



Platinum[®] World Portfolios PLC Quarterly Investment Manager's Report

Platinum World Portfolios - International Fund
Platinum World Portfolios - Asia Fund
Platinum World Portfolios - Japan Fund
Platinum World Portfolios - Health Sciences Fund

31 December 2022

 **Platinum[®]**
WORLD PORTFOLIOS PLC

Contents

Performance Returns	3
----------------------------	---

Macro Overview	4
-----------------------	---

by Andrew Clifford, Co-Chief Investment Officer

The Chinese Property Market The Most Important Industry Globally Which Few Understand	8
--	---

by Julian McCormack, Investment Analyst

Fund Updates

PWP - Platinum International Fund	12
-----------------------------------	----

PWP - Platinum Asia Fund	16
--------------------------	----

PWP - Platinum Japan Fund	20
---------------------------	----

PWP - Health Sciences Fund	24
----------------------------	----

Performance

to 31 December 2022

SUB-FUND	PORTFOLIO VALUE (US\$ MIL)	QTR	1 YR	2 YRS COMPOUND PA	3 YRS COMPOUND PA	5 YRS COMPOUND PA	SINCE INCEPTION COMPOUND PA	INCEPTION DATE
PWP - International Fund								
Class A (USD)	28.5	15.7%	-6.1%	-0.5%	3.8%	2.0%	6.4%	27 Apr 2016
Class B (USD)	2.5	15.5%	-6.7%	-1.1%	3.1%	1.2%	5.8%	2 Dec 2016
Class D (USD)	0.1	15.1%	-7.0%	-1.3%	3.0%	1.2%	4.9%	16 Nov 2015
Class F (EUR)	0.4	6.0%	-0.5%	5.8%	4.8%	3.6%	4.6%	4 Apr 2017
Class G (GBP)	12.3	7.3%	5.7%	6.1%	7.2%	4.4%	9.5%	27 Apr 2016
MSCI AC World Net Index (USD) ⁽¹⁾		9.8%	-18.4%	-1.6%	4.0%	5.2%	7.9%	16 Nov 2015
MSCI AC World Net Index (USD) (EUR) ^(2,3)		0.8%	-13.0%	5.3%	5.8%	7.7%	7.3%	4 Apr 2017
MSCI AC1 World Net Index (USD) (GBP) ^(2,4)		1.9%	-8.1%	4.9%	7.4%	7.7%	11.2%	27 Apr 2016
PWP - Asia Fund								
Class A (USD)	13.5	13.3%	-14.4%	-11.4%	3.5%	1.4%	6.6%	10 Mar 2017
Class B (USD)	1.9	13.5%	-14.6%	-	-	-	-14.7%	27 Jan 2021
Class D (USD)	2.4	13.5%	-14.6%	-11.8%	3.3%	1.1%	6.7%	16 Nov 2015
Class F (EUR)	0.1	4.2%	-8.9%	-5.7%	-	-	6.4%	3 Feb 2020
Class I (USD)	137.0	13.4%	-14.3%	-11.2%	3.6%	1.6%	7.3%	19 Jan 2017
MSCI AC Asia ex Japan Net Index (USD) ⁽¹⁾		11.4%	-19.7%	-12.5%	-1.5%	-0.6%	5.3%	16 Nov 2015
MSCI AC Asia ex Japan Net Index (USD) (EUR) ⁽²⁾		2.2%	-14.4%	-6.3%	-	-	1.4%	3 Feb 2020
PWP - Japan Fund								
Class A (USD)	9.5	9.6%	-11.5%	-2.5%	0.4%	-0.8%	5.3%	11 Jan 2016
Class B (USD)	1.4	9.4%	-	-	-	-	-	21 Jun 2022
Class D (USD)	14.3	9.4%	-12.1%	-3.2%	-0.3%	-1.5%	4.8%	16 Nov 2015
Class F (EUR)	0.1	0.4%	-6.2%	3.6%	1.4%	0.8%	1.8%	18 Oct 2017
MSCI Japan Net Index (USD) ⁽¹⁾		13.2%	-16.6%	-7.9%	-1.0%	0.2%	3.6%	16 Nov 2015
MSCI Japan Net Index (USD) (EUR) ^(2,3)		3.9%	-11.2%	-1.4%	0.7%	2.6%	3.2%	18 Oct 2017
PWP - Health Sciences Fund								
Class D (USD)	25.3	-	-	-	-	-	-	28 Oct 2022

(1) For the purpose of calculating the "since inception" returns of the Index in USD, the inception date of Class D of the Fund is used, since Class D was the first USD-denominated share class activated.

(2) The MSCI Index returns in USD have been converted into the specified currency (EUR or GBP, as the case may be) using the prevailing spot rate.

(3) For the purpose of calculating the "since inception" returns of the Index in EUR, the inception date of Class F of the Fund is used, since Class F was the first EUR-denominated share class activated.

(4) For the purpose of calculating the "since inception" returns of the Index in GBP, the inception date of Class G of the Fund is used, since Class G was the first GBP-denominated share class activated.

Fund returns are net of accrued fees and expenses, are pre-tax, and assume the accumulation of net income and capital gains. Where a particular share class is not denominated in USD, the net asset value per share in USD, being the Fund's base currency, is converted into the denomination currency of that share class using the prevailing spot rate.

Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations See note 1, page 28.

Source: Platinum Investment Management Limited for Fund returns; FactSet Research Systems for MSCI Index returns.

Macro Overview: 2023 - A Great Environment for 'True' Investors

by Andrew Clifford, Co-Chief Investment Officer

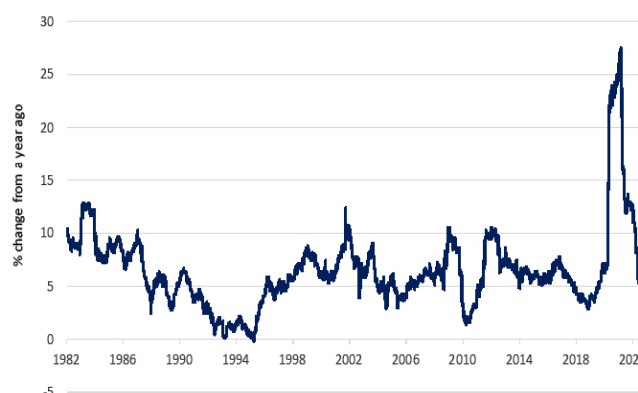
2022 was a dramatic year for markets. CEO and Co-CIO Andrew Clifford sat down with Investment Analyst Julian McCormack in December to share his thoughts on events, covering interest rates, recession fears, China and Europe - and what they all mean for the markets in 2023 and Platinum's portfolios. An edited transcript of the conversation is below.*

JM: Andrew, markets seem to be pricing in a mild recession. What is your broad overview of interest rates, inflation, recession fears, etc.?

AC: I think we need to get ahead of the game here. It is relatively clear that inflation has probably peaked. You can spend all your life trying to work out how quickly it recedes and when rate cuts will come. Ahead of that, though, I think monetary conditions are a much better indicator to focus on, specifically, in its most simple form, the growth rate of M2, a broad measure of the money supply. In 2022, in the US, the epicentre of the great money printing exercise we've just lived through, M2 is shrinking, and importantly, it's occurring in a nominal economy that is actually growing at a reasonable pace at this point. Essentially, that means monetary conditions are very tight, and you have to get well beyond the rate cuts before that's going to turn around. So, that tells you that inflation is probably going to come down over the next year or so. But for us as investors, that's not the interesting point; it's what it means for markets and asset prices. As I've said on many occasions in our reports and presentations, I think the shrinking of the money supply is a very significant headwind for markets, pushing them to the downside.

Fig. 1: US Money Supply M2 is Shrinking

% change on a year ago, weekly



Source: Federal Reserve Bank of St. Louis, 5 December 2022. M2 includes M1 (cash and cash-like, or currency and coins held by the non-bank public, checkable deposits, and travellers' checks [sic]) + savings deposits (including money market deposit accounts), small-time deposits under \$100,000, and shares in retail money market mutual funds.

* The full interview is available in audio format on The Journal page of our website <https://www.platinumworldportfolios.ie/Insights/The-Journal>
Interview was recorded on 20 December 2022.

JM: It's been an interesting reversal of either complacency or comfort in recent weeks. Everyone was expecting some sort of rally, which came and then just wilted away towards the end of the month, at the time of recording (20 December).

AC: Everyone has been expecting inflation to ease off. It looks like that's happening, and everyone appears to be positioned for that. However, the US Federal Reserve (Fed) is telling us it's going to be a while before rates peak, and we start to get those rate cuts. Again, we can spend all our lives trying to predict what will happen, but I think the more important thing is the impact that this will have on company earnings. That's the next focus, and there's a mixed bag there. We're seeing plenty of companies release disappointing numbers, and there have been decent falls in stock prices on the back of that. But at the same time, if you look at the absolute numbers for many companies, they're not all bad, but our job as investors is to think about how things will look 3-5 years ahead. Indeed, combined with coming out of COVID, the COVID beneficiaries, and those who were hurt by COVID, there are some mixed messages. Some companies are going to experience poor earnings just because they've been through an extraordinary boom and their business is coming back to trend, or will probably go below trend, while others that suffered from supply chain problems may yet have many good years ahead of them.

JM: There have been lots of idiosyncratic events, not least the implosion of speculative parts of the equity market, crypto exchanges, ructions in the UK gilt market, and suspensions in redemptions in captive real estate investment trusts. Do you have any comments about these?

