Platinum International Health Care Fund

Bianca Ogden
Portfolio Manager

Performance and Changes to the Portfolio

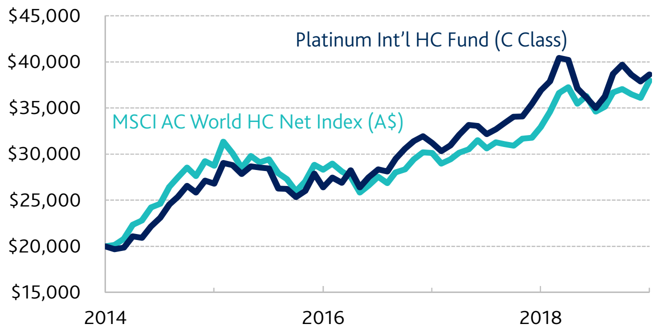
(compound p.a.+, to 30 June 2019)

	QUARTER	1YR	3YRS	5YRS	SINCE INCEPTION
Platinum Int'l HC Fund*	-3%	5%	14%	14%	10%
MSCI AC World HC Index^	3%	15%	10%	14%	9%

+ Excludes quarterly returns.
* C Class – standard fee option. Inception date: 10 November 2003.
After fees and costs, before tax, and assuming reinvestment of distributions.
^ Index returns are those of the MSCI All Country World Health Care Net Index in AUD. Source: Platinum Investment Management Limited, FactSet.
Historical performance is not a reliable indicator of future performance.
See note 1, page 4. Numbers have been subject to rounding adjustments.

Value of $20,000 Invested Over Five Years

30 June 2014 to 30 June 2019



After fees and costs, before tax, and assuming reinvestment of distributions.
Historical performance is not a reliable indicator of future performance.
Source: Platinum Investment Management Limited, FactSet.
See notes 1 & 2, page 4.

During the quarter, investors continued to favour companies in the medical technology (medtech) and tool[1] sector, and remain excited about new bio technology (biotech) listings (IPOs) in the US and China. In the US in particular, the trend is towards pre-clinical biotechs with a higher percentage of early-stage investors participating in the listing round (50% vs. 37% in 2016-2018). Consequently, the available free float is limited, resulting in some drastic price moves upon listing. The hope of being part of the next big innovation remains very strong, while several secondary equity offerings require large discounts, highlighting the dichotomy in the biotech market. We have selectively participated in new listings, with a focus on China.

Gene therapy remains a hot topic, while investor fatigue in the area of immune oncology continues. The annual American Society of Clinical Oncology (ASCO) gathering in the US was subdued this year, with limited high-profile immune oncology presentations. The focus has shifted back to mutation-defined cancers, which was further strengthened by the acquisition of Array Biopharma by Pfizer.

Some of the Fund's short positions, as well as a number of setbacks in our biotechs contributed to the Fund's disappointing performance over the quarter and the year. Setbacks are part of this sector, while the continued investor bias towards the more expensive medtech and tools sector has also not been helpful.

Quanterix and **NanoString Technologies**, two companies that focus on disease biomarker detection, provided a strong contribution to annual performance (+133% and +122% respectively, in local currency terms). Both companies are gaining traction with existing and new customers. Swiss company, **Roche** was also a solid contributor to performance for the year (+28%). The company is managing the loss of exclusivity of its older oncology products well.

Chinese biotech, **Zai Lab** (+46%) is making good progress with its oncology pipeline in China, while at the same time continuing to license, at very reasonable prices, new pipeline drugs from US biotech companies. Given China's focus on accelerating the approval of new innovative drugs, Zai Lab is

1 Companies that supply the technologies and instruments for drug discovery and diagnostics

well positioned to play an important role in the Chinese biotech industry.

During the quarter, we added to a number of our holdings and divested biotechs that had a setback and have to re-adjust their R&D activities.

