

Figure 1: Increasing cyber threats and attacks in last 12 months:



Figure 2: Global cybersecurity deals: 2017 was a record year:

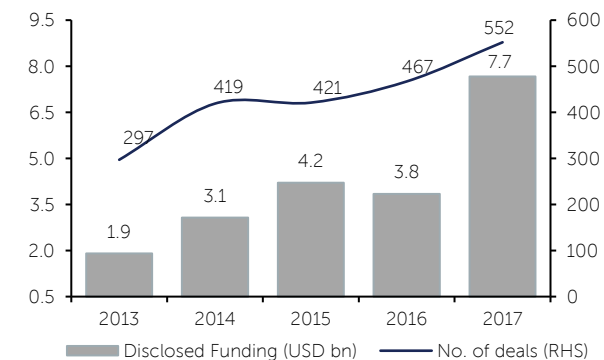
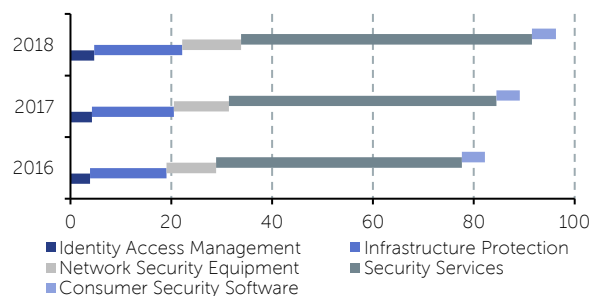


Figure 3: Worldwide security spending expected to rise further:



Source: Figure 1 – IT Pro (02/21/2018), Figure 2 – CB Insights, Figure 3 – Gartner (12/07/2017)

## Cyber Security

Present massive reliance on digital systems and networks has resulted in unprecedented rise in computer oriented crimes, also known as cybercrimes. In 2017, confidential data of around 3 billion users and 145 million customers of Yahoo and Equifax, respectively, was put to security risk during the cyberattacks, illustrating the constantly evolving and expanding threat from cybercrimes. In order to protect and prevent against rising cybercrimes, companies globally spend significant amount of money on products and services to ensure cybersecurity. Cybersecurity products protect computer hardware, software, networks and data from any potential vulnerabilities, unauthorized access, attacks, and other security concerns.

## Growth Opportunity – Is it the right time to invest?

**Rising cybercrime activities:** Internet users will increase to 6.0 billion and 7.5 billion by 2022 and 2030, respectively, from 3.8 billion in 2017, according to Cybersecurity Ventures research. Certainly, cybercrimes will also rise on the back of such high participation in the internet activities (Figure 1). The research firm estimated that the world will face USD 6 trillion in annual cybercrime damages by 2021, almost double from the USD 3 trillion in 2015. The most vulnerable industries will be healthcare, manufacturing, financial services, government, and transportation.

**Rapidly growing cybersecurity industry:** The cybersecurity industry stood strong at around USD 138 billion in 2017 and is expected to increase to USD 232 billion in 2022 at a compounded annual growth rate of 11%, according to Markets and Markets research. The alarming rise in cyber terrorism and stricter data protection requirements are the key forces driving the cybersecurity market. According to research firm Gartner, organizations across the world will spend USD 96.3 billion on enterprise security in 2018, representing an 8% increase from 2017 (Figure 3). The research firm anticipated that the cumulative spending will exceed USD 1 trillion within next five years.

**Increasing initiatives for cybersecurity implementation:** Interestingly, technology and digital media giants, and conglomerates have been increasing their involvement in strengthening the cybersecurity framework. Alphabet, the parent company of Google, has recently formed a new cybersecurity company called Chronicle, which presently is in the early stages of developing a cybersecurity intelligence and analytics platform. Facebook has also stepped up its focus on cybersecurity by appointing a former White House cyber official, as its first director of cybersecurity policy. In February 2018, Siemens formed a consortium of companies with the vision to build greater cybersecurity standards. The major industrial and technology associates in the group include Airbus, Allianz, Daimler Group, IBM, NXP semiconductors, and Deutsche Telekom. These companies have signed a charter which will introduce a dedicated ministry in governments and a chief information security officer at companies to implement stricter cybersecurity measures. The governments across the world are also actively reinforcing cybersecurity networks. The US had signed an executive order in May 2017 to strengthen cybersecurity of federal networks and critical infrastructure. China implemented new cybersecurity laws in June 2017, which will help in protecting personal information and individual privacy.

