

Tel Aviv Stock Exchange

Start-up market?

Israel's technology and healthcare industries together make up one of the strongest hubs of value creation globally. Until now this value creation has largely bypassed the Tel Aviv Stock Exchange (TASE), with trade sales or overseas exchanges preferred to a domestic listing. Far-reaching reforms are now being put in place to change this. Success will make it much easier for domestic and international equity investors to support and benefit from this hub of value creation.

12 September 2016

A multitude of issues

There has been recognition among successive Israeli governments dating back more than 20 years that the financial sector in Israel is underrepresented relative to its potential. While Israel boasts a world-leading technology sector, the domestic financial services industry has seen little benefit. In the last five years alone, 515 Israeli technology companies have completed an "exit" (ie trade sale) for a total of US\$44bn, while of the 36 Israeli technology companies that have chosen to list (raising US\$2.5bn) 32 have picked the US or London rather than Tel Aviv. The overly burdensome regulatory environment in which the TASE operates and the desire by many companies to stay out of the public spotlight have compounded the TASE's weak position.

A multi-pronged reform process

A number of reforms are under way to change this and are highlighted in this report, ie regulatory relief driven by the Israel Securities Authority (ISA) with 52 law changes over the last year, the TASE reforms including impending demutualisation and the proposed tax reforms. We also provide investors with a guide to trading on the TASE.

Challenges remain and reversing many years of decline will not happen overnight; however, the opportunity is significant. Conservatively, there are estimated to be 3,100-4,200 start-ups in Israel, with approximately 200 of these late-stage companies in a position to list.

Domestic and international public market investors should be aware of and monitor developments in Israel and the TASE as the country repositions its financial sector to better meet the demands of its burgeoning technology community.

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Israel is a global technology leader

A major hub of value creation

The Israel technology and biotech sectors are the driving force behind Israel's economy. Industrial production in Israel's hi-tech sector grew at 5.4% in 2005-15 versus 3.1% for Israel's industrial production (source: Israel Ministry of Finance) and just 1.4% for OECD GDP growth over the same period. Other sources estimate the Israeli technology sector growing at 9% in 1998-2012 (source: The Economist). By any measure, the Israeli technology sector has been one of the few areas of growth worldwide in recent years.

The TASE estimates that there is a potential IPO pipeline of approximately 200 late-stage Israeli technology companies in a vibrant start-up environment with an estimated 3,100-4,200 start-ups according to Compass's *The Global Startup Ecosystem Report 2015*, although anecdotally 5,000-10,000 is a commonly quoted range. Given the reforms that are currently underway, this pipeline is likely to grow and an increasing number may consider an IPO on the TASE.

Fast facts

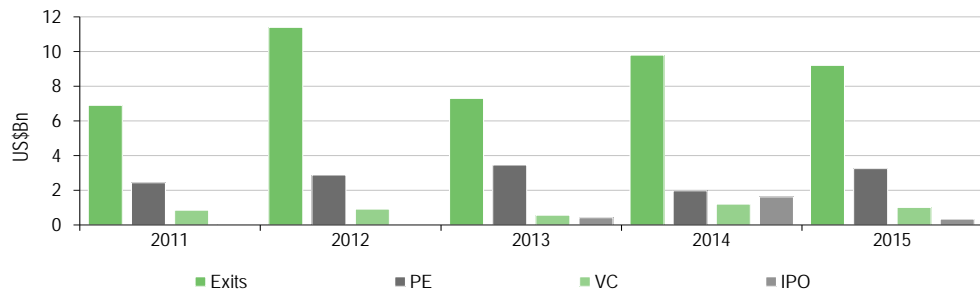
- Israel hosts 280 foreign R&D centres, more than any other country in the world (source: Israel Ministry of Finance).
- Israel has the highest number of start-ups per head in the world: 375 versus 190 in the US (source: The Economist).
- Israel is the global leader in R&D spending as a percentage of GDP (source: International Institute for Management Development, IMD) and is in second place (behind South Korea) in Bloomberg's Global Innovation Index.
- There are estimated to be 3,100-4,200 start-ups in Israel (source: The Global Startup Ecosystem Report 2015, Compass).
- The Israeli start-up sector is the third fastest growing in the world (source: The Global Startup Ecosystem Report 2015, Compass).
- Israel has more second degrees per head than any other country.

