics. In addition to the informational purpose, indexes now also perform an analytical and decision-making role (primarily as benchmarks and substitutes for market portfolios); they provide the basis for the creation of new financial instruments and are an instrument for the construction of index portfolios (e.g. exchange-traded funds). In all these cases, the role of stock exchanges was often limited to exploiting the already existing "flagship indexes",

⁴ To the best of my knowledge, taxonomy of index providers was proposed so far only by Verstein (2013: 25). He distinguished "product index providers", who create indices as their primary business and "byproduct index providers", who produce indexes as an accident to some other profit-making activity.

⁵ Comprehensive overview of the securities market indexes, including stock exchange indexes, can be found in: Schilling (1996).

associated with a given market, whereas there was little response to the demand reported by financial market participants. The gap thus formed began to be filled by other, more active players creating new indexes, which have become an important competition for stock exchange indexes over time.

Financial index providers belonging to the same category are also, for instance, multilateral trading facilities (MTFs), operating in Europe, and other trading platforms that are an alternative to traditional stock exchanges. These institutions, operating in financial markets for a short time (first European MTFs were launched in the last decade), perform roles similar to stock exchanges (although in many aspects the way they operate is different) and hence they are naturally entitled to construct their own stock indexes, too. Due to a relatively short presence in financial markets, their potential to compete in this area with traditional stock exchanges is currently still small (for example, BATS Chi-X Europe, the largest European MTF operating on 15 markets, launched first 18 indexes for the UK stock market as late as June 2016) (https://www.bats.com/europe/equities/); nevertheless, it can be assumed that the importance of these entities will keep increasing steadily.

Another group of index providers includes financial institutions. There are two groups of players in this category: banks (mainly investment banks) and asset management institutions (especially those managing exchange-traded funds) acting as independent entities and belonging to a large capital group. In both cases, this kind of activity is generally of secondary importance – both from a financial and, for instance, PR perspective; still, it is provided either as a complementary service to other financial services (e.g. banks in the debt market), or as a means of reducing the cost of core business (asset management companies).

Banks as index providers offer a variety of their types, although they usually specialise in constructing fixed-income indexes, primarily bond indexes. This kind of activity is mainly observed in reputable large investment banks, especially American and European ones, such as Citigroup, Barclays Bank, Deutsche Bank, Credit Suisse, UBS, JPMorgan or Goldman Sachs⁶. Their indexes are used both as a barometer of the situation in a given segment of the financial market, as well as tools enabling the creation and the offer of financial products to investors – mainly structured products and index products (especially exchange-traded notes, i.e. ETNs).

⁶ It is noteworthy that in recent years some banks have totally, or partially sold their index businesses to other entities. UBS, following the LIBOR scandal, sold a significant part of their indexes in 2014 (just to mention the sale of the well-known Dow Jones - UBS Commodity Index and Australian bond market indexes to Bloomberg and convertible bond indexes to Thomson Reuters). In 2016, Barclays Bank, in turn, sold Barclays Risk Analytics and Index Solutions (BRAIS) - a company dealing with index constructing (including such well-known indexes as a family of Barclays Aggregate Indexes) – to Bloomberg.

Some asset managers, in turn, independently construct indexes as part of an increasingly popular phenomenon of self-indexing. This involves creation of own proprietary indexes by financial institutions offering index-based investment products (most often asset management companies, but also other institutions). The aim of this type of activity, pursued for a relatively short time⁷, is first and foremost a significant reduction (and sometimes even elimination) of intermediation costs resulting from the licensing of indexes from external providers (Miziołek, 2014: 280).

