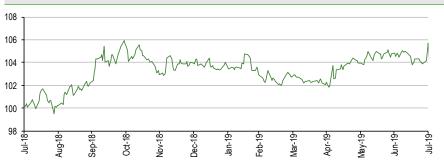


### Aberdeen Asian Income Fund

### Long-term record of double-digit total returns

Aberdeen Asian Income Fund (AAIF) aims to generate an above-average level of income and long-term capital growth, even in challenging times, from a diversified portfolio of Asia Pacific equities. Data from the fund's manager Aberdeen Standard Investments (ASI) Asia highlight the importance of income in the region; since 2000, c 50% of share price total returns have been from reinvested dividends and corporates are supportive of dividend growth. AAIF has generated double-digit NAV and share price total returns over the last decade and currently offers a 4.4% dividend yield. The dividend is well covered and the fund has c 0.9x the FY18 annual distribution in revenue reserves.

#### NAV outperforming during a volatile period for the MSCI AC Asia Pacific ex-Japan index



Source: Refinitiv, Edison Investment Research

### The market opportunity

The Asia Pacific region has above-average growth prospects, due to a variety of factors, including a growing middle class. Earnings valuations are also relatively attractive, while a culture of higher dividends means Asian equities now offer a comparable yield compared with global equities.

### Why consider investing in AAIF?

- Exposure to region with above-average growth and attractive valuations, with differentiated geographic weightings versus its peers.
- Long-term outperformance versus the Asia Pacific stock market and it outpaced a strong market in the first half of 2019.
- High-conviction, fundamental approach, with well-resourced team seeking high-quality companies with high and growing dividends that can be held for the long term (attractive 4.4% dividend yield fully funded from portfolio income).

### Potential for higher rating

AAIF's current 9.0% share price discount to cum-income NAV compares with the average discounts of 8.8%, 8.0%, 6.5% and 2.2% respectively over the last one, three, five and 10 years. There is scope for the discount to narrow given the fund's performance track record and its two closest peers in the AIC Asia Pacific Income sector are consistently rated more highly. AAIF has increased its dividend for the last 10 consecutive years and currently yields 4.4%.

## Investment companies Asia-Pacific equity income

#### 16 August 2019

Price	209.5p
Market cap	£373m
AUM	£440m

 NAV\*
 228.6p

 Discount to NAV
 8.3%

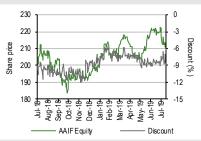
 NAV\*\*
 230.2p

 Discount to NAV
 9.0%

\*Excluding income. \*\*Including income. As at 14 August 2019.

Ordinary shares in issue 177.9m
Code AAIF
Primary exchange LSE
AIC sector Asia Pacific Income

#### Share price/discount performance



#### Three-year performance vs index



52-week high/low 222.5p 183.5p NAV\*\* high/low 243.7p 207.8p \*\*Including income.

# Gearing 8.4% Net\* 6.8%

\*As at 30 June 2019.

Analysts

Mel Jenner +44 (0)20 3077 5720 Sarah Godfrey +44 (0)20 3681 2519

investmenttrusts@edisongroup.com

Edison profile page

Aberdeen Asian Income Fund is a research client of Edison Investment Research Limited



#### Exhibit 1: Company at a glance

#### Investment objective and fund background

AAIF aims to provide investors with a total return primarily through investing in Asian Pacific securities, including those with an above-average yield. Within its overall investment remit, the company aims to grow its dividends. While the portfolio is constructed without reference to any benchmark, the company measures its performance against the MSCI AC Asia Pacific ex-Japan index, in sterling terms.

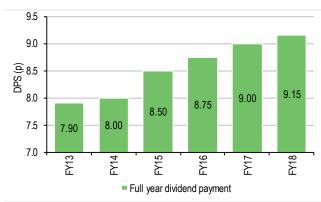
#### Recent developments

- 14 August 2019: results for the six months ended 30 June 2019. NAV TR +13.3% and share price TR +13.4% versus TR +12.5% for the MSCI AC Asia Pacific ex-Japan and TR +11.5% for the MSCI AC Asia Pacific ex-Japan High Dividend Yield indices (both currency adjusted).
- 10 July 2019: second interim dividend of 2.25p declared for the year ending 31 December 2019, payable on 24 August.
- 11 April 2019: first interim dividend of 2.25p declared for the year ending 31 December 2019, payable on 24 May.