Not yet with the capital markets structure to match

Exits and staying private preferred to IPO

In general, when faced with a strategic choice of either exiting, staying private or going public, the vast majority of Israeli companies choose one of the first two options. As the chart below demonstrates, exiting was the preferred choice in the 2011-15 period, with 515 Israeli companies acquired for US\$44.7bn, the most high-profile of which in recent years was Google's purchase of Waze for US\$1.2bn in 2013. The private sector, via VCs and private equity, invested a combined US\$18.6bn during this period, while only 36 Israeli technology companies chose to hold an IPO, raising a combined US\$2.5bn during the same period.

Exhibit 1: Israeli company exits, private sector investment and IPOs US\$bn (2011-15)

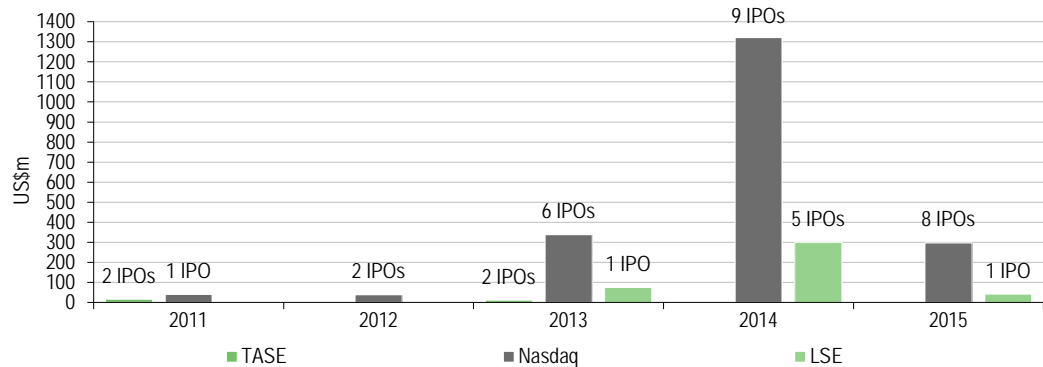


Source: IVC, TASE, NASDAQ, LSE, Edison Investment Research

The TASE has been largely bypassed

Having established that Israeli companies have preferred to exit or stay private, we show below that Israeli technology companies which have decided to hold an IPO have chosen overseas markets (mainly NASDAQ and LSE) over the TASE. In fact, during this five-year period, there have been just four technology IPOs on the TASE raising US\$30m versus US\$2.5bn raised by 32 companies on overseas markets.

Exhibit 2: Israel tech sector IPOs 2011-15



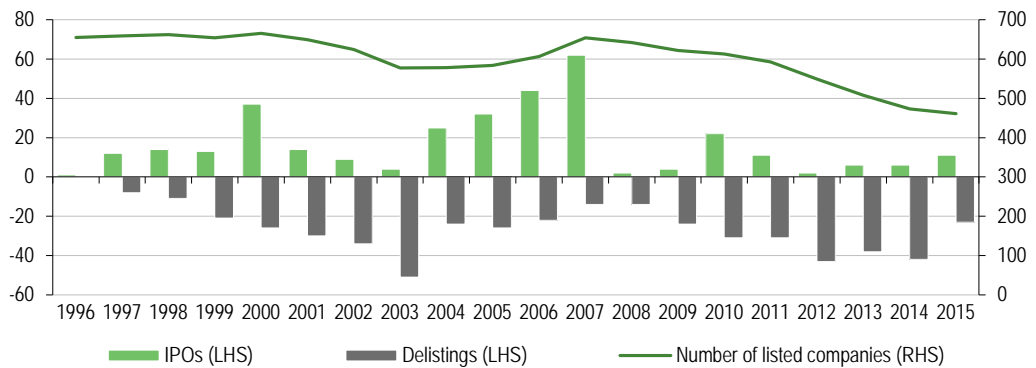
Source: TASE, NASDAQ, LSE, Edison Investment Research

We note that there are 131 companies in the broader technology sector (including software, hardware, IT services, biotech, medical devices and defence, among others) listed on the TASE, representing approximately 25% of the listed companies; however, most are small and the sector makes up only approximately 10% of the total market capitalisation of the TASE.

De-listings have been gathering pace

Following a brief recovery in net new companies on the TASE in the years leading up to the 2008 financial crisis, the number of de-listings has gathered pace, resulting in a 30% decline in total TASE traded companies from 2007-15. The de-listings are due to numerous factors, however there was a significant impact from the introduction of the Concentration Law in 2013, which was aimed at reducing the concentration of power in the hands of corporations and ultra-wealthy individuals and restricted the use of multi-tiered holding companies, among other measures. Other factors contributing to de-listings have been M&A activity and a regulatory environment that increased in severity as a response to the 2008 financial crisis and then continued to change frequently. In addition, there is often a desire among companies to avoid public exposure.