The third group, very diverse, encompasses all other entities involved in creating indexes. This group includes both capital groups, independent companies and institutions whose business is diversified and the provision of indexes is just one of many services on offer, as well as the companies for which it is the main (and sometimes the sole) subject of activity. There are two of the world's largest index providers in this category – MSCI and S&P Dow Jones Indices⁸. The American company MSCI, founded by the investment bank Morgan Stanley and Capital Group International (its shareholding structure is now heavily dispersed) and creating indexes since 19689, offers institutional investors tools for supporting investment decisions based on their own research – including indexes, risk and investment portfolios analysis and various types of data (https://www.msci.com/). American company S&P Dow Jones Indices was formally established in 2012 as a result of Standard & Poor's Indices and Dow Jones Indexes merger¹⁰ and is now part of S&P Global (former McGraw-Hill Financial). It carries out a diversified activity in terms of providing and maintaining various types of financial indexes (equity, debt, commodity, real estate – it offers a total of over one million indexes), including the provision of services related to licensing, distributing and managing of indexes for third parties (stock exchanges included, mainly in emerging markets) (https://us.spindices.com/).

Most of the largest index providers are public companies, keeping their operations really transparent. In 2012, three companies: MSCI, S&P Indices and FTSE formed Index Industry Association (currently IIA comprises of 12 entities). It is

⁷ For example, in the American ETF market, the first asset manager (Wisdom Tree Investments) obtained in 2006 a permit with the Securities and Exchange Commission (SEC) to create their own indexes. Currently, own indexes are created by, inter alia, VanEck, Guggenheim, Northern Trust, First Trust and even by one of the largest players in the US ETF market – State Street Global Advisors.

⁸ Other significant entities in this group comprise Bloomberg Indices, Morningstar, IHS Markit and Center for Research in Security Prices (CRSP).

⁹ It was the year when the first Capital International Indices were published.

¹⁰ The history of creating financial market indexes dates back – through their predecessors – to the late nineteenth century, when the Dow Jones Transportation Index and Dow Jones Industrial Index were launched.

an official body of a non-profit character, representing the index industry on a global scale (mainly the largest index providers) (http://www.indexindustry.org/).

The market of index providers is characterised by a relatively high degree of concentration. In the United States - the largest market in the world's index industry - the three biggest companies (S&P Dow Jones Indices, MSCI and FTSE Russell) provide benchmarks for mutual funds, the assets of which amount to approximately USD 9.4 trillion and account for 73% of funds' assets in total. Barclays indexes dominate in the bond market – these benchmarks are used in more than a half of ETFs (taking into account the value of their assets) with exposure to fixed income instruments (Authers, 2015).

3. Selected determinants of growing importance of index providers in the financial market

Growing importance of index providers in the international financial market has been visible for about two decades. The process is not rapid, though in recent years its dynamics has noticeably accelerated. Key reasons for an increasing role of these entities on a global scale, especially in some – mainly most developed – national financial markets, include:

- The dynamic development of various forms and methods of investing in the financial market, especially collective investment institutions (including investment funds), which generally use financial indexes to construct their benchmarks (except for hedge funds and some traditional and alternative investment funds).
- The emergence (or dissemination) of new financial instruments based on index derivatives and the development of exchange-traded and over-the-counter (OTC) derivatives (including mainly index futures, index options and index swaps). Market indexes are used as reference rates embedded in structured products and index-based derivatives (Novick et al., 2016: 6).
- A growing interest in new classes of assets both financial (e.g. currency) and non-financial (e.g. commodities, real estate) – and the emergence of completely new areas of investment in exchange and OTC markets (e.g. emotional investments), which imposes the creation of the indexes designed to reflect the situation in these markets.
- The development of electronic trading platforms that enable, inter alia, "index trading" (e.g. through such financial instruments as contracts for difference, i.e. CFD).
- A growing specialisation in financial markets, which necessitates the creation of indexes for new, often niche, financial market segments and investment strategies.

6. The development of research on financial markets, including the effectiveness of investments – indexes are used more and more frequently for analytical and decision-making purposes.