Forthcoming		Capital structure		Fund deta	Fund details			
AGM	May 2020	Ongoing charges	1.07%	Group	Aberdeen Standard Investments			
Final results	April 2020	Net gearing	6.8%	Manager	Aberdeen Standard Investments Asia			
Year end	31 December	Annual mgmt fee	0.85%	Address	1st Floor, Sir Walter Raleigh House,			
Dividend paid	Quarterly	Performance fee	No		48-50 Esplanade, St Helier, Jersey, JE2 3QB			
Launch date	December 2005	Company life	Indefinite	Phone	0808 500 0040/+44 (0) 20 7618 1444			
Continuation vote	None	Loan facilities	£50m with Scotiabank	Website	www.asian-income.co.uk			

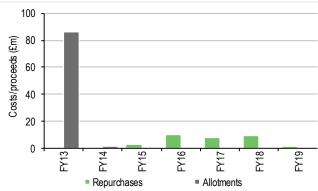
#### Dividend policy and history (financial years)

Dividends are paid quarterly, in May, August, November and February. The board's aim is to grow the company's dividends.

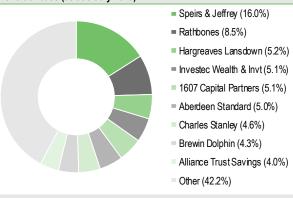


#### Share buyback policy and history (financial years)

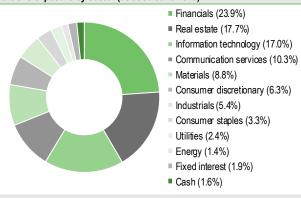
Renewed annually, the board has the authority to repurchase up to 14.99% of AAIF shares or allot up to c 10% of shares. Shares may be repurchased when the discount to NAV exceeds 5%.



### Shareholder base (as at 5 July 2019)



### Portfolio exposure by sector (as at 30 June 2019)



Top 10 holdings (as at 30 June 2019)				
			Portfolio	weight %
Company	Country	Sector	30 June 2019	30 June 2018*
Samsung Electronics (pref)	South Korea	Information technology	5.1	4.2
Taiwan Semiconductor Manufacturing Co	Taiwan	Information technology	4.7	4.4
Tesco Lotus Retail Growth	Thailand	Consumer staples	3.8	2.8
HSBC	Hong Kong	Financials	3.7	3.8
Venture Corporation	Singapore	Information technology	3.7	4.0
Oversea-Chinese Banking Corporation	Singapore	Financials	3.3	3.3
Taiwan Mobile	Taiwan	Communication services	2.9	2.7
SingTel	Singapore	Communication services	2.7	N/A
Ping An Insurance	China	Financials	2.7	N/A
LG Chem (pref)	South Korea	Materials	2.4	N/A
Top 10 (% of holdings)			35.0	33.5

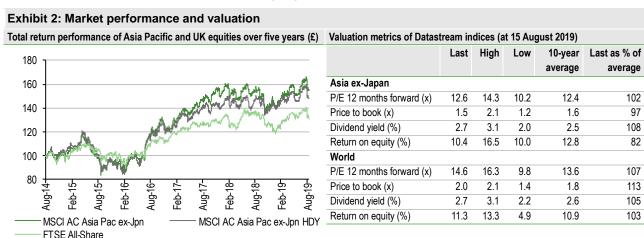
Source: AAIF, Edison Investment Research, Bloomberg, Morningstar. Note: \*N/A where not in end-June 2018 top 10.



