

Building A Better Country Index

Single-market index innovation

By Steven Schoenfeld and Bruce Schoenfeld



This article focuses on how one particular subset of indexing—single-country funds based on arguably superior index construction methodology—is changing one element of the international investing landscape. In a way, it's ironic that innovation is still needed in these most basic building blocks of indexing, but indeed it is. The article reviews the key elements of benchmark design; the unique challenges involved in developing a complete and accurate single-country benchmark; and several examples of the innovation that is taking place in the development of new, single-country benchmarks. While the article focuses mainly on broad benchmarks covering Israel, we also address the issue of building better indexes for foreign markets from the perspective of other countries and sectors. What we hope readers will see is that there is still opportunity for innovation with single-country benchmarks, especially when they are liberated from the constraints of the most prevalent global benchmark frameworks.

'Perfection Impossible': Revisiting Key Elements Of Benchmark Design

As noted 12 years ago in this journal,¹ and 10 years ago in the book "Active Index Investing,"² it is exceedingly difficult, if not impossible, to create a perfect index. This is due not only to the different uses of indexes—for

The requirement that an index be *investable* follows logically from the issue of completeness. An index comprising illiquid securities, those with a small free float or subject to onerous investment restrictions, is of limited utility to investors seeking to use the index as a benchmark or to form the basis of a tracking instrument or fund.

example, for benchmarking portfolio performance or for use in asset allocation strategies—but also because of the inherent trade-offs involved in their design.³ While these trade-offs, and how best to minimize their impact, continue to be debated among index professionals, there has emerged general agreement over the best practices for index design and construction. These generally consist of *seven key criteria*, a review of which follows below.

Perhaps the most important of these seven criteria is *completeness*, or how effectively the index represents the investable universe for active as well as passive managers. A fully complete index is broad, deep and enhances diversification for investors. Although "completeness" is a seemingly vague term—one that could mean different things to different investors—"complete coverage of the targeted asset class is the foundation for the utility of indexes in all their potential applications."⁴

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or to form the basis of a tracking instrument or fund. Note, though, that the requirement for completeness and the need for investability would seem to be mutually exclusive. We discuss this conundrum when looking at the trade-offs involved in creating the best possible index.

A quality index also needs to be *transparent*. It must have clear rules for the way the index is created and managed, and these rules, or methodology, must be publicly available to all interested parties. It is especially crucial for investors to be aware of the rules surrounding index rebalancing, including the inclusion of new constituents and exclusion of existing constituents. Similarly, index return and constituent data must be readily available and accurately priced on a timely basis. Investors must be able to easily access total and net return data and information on dividends. All data must be released in a timely and efficient manner.

In a classic "chicken and egg" manner, the better an index meets the above criteria, the more *widely accepted* it will be among investors. And the more accepted by investors, the more widespread its use will be, both for benchmarking and to serve as the underlying basis for investment products.

On a more technical level, an index will find greater acceptance by investors, particularly large institutional investors, if it offers the easy *ability to cross buy and sell orders*. This allows institutional managers to match orders

without added transactions costs. Equally important is the availability of listed or OTC futures and options, which provide investors with additional tools for managing risk and exposure levels. Finally, the ideal index meets all of the above criteria while also minimizing constituent turnover and transaction costs associated with rebalancing.

Single-Country Benchmarks And The Issue Of 'Completeness'

The seven key criteria for index design should be adhered to regardless of whether an index fits into these new categories of active indexes or is a more traditional, "plain vanilla" product. While these criteria have become accepted wisdom among industry professionals, the issue of completeness still remains a challenge for index developers, particularly for single-country indexes and the investment products which track them.

Indeed, we would argue that many single-country indexes are glaringly weak when it comes to completeness, and that this weakness stems from a philosophical disagreement on the part of index providers as much as from practical, technical and operational issues.