Undoubtedly, all these factors have contributed to the growth of importance of indexes and their providers in the international financial market, but the most significant role in this process has been played by a huge increase in the popularity of index financial products, assuming the form of investment portfolios. since the second half of the past decade (in particular). Although the first solutions of this kind (e.g. index investment funds) appeared on the US market already in the 1970s, it was only more than a dozen years later that the demand for them became significant enough to have a positive impact on the index industry. The catalysts for changes in this area have become primarily exchange-traded funds (usually managed passively, i.e. aiming to replicate the investment performance of a particular index), which, given their numerous advantages, proved to be competitive financial products (especially over the last few years) compared to actively managed funds, dominating up to then. Interest in ETFs was also reflected in growing sales of traditional index funds (equity funds mainly) and in the creation of index-related debt instruments such as ETNs and exchange-traded commodities (ETCs).

The above-mentioned indications for the development of the index industry was reflected in a huge net inflow of capital, chiefly to index investment products, and in the increased value of their assets. This trend was most noticeable in the United States (for example, at the end of 2016, the share of ETF assets and index funds in investment funds' total assets was approximately 35%), therefore the American financial market boasts the largest number of index providers (including the biggest players in the industry) and there they play the most important roles (they are mostly US companies). In the markets where index products attract definitely less of investors' attention¹¹ than in the United States, though still relatively much (compared to the world), the number of index providers is much lower and they are largely foreign entities. The situation in the emerging markets is different. The degree of penetration of the financial market with index products is the smallest – these markets are generally dominated by foreign index providers, while the only notable domestic index providers are the local stock exchanges (more and more frequently they cooperate in this regard with one of the global companies). Although there are no accurate data, it can be estimated that there are around 200 index providers in the world today.

¹¹ For example, according to the Investment Association data, the assets of tracker funds in the UK at the end of 2016 accounted for 13.5% of the total funds' assets (http://www.theinvestmentassociation.org/). In Canada, at the end of third quarter of 2016, the share of passively managed assets in total assets reached 10% (Davis, 2017: 26–30).

4. The consequences of an increasing role of index providers for the capital allocation in the financial market

A growing role played by index providers in the global financial market is primarily a derivative of a dynamically increasing value of assets invested in the financial products that are linked to indexes either directly (such as ETFs) or indirectly (such as structured products). It is therefore worth considering both current and future consequences of this phenomenon.

One of the most important aspects, in the context of the international financial market development, is an impact of the decisions made by index providers on micro-, mezzo- and macroeconomic capital flows, and thus on market trends (in a short, medium or long perspective)¹². These decisions are generally taken in two ways. In rules-based indexes¹³, where the methodology of their creation and modification is strictly defined and respected by an index provider, all kinds of decisions are known in advance and the rules concerning changes in the composition or structure of index portfolio are commonly known and transparent. This applies both to standard (periodic) changes, resulting from previously adopted rules, as well as nonstandard (extraordinary) modifications triggered by market operations (e.g. share split or re-split, dividend payment). On the other hand, in the case of discretionary indexes, where decisions are made in a discretionary way, mostly by the so-called index committee (this applies, for example, to the most internationally recognised stock index – S&P 500 index), these rules are not publicly disclosed, making them less transparent and less predictable, as well as more prone to discretionary decisions.

Although it might seem that the decisions concerning portfolios of rules-based indexes are free from that risk, as they result from the adopted methodology of index creation and administration, there is also the so-called "human factor" playing an important role, as it is people who define this methodology and introduce potential modifications to it. In the case of the most common indexes, based on the capitalisation of companies¹⁴, human interference in the rules regarding their cal-

¹² This article will not characterise other effects of index providers' activities. However, it is worth noting that by constructing ESG indexes these entities can play an important role in, for instance, shaping the way in which investors assess companies. For example, in December 2015, FTSE Russell removed Volkswagen shares from the FTSE4Good index series because it was deemed that the company had misled consumers and government agencies in terms of exhaust emission data (Makepeace, 2016).

¹³ Further analysis will refer almost exclusively to equity indexes, though similar considerations can also be made for any other selected index types.