Commentary

Acquisitions, partnerships and licensing deals are the norm in the biotech and medtech world. They are essential and most of the time make 'strategic sense', but frequently come with a very high price tag or operational issues that are often overlooked. Companies are very quick to offer 'adjusted profit' calculations following deals (particularly in biotech) blurring the facts of what really has been spent on external and internal R&D. To us, prudent external capital allocation is as important as internal R&D budgets. A company that has spent years on internal R&D and then acquires a whole new pipeline, is in our view inefficient in managing its own internal R&D engine.

AbbVie's intentions to acquire Allergan for US$63 bn is a case in point. We have struggled to invest in both of these companies in the past (and at times have actually shorted them) given their reliance on a particular franchise, debt burdens and deal-making track record. AbbVie has a market capitalisation of US$97.1 bn and US$32.6 bn in net debt[2], while Allergan has a market capitalisation of US$53.2 bn and $18.9 bn in net debt. Following the deal, the combined entity will have a market cap of about US$125 bn, with roughly US$95 bn in debt and US$17 bn in cash. There are only two other companies with a larger debt burden, General Electric with US$106 bn and Verizon Wireless with US$110 bn. This fact alone has to be taken into consideration.

AbbVie was spun out of Abbott Laboratories in 2013, with the hope that the new entity will be in a better position to focus on diversifying its revenue stream away from Humira, an anti-inflammatory antibody that was approved 17 years ago, and today generates 57% of AbbVie's sales (which equates to US$18.9 bn in sales this year). The much-hoped

2 AbbVie is estimated to have US$32.9 bn in sales, of which US$18.9 bn will come from Humira (the US patent expires in 2023)

Top 10 Holdings

COMPANY	COUNTRY	INDUSTRY	WEIGHT
SpeeDx Pty Ltd	Australia	Health Care Providers	3.5%
Sanofi SA	France	Pharmaceuticals	2.9%
Roche Holding AG	Switzerland	Pharmaceuticals	2.9%
Telix Pharmaceutical	Australia	Biotechnology	2.6%
Takeda Pharma Co	Japan	Pharmaceuticals	2.6%
Quanterix Corp	US	Life Science	2.5%
Zai Lab Ltd	China	Biotechnology	2.2%
NanoString Technologies	US	Life Science	2.2%
Gilead Sciences Inc	US	Biotechnology	2.2%
Almirall SA	Spain	Pharmaceuticals	2.1%

As at 30 June 2019. See note 6, page 4.
Source: Platinum Investment Management Limited.

For further details of the Fund's invested positions, including country and industry breakdowns and currency exposures, updated monthly, please visit https://www.platinum.com.au/our-products/pihcf.

Disposition of Assets

REGION	30 JUN 2019	31 MAR 2019	30 JUN 2018
North America	37%	37%	39%
Europe	27%	24%	34%
Australia	11%	13%	10%
Asia	5%	5%	2%
Japan	5%	4%	4%
Cash	16%	17%	11%
Shorts	-6%	-8%	-1%

See note 3, page 4. Numbers have been subject to rounding adjustments.
Source: Platinum Investment Management Limited.

Net Sector Exposures

SECTOR	30 JUN 2019	31 MAR 2019	30 JUN 2018
Health Care	77%	74%	87%
Consumer Staples	1%	1%	0%
Financials	0%	0%	1%
TOTAL NET EXPOSURE	78%	75%	88%

See note 4, page 4. Numbers have been subject to rounding adjustments.
Source: Platinum Investment Management Limited.

Net Currency Exposures

CURRENCY	30 JUN 2019	31 MAR 2019	30 JUN 2018
US dollar (USD)	50%	51%	44%
Japanese yen (JPY)	17%	16%	4%
Euro (EUR)	10%	10%	20%
Swiss franc (CHF)	8%	7%	5%
British pound (GBP)	7%	8%	10%
Australian dollar (AUD)	3%	2%	12%
Swedish krona (SEK)	2%	2%	2%
Norwegian krone (NOK)	2%	2%	0%
Hong Kong dollar (HKD)	2%	2%	0%
Danish krone (DKK)	1%	1%	1%
Canadian dollar (CAD)	<1%	<1%	1%
Korean won (KRW)	-1%	-1%	0%