Figure 1a

Comparison Of Weight Of Israeli Equities In Leading Global Benchmarks With BIGI Inclusion							
	Global Market Country Weights (MSCI ACWI)		Adjusted Country Weights MSCI ACWI, W/ BlueStar Israel*		Global Market Country Weights (MSCI ACWI)		Adjusted Country Weights MSCI ACWI, W/ BlueStar Israel*
USA	48.93%	USA	48.85%	Singapore	0.52%	Singapore	0.52%
UK	7.81%	UK	7.79%	Belgium	0.44%	Belgium	0.44%
Japan	7.37%	Japan	7.36%	Malaysia	0.43%	Malaysia	0.43%
Canada	3.87%	Canada	3.86%	Norway	0.32%	Israel	0.35%
France	3.69%	France	3.68%	Finland	0.31%	Norway	0.32%
Germany	3.38%	Germany	3.38%	Indonesia	0.27%	Finland	0.31%
Switzerland	3.29%	Switzerland	3.29%	Thailand	0.24%	Indonesia	0.27%
Australia	2.81%	Australia	2.81%	Israel	0.19%	Thailand	0.24%
China	2.00%	China	1.99%	Turkey	0.18%	Turkey	0.18%
Korea	1.69%	Korea	1.69%	Poland	0.18%	Poland	0.18%
Spain	1.34%	Spain	1.34%	Chile	0.17%	Chile	0.17%
Taiwan	1.32%	Taiwan	1.32%	Colombia	0.11%	Colombia	0.11%
Brazil	1.19%	Brazil	1.18%	Ireland	0.11%	Ireland	0.11%
Sweden	1.11%	Sweden	1.11%	Philippines	0.11%	Philippines	0.11%
Hong Kong	1.03%	Hong Kong	1.03%	Austria	0.10%	Austria	0.10%
Netherlands	0.98%	Netherlands	0.98%	Greece	0.09%	Greece	0.09%
Italy	0.95%	Italy	0.95%	Portugal	0.07%	Portugal	0.07%
South Africa	0.82%	South Africa	0.82%	New Zealand	0.05%	New Zealand	0.05%
India	0.75%	India	0.74%	Peru	0.05%	Peru	0.05%
Russia	0.59%	Russia	0.59%	Czech Republic	0.03%	Czech Republic	0.03%
Mexico	0.56%	Mexico	0.56%	Hungary	0.02%	Hungary	0.02%
Denmark	0.54%	Denmark	0.54%	Egypt	0.02%	Egypt	0.02%

Sources: BlueStar Global Investors, MSCI. *The BlueStar Israel Index has been substituted for the original index's market capitalization for Israel.

The issue of *completeness* arises due to a key cornerstone of MSCI's and FTSE's methodologies that "each security is classified in one, and only one, country."⁵ Nationality classification is a key part of both index providers' methodologies.

This disagreement is readily apparent when comparing the index methodologies of established industry leaders for multicountry/global index families—namely, MSCI, FTSE and S&P Dow Jones—with newer index developers, some of which take different approaches to company nationality and classification. Global index providers such as MSCI and FTSE face unique challenges due to the breadth and depth of their index products. Not only do their indexes cover broad global market agglomerations (e.g., MSCI World, FTSE All-World), regional markets (e.g., Latin America, Asia and Europe, et al.), but single-country markets as well.

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Nationality classification is a key part of both index providers' methodologies. Once countries are given a market status (e.g., developed, emerging, frontier), companies are allocated to a country based on measures such as where it is incorporated; its tax domicile; the location of corporate headquarters; major factors of production; and the currency in which the security is denominated.⁶

In cases where the methodology framework does not provide a definitive answer, MSCI, for example, uses the following elements to classify a company:

- "The company's primary listing, secondary listings, if any, and the geographic distribution of its shareholder base;
- The geographic distribution of its operations (in terms of assets and production);