AC: We would expect that after the boom we've been through and the speculative mania that we experienced, there will be some sort of crisis point coming out of this. The blow-up of the crypto market and the exchanges has no doubt caused a lot of pain for people, but it doesn't seem to have had any real flow-on effect on broader markets or the economy for the moment. Similarly, the deflating stock prices of the more speculative stock names have not had any particularly bad impact on the broader economy or market. The UK gilts and the issues that the pension funds had there were the beginning of a concerning event. The fiscally lax mini-budget announced by the UK government in late September, sent bond yields skyrocketing, and forced pension funds, which had taken leveraged positions in gilts and other fixed-interest products, to liquidate their positions. The Bank of England's intervention in the bond market seemed to have averted a great crisis there. But then, recently, we've had a couple of large, high-profile real estate investment trusts suspend redemptions. It's interesting, of course, as I've said over the last 2-3 years, I do suspect the

problems are hidden in the unlisted part of the markets. The promoters of those trusts will tell you that it's all part of normal operations; if redemptions are greater than a certain percentage, they will suspend redemptions. But still, these things tend to become self-perpetuating, where everyone starts lining up for their redemption every month, and on top of that, it's in this unlisted part of the market, where there is an awful lot of debt. It's those sorts of things that could have a bigger or broader impact going forward. And I think there are plenty of places in the unlisted world where that may occur.

JM: As that liquidity has been drained, we are seeing the US dollar, which has strengthened all year, weaken in recent weeks and months. What are your thoughts on the US dollar?

AC: I think it was a case of US dollar strength rather than yen or euro weakness, or any of the other currencies. We saw the yen briefly touch 150 in October, this is an extraordinarily low level for that currency. The euro was also hit hard, although it's a more difficult story because of the energy security issue and changing competitiveness. Across the board, other currencies are looking extraordinarily cheap. The US has been increasing rates faster than anywhere else. Rate differentials are often a driver of currency markets, but I do think we are probably approaching the peak in the momentum of that rate differential opening up. The US dollar has already reversed a fairly decent amount of the rally that it had. You can never get the timing of these things right, but over the next 18 months to three years, I expect the US dollar will weaken.

JM: You mentioned the euro, it's a difficult place to think about given it was all cataclysmic six months ago and has dropped off the headlines now. So, how are you thinking about Europe and its mixed bag of potential outcomes?

AC: At the centre of the problem for Europe is obviously energy. Very little investment in new capacity, whether that's oil, gas or thermal coal, has taken place in recent years. In addition, the energy transition is beginning and people are reluctant to invest in these areas. In the meantime, though, we are still going to need to consume these fossil fuels, so there is this awkward period over the next few years where the supply of energy is likely to be tight. Then, of course, on top of that, and in particular for Europe, we have Russia's invasion of Ukraine, which impacts basically all of those key energy markets. The really important market for Europe is gas, particularly its transportation, which is reliant on Russian pipelines. This fundamentally impacts the competitiveness of Europe, and we've seen industries close down in chemicals, fertilisers, and so on; areas that are heavy users of energy have had to close capacity because they're not competitive. That's a fundamental change, and

Fig. 2: Consumer and Business Confidence is Incredibly Weak in Europe

Source: FactSet Research Systems.

we've seen natural gas consumption down 20% in the period August-November versus the same three-month period in 2017-2021, across most of Europe as a result of that.¹ In the very short term, as Europe has scrambled to sort out its energy supplies, it looks like they will get through the winter in fairly good shape without any severe squeeze on supply, with storage levels still good. However, the longer-term issue will be, as the years go by, how quickly they're able to replace that Russian gas. This is the core problem for Europe. Consumer and business confidence is incredibly low (see Fig. 2), with the former even below levels reached during the global financial crisis (GFC), so it's a very difficult environment there.² There are a couple of positives, though. The fall in the euro takes away some of that pain. The weaker euro will help industries where energy may not be as important and where Europe is still a big exporter. The other factor that will help on that front is we are at the foothills of the recovery of the Chinese economy. China is an important trading partner for Europe (China was the European Union's third-largest export market in 2021 in US dollars, representing 11% of its exports),³ so it's another positive that may help to offset the energy supply conundrum.

JM: You've been building pretty reasonable positions in some energy companies, what are your thoughts on the outlook for energy for 2023 and beyond?

AC: I think there is a really good long-term story for most of the energy markets. However, I think one needs to be a little cautious about getting too enthusiastic at this point; the medium-term story is great, but the short-term one is unknowable. I mean, some things could happen; I'm not

predicting them, but if, for example, we were to see the end of the conflict in Ukraine, that could ease market tightness somewhat. The other issue to think about, and we're seeing it in a whole range of industries, is government interference in markets. We have seen price caps on gas in Australia. We've also seen taxes proposed in places like the UK. So, when you're looking at energy supplies, there's a real possibility you're not going to get the entire upside of any shortages that develop, whether it's prices being capped or profits being taxed. While we certainly have some energy positions in our global equity portfolio, they're relatively modest compared to the story that's out there.

JM: Moving on to China, six months ago, it was at the centre of yet another crisis, which all seemed to have abated by the end of the year. Where are we in terms of the Chinese economy, especially in light of its reopening post-COVID?

AC: Let's take a step back for a moment and think about the last 20-odd years of the commentary around China. There's always been this element that this thing is not real, it's a house of cards, it's a Ponzi scheme, and it's all going to fall apart any moment now. Whenever there is a crisis or an issue in the economy, that's the lens through which many people see it. The problem with that kind of analysis is that it can lead one astray. Just look at the most recent example, President Xi Jinping was heavily criticised in the Western media for the COVID lockdowns. Now that they've been relaxed, he's being heavily criticised for having taken a gamble on the lives of his people. On COVID, we've said all along that China will get through it, as every other country has, and with the tragedy that it involves. But the issue coming back to China more broadly is that the framework I would use is that this is a very large, dynamic and sophisticated market economy. People worry about the

¹ <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20221220-3>

² Source: FactSet Research Systems.

³ <https://tradingeconomics.com/european-union/exports-by-country>

politics there, and there are plenty of reasons to worry about that, but at the end of the day, the political leadership doesn't run the place; the bureaucrats do, as they do in the UK or the US, and this is a very sophisticated bureaucracy. Poor policy decisions led to the situation they have with COVID today, and the same can be said of the property market, which led to a freezing up of the residential property development sector. Where are they now? Well, they will work their way through COVID, and they have come up with an obvious solution to the property market problem, which is to provide liquidity to ensure property developments are completed and apartments are delivered to the buyers. I suspect that once they work their way through that, the next thing they're going to find out is that because of two years of suppressed property sales, they will quite possibly have a shortage of residential apartments by the end of 2023 or going into 2024.

JM: Any final comments on your outlook for 2023?

AC: In summary, I expect 2023 will be the flip side of what we've had for the last couple of years. I think we will have a Chinese economy that will strongly recover, a US economy that's fading, and a European economy that will be difficult to call. We're going to continue to have these uncertainties around, but as has been the case in the last year or two, there will continue to be opportunities in markets to make money. There are plenty of sectors that have sold off very heavily and are trading at valuation levels that we rarely see. Countries like China are still trading at very attractive valuations, despite the recent market bounce. While I think the overall environment doesn't look great for markets, our focus remains on looking for individual opportunities. The more uncertainty there is, and when that uncertainty changes from one quarter to the next, the more opportunities there are to make money from markets. So, I think it's actually a great environment for 'true' investors.

MSCI Regional Index Net Returns to 31.12.2022 (USD)

REGION	QUARTER	1 YEAR
All Country World	9.8%	-18.4%
Developed Markets	9.8%	-18.1%
Emerging Markets	9.7%	-20.1%
United States	7.0%	-19.8%
Europe	19.6%	-17.0%
Germany	24.6%	-22.3%
France	22.2%	-13.3%
United Kingdom	17.0%	-4.8%
Italy	26.4%	-14.4%
Spain	22.9%	-7.3%
Japan	13.2%	-16.6%
Asia ex-Japan	11.4%	-19.7%
China	13.5%	-21.9%
Hong Kong	18.2%	-4.7%
Korea	18.1%	-29.4%
India	2.0%	-8.0%
Australia	15.7%	-5.3%
Brazil	2.4%	14.2%

Source: FactSet Research Systems.
Total returns over time period, with net official dividends in USD.
Historical performance is not a reliable indicator of future performance.

MSCI All Country World Sector Index Net Returns to 31.12.2022 (USD)

SECTOR	QUARTER	1 YEAR
Energy	17.8%	33.1%
Industrials	17.5%	-13.1%
Materials	16.2%	-11.6%
Financials	14.3%	-9.8%
Health Care	13.1%	-6.1%
Consumer Staples	11.2%	-6.6%
Utilities	10.3%	-4.7%
Real Estate	5.9%	-24.6%
Information Technology	5.8%	-31.1%
Communication Services	2.4%	-35.5%
Consumer Discretionary	-0.7%	-31.8%

Source: FactSet Research Systems.
Total returns over time period, with net official dividends in USD.
Historical performance is not a reliable indicator of future performance.

The Chinese Property Market: The Most Important Industry Globally Which Few Understand

by Julian McCormack, Investment Analyst

A property implosion was 2022's China crisis narrative. We have owned Chinese property companies, namely China Resources Land and China Overseas Land & Investment over the past year, which have performed well. The Chinese property sector provides an apt case study of the reverse of an asset price bubble.* Indeed, it looks to us like a good example of an "anti-bubble".

In his excellent book *Principles for Navigating Big Debt Crises*, Ray Dalio gives a simple framework for spotting bubbles:

- Prices are high relative to traditional measures;
- Prices are discounting future rapid price appreciation from these high levels;
- There is broad bullish sentiment;
- Purchases are being financed by high leverage;
- Buyers have made exceptionally extended forward purchases (e.g. built inventory, contracted for supplies etc.) to speculate or to protect themselves against future price gains;
- New buyers (i.e. those who weren't previously in the market) have entered the market; and
- Stimulative monetary policy threatens to inflate the bubble even more (and tight policy will cause it to pop).

Few of these have been present in China for over a decade, in our view: yes, there is leverage in the system, but sentiment is terrible, asset prices are generally moderate-to-low and officials have been seeking to curtail activity, not stimulate it. Put another way, China looks very much like a place that has had a financial crisis in a long, drawn-out fashion since the heady days of high equity prices and exuberance of the late 2000s.¹

It seems to us reminiscent of Japan in the early 2000s – deep into a multi-decadal bear market and regarded as hopeless by most. The Nikkei 225 went on to triple over the next two decades.² *But what if there is no catalyst?* Japanese equities have provided us with decent returns (six-fold returns in 20 years in our Japan Fund³), with Japanese equities *de-rating* the entire time – earnings and dividends drove all of the returns, even as Japanese equities' multiples declined. This is the nature of anti-bubbles.