¹⁴ For example, according to the ETFGI, in the global ETF and ETP market, such indexes accounted for 77% of the global market at the end of November 2016 (USD 2.03 trillion was invested

culation is highly unlikely due to the fact that the solutions used in practice have been applied for a long time and have already had time to consolidate. The composition and structure of the index in this case is essentially a derivative of the company's capitalisation and liquidity of its shares (although different weight can be attributed to both factors while determining the index ranking). There is much more freedom given in the case of smart (strategic) beta indexes – a truly diverse and increasingly popular group of indexes¹⁵, where the selection of companies to index portfolio and/or their weighing does not depend on their market capitalisation. The way in which some of them are designed is not actually subject to any strict rules (also due to their relatively short history and lack of well-established solutions), as a result of which an index provider can arbitrarily shape the model of its functioning and thus indirectly influence the capital allocation.

From a microeconomic perspective, the decisions concerning inclusion and exclusion of company's shares into/from the index portfolio are crucial. This applies both to the time when the information about a planned change in the index is announced, as well as to the moment of actual modification. In both cases, we are dealing (albeit to varying degrees) with the occurrence of the so-called index effect. It means that there is a short-term price adjustment, involving a rise/ fall in share prices and a rise/fall in the turnover of shares of the companies that are to be included into or removed from the index. This effect can also occur in the long run and may have a permanent character¹⁶. In the most popular indexes (i.e. the indexes being benchmarks for the funds with very high assets and replicated by the most popular index instruments), the inclusion/exclusion of company's shares into/from the index results in a significant inflow/outflow of capital and thus influences their market valuation. This, in turn, can affect either positively or negatively the company's operation and its perception by investors (e.g. in the context of raising capital by issuing shares). It is worth noting that all of the aforementioned events usually occur with unchanged (at least in a short term) economic fundaments of companies.

From a mezzo-economic perspective, index providers can – through their decisions – influence the allocation of capital at the level of economic sectors (within a country, region or on a global scale, depending on the geographic exposure of the index). Currently, in the world's index industry, there are two standards playing the most important role in the industry classification of listed companies¹⁷. The

in these financial instruments) (http://www.etfgi.com/).

¹⁵ These indexes already account for 19% of the global ETF and ETP market (USD 497 billion).

¹⁶ The index effect has been described in many articles – more information on the form and causes of this effect and on its effect on index funds can be found, among others, in: Chen, Noronha and Singal (2004: 1901–1929), Chan, Kot and Tang (2013: 4920–4930) and Dunham and Simpson (2010: 58–64).

¹⁷ Each index provider can create their own sectoral classification – this applies to, e.g., Warsaw Stock Exchange, which introduced at the beginning of 2017 a new, three-tier sectoral classifi-

first standard – Global Industry Classification Standard (GICS) – was developed by MSCI and Standard & Poor's in 1999; it is currently used mainly in the United States as well as by some entities from other parts of the world. The authors of the other standard - Industry Classification Benchmark (ICB) - were Dow Jones and FTSE in 2005; nowadays IBC is owned by FTSE Russell. This classification covers more than 70,000 companies and is primarily used by European index providers (but not only)¹⁸. Both classifications apply a four-tier distribution of issuers – each of them assigned to a specific category, based on the adopted methodology.

Industry classifications used by index providers are important mainly in the case of capital allocation made by the entities offering index sector financial products and products linked to the broad market indexes (they are generally well-diversified by industry). Each change in the classification or a significant modification of the current classification rules may lead to a change in the involvement in shares of the companies from a given economic sector. These changes may comprise, for example, of a shift of subsectors between sectors, elimination of some subsectors or separation of new subsectors. While this is of relatively minor importance in the case of changes at the lowest levels of classification (which are, incidentally, most common), the changes at the highest level – in the structure of sectors (GICS) and industries (ICB) (less frequent) – may trigger capital flows on a huge scale. An example could be the introduction of a new sector – real estate – in September 2016 to the GICS classification¹⁹. Formerly it constituted one of the industry groups in the financial sector. The separation of it, in response to the growing importance of real estate in the global economy (it was actually the first newly-created sector since the inception of this classification), not only echoed broadly in the investment industry, but also made it necessary to adjust to the new standard through the reallocation of capital in the field of passive (mainly, though not exclusively) investments in the financial sector by the entities using the GICS classification. In general, this meant the sale of real estate companies' and equity REITs' shares by exchange-traded funds and index funds replicating financial sector indexes, and

cation of shares and bond issuers (macro sectors, sectors and subsectors) due to the subject of activity and group of clients.