### Market outlook: Attractive prospects in the region

Exhibit 2 (LHS) illustrates that over the last five years, the performance of Asia Pacific equities has significantly outpaced that of UK shares (both in sterling terms). The Asia Pacific region has above-average growth prospects, helped by structural trends including increased demand for premium products, rising urbanisation and the proliferation of ecommerce. In its July 2019 World Economic Outlook, the International Monetary Fund forecast growth in emerging and developing Asia of 6.2% pa in both 2019 and 2020, which is considerably higher than 1.9% in 2019 and 1.7% in 2020 for advanced economies.

Despite the region's superior growth expectations, Asian shares look relatively attractively valued; the Datastream Asia ex-Japan index is trading on a forward P/E multiple of 12.6x, which is a 13.3% discount to the Datastream World index forward P/E of 14.6x. Asia ex-Japan is also trading on a lower premium to its 10-year average – 2% versus 7% for global equities – and with the trend towards higher dividend payments, the region now has a comparable dividend yield to the world market. The investment backdrop of higher growth potential and more attractive equity valuations suggests that global investors may benefit from exposure to the Asia Pacific region, perhaps favouring high-quality companies offering competitive dividend yields given current macro uncertainties, such as the ongoing trade dispute between the US and China.



Source: Refinitiv, Edison Investment Research

### Fund profile: High yield and long-term capital growth

AAIF was launched in December 2005 and is registered in Jersey as a closed-end investment company. It aims to generate an attractive total return, benefiting from the growth prospects of Asian companies, including those with above-average dividend yields. AAIF aims to grow its dividends. The company is managed by ASI Asia, which is based in Singapore and is the Asia Pacific headquarters of Standard Life Aberdeen. ASI Asia has input from investment teams around the region. AAIF is able to invest in any geographies or sectors in the Asia Pacific region, in companies across the market-cap spectrum. While its portfolio is constructed without reference to a benchmark, performance is measured against the MSCI AC Asia Pacific ex-Japan and the MSCI AC Asia Pacific ex-Japan High Dividend Yield indices (both currency adjusted). The manager can invest in preference shares, debt, convertible securities, warrants and equity-related securities, and off-benchmark stocks (which includes Japan); although, in aggregate, these securities are less than 10% of the fund's NAV. AAIF's portfolio typically contains between 40 and 70 holdings; a maximum 20% of total assets is permitted in a single issuer. The board has recently authorised the manager to write covered put and call options and to undertake stock lending to generate additional revenue,



although these features will be used sparingly. Gearing of up to 25% of NAV (up to 15% of NAV in normal market conditions) is permitted; net gearing at end-June 2019 was 6.8%.

### The fund manager: ASI Asia

### The manager's view: Improving earnings estimate revisions

We spoke with Yoojeong Oh, one of AAIF's portfolio managers, who suggests the outlook for corporate earnings is improving, while Asian companies still have significant cash on their balance sheets. Over the last 12 months, there have been a series of negative earnings estimate revisions, especially in the technology sector as the trade dispute between the US and China has escalated. However, the manager notes that high-quality companies are now experiencing upward estimate revisions, so she is hopeful that 'earnings are turning around'. Oh highlights AAIF's positions in technology bellwethers Taiwan Semiconductor Manufacturing Company and Samsung Electronics. She says these companies are at the top of the supply chain and the team is upbeat about their potential in 2020, following on from a lower-growth environment this year. Oh is encouraged by these companies' prospects over the next three to five years, partly due to increased demand for artificial intelligence technologies, which require many complex semiconductor memory chips; the team has taken advantage of share price weakness to increase AAIF's exposure to these firms.

The manager says at the start of this year, company valuations looked 'very attractive indeed' given the long-term growth potential in the Asia Pacific region. AAIF has a bias towards the South East Asian economies, where there are very favourable demographic trends, including a growing middle class; the fund is skewed to domestic rather than export-led growth, taking advantage of the significantly higher economic activity in emerging compared with developed markets.