See note 5, page 4. Numbers have been subject to rounding adjustments.
Source: Platinum Investment Management Limited.

diversification has however, not transpired, despite having the financial resources to do so, with significant cash generated by Humira and higher debt. Since 2013, AbbVie has increased its net debt to US$32.6 bn and invested almost US$26 bn in R&D. It has also completed two significant acquisitions, Pharmacyclics for US$21 bn in 2015 and Stemcentrx in 2016 for US$5.8 bn[3]. In 2014, AbbVie also made a US$55 bn offer for US/UK, Ireland-domiciled biotech company, Shire but the deal was abandoned due to a change in US tax legislation that no longer 'encouraged' US companies to be domiciled abroad. AbbVie had to pay a US$1.6 bn break-up fee to Shire for pulling out of the deal.

Its investment in R&D, acquisitions and break-up fee amounted to a total outlay of US$54.4 bn over just six years. Along the way, there have been over US$26 bn in buybacks and almost US$28 bn in dividends to placate shareholders.

In terms of new drug launches in that time, AbbVie obtained Imbruvica, a drug for a number of blood cancers via the Pharmacyclics acquisition, and received approval for four more drugs. None of these four drugs are wholly owned by the company and it has to either share profits or pay royalties. There is nothing wrong with licensing or alliance deals, however what is important, is the prices that are paid when these deals occur.

Both AbbVie's acquisitions, Pharmacyclics and Stemcentrx, stand out. Pharmacyclicis' blood cancer drug Imbruvica was approved in 2013. Since then it has been a successful drug, but AbbVie has to share the profits with Johnson & Johnson (J&J) who had great foresight in 2011. At that time, Pharmacyclics' BTK inhibitor (which now has the commercial name of Imbruvica) was in phase 2 trials and seeing its potential, J&J signed a 50/50 alliance with Pharmacyclics for a very modest upfront payment of US$150 million. There were obviously further investment and milestone payments, but it is clear that J&J's business development team has done very well.

In 2015, AbbVie spent more money acquiring Stemcentrx, a biotech founded in 2008 with a focus on cancer stem cells. Stemcentrx's valuation was already on the higher side given its well-known investors, but AbbVie was convinced the founders had to be backed. Last year, things started to unravel, with one founder leaving, the lead pipeline asset failing to live up to expectations and in January this year, AbbVie announced a write-off of most of the acquisition cost.

Valuing external assets is crucial and as the Pharmacyclics example shows, some companies are better at it than others are. AbbVie's capital allocation discipline, in our opinion, is more questionable and the Allergan acquisition does not give us confidence things are any different this time. Allergan has been through many changes and it too faces its own set of challenges. In 2014, Valeant set out to acquire Allergan, which did not eventuate; instead, Actavis acquired Allergan in 2015 with the new entity keeping the Allergan name. Allergan's Botox franchise was (and remains) a key asset, while the plan to source a pipeline of assets externally and efficiently develop them has been less successful. That 'external R&D' approach allowed for creative accounting and hence made earnings look promising, but new approvals have been limited. Pfizer must have liked that idea, as well as the Irish domicile, and announced its intention to acquire Allergan in late 2015. The deal did not happen either and Allergan continued on its own journey, selling its generic drugs business to Teva, while continuing to work on its pipeline and expanding its aesthetic franchise. In the end, drug development via licensing turned out to be harder than they anticipated, the share price drifted lower, which together with looming Botox competition and the US opioid crisis, rattled the company. A break-up of the company was on the cards but then along came AbbVie, and Allergan has finally found a new home.

Many deals, such as the AbbVie acquisition of Allergan may look attractive in a spreadsheet, however, in reality it is not that straightforward. Drug development is a difficult business, as the history of both AbbVie and Allergan shows, but despite that, AbbVie is prepared to take on a very large debt burden. Not long ago, AbbVie (and several analysts) sprouted about the long-term sustainability of Humira. We were not convinced then, and neither are we convinced now, that this new entity will be highly innovative.