Exhibit 3: Number of companies listed on the TASE 1996-2015



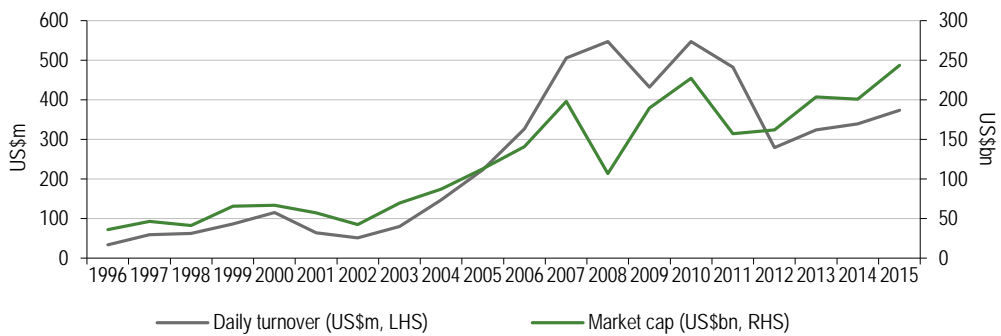
Source: TASE

Volumes also in decline

Similar to other exchanges around the world, the TASE saw a 32% decline in turnover in equities since the financial crisis despite a rebound in indexes to pre-crisis levels. International investors have significantly reduced in number on the TASE, largely as a result of the MSCI's 2010 upgrade of Israel to developed market status from emerging market status (Israel accounted for 2.7% of the MSCI Emerging Markets index before the upgrade, but only 0.2% of MSCI World afterwards) and because the MSCI did not include it in the MSCI Europe index. At such a small weighting, Israel has become virtually insignificant to international investors using MSCI World as a benchmark.

It is worth noting that the TASE hosts a very active bond market that in 2015 traded an average of US\$1.1bn per day (including ETNs). In addition, the ETN market itself is highly developed (there were 638 ETN series traded on the TASE in 2015) and equity-linked ETN trading represented 32% of total equity turnover on the TASE in 2015.

Exhibit 4: TASE daily turnover (US\$m) and market capitalisation (US\$bn)



Source: TASE

Structural reforms to reverse these trends

The wave of amendments to securities law, company law and tax reforms currently being implemented in Israel is designed to have a profound impact on the Israeli capital markets in general and the TASE in particular. While we acknowledge that it will take time to alter the decision-making processes of corporations and investors, at least the Israeli authorities have laid the groundwork for change.

Below we summarise the factors considered by companies and investors when comparing the merits of different exchanges – we compare the TASE before and after the reforms with the biggest competitor for listings, NASDAQ.

Exhibit 5: Factors considered by companies and potential investors			
	TASE (pre-reforms)	TASE (post-reforms)	NASDAQ
Listing fees	✓	✓	×
Regulatory requirements	×	✓	×
Continuing reporting obligations	×	✓	✓
Speed of issue	×	✓	✓
Quality of institutional investors	×	✓	✓
Tax burdens	×	✓	×
Research coverage	×	✓	✓
Investment accessibility and diversification of investment instruments	×	✓	✓

Source: Ernst & Young, Edison Investment Research

Following the planned reforms, the structural obstacles to the TASE attracting more Israeli companies (specifically technology companies) will have been largely removed. Indeed, Israel has certain inherent advantages over other markets from the perspective of smaller technology companies, eg as a result of the advantage of “home bias”, Israeli investors are more likely to be longer-term holders, and secondly the significant ETN/ETF industry in Israel, which ensures index members liquidity that they are hard pressed to find on overseas markets.

The opportunity for the TASE should not be underestimated; Israel has a world-leading technology sector and the financial services sector can attempt to fly on its coat tails.

A multi-pronged approach

As detailed in the ISA's 260-page [2015 Annual Report](#), the overriding aim of the reform of the Israeli capital markets and the TASE in particular is “to enable it to efficiently fulfil its function as a meeting place for investors and entrepreneurs, for financing economic activity and diversifying investments and savings channels for the public”.