Figure 1b

Comparison Of Weight Of Israeli Equities In Leading Global Benchmarks With BIGI Inclusion							
	Global Market Country Weights (MSCI ACWI Ex-U.S.)		Adjusted Country Weights MSCI ACWI Ex-U.S., W/ BlueStar Israel*		Global Market Country Weights (MSCI ACWI Ex-U.S.)		Adjusted Country Weights MSCI ACWI Ex-U.S., W/ BlueStar Israel*
UK	15.29%	UK	15.24%	Belgium	0.87%	Belgium	0.86%
Japan	14.43%	Japan	14.39%	Malaysia	0.83%	Malaysia	0.83%
Canada	7.57%	Canada	7.54%	Norway	0.62%	Israel	0.69%
France	7.22%	France	7.20%	Finland	0.61%	Norway	0.62%
Germany	6.63%	Germany	6.61%	Indonesia	0.53%	Finland	0.61%
Switzerland	6.45%	Switzerland	6.43%	Thailand	0.47%	Indonesia	0.52%
Australia	5.51%	Australia	5.49%	Israel	0.37%	Thailand	0.47%
China	3.91%	China	3.90%	Turkey	0.36%	Turkey	0.36%
Korea	3.32%	Korea	3.31%	Poland	0.35%	Poland	0.35%
Spain	2.62%	Spain	2.61%	Chile	0.32%	Chile	0.32%
Taiwan	2.59%	Taiwan	2.58%	Colombia	0.22%	Colombia	0.22%
Brazil	2.32%	Brazil	2.31%	Ireland	0.21%	Ireland	0.21%
Sweden	2.17%	Sweden	2.16%	Philippines	0.21%	Philippines	0.21%
Hong Kong	2.02%	Hong Kong	2.01%	Austria	0.19%	Austria	0.19%
Netherlands	1.92%	Netherlands	1.91%	Greece	0.17%	Greece	0.17%
Italy	1.86%	Italy	1.85%	Portugal	0.13%	Portugal	0.13%
South Africa	1.60%	South Africa	1.60%	New Zealand	0.10%	New Zealand	0.10%
India	1.46%	India	1.45%	Peru	0.09%	Peru	0.09%
Russia	1.15%	Russia	1.15%	Czech Republic	0.05%	Czech Republic	0.05%
Mexico	1.09%	Mexico	1.09%	Hungary	0.05%	Hungary	0.05%
Denmark	1.07%	Denmark	1.06%	Egypt	0.04%	Egypt	0.04%
Singapore	1.02%	Singapore	1.02%				

Sources: BlueStar Global Investors, MSCI. *The BlueStar Israel Index has been substituted for the original index's market capitalization for Israel.

- The location of headquarters; and
- The country in which investors consider the company to be most appropriately classified.”⁷

In some cases, MSCI may exclude a company from all its indexes if the country allocation process results in a country other than the company's primary listing. In practice, this most often occurs for companies incorporated in an emerging market, but that are only listed on a developed-market exchange.⁸ We look at this specific issue later in the paper.

Despite the rigorous methodologies followed by the major index providers and their best efforts to avoid misallocating securities to countries and indexes that are not truly representative of the underlying business, this frequently occurs in practice.

The case of South African Breweries provides an excellent example of this. The venerable South African company (it was first listed in Johannesburg in 1897), which, even after its 2002 acquisition of the U.S.-based Miller Brewing, derives almost 20 percent of its revenues from South Africa and more than 75 percent of revenues from emerging markets. Yet because the company shifted its “primary

exchange listing to London in 1999, the company, now called SAB Miller, is classified as a U.K. company by both FTSE and MSCI.⁹ Because of this, SAB Miller is not included in either MSCI's or FTSE's South African indexes, even though it has a 10.75 percent weighting in that country's flagship Top 40 domestic equity index.

In addition to South Africa, the country allocation framework followed by the major index providers is most susceptible to second-guessing in countries such as Russia and Israel. For example, many Russian companies are excluded from MSCI's indexes due to its rule that a company can be excluded if its operations are in an emerging market but its listing is in a developed market. Similarly, many Israeli companies have been left out of global, regional and country indexes because of what we view to be the overly strict country allocation procedures followed by the major index providers.

The exclusion of companies that by any clear-headed, intuitive analysis would be allocated to a specific country not only suggests that some major indexes fail the “completeness” test, but also has a detrimental impact on specific markets and the companies themselves