### Asset allocation

### Investment process: Seeking mispriced securities

The manager's philosophy is that a company's share price is driven by the firm's fundamentals, but over shorter periods, stock markets can be inefficient, leading to mispriced securities. Oh and the rest of the investment team undertake their own fundamental research and due diligence, including many face-to-face meetings, seeking companies that are trading at a discount to their estimated intrinsic worth. The focus is on high-quality businesses with strong franchises exposed to long-term growth trends in the Asia Pacific region, which have strong balance sheets that can support healthy dividend payments. AAIF's investible universe contains all companies in the region with in-house 'buy' or 'hold' recommendations. Portfolio turnover is low, averaging c 10–15% pa, implying around a seven- to 10-year holding period (in 2018, seven new positions were initiated, whereas there were 10 complete disposals and portfolio turnover was 13%). Oh says the level of activity in the fund is driven by available investment opportunities, with ideas generated by the more than 50-strong Asian team of investment professionals in eight countries in the region highlighting ideas suitable for an income fund. She says the Asian market is now more income friendly, offering a greater number of potential investee companies.

The manager stresses the importance of environmental, social and governance engagement with company managements as part of the research process. She highlights China Resources Land, which the investment team has met with several times in recent months, encouraging the company to capture the growing opportunities in green building design and development. Oh says the Chinese property developer has been willing to support ASI Asia's suggested initiatives, such as changing its reporting and management structure to exercise greater control over the firm's local



teams, ensuring they pay more attention to green certification and processes initiated at the company's headquarters.

The manager suggests that following board approval to write covered options, AAIF's revenue potential could be enhanced by around 20–30bp pa from option premiums. All option activity will be in line with the current investment process. As an example, the team was looking to reduce the fund's exposure to Australian miner Rio Tinto, based on the belief that elevated iron ore prices (due to an outage at Brazilian competitor Vale) are unsustainable, so a short-dated covered call was written on the stock.

### **Current portfolio positioning**

At end-June 2019, AAIF's top 10 positions made up 35.0% of the portfolio, which was broadly in line with 33.5% at end-June 2018. As shown in Exhibit 3, compared with the MSCI AC Asia Pacific ex-Japan index, AAIF has a significant overweight position to Singapore (+19.0pp), where the team finds good-quality businesses with above-market dividend yields and has a similar sized underweight exposure to China (-19.6pp); this includes zero holdings in low/no-dividend paying, large internet companies such as Tencent and Alibaba, which together make up c 10% of the index. In terms of sector exposure, the greatest divergences between AAIF and the MSCI AC Asia Pacific ex-Japan index are an overweight in real estate (+11.1pp) and an underweight position in consumer discretionary (-5.6pp).

		• • • • • • • • • • • • • • • • • • • •				
	Portfolio end- June 2019	Portfolio end- June 2018	Change (pp)	Index weight	Active weight vs index (pp)	Fund weight/ index weight (x)
Singapore	22.3	24.1	(1.8)	3.3	19.0	6.8
Australia	19.3	19.6	(0.3)	17.3	2.0	1.1
China	10.7	9.5	1.2	30.3	(19.6)	0.4
Hong Kong	9.2	10.7	(1.5)	9.7	(0.5)	0.9
Taiwan	9.0	7.1	1.9	10.4	(1.4)	0.9
South Korea	7.6	5.6	2.0	11.9	(4.3)	0.6
Thailand	7.2	5.9	1.3	2.9	4.3	2.5
Japan	3.8	4.2	(0.4)	0.0	3.8	N/A
Malaysia	3.4	6.5	(3.1)	2.0	1.4	1.7
New Zealand	2.7	3.0	(0.3)	0.6	2.1	4.5
India	2.1	0.9	1.2	8.6	(6.5)	0.2
United Kingdom	0.6	1.3	(0.7)	0.0	0.6	N/A
Indonesia	0.5	0.0	0.5	2.0	(1.5)	0.3
Philippines	0.0	0.0	0.0	1.1	(1.1)	0.0
Sri Lanka	0.0	0.9	(0.9)	0.0	0.0	N/A
Cash	1.6	0.7	0.9	0.0	1.6	N/A
	100.0	100.0		100.0		

Source: Aberdeen Asian Income Fund, Edison Investment Research. Note: Numbers subject to rounding.