To accomplish this goal, the ISA identifies two key challenges: “The first is restoring quality manufacturing companies’ interest in financing economic activities through the capital market and the Tel Aviv Stock Exchange. Such interest will only be achieved when the advantages of raising capital from the public exceed, in the eyes of any company considering an issue, the costs of its becoming a reporting corporation. The second challenge is increasing Israeli investors' interest in investing on the local market, inter alia, through developing the market and increasing the supply and quality of the products available to them”.

The reforms are numerous and it is beyond the scope of this report to detail them all. However, we do touch on three areas that we believe are most significant in reviving interest in the local capital markets:

1. an Israeli JOBS Act;
2. the TASE demutualisation; and
3. tax reforms.

An Israeli JOBS Act

The Israel Securities Authority (ISA), in collaboration with the Ministry of Finance and the Ministry of Justice, has issued 52 regulatory amendments to various securities laws since last year, which

significantly reduce disclosure requirements and provide many other forms of regulatory relief for small companies in an effort to encourage Israeli start-ups to go public in Israel.

These modifications are comparable to those introduced by the US Jumpstart Our Business Startups Act (JOBS Act) in 2012, which contributed to an IPO boom in 2013 and 2014, with 220 IPOs raising US\$77bn within nine months of the Act's passage. Of those IPOs, 84% were technology companies.

Below are the key features of the regulatory amendments in Israel that correspond to reliefs granted by the US JOBS Act:

- Exemption from reporting three-year comparative data; only two years required (eg 2015 versus 2014) for five years after the IPO date.
- Exemption from reporting on the effectiveness of internal control for a period of five years from IPO date.
- Only major developments are required in the quarterly reports in place of details regarding all events – only applies to companies in the TASE's Tech - Elite index (companies with minimum market cap of NIS150m).
- Biannual reporting instead of quarterly reporting for small companies (those with a market cap of less than NIS300m) and members of the TASE's Tech - Elite index for the first five years after listing – awaiting Knesset approval.
- Exemption from shareholders' approval on the transition to reporting in English as well as for dual listing only applies to companies in the TASE's Tech - Elite index.

Additional amendments that came into force include the following:

- Preparation of IPO prospectuses in English and filing US GAAP reports for companies that will join the TASE's Tech - Elite index on listing (minimum offering value of NIS100m required).
- All direct and indirect engagements between a company and its officers, including the dual role of a chairman serving as CEO, to require approval only five years after IPO date.

Tax reform

The Ministry of Finance has introduced a tax reform bill for Israeli and multinational high-tech companies in an attempt to encourage growth of the Israeli high-tech sector and to provide an incentive for multinationals to register their intellectual property in Israel.

The plan reduces companies' tax for Israeli and multinational mid-sized companies from 25% to 12% and dividends tax from 20% to 4%. In addition, large multinationals will be taxed at only 6% from (9-16%). The plan was proposed in a fast-track path and debated as part of the Economic Arrangements Law for 2017. Ernst & Young's Israeli Tax department head, Sharon Shulman, described the legislation as "very dramatic for Israeli high-tech" and said that "there won't be another event like this for the next 20-30 years".

While the tax reform encourages both Israeli and multinational firms to list and operate in Israel, other jurisdictions are facing new threats, eg the recent European Commission ruling against Apple to pay €13bn in back taxes.

Moves are also underway to alter the current tax regime, which establishes a structural preference to investing in the housing market over the capital market, eg recent taxes introduced on holders of investment properties. ISA chairman Professor Shmuel Hauser stated: "I believe that it is time to initiate, even as a temporary provision and for a limited term, a tax relief regime that will encourage investing on the local market. For instance, there is room to contemplate fostering the capital market (for investor benefit, and to cool down the real estate market) by repealing tax biases that encourage the public to invest in real estate rather than in the capital market".

TASE reforms

The ISA set up a committee in 2011 to improve trade efficiency and liquidity on the TASE. Management consultants McKinsey were retained to provide the committee with inputs. The key recommendations were as follows:

- To demutualise the TASE, expected to pass in the winter session of the Knesset.
- Easing membership criteria to encourage more foreign members.
- Increase competitiveness among brokerage firms.
- Upgraded trading system: MoU signed to purchase the Genium INET Nasdaq system.
- Change the trading days: from Sunday-Thursday to Monday-Friday.
- Index reform: widening of benchmark indexes to encourage broader market liquidity.
- The TASE clearing house will be able to provide services directly to European financial intermediaries and foreign investors.
- Increase research coverage of technology shares traded on the TASE: Edison is delighted to be involved with the TASE research programme.
- Non-voluntary listing of international technology companies with a market capitalisation of more than US\$50bn, allowing Israeli investors to trade in widely held US companies such as Facebook, Google and Apple on the TASE.