Figure 1c

Comparison Of Weight Of Israeli Equities In Leading Global Benchmarks With BIGI Inclusion							
	Global Market Country Weights (FTSE All World)		Adjusted Country Weights FTSE All World, W/ BlueStar Israel*		Global Market Country Weights (FTSE All World)		Adjusted Country Weights FTSE All World, W/ BlueStar Israel*
USA	48.29%	USA	48.24%	Belgium/Lux	0.43%	Belgium/Lux	0.43%
Japan	8.02%	Japan	8.01%	Finland	0.31%	Israel	0.35%
UK	7.88%	UK	7.87%	Norway	0.31%	Finland	0.31%
France	3.48%	France	3.48%	Thailand	0.25%	Norway	0.30%
Canada	3.48%	Canada	3.48%	Indonesia	0.24%	Thailand	0.25%
Germany	3.33%	Germany	3.33%	Israel	0.23%	Indonesia	0.24%
Switzerland	3.28%	Switzerland	3.27%	Turkey	0.17%	Turkey	0.17%
Australia	2.92%	Australia	2.92%	Poland	0.16%	Poland	0.16%
China	1.88%	China	1.88%	Phillipines	0.15%	Phillipines	0.15%
Korea	1.64%	Korea	1.64%	Chile	0.15%	Chile	0.15%
Spain	1.35%	Spain	1.35%	Austria	0.10%	Austria	0.10%
Taiwan	1.30%	Taiwan	1.30%	Colombia	0.10%	Colombia	0.10%
Hong Kong	1.27%	Hong Kong	1.27%	Ireland	0.08%	Ireland	0.08%
Brazil	1.22%	Brazil	1.21%	Portugal	0.08%	Portugal	0.08%
Sweden	1.09%	Sweden	1.09%	New Zealand	0.07%	New Zealand	0.07%
Netherlands	1.04%	Netherlands	1.04%	UAE	0.07%	UAE	0.07%
India	0.98%	India	0.98%	Greece	0.05%	Greece	0.05%
Italy	0.93%	Italy	0.93%	Peru	0.03%	Peru	0.03%
South Africa	0.88%	South Africa	0.87%	Egypt	0.03%	Egypt	0.03%
Denmark	0.57%	Denmark	0.57%	Czech Republic	0.03%	Czech Republic	0.03%
Russia	0.55%	Russia	0.55%	Hungary	0.02%	Hungary	0.02%
Singapore	0.54%	Singapore	0.54%	Pakistan	0.02%	Pakistan	0.02%
Mexico	0.54%	Mexico	0.54%	Morocco	0.00%	Morocco	0.00%
Malaysia	0.46%	Malaysia	0.46%				

Sources: BlueStar Global Investors, FTSE. *The BlueStar Israel Index has been substituted for the original index's market capitalization for Israel.

given the trillions of dollars that are invested globally according to index benchmarks.

Innovation In Single-Country Benchmark Development

As in any industry, perceived limitations in existing products often spur innovation and the development of superior solutions. The financial services industry in general and especially the index/ETF industry have proven this maxim repeatedly and impressively over the past three decades, and if anything, the pace of innovation is accelerating.

We believe one good example of this innovation was highlighted by our 2011 launch of the BlueStar Israel Global Index (BIGI). The index was designed to resolve the difficult country allocation issues described above, while still adhering to the seven key criteria for index construction outlined in the first section of this paper.

Until the development of BIGI, and the June 2013 launch of the Market Vectors Israel ETF (ISRA | C-32) that tracks it, portfolio managers wanting to make the proper allocation

to Israeli equities in the context of an all-country, international or developed-market portfolio had limited choices on how to execute this strategy. The benchmarks existing at the time, whether those offered by MSCI, FTSE or even the Tel Aviv Stock Exchange (TASE), all failed to represent the complete universe of Israeli stocks, and, in the process, short-changed investors seeking to capture the full-opportunity equity returns from Israel's fast-growing, dynamic economy.

Indeed, some of the most successful Israeli companies were then and are still excluded from the most prominent global Israeli benchmarks because of the country allocation process followed by the major global index providers. These include Checkpoint Software, SodaStream, Amdocs and Verint Systems, to name just a few. Based on our proprietary research, the amount of market capitalization that is excluded from the most used benchmarks was close to \$70 billion as of Dec. 31, 2013, and passive investors in these benchmarks would have to have allocated an additional 32 to 44 bps to Israeli stocks to achieve what we consider is the appropriate weight of Israeli equities in

global benchmarks. (See Figures 1a-1c for a comparison of Israel's weight in some major global benchmarks using the BIGI methodology and that of the major index providers.)

The amount of "missing" market capitalization due to less-than-complete single-country benchmarks should not be taken lightly, as it not only impacts investors, but the state of local capital markets as well. The impact on Israeli capital markets was magnified by its 2010 "graduation" to developed-market status by MSCI. At that point, Israel's country weighting went from roughly 400 bps in MSCI's emerging markets index to less than 40 bps in its broadest developed-market index, which made it easily ignorable by global portfolio managers.

The result was a sharp decline in trading volumes on the TASE. Had Israel been included in global indexes as its true weight—roughly 75 to 80 bps—some of this impact might have been mitigated.

The diminution of a single country also shortchanges investors with a regional rather than global perspective, and, in particular, tactical investors who follow a country-driven asset allocation model because they are getting less than full exposure to their preferred market or markets.

BlueStar's BIGI benchmark was created to address this underrepresentation in accordance with a proprietary methodology created by index professionals in

4. The company generates at least 50 percent of its revenues in Israel or at least 50 percent of its operating expenses are derived from operations in Israel.