Given attractive valuations in the Asia Pacific region, there are a number of new positions in AAIF's portfolio. These include:

- Auckland International Airport operates in a quasi-monopoly, attractive growth market. It owns a significant number of freehold assets and has opportunities to develop the land around the airport. Auckland International Airport has a strong balance sheet, which supports its history of growing dividends.
- Bank Rakyat Indonesia specialises in microfinance and lending to small and medium-sized enterprises (SMEs). It is benefiting from consumption growth and favourable demographic trends (Indonesia has one of the largest emerging market populations). Bank Rakyat has high-quality assets on its balance sheet and has good potential for dividend growth (current yield is c 3%). Oh says that while its net interest margins will come under pressure in a lower interest rate environment, this should be more than offset by domestic demand growth.
- China National Offshore Oil Corporation (CNOOC) the manager explains that this
  company was trading at a discount to its estimated fair value, based on ASI Asia's in-house



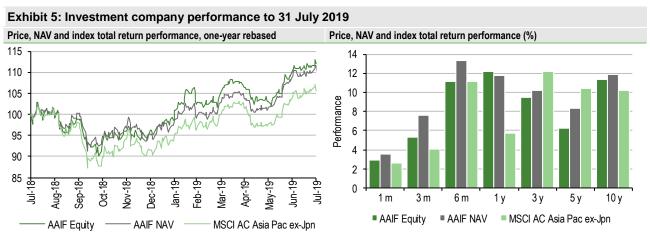
- forecast of \$60 per barrel of oil equivalent. CNOOC has good production growth and a strong balance sheet supporting a dividend yield of c 6%.
- Medibank an Australian insurance company catering to the growing healthcare sector. It has net cash on its balance sheet and a growing dividend. Oh believes that Medibank has a strong technology platform, whose value is not being reflected in its current share price.
- Tisco offers car financing in Thailand; it is the market leader with a very conservative and selective credit rating system. The company should benefit from higher auto demand in a lower interest rate environment. Tisco's strong balance sheet offers the potential for dividend growth.

### Performance: Strong start to 2019

Exhibit 4: Five-year discrete performance data									
12 months ending	Share price (%)	NAV (%)	MSCI AC Asia Pac ex-Jpn (%)	MSCI AC Asia Pac ex-Jpn HDY (%)	FTSE All-Share (%)				
31/07/15	(6.1)	(5.5)	(1.2)	1.2	5.4				
31/07/16	10.1	17.8	17.6	11.9	3.8				
31/07/17	16.1	16.2	25.7	22.6	14.9				
31/07/18	0.8	3.1	6.1	5.9	9.2				
31/07/19	12.2	11.8	5.7	6.7	1.3				
On the Defeation No.	ta. All O/ am a tatal mate.	and the sector that has	and the second second						

Source: Refinitiv. Note: All % on a total return basis in pounds sterling.

In H119, AAIF's NAV and share price total returns of +13.3% and +13.4% respectively were ahead of the +12.5% total return of the MSCI AC Asia Pacific ex-Japan index and the +11.5% total return of the MSCI AC Asia Pacific ex-Japan High Dividend Yield index. Oh says she is encouraged that the fund's performance kept up with a strong stock market in H119 despite wide divergences from the indices, such as an overweight position in technology and an underweight position in the banking sector, and a large overweight exposure to Singapore, with a below-index weight in India. AAIF has benefited from being underweight South Korea, which has underperformed, but Oh notes that stock selection in the country has also been favourable, such as the positions in LG Chem and Samsung Electronics. Detractors from AAIF's performance in the first half of this year included not owning Hong Kong insurance company AIA, although this was more than outweighed by good performance from the company's holding in Ping An Insurance. The position in HSBC has not been beneficial in the short term. However, Oh is confident in the company's longer-term prospects; it is restructuring its operations, has a valuable franchise based on global trade flows and offers an attractive c 7.0% dividend yield.



Source: Refinitiv, Edison Investment Research. Note: Three, five and 10-year performance figures annualised.