We think we see something similar in Chinese residential property. Markets work in cycles, and this may well be what the bottom of a market cycle looks like.

Central to all clichés is a kernel of truth. Property prices in China have fallen, as has new build activity, and consumer confidence is low. Note how these conditions are the reverse of Dalio's bubble checklist above. Commentators "know" that the industry is "a Ponzi scheme" in the grip of "a slow-motion crisis".⁴

And yet we have owned property developers in China and made money. Perhaps we are reckless, taking huge "risks" by owning such companies? Or perhaps, when everyone "knows" how terrible the outlook for an industry is and the facts belie this "knowledge", one has found an anti-bubble, and can commit capital with low risk, despite the discomfort of swimming against the tide?

² Source: FactSet Research Systems.

³ Source: <https://www.platinum.com.au/Investing-with-Us/Prices-Performance>. Fund returns are net of accrued fees and costs, are pre-tax, and assume the reinvestment of distributions. Historical performance is not a reliable indicator of future performance. See note 1, page 44.

⁴ <https://www.ft.com/content/e9e8c879-5536-4fbc-8ec2-f2a274b823b4>; <https://www.theguardian.com/business/2022/sep/25/china-property-bubble-evergrande-group>

¹ See https://www.linkedin.com/posts/andrew-clifford_yet-another-china-crisis-activity-6862185497717039104---5g?utm_source=share&utm_medium=member_desktop

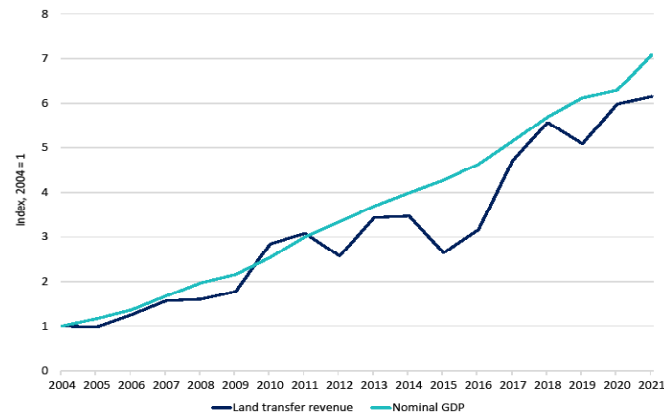
* We have discussed this separately – see <https://www.platinumworldportfolios.ie/Insights/The-Journal/The-Paradox-of-Cycles>

In the case of the Chinese property market, the facts do indeed belie the prophecies of doom.

Contrary to most commentary, Chinese property prices have risen in an unremarkable fashion, both relative to other countries and relative to incomes or nominal gross domestic product (GDP). For instance, real house prices in China appreciated at a slower rate than those in Germany in the decade to the end of 2020.⁵ Government revenue from land transfers, which is at the core of the Chinese residential property industry, has grown more slowly than nominal GDP over the last 17 years.

5 <https://www.economist.com/graphic-detail/global-house-prices>.

Fig. 1: Chinese land transfer revenue versus nominal GDP, indexed



Source: citi.

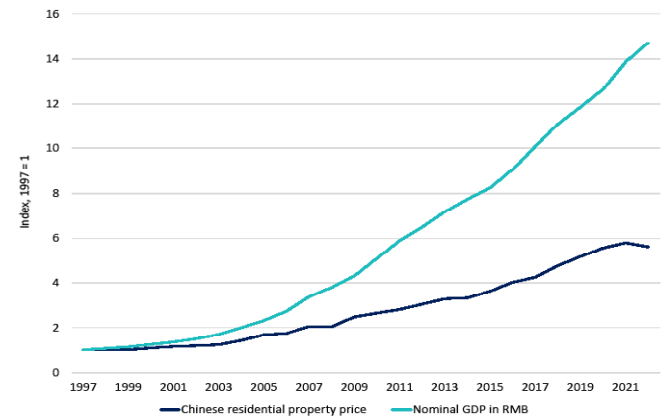
Further, Chinese house prices, as collected by the equity research team at citi, have appreciated by far less than nominal GDP growth since 2005.

Fig. 2: Chinese house price growth versus nominal GDP, change year on year

	1998	1999	2000	2001	2002
Change in avg residential property price	0.9%	-0.1%	8.1%	6.0%	3.0%
Change in nominal GDP	7.3%	6.0%	9.8%	8.6%	10.3%
	2003	2004	2005	2006	2007
Change in avg residential property price	3.9%	15.2%	18.1%	4.1%	17.0%
Change in nominal GDP	13.7%	17.5%	15.6%	17.8%	23.7%
	2008	2009	2010	2011	2012
Change in avg residential property price	-0.3%	21.1%	6.7%	6.1%	8.4%
Change in nominal GDP	12.7%	13.7%	18.3%	15.7%	10.0%
	2013	2014	2015	2016	2017
Change in avg residential property price	7.7%	1.4%	9.1%	11.3%	5.7%
Change in nominal GDP	10.5%	7.8%	6.5%	9.9%	11.3%
	2018	2019	2020	2021	22 YTD
Change in avg residential property price	12.2%	8.7%	7.5%	4.2%	-3.1%
Change in nominal GDP	9.9%	7.0%	6.8%	9.7%	6.1%

Source: citi, FactSet Research Systems.

Fig. 3: Chinese house price growth versus nominal GDP, indexed



Source: citi, FactSet Research Systems.

Simply put, Chinese property prices have increased a great deal in the last few decades, but why wouldn't they in a fast-growing economy with rapid household income growth and a colossal urbanisation drive?

Further, Chinese mortgage rates have remained high by global standards, never falling below 4.7% and remaining well above 5% since 2018 for borrowers with one property, with considerably higher rates applying for purchasers of a second property.⁶ Chinese borrowers require large down-payments for houses, with first-home buyers requiring 30% down-payments and second- and third-home buyers needing more equity still.⁷

There is no evidence of any meaningful glut of properties in China.

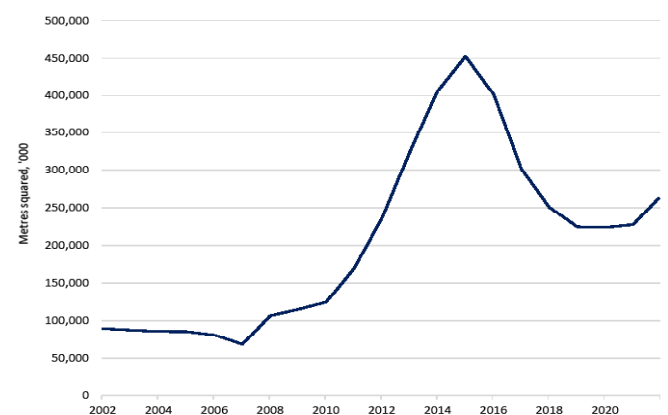
Has there been malinvestment? Yes.

Is there evidence of a nationwide excess of housing units? No.

6 CLSA.

7 CLSA.

Fig. 4: Vacant residential floor space waiting for sale



Source: citi. Note 2022 data is to November.

But what of the tens of millions of empty apartments so frequently reported on by the Western media regarding China? Well, there are likely many millions of homes built in poorly conceived projects by property developers across China – this should be no surprise. Property developers build unsuccessful projects in every jurisdiction. There are around 400 to 500 million households in China in our estimation, so when we see breathless reporting of “50 million empty homes in China”,⁸ that would be roughly in line with the 10% unoccupied homes in Australia,⁹ for instance.

Prior to 1994, there was in effect, no private ownership of housing in China, and while housing was provided universally, residential area per capita in urban areas was a tiny 6.7 square metres (sqm) on average, generally with shared bathroom and kitchen facilities.¹⁰ Since that time, China has completed just over 17 billion square metres of housing,¹¹ in the largest urbanisation in human history.

Let’s break down that number.

- There are 1.4 billion people in China¹²
- The urbanisation rate is 62.5%¹³
- The average Chinese household homes 2.6 people¹⁴
- Residential housing per capita in urban China is 39 sqm per person.¹⁵

Multiplying this out gives us an average house size of approximately 100 sqm in urban China, and implies that of the 875 million people living in Chinese cities, only 438 million are living in a modern (post-1994) dwelling.

Put another way, if China is to house all of its current urban population in modern housing stock, it needs to double its entire modern housing build out, ignoring any replacement of existing housing.

⁸ <https://www.smh.com.au/business/the-economy/ghost-cities-50-million-homes-in-china-are-empty-20181110-p50f70.html>

⁹ <https://www.abc.net.au/news/2022-09-02/housing-property-australias-one-million-empty-homes/101396656#:~:text=The%20recent%20release%20of%202021,surely%20make%20a%20big%20difference.>

¹⁰ China People’s Daily: <http://en.people.cn/n3/2018/12/13/c90000-9528155.htm>; Fang et al, “Demystifying the Chinese Housing Boom”, NBER Macroeconomics Journal, vol 30, 2015, <https://www.journals.uchicago.edu/doi/full/10.1086/685953>

¹¹ Source: citi, data to November 2022.