Qualitative criteria:

1. The company was founded in Israel;
2. The company has significant management, operational, logistical or R&D facilities in Israel;
3. A majority of the board of directors or at least two senior executives are domiciled in Israel;
4. The company's business results would be materially altered without its Israel-located assets. These may include, but are not limited to, intellectual and human capital, patents, licenses, etc.; and
5. The company is a subsidiary of a non-Israel operating entity of a quantitatively defined Israeli company.

The result is not only more inclusive and complete numerically (BIGI currently has 114 constituents compared with the 53 of the MSCI Israel index), but also reduces concentration and provides a more balanced and accurate representation of the Israeli economy's composition (see Figures 2a, 2b and 3). The total "missing market cap" of Israeli companies within the top 10 BIGI constituents alone is \$49.4 billion, over half the market cap of the entire MSCI Israel Index.

All of the above seems well suited to the world of academics and finance researchers, but the historical invest-

Russia is another market where index innovation has taken place in order to address the perceived weaknesses in the offerings of the major index providers. It suffers from the index providers' diktat that some emerging-market-domiciled companies can be excluded from all indexes if they are listed on a developed-market exchange.

consultation with a broad range of interested parties.¹⁰ The methodology for determining whether a company is Israeli is described below.

Companies consider many factors in choosing an exchange on which to list their shares, including cost of and access to capital, liquidity and marketing/brand awareness. Due in part to inefficiencies in the domestic Israeli equity market, a desire to be more accessible to their perceived investor base and major markets for their products, many Israeli companies choose to list their shares outside of Israel, primarily in the U.S. Despite this, the companies can be characterized as Israeli—and therefore allocated to an Israeli index—based on other quantitative and qualitative criteria. To achieve the highest possible level of index "completeness," the BIGI benchmark considers a company to be part of the Israeli global equity universe if it meets at least one quantitative criteria and/or at least two qualitative criteria from the following lists:

Quantitative criteria:

1. The company is listed on the TASE;
2. The company maintains tax status in Israel;
3. The company is headquartered in Israel; and

ment performance of BIGI, particularly relative to Israeli-equity benchmarks that predated its existence, is also a strong argument in its favor (see Figure 4).

Another Country, Similar Problems: Russia

Israel is certainly not the only market where these challenges arise. Russia is another market where index innovation has taken place in order to address the perceived weaknesses in the offerings of the major index providers. It suffers from the index providers' diktat that some emerging-market-domiciled companies can be excluded from *all* indexes if they are listed on a developed-market exchange.

Because of this, the MSCI Russia index is less than complete and highly concentrated—the index only has 22 constituents, and the top five companies comprise more than 54 percent of the index. This is in a market where the main index, the Micex, has more than twice as many listed companies. Four of MSCI Russia's constituents are listed in London and one in the U.S. Leading companies in several industries, most notably retail and technology, are excluded from MSCI Russia,

Figure 2a

BIGI Vs. MSCI Israel Capped Index – Weighting Comparison For BIGI's Top 50 Components, Part I					
Company	Index Exchange (Primary Listing)	BIGI Weight	MSCI Capped Weight	BIGI-MSCI Weight Diff.	Market Cap (\$B)
Teva Pharmaceutical Industries	IT	12.63%	25.17%	-12.54%	49.90
Perrigo Company PLC	UN	11.23%	0.00%	11.23%	19.50
Check Point Software (US)	UQ	6.07%	0.00%	6.07%	12.79
Amdocs Ltd	UQ	4.74%	0.00%	4.74%	7.41
Bank Hapoalim BM Reg	IT	3.84%	10.10%	-6.26%	7.65
Bank Leumi Le-Israel BM	IT	3.45%	8.46%	-5.01%	5.75
Stratasys Ltd	UQ	3.09%	0.00%	3.09%	5.61
VeriFone Systems Inc	UN	2.46%	0.00%	2.46%	4.11
Israel Chemical Corp	IT	2.44%	6.17%	-3.73%	10.86
Bezeq Israeli Telecom Corp	IT	2.37%	4.93%	-2.56%	5.07
Verint Systems	UQ	1.67%	0.00%	1.67%	2.90
Nice Systems Ltd	IT	1.64%	3.91%	-2.27%	2.45
Israel Corp	IT	1.44%	2.50%	-1.06%	4.39
Playtech	LN	1.35%	0.00%	1.35%	3.05
Taro Pharmaceutical Industries	UN	1.27%	0.00%	1.27%	6.28
Delek Group Ltd	IT	1.24%	3.17%	-1.93%	4.83
Opko Health Inc	UN	1.19%	0.00%	1.19%	3.66
Mizrahi Tefahot Bank Ltd	IT	1.18%	2.90%	-1.72%	2.97
Israel Discount Bank 0.1	IT	1.09%	2.59%	-1.50%	1.79
Delek US Holdings	UN	1.08%	0.00%	1.08%	1.68
Elbit Systems Ltd	IT	1.01%	2.35%	-1.34%	2.63
Mellanox Tech	UQ	0.90%	0.00%	0.90%	1.55
Caesar Stone Sdot Yam Ltd	UQ	0.83%	0.00%	0.83%	1.71
Paz Oil Company Ltd	IT	0.76%	1.35%	-0.59%	1.63
Gazit Globe 1982 Ltd	IT	0.75%	1.97%	-1.22%	2.36