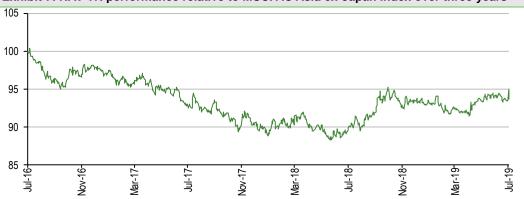


Exhibit 6: Share price and NAV total return performance, relative to indices (%)									
One month Three months Six months One year Three years Five years									
Price relative to MSCI AC Asia Pac ex-Japan	0.3	1.2	0.0	6.1	(6.9)	(17.2)	11.2		
NAV relative to MSCI AC Asia Pac ex-Japan	0.9	3.3	2.0	5.7	(5.0)	(8.9)	16.7		
Price relative to MSCI AC Asia Pac ex-Japan HDY	1.2	2.3	2.6	5.2	(5.2)	(13.5)	10.0		
NAV relative to MSCI AC Asia Pac ex-Japan HDY	1.9	4.5	4.7	4.8	(3.3)	(4.9)	15.5		
Price relative to FTSE All-Share	0.9	2.7	0.5	10.8	3.3	(2.3)	16.9		
NAV relative to FTSE All-Share	1.6	4.9	2.5	10.4	5.5	7.4	22.7		

Source: Refinitiv, Edison Investment Research. Note: Data to end-July 2019. Geometric calculation.

AAIF's relative returns are shown in Exhibit 6. It has outperformed both the MSCI AC Asia Pacific ex-Japan and the MSCI AC Asia Pacific ex-Japan High Dividend Yield indices over one and 10 years in both NAV and share price terms, while lagging over three and five years (periods during which growth stocks performed relatively better than value stocks). For UK-based investors, it is interesting to note that AAIF has outperformed the FTSE All-Share index in both NAV and share price terms over almost all periods shown.

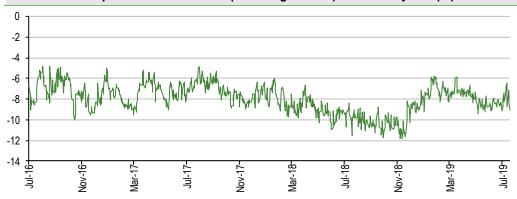
Exhibit 7: NAV TR performance relative to MSCI AC Asia ex-Japan index over three years



Source: Refinitiv, Edison Investment Research

### Discount: Scope for discount to narrow

Exhibit 8: Share price discount to NAV (including income) over three years (%)



Source: Refinitiv, Edison Investment Research

Oh comments that AAIF's discount remains persistently wide. However, she is hopeful that the shares can rerate, given the fund's strong performance (both absolute and relative) over the last 12 months and the focus on quality companies, which are generally preferred by investors during periods of higher stock market volatility. AAIF is currently trading at a 9.0% share price discount to cum-income NAV, which is around the middle of the 5.7% to 11.8% range of discounts over the last



12 months. Over the last one, three, five and 10 years, the fund has traded at average discounts of 8.8%, 8.0%, 6.5% and 2.2% respectively.

The board is committed to repurchasing shares when the share price discount to ex-income NAV exceeds 5% (in normal market conditions). During H119, 0.7m shares were bought back (0.4% of the share base) at a cost of c £1.4m.

### Capital structure and fees

AAIF is a Jersey-registered, London-listed closed-end investment company with one class of share; there are currently 177.9m ordinary shares in issue (with a further 17.1m held in treasury). It has a £40m three-year unsecured loan facility with Scotiabank (Ireland), with an option to increase it to £60m. In March 2018, the company entered into a new three-year £10m term facility with Scotiabank Europe to replace a similar maturing facility. At end June 2019, net gearing was 6.8%. AAIF's investment manager is Aberdeen Private Wealth Management (APWML), which subdelegates portfolio management to ASI Asia. AWPML receives an annual management fee of 0.85% of AAIF's rolling monthly-average NAV over the previous six months. Fees are charged 40% to revenue and 60% to capital, in line with the expected split of returns between income and capital; there is no performance fee. In H119, the company's ongoing charges were 1.07%, 4bp lower than 1.11% in FY18.