TASE demutualisation

The Knesset (the national legislature of Israel) has approved the first reading of a Bill introduced by the ISA and the Ministry of Finance to transform the TASE from a non-profit organisation to a for profit company ruled by a separation of ownership and membership.

This Bill, which is estimated to pass by the end of Q117; would cease the dominance of domestic banks, insurance companies and brokerages over the exchange (reducing the current holdings in the TASE from 71% to 35%), encourage competition over capital sources, diversify the investment instruments offered to the public and increase members of the exchange to also include foreign organisations.

In addition, the structural change lays a solid foundation for future strategic partnerships with international stock exchanges and investors. The January 2016 announcement that the TASE and NASDAQ signed an agreement to launch a new trading platform for Israel private technology companies and the purchase of the TASE's NASDAQ trading system boosted speculation of further co-operation between the two exchanges post-demutualisation. However, it should be noted that our understanding is that the TASE is open to all strategic options.

Challenges

Despite the effort to encourage companies to list and scale up in Israel, numerous challenges exist that could slow down or hinder the sought-after improvements, as the successful transition to a flexible and business-friendly environment is a complex and long-term process. A few of these challenges are highlighted below:

- Shortage of skilled workers: in June of 2016 the chief scientist at the Ministry of Finance reported that Israel will lack 10,000 engineers in the coming decade if the government does not address issues such as a decline in the share of Israelis graduating in the sciences. The Education Minister; Naftali Bennett, has launched a plan to boost technology and science graduates and to encourage more women, ultra-orthodox and members of the Arab community into the workforce. In addition, the government is considering offering long-term work visas for foreign engineers.
- A law was passed earlier this year capping compensation of executives in the financial services sector and there are concerns that the anti-business elements in the government intend to extend the cap to other sectors.
- The TASE Workers' Union opposes the plan to privatise the TASE and currently exerts power over it as a non-profit organisation on issues such as payments and provisions to employees. Ultimately, an agreement is expected to be reached with the unions that will give them a share of the TASE ownership post demutualisation.
- The high concentration of assets managed by a small number of Israeli institutional investors means that small companies will continue to find it difficult to attract the larger Israeli funds that rarely invest outside the TA-100, where the lowest market capitalisation is approximately US\$200m.

TASE trading guide

The current trading hours of the TASE are shown below. Note that there is a proposal to move the trading week from Sunday-Thursday to Monday-Friday to bring Israel in line with the most global markets. Share prices on the TASE are quoted in agorot (100 agorot = one shekel).

Exhibit 6: TASE trading hours (equities)				
Phase	Day	Group A shares	Group B shares	
Pre-opening	Sun-Thu	9:00	9:00	
Theoretical prices	Sun-Thu	9:10	9:10	
Opening auction	Sun-Thu	9:45-9:46	10:15	
Continuous trading	Sun-Thu	9:45-9:46	10:15	
Pre-closing & theoretical	Sunday	16:14-16:15	16:14-16:15	
	Mon-Thu	17:14-17:15	17:14-17:15	
Closing auction	Sunday	16:24-16:25	16:24-16:25	
	Mon-Thu	17:24-17:25	17:24-17:25	

Source: TASE

Group A shares are those included in the Index Universe, ETNs and units in closed-end mutual funds.

Group B shares are not included in the Index Universe and convertible securities.

Note all times are Israel Standard Time, ie GMT + 2 hours.

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Dan is the head of Edison's technology and telecoms team. He has over 16 years' experience covering the technology and telecoms industries. He was formerly a technology analyst for Singer Capital Markets, Teathers, Bridgewell, RW Baird and Nomura. Before this he advised on emerging trends in technology as a market analyst at Ovum, having started his career in the telecommunications software industry.

Will Manuel, Director Edison Israel

Will has over 20 years' experience in financial services as an analyst and head of emerging markets equity research 2005-10. He is an award winning Israel country analyst; 2000-05 HSBC, previously at Merrill Lynch and Psagot Ofek before joining Edison as Israel representative in 2014.

Peter Molloy, President, Edison US

Peter is one of the founding directors of Edison and is based in the New York office. Before this he was a senior investment manager at Hermes Investment Management, managing a UK-focused small- and a mid-cap portfolio, and had close involvement with Hermes' shareholder activism initiatives. Peter started his career with Sun Life of Canada Asset Management as an investment analyst.

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