Sources: BlueStar Global Investors, BlackRock iShares

leaving investors who follow the index little or no exposure to those dynamic and fast-growing sectors of the Russian economy, and making the index overly reliant on the energy and natural resources sectors.

In an effort to mitigate these weaknesses, in 2007, Van Eck launched its Market Vectors Russia ETF (RSX | C-63), which originally tracked a custom-calculated DAX Russia index to compete with MSCI Russia by including a much broader slate of companies. The ETF has since switched to an index calculated by Van Eck subsidiary Market Vectors Index Solutions (MVIS). The new benchmark currently comprises 37 companies and is much less top heavy than MSCI Russia. For example, natural gas giant Gazprom is 9.3 percent of the MVIS index compared with 21.0 percent in MSCI Russia.

RSX is but one example of Van Eck's innovative approach to single-country indexes embodied in its Market Vectors series of funds. According to Van Eck, Market Vectors indexes are built on three key factors that ensure completeness and investability, and more accurately reflect the globalization of today's investment landscape. These

factors are: a focus on pure play and the reflection of target markets through the inclusion of offshore companies; demanding liquidity criteria and diversification to avoid heavy overweighting of particular companies or sectors.

The Case Of Single-Country Sector Indexes

Using a broader and more complete country allocation methodology is even more important when it comes to the design and maintenance of single-country sector indexes. The exclusion of even one key sectorally significant constituent can render such an index less representative and thus less-efficient for sector exposure. We can see this innovation at work in arguably the fastest-growing and most dynamic sector of all—technology—in the two foreign countries that have the most companies listed on Nasdaq, China and Israel.

China presents the most interesting case, as there are three ETFs with underlying indexes that focus solely on technology.¹¹ These indexes range in size from 29 to 61 constituents, with a mix of Hong Kong- and U.S.-listed companies. This compares with MSCI's flagship China

Figure 2b

BIGI Vs. MSCI Israel Capped Index – Weighting Comparison For BIGI's Top 50 Components, Part II

Company	Index Exchange (Primary Listing)	BIGI Weight	MSCI Capped Weight	BIGI-MSCI Weight Diff.	Market Cap (\$B)
Azrieli Group	IT	0.74%	0.00%	0.74%	4.00
Frutarom	IT	0.72%	1.56%	-0.84%	1.45
Osem Investment	IT	0.60%	1.22%	-0.62%	2.50
Ezchip Semiconduct	IT	0.60%	1.31%	-0.71%	0.74
Strauss Group	IT	0.58%	1.17%	-0.59%	2.08
Wix.com Ltd	UQ	0.56%	0.00%	0.56%	0.75
Radware Ltd	UQ	0.54%	0.00%	0.54%	0.76
Harel Insurance Inv Ltd 1	IT	0.53%	1.05%	-0.52%	1.26
Cellcom Israel Ltd.	IT	0.53%	1.06%	-0.53%	1.21
Partner Communications	IT	0.53%	1.11%	-0.58%	1.22
SodaStream International	UQ	0.51%	0.00%	0.51%	0.70
Imperva Inc	UN	0.50%	0.00%	0.50%	0.69
Aloni Hetz Properties	IT	0.49%	1.02%	-0.53%	1.02
Orbotech Ltd (US)	UQ	0.47%	0.00%	0.47%	0.63
Migdal Insurance Hldgs	IT	0.47%	0.99%	-0.52%	1.72
Ormat Technologies	UN	0.47%	0.00%	0.47%	1.31
LivePerson Inc	UQ	0.47%	0.00%	0.47%	0.55
Shikun & Binui Ltd.	IT	0.45%	0.83%	-0.38%	0.98
Clal Insurance	IT	0.45%	0.63%	-0.18%	1.07
Delek Energy Systems Ltd	IT	0.44%	0.00%	0.44%	3.62
Ormat Industries	IT	0.44%	0.74%	-0.30%	0.90
Plus500 Ltd	LN	0.44%	0.00%	0.44%	0.90
Compugen Ltd	UQ	0.41%	0.00%	0.41%	0.43
First Intl Bank of Israel	IT	0.40%	0.55%	-0.15%	1.61
Delek Automotive Systems Ltd	IT	0.39%	0.57%	-0.18%	1.00