**Robust profitability driving consolidation deals:** In the recent past, most of the cybersecurity companies had reported sustainable earnings, which were above the market consensus expectations, while also providing a solid earnings outlook for future. For instance, during 3Q 2018, FireEye Inc. reported an 8% y/y growth in revenue, while Imperva Inc. posted a 9% y/y increase. The higher growth prospects have driven the global market consolidation with rise in number of deals and disclosed funding during 2017 (Figure 2).

### Fund Details

Ticker	HACK US
ISIN	US26924G2012
Domicile	United States
Currency	USD
Primary Benchmark	P CYBER IDX GTR
Inception Date	11/12/2014
Total Assets (mn)	1,580

Figure 4: Portfolio Allocation: Geography & Sector:

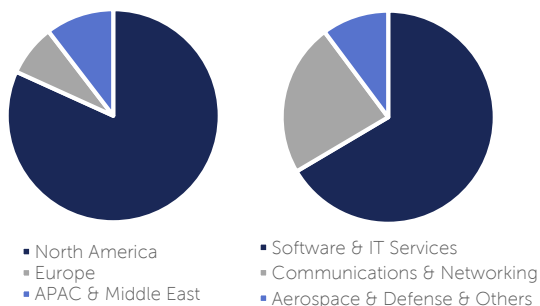
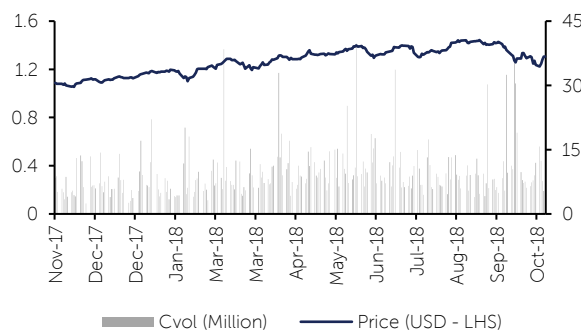


Figure 5: Price-Volume Chart:



Source: Figure 4 – XTF Summary Fact Sheet (10/31/2018), 5 – FactSet, (11/02/2018)

### The Fund

The ETFMG Prime Cyber Security ETF seeks to provide investment results that, before fees and expenses, correspond generally to the price and yield performance of the Prime Cyber Defense Index.

**The Reference Index:** The Index tracks the performance of the equity securities (or corresponding American Depositary Receipts (ADRs) or Global Depositary Receipts (GDRs)) of companies across the globe that engage in providing cybersecurity applications or services as a vital component of their overall business (Cybersecurity Architecture Providers) or provide hardware or software for cybersecurity activities as a vital component of their overall business (Cybersecurity Application Providers). The Index has a quarterly review in March, June, September, and December each year at which times the Index is reconstituted and rebalanced by the Index Provider. As of October 31, 2018, the Index had 50 constituents and the three largest stocks and their weightings in the Index were Cisco Systems (4.66%), Imperva Inc. (4.59%) and FireEye Inc. (4.42%).

**Index Composition:** The Index's exposure to each sector is based on the cumulative market capitalization of index components within the sector relative to the combined market capitalization of Cybersecurity Architecture Providers or Cybersecurity Application Providers sectors. The cumulative weight of all the constituents with an individual weight of 5% or greater may not be in the aggregate account for more than 50% of the weight of the Index as of the Selection Day. Additionally, Index constituents with a market capitalization of less than USD 600 million as of the Selection Day will have their weight reduced by 30–35% depending on their specific market capitalization, and constituents with a three-month average daily value traded (ADVT) of less than USD 2.5 million as of the Selection Day will have their weight reduced by 15–55% depending on their specific ADTV (collectively, the Liquidity Requirements). The weight of any individual Index constituent whose weight is reduced due to the liquidity requirements will be redistributed pro rata among all other Index constituents whose weights have not been reduced due to the liquidity requirements based on the ADTV of such constituents.