¹⁸ ICB classification is used by stock exchanges whose total capitalisation accounts for approximately 65% of global stock markets capitalisation, such as the Euronext, NASDAQ OMX, London Stock Exchange, Taiwan Stock Exchange, Johannesburg Stock Exchange, Borsa Italiana, Singapore Stock Exchange, Athens Exchange, Cyprus Stock Exchange and Kuwait Stock Exchange. ICB classification is also applied by other index providers (e.g. STOXX) and financial media (e.g. Financial Times) (http://www.icbenchmark.com/).

¹⁹ It is worth adding that at the same time the GICS classification identified a new sub-industry - "Financial Exchanges and Data" (within the "Financials" sector, the "Diversified Financials" industry group and the "Capital Markets" industry). It covers a variety of financial exchanges, financial data and analytical tools providers, including credit rating agencies and financial index providers.

the purchase of the aforementioned securities by already existing or newly-created funds, mirroring the investment performance of real estate companies (funds), as well as by sectorally diversified funds, which had usually underweighted entities from this sector up to then²⁰. According to the estimates made by the JPMorgan Chase & Co. investment bank, asset managers could consequently invest up to USD 100 billion in the shares of the real estate sector companies.

The impact of index providers on capital allocation at a macro level may potentially be the greatest. For their own needs, these entities also systematise countries. Apart from the standard and fixed assignment of each analysed country to a specific region (based on a geographic criterion), various economic classifications are created. They take into account, first of all, indicators concerning the level of economic development, financial market development and legal solutions (mainly with regard to capital flows). Based on the adopted methodology, index providers assign each country to one of several categories. For example, S&P Dow Jones Indices distinguishes three groups of countries/markets (developed, emerging and frontier), MSCI – four categories (apart from the abovementioned also standalone), FTSE Russell also four (developed, advanced emerging, secondary emerging and frontier) and STOXX - three groups (developed, emerging and unclassified). In addition to this division, countries are also grouped into other categories, where applied criteria also involve other factors (e.g. social or demographic). The group of BRICS countries (Brazil, Russia, India, China and South Africa) would make a good example.

The classification of countries is of great importance for equity indexes having exposure to the countries with a certain level of economic and financial development. This applies, above all, to the indexes comprising of shares of the companies originating exclusively in e.g. developed markets or emerging markets only. To a lesser degree this concerns geographically diversified indexes of a global nature, although some of them also assign appropriate weights to entities from specific markets. Asset management companies offering investment products with a broad geographical exposure – both traditional benchmark funds and funds that mimic the results of the aforementioned indexes – must adjust the composition of their portfolios to any potential changes in such classifications. Although these modifications are not frequent (for example, FTSE Russell made only 15 changes, concerning 19 countries, between 2001 and 2016), each change has an impact on the capital allocation by asset financial institutions – both in the case of promotion and degradation (an increase in demand for shares by funds having exposure to the category into which the country was classified and increase in share supply by entities having exposure to companies from the category which the country

 $^{^{20}}$ According to the Morningstar data, at the end of April 2016, the value of investment in the financial sector made by traditional investment funds was USD 38.9 billion and in real estate companies (funds) – USD 5.0 billion (http://www.morningstar.com/).

has left). Since shares of the companies from countries with a higher economic development (e.g. developed markets) generally enjoy a much greater global interest than shares of the companies from less developed countries (e.g. emerging markets), the balance of these capital reallocations is usually positive in the case of promotion to a higher category (even though the weight of the country in a new index is lower than in the previous one) and usually negative in the case of lowering the category (although the weight of the country in a new index is higher than in the previous one).