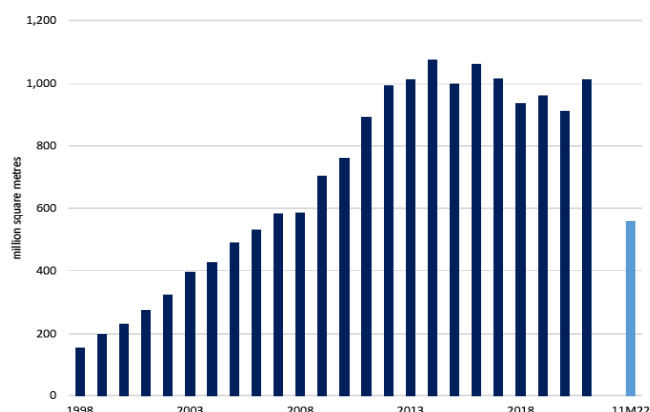
¹² <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=CN>

¹³ <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>

¹⁴ https://www.chinadaily.com.cn/a/202106/12/WS60c3fae2a31024ad0bac66f9_2.html

¹⁵ https://www.chinadaily.com.cn/a/202106/12/WS60c3fae2a31024ad0bac66f9_2.html

Fig. 5: Chinese residential construction completions in metres squared

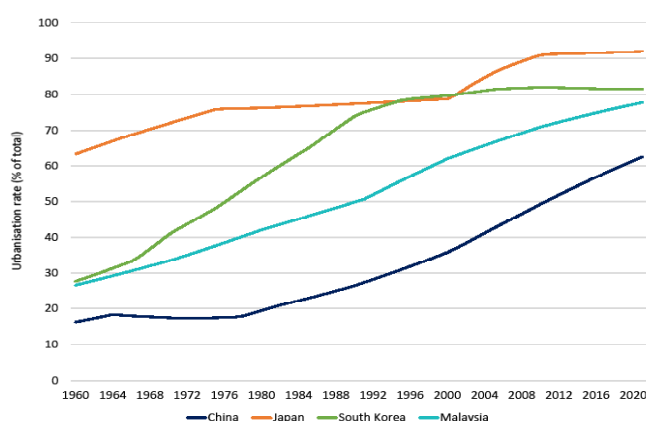


Source: citi.

Further, China’s urbanisation rate of 62.5% is low compared to other Asian countries (see Fig. 6). If we assume that China reaches an urbanisation rate of 80%, in line with other developed and middle-income Asian nations, approximately 200 million people will enter Chinese cities in the coming two decades or so, even assuming a gradually declining population.

All told, China may require a further 25 years of current rates of residential construction to house its urban population in modern housing.

Fig. 6: Urbanisation rates, China versus select Asian high- and middle-income nations



Source: World Bank, <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=CN>

Since a series of reforms in the 1990s, culminating in the cessation of public renting of housing for workers in 1998, China has transformed from a country of workers who rented an abode from the government – this being a nominally Communist country after all – into a nation of home owners. At 90%, China has among the highest rates of home ownership in the world.¹⁶ Therefore, the entire modern housing stock of China has been grafted onto a previously existing housing stock of low-quality shared accommodation. One of the most important issues in China is that the majority of the population still live in poor-quality, pre-1990s era housing – with massive ongoing construction required.

China needs ongoing reforms to allow for dignified rental conditions for workers in cities, not least for migrant workers (those without *hukou*).¹⁷ Further, China likely needed to slow the rate of home construction from the one billion square metres it was building in recent years (see completions data in Fig. 5) and has been at pains to curb property speculation for years.¹⁸

An element of the Chinese residential property reform program has been the direct control of new residential property prices, which we see as both heavy-handed and counterproductive.¹⁹ However, the “three red lines” policy designed to curb excessive financial leverage among developers²⁰ is sensible, albeit difficult to achieve without causing severe disruption to the broader industry, as has occurred. Of the thousands of property developers in China, only a handful meet the “three red lines” rules against excessive gearing.²¹ The Chinese Communist Party has clearly stated that it will support conservatively financed, larger property developers even as it strangles smaller, highly indebted operators.²² We think this is reminiscent of the reforms of the insurance industry and the broad drive against overcapacity in heavy industries like steel, coal and aluminium: larger, better-run operators tend to be advantaged over smaller players as the state cleans up excess capacity and irresponsible practices in previously fast-growing industries.

So, when we observe a better-quality Chinese property developer like China Resources Land trading at mid-single-digit PEs, paying a 5% dividend yield, with a strong balance sheet, amid a regulatory push to eliminate its smaller, more indebted competitors, we see opportunity. This is the reverse of a bubble. This is an anti-bubble, where the crowd perceives “un-investability” despite a long track record of success, data to suggest that property development will be required in China for decades to come, and a commitment by the CCP to employing existing property developers to meet that need. None of this is without risk; anyone who believes there is no risk in owning an equity is sadly mistaken. But investment is about balancing risks. Large, lowly indebted Chinese property developers appear to offer an exceptional opportunity, in our view.

¹⁶ Huang et al, “Home ownership and the housing divide in China”, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7546956/>

¹⁷ <https://www.economist.com/china/2022/09/22/reforms-to-chinas-hukou-system-will-not-help-migrants-much>

¹⁸ <https://www.scmp.com/comment/insight-opinion/article/2119306/xi-jinping-says-houses-are-living-not-speculation-hong-kong>

¹⁹ See <https://www.ft.com/content/5b28ab3c-a896-4c90-b41b-bca9111123dc>

²⁰ <https://www.ft.com/content/d5803d64-5cc5-46f0-bed0-1bc207440f9c>

²¹ See previous footnote.

²² <https://www.ft.com/content/6e9085ec-0d59-43f7-ac00-ccfedbe96ed6>

Platinum World Portfolios - International Fund



Andrew Clifford
Portfolio Manager



Clay Smolinski
Portfolio Manager



Nik Dvornak
Portfolio Manager

Performance

(compound p.a.⁺, to 31 December 2022)

SHARE CLASS	QTR	1 YR	3 YRS P.A.	5 YRS P.A.	SINCE INCEPTION P.A.
PWP Int'l Fund Class A USD	16%	-6%	4%	2%	6%
PWP Int'l Fund Class B USD	15%	-7%	3%	1%	6%
PWP Int'l Fund Class D USD	15%	-7%	3%	1%	5%
PWP Int'l Fund Class F EUR	6%	0%	5%	4%	5%
PWP Int'l Fund Class G GBP	7%	6%	7%	4%	9%
MSCI AC World Net Index (USD) [^]	10%	-18%	4%	5%	8%

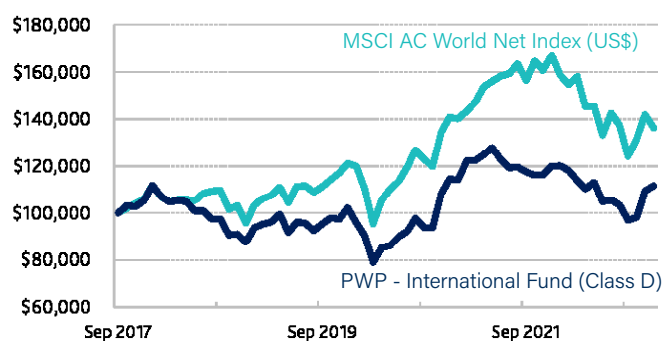
+ Excluding quarterly returns. Fund returns are net of accrued fees and costs. Class D inception date (16 Nov 2015) is used for Index "since inception" returns.

[^] Index returns are those of the MSCI All Country World Net Index in USD. Source: Platinum Investment Management Limited for Fund returns, FactSet Research Systems for Index returns.

Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations. See notes 1 & 2, page 28.

Value of US\$100,000 Invested Over Five Years

31 December 2017 to 31 December 2022



After fees and costs. See notes 1 & 3, page 28. **Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations.**

Source: Platinum Investment Management Limited, FactSet Research Systems.

The Fund (Class D) returned 15.1% over the quarter.¹

The US equity market underperformed the rest of the world during the quarter, as markets started factoring in the impact of tighter fiscal and monetary policies on future company earnings. By region, in local currency terms, Europe led the way, returning 10.6%, followed by Asia ex-Japan (+8.2%) and North America (+6.9%).²

In line with these outcomes, our European holdings dominated the largest contributors to performance, with financial stocks **Intesa Sanpaolo** (+22%), **Beazley** (+21%), **Erste** (+32%) and **Raiffeisen Bank International** (+26%) amongst the best performers. In China, online travel agent **Trip.com** (+26%) was a strong performer on the back of China's pivot away from its zero-COVID policy. Heavy-duty truck engine manufacturer **Weichai Power** (+41%), insurer **Ping An Insurance** (+32%) and **Tencent** (+25%) also provided strong performance. Short positions contributed 0.9% to returns.

Key detractors at an individual stock level included **Allfunds Group** (-14%), which was impacted by volatile markets and the sell-down of significant stakes by two large shareholders, and **Meta Platforms** (-11%), which was weighed down by concerns about weakness in the advertising market.

1 References to returns and performance contributions (excluding individual stock returns) in this PWP - International Fund report are in USD terms. Individual stock returns are quoted in local currency terms and sourced from FactSet Research Systems, unless otherwise specified.

2 MSCI AC Europe, MSCI Asia ex-Japan, MSCI North America, respectively, in local currency. Source: MSCI.

Changes to the Portfolio

The net invested position increased from 56% to 63% over the course of the quarter. This was predominantly the result of closures of short positions, which were reduced from 23% to 17%. The composition of the short portfolio changed, with less emphasis on highly valued growth names and a move toward COVID beneficiaries (e.g. retailers, e-commerce) that we expect will have weak earnings outcomes in the year ahead, as well as some of the more dubious and overvalued "energy transition" related companies.

There were no major new long positions for the Fund. We took advantage of share price weakness in existing positions to add to our holdings in **Allfunds** and **Micron Technology**. We also trimmed a number of positions in strong performers such as **Trip.com**, **Microchip Technology**, **Beazley** and **UPM-Kymmene**.

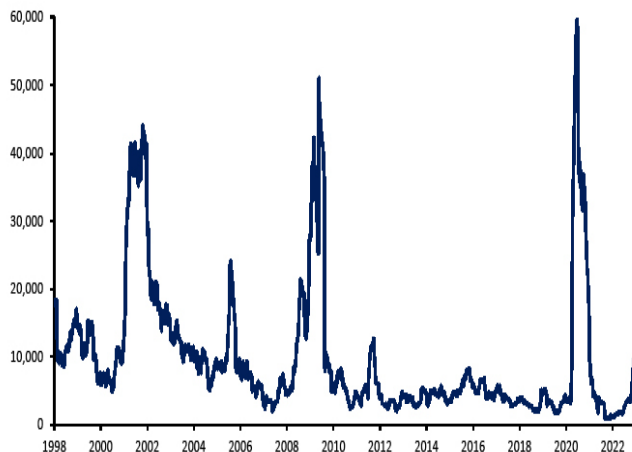
Commentary

In many respects, the economic environment is becoming clearer as we enter 2023, though not in all cases is it necessarily for the better.