**Constituent selection:** Companies meeting the sector criteria are screened for investibility (e.g., must not be listed on an exchange in a country which employs certain restrictions on foreign capital investment), a minimum market capitalization of USD 100 million at the time of selection, and an operating company structure (as opposed to a pass-through security). The Index Provider may include companies in the Index with a market capitalization within 5% of the above threshold as of the Selection Date to account for short term fluctuations in market capitalization resulting from changes in a security's price.

### Principal Investment Strategies

The Fund uses a passive or indexing approach to try to achieve its investment objective and under normal circumstances,

- 1) Uses a replication strategy. A replication strategy is an indexing strategy that involves investing in the securities of the Index in approximately the same proportions as in the Index.
- 2) Invests at least 80% of its total assets, exclusive of collateral held from securities lending, in the component securities of the Index and in ADRs and GDRs based on the component securities in the Index.
- 3) May invest up to 20% of its total assets in securities that are not in the Fund's Index to the extent that the Fund's Adviser believes such investments will help the Fund's overall portfolio track the Index.
- 4) Will concentrate its investments (i.e., hold 25% or more of its net assets) in a particular industry or group of related industries to approximately the same extent that the Index is concentrated.

# Thematic Insights

ETFMG Prime Cyber Security ETF



ASSET  
MANAGEMENT  
LIMITED

2 November 2018

## Disclaimer

**ADCB Assets Management Limited is a member of ADCB Group, licensed by Financial Services Regulatory Authority ("FSRA") in Abu Dhabi Global Market.** This report is intended for general information purposes only for customers of ADCB Asset Management Limited ("AAML") who are either retail or professional investors. It should not be construed as a recommendation, offer or solicitation to purchase or dispose of any securities or to enter in any transaction. The content of this report should not be considered legal, regulatory, credit, tax or accounting advice. Anyone proposing to rely on or use the information contained in the report should independently verify and check the accuracy, completeness, reliability and suitability of the information, obtain independent and specific advice from appropriate professionals or experts regarding information contained in this report and make independent decisions regarding any security mentioned in this report. Information contained herein is based on various sources, including but not limited to public information, that AAML considers accurate and reliable. However, AAML makes no representation or warranty as to the accuracy or completeness of any statement made in or in connection with this report and accepts no responsibility whatsoever for any loss or damage caused by any act or omission taken as a result of the information contained in this report. Charts, graphs and related data or information provided in this report are intended to serve for illustrative purposes only.

The information contained in this report is prepared as of a particular date and time and will not reflect subsequent changes in the market or changes in any other factors relevant to their determination. AAML expressly disclaims any obligation to update or revise any forward looking statements to reflect new information, events or circumstances after the date of this report or to reflect the occurrence of unanticipated events. ADCB Group does and may at any time solicit or provide commercial banking, investment banking, credit, advisory or other services to the companies covered in its reports. As a result, recipients of this report should be aware that any or all of the foregoing services may at time give rise to a conflict of interest that could affect the objectivity of this report. **Past performance does not guarantee future results.** Investment products are not bank deposits and are not guaranteed by ADCB Group. They are subject to investment risks, including possible loss of principal amount invested.

*Sources: 1. Cybercrime Report 2017, Cybersecurity Ventures (Oct 2017), 2. Top 5 cybersecurity facts, figures and statistics for 2018, CSO Online (Jan 2018), 3. What is cyber security? How to build a cyber security strategy, CSO Online (Dec 2017), 4. Gartner Forecasts Worldwide Security Spending Will Reach \$96 Billion in 2018, Up 8 Percent from 2017, Gartner (Dec 2017), 5. The cyber security threat in six charts, IT Pro (Feb 2018), 6. Facebook, Google ramp up cyber initiatives, Politico.com (Jan 2018), 7. Industry giants sign cybersecurity charter, TechCentral.ie (Feb 2018), 8. Cybersecurity Trends to Watch in 2018, CB Insights, 9. Cybersecurity Companies to Watch in 2018, Cybersecurity Investing News (Feb 2018), 10. Bloomberg Fund Details (Dec 2017), 11. Schwab Exchange Traded Funds Report Card, Charles Schwab (Feb 2018), 12. FactSet Fund Details (Nov 2018), 13. Summary Prospectus, ETF Managers Group (Sep 2017), 14. Prospectus, XTF (Oct 2018).*