Outlook

As we have mentioned many times before, innovation in the sector is immense, making it difficult for many generalists to keep up. Many new drug modalities are being tested in the clinic, new diseases are being targeted and on top of that, we have China accelerating new drug approvals. For an investor these are exciting times, but it also requires a firm valuation framework to ensure we balance the risk that is inherent in drug development. Tool companies offer a great way of gaining exposure to many different innovations, while clinical research organisations should also find new opportunities in emerging markets.

The US election next year will increase chatter on the healthcare sector, which should provide some interesting investment opportunities as well.

3 In addition to the US$5.8 bn AbbVie also agreed to pay US$4 bn in future milestones.

Notes

1. Fund returns are calculated using the net asset value (NAV) unit price (which does not include the buy/sell spread) of the stated unit class of the Fund and represent the combined income and capital returns of the stated unit class over the specified period. Fund returns are net of fees and costs, are pre-tax, and assume the reinvestment of distributions. Returns for P Class are net of any accrued investment performance fee.

   The MSCI Index returns are in Australian Dollars and are inclusive of net official dividends, but do not reflect fees or expenses. For the purpose of calculating the "since inception" returns of the MSCI Index, the inception date of C Class of the Fund is used. Where applicable, the gross MSCI Index was used prior to 31 December 1998 as the net MSCI Index did not exist then. Fund returns are provided by Platinum Investment Management Limited; MSCI index returns are sourced from FactSet.

   Platinum does not invest by reference to the weightings of the Index. A Fund's underlying assets are chosen through Platinum's bottom-up investment process and, as a result, the Fund's holdings may vary considerably to the make-up of the Index that is used as its reference benchmark. Index returns are provided as a reference only.

   The investment returns shown are historical and no warranty can be given for future performance. Historical performance is not a reliable indicator of future performance. Due to the volatility in the Fund's underlying assets and other risk factors associated with investing, investment returns can be negative, particularly in the short-term.

   The stated portfolio values of C Class and P Class of the Platinum International Fund (PIF) do not include funds invested in PIF by the Platinum International Fund (Quoted Managed Hedge Fund), a feeder fund that invests primarily in PIF. The stated portfolio values of C Class and P Class of the Platinum Asia Fund (PAF) do not include funds invested in PAF by the Platinum Asia Fund (Quoted Managed Hedge Fund), a feeder fund that invests primarily in PAF.
2. The investment returns depicted in this graph are cumulative on A$20,000 invested in C Class (standard fee option) of the specified Fund over the specified period relative to the specified net MSCI Index in Australian Dollars.
3. The geographic disposition of assets (i.e. the positions listed other than "cash" and "shorts") represents, as a percentage of the Fund's net asset value, the Fund's exposures to the relevant countries/regions through direct securities holdings and long derivatives of stocks and indices.
4. The table shows, as a percentage of the Fund's net asset value, the Fund's exposures to the relevant sectors through direct securities holdings as well as both long and short derivatives of stocks and indices. In the case of the Platinum Unhedged Fund, the Fund does not undertake any short-selling. Its net exposures are therefore the same as its long exposures.
5. The table shows the effective net currency exposures of the Fund's portfolio as a percentage of the Fund's net asset value, taking into account the Fund's currency exposures through securities holdings, cash, forwards, and derivatives. The table may not exhaustively list all of the Fund's currency exposures and may omit some minor exposures.
6. The table shows the Fund's top 10 long equity positions as a percentage of the Fund's net asset value, taking into account direct securities holdings and long stock derivatives. The designation "China" in the "Country" column means that the company's business is predominantly based in mainland China, regardless of whether the company's securities are listed on exchanges within mainland China or on exchanges outside of mainland China.

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Some numerical figures in this publication have been subject to rounding adjustments. References to individual stock or index performance are in local currency terms, unless otherwise specified.

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