The US economy is clearly slowing in response to falling government spending and rising interest rates. This is now becoming apparent in employment markets, which until recently, had remained resilient, as surveys show businesses are finding it easier to hire, and the number of layoff announcements has increased sharply (see Fig. 1).

Fig. 1: US Employee Layoff Announcements

Seasonally adjusted 13-week average



Source: Evercore ISI. As at 30 December 2022.

Disposition of Assets

REGION	31 DEC 2022	30 SEP 2022	31 DEC 2021
Asia	26%	25%	28%
Europe	25%	25%	21%
North America	15%	17%	21%
Japan	8%	8%	14%
Australia	2%	3%	6%
Other	2%	2%	2%
Cash	20%	21%	8%
Shorts	-17%	-23%	-22%

See note 4, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Sector Exposures

SECTOR	31 DEC 2022	30 SEP 2022	31 DEC 2021
Industrials	16%	16%	20%
Financials	14%	13%	15%
Materials	9%	11%	14%
Consumer Discretionary	8%	7%	10%
Energy	6%	5%	1%
Information Technology	4%	4%	15%
Health Care	4%	3%	5%
Communication Services	3%	2%	5%
Real Estate	3%	3%	3%
Consumer Staples	0%	0%	1%
Other	-4%	-9%	-18%
TOTAL NET EXPOSURE	63%	56%	70%

See note 5, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Currency Exposures

CURRENCY	31 DEC 2022	30 SEP 2022	31 DEC 2021
Euro (EUR)	23%	18%	16%
Chinese Renminbi (CNY)	20%	19%	19%
Japanese Yen (JPY)	18%	14%	11%
United States Dollar (USD)	16%	25%	26%
UK Pound Sterling (GBP)	10%	7%	6%
South Korean Won (KRW)	4%	4%	5%
Canadian Dollar (CAD)	2%	3%	3%
Australian Dollar (AUD)	2%	3%	7%
Indian Rupee (INR)	2%	2%	2%
Brazilian Real (BRL)	2%	2%	1%
Hong Kong Dollar (HKD)	2%	3%	2%
Swiss Franc (CHF)	1%	1%	0%
China Renminbi Offshore (CNH)	-1%	-1%	0%

See note 6, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

However, there are large differentials in growth outlooks across sectors. We have noted previously that many sectors that benefited from COVID (e.g. e-commerce, video streaming, jewellery) would face significant headwinds as “lockdown-inspired” demand fell away. Interest rate-sensitive sectors are also among the weakest, with the housing sector experiencing a collapse in demand. Bright spots include areas still recovering from COVID (e.g. travel, autos), beneficiaries of the trend to return manufacturing to the US and diversify supply chains (e.g. capital equipment, automation), and spending on decarbonisation and energy transition projects. Overall, softer economic activity and receding inflationary pressures are the likely outcomes, and with that, *a peak in short-term interest rates in the year ahead.*

Meanwhile, the **Chinese economy is poised to recover strongly.** During the quarter, the government announced various measures to provide funding to residential property developers. This will allow cash-strapped developers to complete projects that have stalled due to a lack of financing. Residential construction activity is an important sector for the wider economy, and as work recommences on projects across the country, the impact on overall economic growth should be significant. Further, the government has pivoted away from its stringent zero-COVID policy measures that have suppressed economic activity. As witnessed elsewhere over the last three years, the path to reopening is not easy, with a huge increase in infections, an overwhelmed health system, and sadly, a rising death toll. Nevertheless, as we have experienced elsewhere, we expect the country will move beyond this period as herd immunity builds, and the increase in mobility as lockdowns end will add further to economic activity. For more detail on these developments in China, please refer to the PWP-Asia Fund quarterly report, and for a more detailed examination of the property sector, see our feature article, *“The Chinese Property Market: The Most Important Industry Globally Which Few Understand”*.

Of the major economies, the **outlook for Europe remains the most uncertain.** The spike in energy prices that resulted from Russia’s invasion of Ukraine has resulted in an outright loss of competitiveness for European industries. Along with that, both consumer confidence and business confidence have plunged, with the former now at levels below those seen in the global financial crisis (GFC). Energy-intensive industries, such as petrochemicals and fertilisers, have seen significant capacity closures.

Overall consumption of gas across Europe has fallen by the order of 20%.³ While it would appear, at the moment, that Europe has enough gas in storage to avoid severe shortages this winter, the longer-term picture remains highly uncertain.

However, there are some positives to offset this difficult environment. Firstly, the depreciation of the euro will offset some or all of the loss of competitiveness due to higher energy prices, depending on the energy intensity of a given business. Further, the likely recovery of China, an important trading partner for Europe, will be helpful.

Outlook

In summary, the world is looking like the mirror image of recent years, with a slowing US economy, a recovering Chinese economy, and a European economy somewhere in between. **The question is, what does all this mean for the outlook for equity markets?** In recent years, the huge divergence in valuations and share price performance across different sectors and geographies has made this general question difficult to answer. Today, some sectors and countries have experienced multi-year bear markets, where valuations are highly attractive and we are optimistic about future returns. On the other hand, many of the favoured growth names that led the bull market remain unappealing, in some cases due to questionable business models, and in other cases due to valuations that remain high despite deteriorating earnings growth. Also, defensive names remain highly valued as investors continue to seek out hiding places. The mix of these opportunity sets suggests that at a high level, the outlook for the broad market is muted, especially in the US, where there is a relatively higher weighting of growth stocks in the indices, while at a sector or stock-specific level, there remains the possibility of strong returns.

The one overriding risk for all markets is the monetary environment, not just interest rates, which we expect to peak sometime this year, but the lack of growth in the money supply in the major economies, except for China. This can change quickly if demand for credit from the private sector picks up strongly, though that seems an unlikely prospect at the moment. Many market participants are waiting for a sign that interest rates have peaked before diving back into the markets. We would be cautious on this front, as markets will still need to contend with poor earnings outcomes for some time after interest rates start to fall. With such a restrictive monetary environment, there is also the potential for a financial accident that broadly impacts markets. The collapse of the cryptocurrency markets does not appear to have had wider implications. We have long considered that such an accident is most likely to occur in unlisted assets (real estate, infrastructure, private equity) where there is little transparency, and we note with concern that some high-profile unlisted commercial real estate trusts in the US are reaching their monthly redemption limits.

³ <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20221220-3>

Focusing on the opportunity side of the equation, there are some very prospective areas. One of the investment themes that will likely dominate the decade ahead is the **global energy transition as the world moves to reduce CO2 emissions**. This is a significant theme for the Fund, though we have broadly eschewed the obvious investment plays, such as solar panel makers, wind farms and electric vehicle (EV) producers. Instead, we see the current opportunity in companies that enable the transition through critical components and technologies. Examples include Infineon Technologies, a producer of the power semiconductors required to produce EVs, charging stations, and renewable energy technologies. UPM-Kymmene, a pulp producer that has developed technology to produce bioplastics and biodiesel from the waste materials from their current manufacturing lines, is another example.

We continue to see **opportunities in companies that are yet to fully recover from the pandemic**, such as online travel agent Booking Holdings or low-cost airlines Ryanair in Europe and InterGlobe Aviation in India. **Businesses that were harmed by low interest rates**, such as European banks (Intesa Sanpaolo, Erste Group Bank, Raiffeisen Bank International), remain at interesting valuations. Meanwhile, **China, which has experienced a completely different economic and interest rate environment from the other major economies**, resulting in a prolonged bear market, is positioned for a strong rebound.

Top 10 Holdings

COMPANY	COUNTRY	INDUSTRY	WEIGHT
ZTO Express Cayman Inc	China	Industrials	3.9%
UPM-Kymmene OYJ	Finland	Materials	3.0%
Ping An Insurance Group	China	Financials	2.9%
Microchip Technology Inc	US	Info Technology	2.7%
MinebeaMitsumi Co Ltd	Japan	Industrials	2.5%
Tencent Holdings Ltd	China	Comm Services	2.4%
Intesa Sanpaolo SpA	Italy	Financials	2.3%
InterGlobe Aviation Ltd	India	Industrials	2.2%
Trip.com Group Ltd	China	Consumer Disc	2.2%
Shell PLC	Netherlands	Energy	2.2%

As at 31 December 2022. See note 7, page 28.

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 www.platinumworldportfolios.ie/The-Funds/PWP-International-Fund

Platinum Asia Fund



Andrew Clifford
Portfolio Manager



Cameron Robertson
Portfolio Manager



Kirit Hira
Portfolio Manager*

Performance

(compound p.a.⁺, to 31 December 2022)

SHARE CLASS	QTR	1 YR	3 YRS P.A.	5 YRS P.A.	SINCE INCEPTION P.A.
PWP Asia Fund Class A USD	13%	-14%	3%	1%	7%
PWP Asia Fund Class B USD	14%	-15%	-	-	-15%
PWP Asia Fund Class D USD	14%	-15%	3%	1%	7%
PWP Asia Fund Class F EUR	4%	-9%	-	-	6%
PWP Asia Fund Class I USD	13%	-14%	4%	2%	7%
MSCI AC Asia ex Jp Net Index [^]	11%	-20%	-1%	-1%	5%

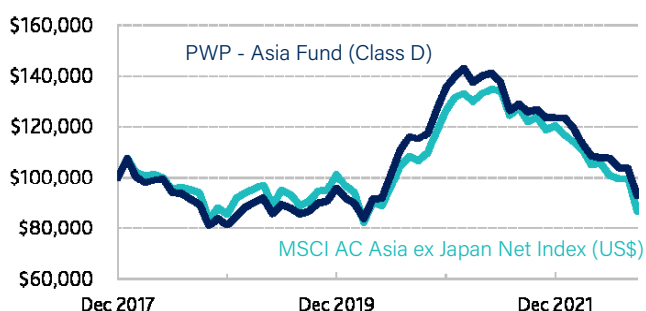
+ Excluding quarterly returns. Fund returns are net of accrued fees and costs. Class D inception date (16 Nov 2015) is used for Index "since inception" returns.