Undoubtedly, the strongest reactions are caused by changes in the top two categories, though they occur sporadically (e.g. FTSE Russell made only four such changes in 2001–2016 – they involved the promotion of Greece (in 2001), Israel (in 2008), South Korea (in 2009) and the degradation of Greece (in 2016)). Still, changes in lower categories may also be of significance, as long as they affect countries of global importance. An example of such a situation is the planned inclusion of A-shares of Chinese companies²¹ in the world's most important emerging markets equity index – MSCI Emerging Markets Index. Although it is currently envisaged that only 5% of these shares will be included in this index²², this may result in a substantial global capital reallocation (an increase in demand for these shares and an increase in the supply of companies' shares from the countries whose participation in index will fall), since the value of the assets benchmarked to the family of MSCI Emerging Market Indexes is estimated by MSCI to be over USD 1.6 trillion (as of mid-2016).

The investors who are guided in their investment decisions by benchmark composition (i.e. practically speaking, index providers who administer them) also play huge roles in emerging markets in the government debt securities sector. It is estimated that at the end of 2014, they possessed more than one-third of all foreign assets invested in these markets in government bonds denominated in a domestic currency, which is approximately USD 200–250 billion (Arslanalp, Tsuda, 2015: 4). Indexes have a significant impact on asset allocation, capital flows and asset prices (both in equity and bond markets), though not only because funds explicitly declare using specific benchmarks in order to compare investment results to them, but also due to the fact that funds with varying degrees of activity (thus also the funds formally managed actively, but practically often mimicking the composition of a benchmark) seek to replicate the structure of asset allocation occurring in the benchmark (Raddatz, Schmukler, Williams, 2014: 28).

²¹ These are shares of the companies domiciled in China, traded in renminbi on the Shanghai Stock Exchange or Shenzhen Stock Exchange and available to Chinese investors, or in accordance with the rules for qualified foreign institutional investors (OFII).

²² As a result of the inclusion of only 5% of A-shares, China's share in the MSCI Emerging Markets Index would increase from 25.9% to 27.3%, and with the 100% inclusion of A-shares, it would increase to 39.9%.

5. Conclusion

Index providers are becoming increasingly important participants of the global financial system. Their role has grown significantly over the last few years, in particular due to ever-expanding scope of the use of indexes in financial markets. This applies especially to the creation of new index-based financial instruments, attracting more and more interest on the part of investors (especially in the United States), and a growing role of benchmarks in the process of asset allocation, pursued by the entities declaring only active portfolio management (a growing share of the so-called closet indexing). Although this phenomenon entails numerous consequences, it is mainly important for the allocation of capital in micro-, mezzoand macroeconomic terms. Index providers' decisions, especially those resulting in changes in the composition of index portfolios, have a direct and often considerable impact on the direction of capital flows in the international financial market, completely independent of (or slightly dependent on) fundamental economic premises. It seems that we are now witnessing an early stage of this trend, as in many areas of the global financial market – both in terms of geography and asset classes – index-based investment instruments still play a relatively minor role.

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Dostawcy indeksów na globalnym rynku finansowym

Streszczenie: Dostawcy indeksów są istotnymi uczestnikami współczesnego globalnego rynku finansowego. Grupa ta obejmuje zróżnicowane podmioty – m.in. giełdy papierów wartościowych, instytucje finansowe (zwłaszcza banki i firmy zarządzające aktywami), firmy analityczne i badawcze oraz dostawców danych finansowych. Rola dostawców indeksów zwiększa się wraz z systematycznie rosnącym znaczeniem indeksowych instrumentów inwestycyjnych. Ich decyzje mają znaczący wpływ na alokację kapitału głównie w skali mikroekonomicznej i makroekonomicznej.

Słowa kluczowe: indeksy finansowe, dostawcy indeksów, międzynarodowy rynek finansowy **JEL:** G15, G29



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