Sources: BlueStar Global Investors, BlackRock iShares

Attempts at innovation in Israeli sector indexes are not new. The TASE has had dedicated indexes for the technology, insurance and energy sectors, among others, for quite some time.

Index, which only has a 20 percent weighting to technology, half of which is in the telecommunications sector, and all of whose constituents are listed in Hong Kong.

Attempts at innovation in Israeli sector indexes are not new. The TASE has had dedicated indexes for the technology, insurance and energy sectors, among others, for quite some time. The local technology indexes, the TA Tech Elite and the TA BlueTech (and previously, the TA Tel Tech), display the same lack of completeness that hampers the broader market indexes; they do not provide investors with the broadest possible exposure to the dynamic Israeli technology sector because they only include domestically or dual-listed companies and exclude Israeli technology companies that are solely listed outside of Tel Aviv. This is not due to any

lack of skill or knowledge by the TASE Index department, but due to the historical constraints of focusing solely on Tel Aviv-listed companies.

In contrast, just as with BIGI, the BlueStar Israel Global Technology Index (BIGITech) was developed to overcome these issues and offer investors the broadest possible exposure to Israeli technology companies, no matter where they are listed or domiciled. The index, which went live in November 2013 and has been backtested to 2004, includes the largest and most liquid Israeli and Israeli-linked technology companies, as well as mid- and small-cap companies that meet stringent liquidity requirements. The proprietary BlueStar methodology results in an index with 54 constituents with an aggregate market capitalization of

[continued on page 59](#)

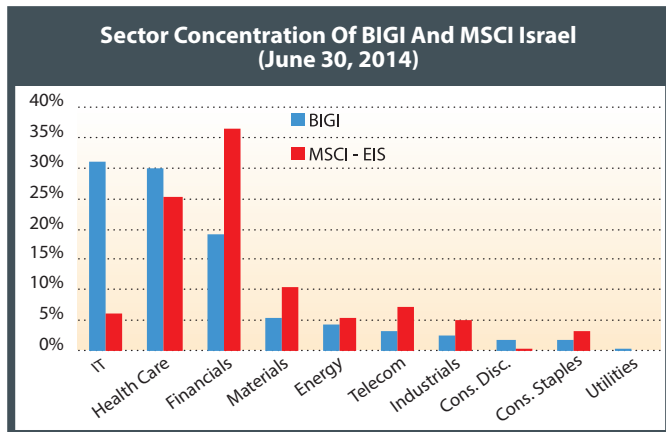
Schoenfeld continued from page 39

\$62 billion compared with 34 constituents and a market capitalization of \$45 billion for the TASE Tech-Elite Index. Its relative performance versus Israel Tech, the Nasdaq-100 and two broad Israel indexes is provided in Figure 5.

Conclusion: Innovating With ‘Basic’ Building Blocks Of Single-Country Indexes

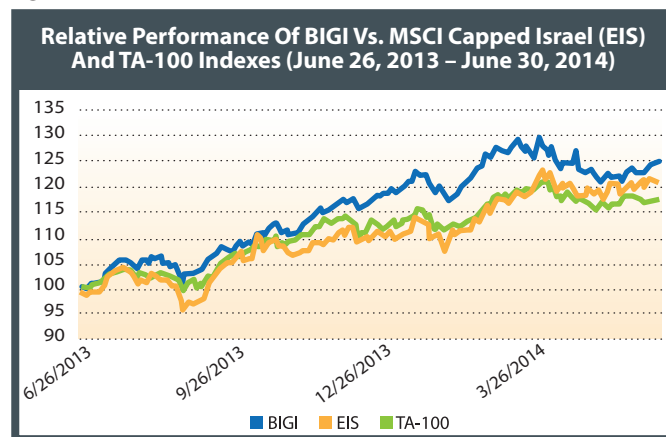
Despite the many advances and changes that have taken place in the development of indexes and investment products