[^] Index returns are those of the MSCI All Country Asia ex Japan Net Index in USD. Source: Platinum Investment Management Limited for Fund returns, FactSet Research Systems for Index returns.

Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations. See notes 1 & 2, page 28.

Value of US\$100,000 Invested Over Five Years

31 December 2017 to 31 December 2022



After fees and costs. See notes 1 & 3, page 28. **Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations.**

See notes 1 & 2, page 28.

Source: Platinum Investment Management Limited, FactSet Research Systems.

The Fund (Class D) returned 13.5% for the quarter.¹

Markets grappled with the withdrawal of liquidity, an inverted US yield curve and a potential 2023 US recession. Meanwhile, in Asia, easing core inflation and further central bank interest rate hikes, combined with expectations that the US Federal Reserve is closer to the end of its tightening cycle, led to a bottoming in most Asian currencies against the US dollar in October. The uncertain backdrop drove volatile markets across Asia. India (+4%) remained resilient, while Vietnam (-13%) best highlights the impact of tight domestic liquidity conditions. Hong Kong (+3%) remained volatile during the period, selling off ~15% post the 20th National Congress of the Chinese Communist Party (CCP), but subsequently recovering ~35% from the lows, following revised property and COVID measures.² Foreign sentiment towards China is recovering, with Hong Kong-listed shares (H-shares) rising more than their mainland China-listed counterparts (A-shares).

Chinese authorities made some adjustments to their zero-COVID policies, which the market took some comfort from. Improving sentiment benefited holdings such as travel website operator **Trip.com** (+26%) and hotel chain **H World Group** (+26%), which were among the biggest contributors to the Fund's performance. **Yum China** (+17%) and **BOC Aviation** (+17%) were also solid performers, albeit they are smaller positions in the Fund.

1 References to returns and performance contributions (excluding individual stock returns) in this PWP - Asia Fund report are in USD terms. Individual stock returns are quoted in local currency terms and sourced from FactSet Research Systems, unless otherwise specified.

2 MSCI India, MSCI Vietnam, MSCI Hong Kong, respectively, in local currency. Source: FactSet Research Systems.

*Effective from 31 October 2022, Kirit Hira joined Andrew Clifford and Cameron Robertson as co-portfolio manager for the Fund. Kirit joined Platinum in 2016 as an investment analyst in the industrials and resources team. In April 2021, he joined the Asia regional team.

Other notable performers in China included insurers **Ping An Insurance** (+32%) and **AIA Group** (+33%). Heavy-duty truck engine manufacturer **Weichai Power** (+41%) recovered with a bottoming in Chinese truck volumes and forklift/warehouse automation subsidiary KION AG trading well. Paper/containerboard manufacturer **Nine Dragons Paper** (+46%) also benefited from a bottoming in unit margins and hopes for a recovery in end demand.

After being one of the best-performing markets this year, the Indonesian bourse saw profit-taking during the quarter. Automotive holding company **Jardine Cycle & Carriage** (-15%) and paints company **Avia Avian** (-21%) were the weaker performers in this market. Our holdings in Vietnamese retailer **Mobile World Investment** (-33%) and listed fund **Vietnam Enterprise Investments** (-8%) also suffered with the broader sell-off in the local market.

Changes to the Portfolio

We continue to refine the portfolio as new ideas are unearthed and portfolio positioning is adjusted. While we have not added to our net position in China, the sell-off in Hong Kong-listed China assets during the quarter presented us with an opportunity to switch our A-share exposure to specific Chinese companies into their respective H-shares, which were trading at significant discounts at the time. By the end of the quarter, discounts had reverted to more normal levels, and we commenced the process of switching our dual-listed Chinese holdings back to A-shares.

We started a position in Chinese waterproofing manufacturer **Beijing Oriental Yuhong**. While building material suppliers have struggled with the property downturn, the outlook appears more promising as property starts to bottom, completions drive late-cycle interior

waterproof application and suppliers focus on cash collection from developers. Recent policies to improve building quality will see increased requirements for waterproofing with longer warranty periods. Finally, Yuhong has also leveraged its strong distribution channel to enter new building material markets, such as mortars and decorative wall coating.

In India, we exited our position in private bank **ICICI Bank**. ICICI has navigated the COVID period well, booking excess provisions with lower non-performing loans while carrying surplus capital. However, with system credit growth at multi-year highs of ~17%³ and margins elevated, the positive outlook is well understood, and valuations have become stretched versus other investment opportunities. We also further trimmed our position in automaker **Maruti Suzuki**.

We made a number of other adjustments during the quarter. These included adding to our Korean positions, such as home appliance company **Coway** and specialty chemical producer **Soulbrain**. Foreign ownership in Korea remains at global financial crisis (GFC) lows, valuations look attractive and further steps were taken to improve governance. We reduced our position in Chinese software maker **Kingsoft**. More recently, we also trimmed our exposure to **Trip.com** and **H World** and fully exited our position in Macao casino operator **Melco Crown Entertainment**.

We ended the year with a relatively high net invested position of 89%.

Commentary

The negative **China** headlines reached a crescendo after the closing of the National Congress, where President Xi

³ RBI, Macquarie Research, December 2022.

Disposition of Assets

REGION	31 DEC 2022	30 SEP 2022	31 DEC 2021
China	50%	47%	44%
South Korea	11%	10%	11%
India	8%	10%	10%
Taiwan	5%	5%	7%
Vietnam	5%	5%	5%
Hong Kong	4%	4%	7%
Philippines	2%	2%	2%
Macao	2%	2%	1%
Singapore	1%	2%	1%
Thailand	1%	0%	0%
Cash	10%	13%	13%
Shorts	-1%	-1%	-1%

See note 4, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Sector Exposures

SECTOR	31 DEC 2022	30 SEP 2022	31 DEC 2021
Consumer Discretionary	19%	20%	17%
Real Estate	15%	13%	13%
Information Technology	13%	13%	16%
Industrials	13%	12%	12%
Financials	12%	12%	12%
Materials	5%	4%	4%
Consumer Staples	4%	4%	2%
Communication Services	4%	3%	4%
Other	3%	4%	4%
Health Care	1%	1%	1%
Energy	0%	0%	0%
TOTAL NET EXPOSURE	89%	86%	86%

See note 5, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Jinping was re-elected for an unprecedented third term as General Secretary of the CCP. Concerns mounted that the Standing Committee comprised Xi loyalists, including Shanghai Party Secretary Li Qiang, the likely successor to Li Keqiang as Premier, further consolidating Xi's power. This was complicated by several well-respected members retiring from the Central Committee. The Hang Seng sold off to levels not seen in 13 years, and the A-share/H-share spread reached decade highs of ~50%.⁴ Chinese elite politics remains opaque at the best of times. President Xi has had a strong political base for many years and this was a further step in that direction. Nonetheless, markets were alarmed by the latest political developments.

The primary concerns facing China remain the downturn in the property sector, rolling zero-COVID lockdowns and, more recently, weakening exports. These have sent China into a severe economic downturn. An added dimension has been escalating geopolitical tensions with the West, which have seen tail events, such as speculation of an invasion of Taiwan or more widespread secondary sanctions on Chinese businesses/individuals, come to the fore. It was encouraging to see some positive developments addressing all these concerns in recent months.

Having dealt with the initial COVID strains well in 2020, China has struggled to manage the Omicron variant for much of 2022. With an older demographic, relatively ineffective domestic vaccines and poor vaccination rates, authorities have resorted to rolling lockdowns to minimise contagion, most recently, in Beijing, Guangdong, Chongqing and Sichuan during November, culminating in ~25%⁵ of China's economy in lockdown and the 'white paper' protests.

⁴ Source: FactSet Research Systems.

⁵ Source: Nomura, November 2022.

Net Currency Exposures

CURRENCY	31 DEC 2022	30 SEP 2022	31 DEC 2021
Chinese Renminbi (CNY)	50%	47%	44%
South Korean Won (KRW)	11%	10%	11%
Hong Kong Dollar (HKD)	10%	15%	17%
Indian Rupee (INR)	7%	9%	10%
New Taiwan Dollar (TWD)	5%	5%	7%
Vietnamese Dong (VND)	5%	5%	5%
United States Dollar (USD)	4%	3%	3%
Philippine Peso (PHP)	2%	2%	2%
Macanese Pataca (MOP)	2%	2%	1%
Singapore Dollar (SGD)	1%	2%	1%
UK Pound Sterling (GBP)	0%	0%	1%

See note 6, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

In the wake of growing social unrest and severe economic impact, Chinese authorities pivoted from the stringent zero-COVID policies with a 20-point plan announced in early November. While this included a further easing of quarantine rules, of interest, were measures to increase hospital/ICU capacity and build stockpiles of COVID-related treatments, one would assume, ahead of a more formal cessation of lockdowns. More recently, quarantine for inbound travellers will be scrapped early in the new year and outbound travel is opening up. This gives some confidence that a reopening of the last remaining closed economy is on the horizon.

As we have witnessed in other countries, the path to reopening will not be easy. We will see headlines relating to shortages in medical treatments, stretched hospital resources and, unfortunately, higher instances of death over the coming months before either herd immunity is reached or we see widespread inoculation with Western vaccines. How other countries deal with inbound Chinese travellers in the interim should also be closely watched, with a number of countries already reintroducing testing requirements for inbound Chinese travellers.