### Dividend policy and record

Oh comments that more and more Asian companies are recognising the importance of paying an annual dividend. This has allowed AAIF to more than double its dividend since the fund's launch in 2005, while reserves have been built up (c 8.5p per share at end-H119). The company pays quarterly dividends in May, August, November and February. In FY18, the 9.15p per share dividend was +1.7% year-on-year and was more than covered by income. AAIF has been added to the AIC's list of 'next-generation dividend heroes', having increased its dividend for 10 consecutive years. For FY19, the board has announced its intention to declare three interim dividends of 2.25p per share; a decision on the level of the fourth interim dividend will be made in January 2020. Based on its current share price, AAIF offers a 4.4% dividend yield.

### Peer group comparison

Exhibit 9: AIC Asia Pacific Income sector as at 13 August 2019*										
% unless stated	Market cap £m	NAV TR 1 year	NAV TR 3 year	NAV TR 5 year	NAV TR 10 year	Discount (cum-fair)	Ongoing charge	Perf. fee	Net gearing	Dividend yield
Aberdeen Asian Income	379.8	4.6	21.8	42.6	194.2	(7.4)	1.1	No	107	4.3
Henderson Far East Income	474.0	3.9	22.6	51.7	139.0	1.8	1.1	No	102	6.1
JPMorgan Asian	344.3	1.8	41.2	86.6	155.3	(6.2)	0.7	No	100	3.2
Martin Currie Asia Unconstrained	145.2	(0.6)	26.5	56.3	114.1	(3.6)	1.1	No	100	2.0
Schroder Oriental Income	668.1	2.8	23.9	66.4	270.8	1.0	0.8	Yes	102	3.9
Average (5 funds)	402.3	2.5	27.2	60.7	174.7	(2.9)	1.0		102	3.9
Company rank in sector	3	1	5	5	2	5	3		1	2

Source: Morningstar, Edison Investment Research. Note: \*Performance to 12 August 2019 based on ex-par NAV. TR=total return. Net gearing is total assets less cash and equivalents as a percentage of net assets.

AAIF is a member of the newly formed five-strong AIC Asia Pacific Income sector. Its NAV total returns rank first over the last 12 months (2.1pp above the mean), second over 10 years (19.5pp above the mean) and are below average over three and five years. Despite the fund's above-average performance over the last one and 10 years, its discount is the widest in the peer group (its



two closest peers, Henderson Far East Income and Schroder Oriental Income are both consistently afforded a higher rating); the valuation differentials may be due to AAIF's large Singaporean weighting and below-index exposure to China. The company's ongoing charge is the third highest but is only modestly above average and no performance fee is payable. AAIF has the highest level of gearing in the sector. Its dividend yield is second only to Henderson Far East Income's and is 0.4pp above the average.

### The board

There are six directors on AAIF's board; all are non-executive and five are independent of the manager. The chairman is Charles Clarke, who was appointed as a director in March 2012 and assumed his current role in May 2018. The other four independent directors and their dates of appointment are Krystyna Nowak (senior independent director, May 2015), Ian Cadby (May 2016), Mark Florance (May 2017) and Nicky McCabe (May 2018). Hugh Young has served on AAIF's board since the company's inception in 2005; as the managing director responsible for Standard Life Aberdeen's operations in Asia, he is considered to be non-independent.



#### General disclaimer and copyright

This report has been commissioned by Aberdeen Asian Income Fund and prepared and issued by Edison, in consideration of a fee payable by Aberdeen Asian Income Fund. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2019 Edison Investment Research Limited (Edison). All rights reserved FTSE International Limited ("FTSE") © FTSE 2019. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.

#### **Australia**

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

#### **New Zealand**

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

#### **United Kingdom**

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person

#### **United States**

The Investment Research is a publication distributed in the United States by Edison Investment Research, Inc. Edison Investment Research, Inc. is registered as an investment adviser with the Securities and Exchange Commission. Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.