Figure 3



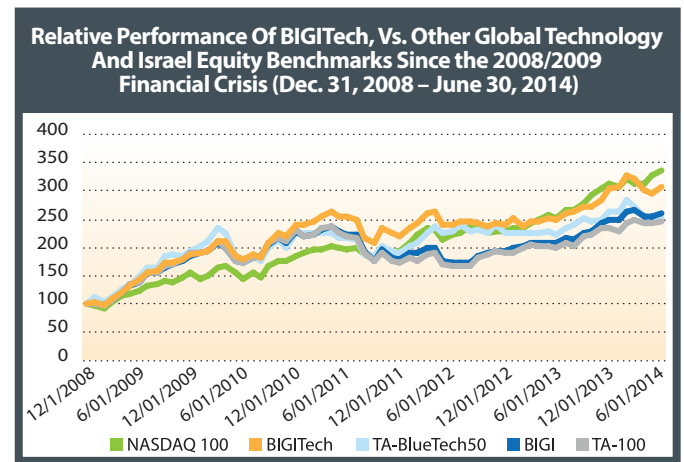
Sources: BlueStar Global Investors, BlackRock iShares

Figure 4



Sources: BlueStar Global Investors, Tel Aviv Stock Exchange, BlackRock iShares

Figure 5



Sources: BlueStar Global Investors, Tel Aviv Stock Exchange, Nasdaq OMX Global Indexes

that track them over the past 10 years, it is clear that there remains plenty of room for innovation. This is true of basic “building block” country indexes, where innovation has shifted to new, “active” formulations and to complex “national” capital markets such as Israel, Russia and China, where a break with conventional classification methodologies can result in a more representative benchmark for a country’s equity market.

The globalization of international stock markets, with exchanges from New York to New Delhi vying for new listings, highlights the importance of continued innovation in the creation of single-country indexes. It is especially vital in the case of Israel, where more than 20 companies have either filed or announced plans to file for initial public offerings in the next several months, only a handful of which actually plan to list on the domestic Israeli market. One of these IPOs, for Mobileye, the maker of automobile collision warning systems—which, as of this writing, is seeking a market valuation of as much as \$5 billion—will likely be the largest Israeli company IPO ever. However, because of the methodology developed by BlueStar, the only Israel-focused index in which it will be included is BIGI.

By applying the seven key criteria of index construction in a dynamic manner, it is possible to create better indexes that appropriately balance the inherent trade-offs of index design and therefore develop a more perfect solution to the issue of *completeness*.

Endnotes

- ¹Steven A. Schoenfeld, “Perfection Impossible – Why Simply ‘Good’ Indexes Can Result in a More Perfect Solution” Journal of Indexes, Second Quarter 2002
- ²Steven A. Schoenfeld, “Active Index Investing: Maximizing Portfolio Performance and Minimizing Risk through Global Index Strategies,” John Wiley & Sons, Inc., Hoboken, 2004.
- ³S. Schoenfeld, op. cit., pp 81-99.
- ⁴Ibid. p. 83.
- ⁵See “MSCI Country Classification Standard,” March 2014.
- ⁶See “FTSE GEIS: A global, rigorous and comprehensive benchmark,” FTSE, 2014.
- ⁷MSCI, op. cit.
- ⁸Ibid.
- ⁹Although SAB at the time said the reason for shifting its primary listing to the LSE in 1999 was to enable it to better pursue its international growth strategy, the underlying reason was to avoid South African exchange controls then in place that required it to get central bank approval for any shifting of assets offshore (i.e., acquisitions). This was a common strategy pursued by South African companies at the time, which, in addition to avoiding central bank scrutiny, also enabled them to maintain assets in hard currency at a time of extreme volatility in the South African rand. Other companies that subsequently shifted their primary listings to London include Anglo American, Old Mutual and BHP Billiton, among others.
- ¹⁰For the complete BIGI methodology, please see bluestarindexes.com.
- ¹¹Global-X China Technology ETF (QQQC|D-20), Guggenheim China Technology ETF (CQQQ|C-25) and the Krane Shares CSI China Internet ETF (KWEB|B-20)