The contagion from the "Three Red Lines" policy progressively escalated to the wider Chinese property sector over 2022. Given the systemic importance of the sector to the wider Chinese economy, it was only a matter of time before mitigating measures were taken. Authorities extended liquidity to property developers via the "Three Arrows", namely bank credit, bonds and equity issuance. In total, we have seen Rmb4 trillion in credit disbursement and bond issuance to more than 60 developers, with 19 A-share-listed developers planning to

Top 10 Holdings

COMPANY	COUNTRY	INDUSTRY	WEIGHT
Ping An Insurance Group	China	Financials	4.9%
ZTO Express Cayman Inc	China	Industrials	4.8%
Taiwan Semiconductor	Taiwan	Info Technology	4.8%
Samsung Electronics Co	South Korea	Info Technology	4.7%
InterGlobe Aviation Ltd	India	Industrials	4.4%
Tencent Holdings Ltd	China	Comm Services	3.8%
China Resources Land Ltd	China	Real Estate	3.7%
Vietnam Enterprise Inv	Vietnam	Other	3.3%
Trip.com Group Ltd	China	Consumer Disc	3.3%
Alibaba Group Holding Ltd	China	Consumer Disc	2.9%

As at 31 December 2022. See note 7, page 28.

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 www.platinumworldportfolios.ie/The-Funds/PWP-Asia-Fund

raise equity.⁶ Early in the new year, an outright easing of the “Three Red Lines” policy was reported.

With a firmer policy in place, liquidity flowing and high-yield bond spreads narrowing, the immediate financial distress facing Chinese developers has been averted. However, the collateral damage appears to be a crisis of confidence from both developers and property buyers alike. Year-to-date developer land purchases were down 54% year on year to November and contract sales have fallen 43%.⁷ Those developers that have defaulted have seen more material sales declines of 70-90%, while state-owned developers have fared better. Previously tight liquidity, COVID lockdowns, property price declines and concerns around stressed developers completing projects have all contributed to the downturn. The path to recovery for the property market still has a long way to play out. While vague, the recent Central Economic Work Conference hinted at new real estate development models, which could point to some forthcoming structural changes. The G20 Summit, held in Bali in November, marked the first instance President Xi held face-to-face meetings with Western counterparts for three years. A more moderate formal address from Xi combined with one-on-one meetings with Western leaders was viewed as a thawing of geopolitical relations with the West.⁸ German Chancellor Olaf Scholz was the first Western leader to travel to Beijing to meet President Xi post the National Congress. While the visit polarised Europeans, the fact that a business delegation of German CEOs accompanied Scholz is a timely reminder of how integrated China remains with the global economy and perhaps how difficult it would be to completely unwind this.⁹

Turning to the rest of the region, **India** deserves a mention given the resilience of the market. After a decade-long deleveraging cycle, loans to Indian corporates grew ~14% year on year in October.¹⁰ With capacity utilisation approaching 75%, a US\$1.3 trillion infrastructure pipeline and a resurgent residential property market, there is growing optimism surrounding a forthcoming capital expenditure (capex) cycle. Both factors could prove a powerful combination supporting economic growth and this certainly features in Prime Minister Modi's plans for a US\$5 trillion economy by 2025. We have previously mentioned the structural reforms implemented by the prime minister, the most notable of which relates to the Production Linked Incentives Scheme, which will see ~US\$28 billion of incentives for manufacturing across 14 sectors. Over the past year, ministries have finalised the awards across

multiple industries. While IT services remain India's greatest export, it still only employs 4.5 million people. A vibrant manufacturing sector offers more compelling opportunities for labour upskilling in a country where agriculture still employs 40% of the population. Perhaps the only critique is that policy remains focused on India's indigenous requirements rather than being truly export competitive. While the prospects for India look bright and we remain optimistic regarding our current Indian investments, the elevated valuations do curb some of our enthusiasm for the broader market.

During the quarter, members of our team visited Thailand and Indonesia. **Thailand** is reemerging post-COVID. With a heavy reliance on tourism (~20% of pre-COVID GDP),¹¹ a less aggressive tightening stance by the Bank of Thailand (BOT) and a general election forthcoming in May 2023, it remains the only ASEAN economy where GDP is still below pre-pandemic levels. However, inbound tourism is recovering quickly from ~10 million in 2022 to as much as 23 million expected in 2023 as Chinese tourists return.¹²

Indonesia has been one of the region's best-performing economies and markets, supported by a resource-rich trade surplus. Like many Asian countries and with the new business-friendly Omnibus Jobs Creation Bill enacted, Indonesia is also a beneficiary of large foreign direct investment. Specifically, Indonesia is focused on leveraging its vast nickel resources into a vertically integrated electric vehicle industry, with leaders such as LG Energy, Chinese battery maker CATL and Hyundai already committing large sums of foreign direct investment to set up manufacturing. These trips yielded valuable on-the-ground insights after many years between visits. Small positions in a number of new ideas were initiated in the Fund post the trip.

Outlook

Given an uncertain backdrop, it remains difficult to express absolute confidence about the direction of Asian markets in 2023. While inflation is normalising from its elevated levels and interest rates are getting closer to the end of their tightening cycle, the risk of a US recession is gaining wider acceptance, with possible contagion to some Asian economies. That said, there are seeds of optimism for Asian markets, particularly as most economies appear more resilient versus prior downturns, given more stable political settings, proactive monetary policy combined with sound structural reforms, and China emerging from COVID. We continue to find attractive investment opportunities, with valuations across many markets remaining reasonable.

6 Source: Goldman Sachs.

7 Source: citi.

8 https://www.fmprc.gov.cn/eng/zxxx_662805/202211/t20221115_10975446.html

9 <https://www.bundeskanzler.de/bk-en/news/chancellor-guest-article-politico-china-2139576>

10 RBI, Macquarie Research, December 2022.

11 <https://knoema.com/atlas/Thailand/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP>

12 Source: TISCO, Jefferies.

Platinum Japan Fund



James Halse
Portfolio Manager

Performance

(compound p.a.⁺, to 31 December 2022)

SHARE CLASS	QUARTER	1 YR	3 YRS P.A.	5 YRS P.A.	SINCE INCEPTION P.A.
PWP Japan Fund Class A USD	10%	-12%	0%	-1%	5%
PWP Japan Fund Class B USD	9%	-	-	-	-
PWP Japan Fund Class D USD	9%	-12%	0%	-2%	5%
PWP Japan Fund Class F EUR	0%	-6%	1%	1%	2%
MSCI Japan Net Index (USD) [^]	13%	-17%	-1%	0%	4%

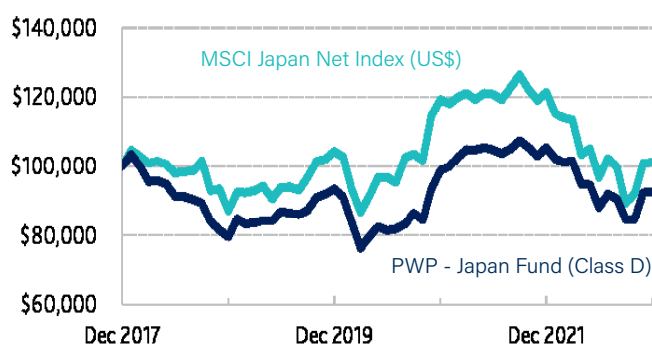
+ Excluding quarterly returns. Fund returns are net of accrued fees and costs. Class D inception date (16 Nov 2015) is used for Index "since inception" returns.

[^] Index returns are those of the MSCI Japan Net Index in USD. Source: Platinum Investment Management Limited for Fund returns, FactSet Research Systems for Index returns

Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations. See notes 1 & 2, page 28.

Value of US\$100,000 Invested Over Five Years

31 December 2017 to 31 December 2022



After fees and costs. See notes 1 & 3, page 28. **Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations.** See notes 1 & 2, page 28. Source: Platinum Investment Management Limited, FactSet Research Systems.

Japanese equities rallied during the quarter, at first in line with other developed markets, then likely on news that China, Japan's close neighbour and major trading partner, was exiting its zero-COVID policies, which has positive implications for the return of Chinese tourists and the demand for Japanese goods. The rally persisted even as the yen strengthened, until late in the quarter, when the Bank of Japan (BOJ) surprised the market by announcing it would increase its target band for the 10-year bond rate, causing the yen to strengthen further and equities to sell off. Overall, for the quarter, the combination of rising equities and a rebounding yen helped the Fund (Class D) deliver solid performance, returning 9.4% for the period.¹ Unfortunately, this was below the market's return, due primarily to our currency positioning and low exposure to financial services stocks, which rallied due to the prospect of stronger profits as a result of higher interest rates.

Regular readers may recall our discussion of yen weakness in the September quarterly report and our use of hedging to mitigate some of the effects of that move on investors in the Fund. By September, we viewed the yen as cheap and removed our hedging, with the decision aided by a form of backstop in terms of the expressed intention of the Japanese government to intervene in the currency market to prevent further rapid depreciation. That backstop was not tested rigorously because the pressure on the currency from an appreciating US dollar (USD) reversed as US bond yields fell on expectations of less aggressive rate increases in the face of cooling inflation. These dynamics were further

¹ References to returns and performance contributions (excluding individual stock returns) in this PWP - Japan Fund report are in USD terms. Individual stock returns are quoted in local currency terms and sourced from FactSet Research Systems, unless otherwise specified.

compounded by the BOJ's decision near the end of the quarter.

The yen remains cheap at current levels of around ¥132 to the USD, which enhances Japan's relative competitiveness, particularly in the area of labour costs. As a result, we are seeing increased announcements around major investments in domestic production capacity, as companies seek to take advantage of these low costs while steering clear of the rising geopolitical tensions between the US and China, and shortening supply chains in response to the issues experienced during the pandemic and Russia's invasion of Ukraine. Projects announced include new semiconductor chip fabrication plants for Taiwan Semiconductor Manufacturing (TSMC) and Kioxia (51% owned by Toshiba/49% by Bain Capital) and a new multi-billion dollar image sensor plant for Sony. While not yet reflected in the gross capital formation statistics, we expect these projects to flow through in due course.

It is not just in hardware component manufacturing where we are seeing this pick-up in activity. Investment in IT services and software has accelerated as the pandemic forced recognition of the need to replace antiquated systems and processes (see Fig. 1 below).

Social distancing requirements were a wake-up call for private and government organisations that were reliant on customers and suppliers using paper-based forms that required an in-person appearance. Increasingly, processes are being digitised, on-premise software systems and applications moved to the cloud, and antiquated mainframes retired.

This step-up in growth creates a supportive environment for the domestic IT services sector, which is in any case, particularly well-positioned in Japan due to the lack of in-house capability, even amongst many of the largest and strongest companies.

Disposition of Assets

REGION	31 DEC 2022	30 SEP 2022	31 DEC 2021
Japan	81%	77%	79%
South Korea	9%	7%	8%
Cash	10%	16%	13%
Shorts	-6%	-5%	-8%

See note 4, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Sector Exposures

SECTOR	31 DEC 2022	30 SEP 2022	31 DEC 2021
Information Technology	26%	19%	19%
Industrials	20%	21%	25%
Materials	18%	17%	16%
Consumer Staples	7%	8%	4%
Consumer Discretionary	6%	5%	7%
Communication Services	4%	6%	5%
Health Care	3%	3%	2%
Financials	0%	0%	2%
Real Estate	0%	0%	1%
Other	0%	0%	-2%
TOTAL NET EXPOSURES	84%	79%	79%

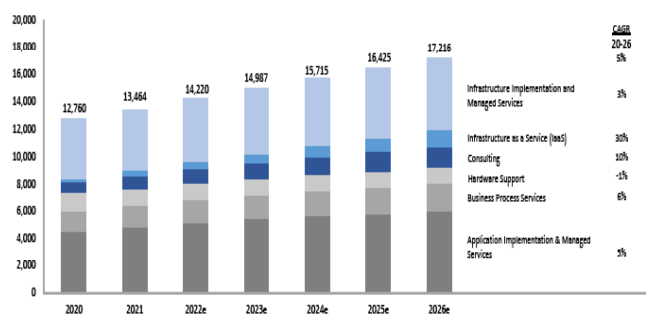
See note 5, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Currency Exposures

CURRENCY	31 DEC 2022	30 SEP 2022	31 DEC 2021
Japanese Yen (JPY)	88%	83%	62%
South Korean Won (KRW)	9%	7%	8%
United States Dollar (USD)	3%	8%	30%
Australian Dollar (AUD)	1%	1%	0%

See note 6, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Fig. 1: Japan IT Service Market Outlook (JPY billions)



Source: Gartner/Bank of America. CAGR = Compound annual growth rate.

This dynamic relates to the nature of the employment market in Japan. Companies hire graduates out of university with the expectation they will stay with the company for life and rotate through many departments. Software engineering graduates typically want to be software engineers and not rotate through finance, marketing, and operations. This leads to more than 70% of software engineers in Japan being employed by IT service firms, also known as System Integrators (SIs). Given the shortage of engineers in Japan, this places the SIs in a strong position. We met with many of these companies and their customers on our recent trip to Japan and this story was reinforced everywhere. We have exposure to this theme via several positions, including SIs **Fuji Soft** and **DTS**, and cloud software company **Henne K.K.**

The relative inefficiency of this system also creates opportunities for innovative younger companies. One such business we took an initial position in during the quarter is **SHIFT, Inc.** SHIFT provides independent software testing and assurance services both to end clients and to the SIs using specialised testers who do not have to be experienced software engineers. This allows SHIFT to provide testing at a lower cost than the SIs, which the end clients love. One might be forgiven for thinking the SIs would resist this outsourcing, but with the shortage of engineers, the SIs are all too happy for SHIFT to take on this lower-value work and free up their engineers for higher-value tasks. SHIFT has been growing rapidly and looks to have a long growth path ahead of it.

We took advantage of the sell-off in high-growth names to start an initial position at an average price of around ¥20,500 per share while we completed our full due diligence. The stock quickly appreciated past ¥28,000, unfortunately too quickly for us to build a full position at the price we wanted. The sell-off in high-growth stocks over the last month may provide another opportunity. We will continue to watch the stock and believe the company has a promising future.

Strong performers in the quarter included **SHIFT** (+15% from initial purchase), owner of the Bobcat small-earth mover brand **Doosan Bobcat** (+21%), coating-machine maker **Hirano Tecseed** (+31%), and seismic consultant **Oyo** (+22%). There were limited detractors from performance thanks to the strength of the yen, two of note were **Daisue Corporation** (-19%), weakening in sympathy with the IT services sector, and **DTS** (-11%), falling as its margins were squeezed by rising input costs.

Changes to the Portfolio

During the quarter, we added new positions in **SHIFT**, as described above, and **Henne**, a provider of cloud-based security services, in particular a single sign-on product that provides secure access to multiple third-party applications. We also added a new position in **Nippon Ceramic**, a leading manufacturer of sensors for security cameras and automobile applications. We added to positions in **Fuji Soft**, **Oyo** and **DTS**. We exited positions in construction conglomerate **Infroneer** for a small profit, as the case around the merging of the different listed components of the former Maeda Group played out. We also sold SI company **Biprogy** as we saw better opportunities in DTS, Fuji Soft and SHIFT.

Outlook

While inflation remains relatively benign if viewed at a core level that excludes food and energy, the BOJ (likely pushed by Prime Minister Fumio Kishida) has clearly responded to the pain being experienced by consumers as they face dramatic increases in the cost of living, without accompanying increases in their incomes. We expect any moves to further normalise interest rates in Japan will be cautious and measured to minimise any market disruptions. While further increases are possible, the recent strength of the yen, which makes imported consumer products less expensive, has likely lessened the pressure on the BOJ to take more drastic action. Monetary policy continues to be loose, which should be supportive of stock prices, and combined with the evidence we are seeing of increased reshoring of manufacturing capacity, points to a relatively healthy outlook for the domestic economy. Exogenous shocks such as a deep recession in the US and Europe

Top 10 Holdings

COMPANY	COUNTRY	INDUSTRY	WEIGHT
Toyo Seikan Group	Japan	Materials	6.4%
Fuji Soft Inc	Japan	Info Technology	4.9%
Fujitec Co Ltd	Japan	Industrials	4.7%
Minebea Co Ltd	Japan	Industrials	4.0%
Toyota Motor Corp	Japan	Consumer Disc	3.2%
Pigeon Corp	Japan	Consumer Staples	3.0%
Lixil Group Corp	Japan	Industrials	2.9%
Unicharm Corp	Japan	Consumer Staples	2.8%
Open House Co Ltd	Japan	Consumer Disc	2.7%
Doosan Bobcat Inc	South Korea	Industrials	2.6%

As at 31 December 2022. See note 7, page 28.

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 www.platinumworldportfolios.ie/The-Funds/PWP-Japan-Fund

remain a risk, but Japan may be cushioned in such a scenario by a recovery in the economy of its large neighbour, which is out of sync with the remainder of the world as it emerges from its zero-COVID policy and loosens its recent tight monetary and regulatory policy stance.

On the corporate governance front, we see continued grounds for optimism as an activist shareholder succeeded in appointing two independent directors to the Board of Fuji Soft, and another activist has called an extraordinary general meeting to replace the “independent” directors at elevator manufacturer Fujitec. Even if not fully successful, these actions reinforce to company boards in general, and outside directors in particular, the importance of listening to shareholders and adopting good governance practices if they wish to avoid being a target of shareholder action. We expect that, over time, this should translate to better corporate performance and cash returns for shareholders across Japanese equity markets.

Platinum Health Sciences Fund



Dr Bianca Ogden
Portfolio Manager

Performance

(to 31 December 2022)

SHARE CLASS	ONE MONTH	SINCE INCEPTION
PWP Health Sciences Fund Class D USD	1.1%	3.0%

Fund returns are net of accrued fees and costs. Inception date is 28 Oct 2022. The Fund uses an absolute return hurdle for performance comparison purposes and for the purposes of calculating performance fees payable to the investment manager. Source: Platinum Investment Management Limited. **Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations.** See notes 1 & 2, page 28.

As at the date of this document there is insufficient data for the Value of US\$100,000 Invested Chart.

The Fund (Class D) returned 3.0% since its inception.¹

Since the inception of the Fund on 28 October 2022, we have continued to deploy capital into a range of names. Given the company-level volatility that this sector experiences, often exacerbated by events early in the year, we continue to apply our disciplined approach to valuations while looking for opportune times to invest further in a prudent fashion.

Below is a summary of key highlights in the health sciences sector over the December quarter.

The sentiment towards biotechs has changed ever so slightly in recent months: successful progress is rewarded, while failure results in sell-offs. Previously, positive news saw very muted and even declines in share prices. Many investors continue to hide out in managed care and pharmaceutical stocks, with Eli Lilly being the consensus-favourite stock, despite its high valuation and increasing competition in the obesity treatment space. Within healthcare, biotech and emerging life science tool companies remain the most interesting sector, given the outstanding innovation potential and valuations.

Contrary to public opinion, the funding environment for these companies is healthy, and equity financings are being completed quickly, particularly when clinical data is successful. **Prometheus Biosciences** (+86% over the quarter), a holding in the Fund, was able to raise US\$500 million following solid phase 2 data for its anti-TL1A antibody for inflammatory bowel diseases (IBD).

¹ References to returns and performance contributions (excluding individual stock returns) in this PWP - Health Sciences Fund report are in USD terms, unless otherwise specified. Individual stock returns are quoted in local currency terms and sourced from FactSet Research Systems, unless otherwise specified and are for the December quarter.

Licensing deals continue unabated, with several of our holdings receiving non-dilutive cash from partners along with a share price uplift. Jazz Pharmaceuticals took out its option to develop **Zymeworks'** zanidatamab (Her2 antibody for the treatment of metastatic breast cancer), paying US\$325 million to Zymeworks (a holding in the Fund, +28% over the quarter). GSK entered a significant collaboration with Fund holding **Sanofi** (+15%) expanded its partnership with French natural killer (NK) cell biotech Innate Pharma, giving them €25 million.

There is a lot of money sitting on the sidelines. Sanofi and Johnson & Johnson (JNJ) both took a closer look at Horizon Therapeutics, with Amgen acquiring the company in the end for almost US\$28 billion, while Sanofi and JNJ stayed disciplined and decided against a purchase. **Takeda Pharmaceutical** (+9%) paid US\$4 billion for Nimbus' Tyk-2 inhibitor (for inflammatory diseases) during the quarter - a pretty steep cash payment. It was obviously a very competitive bidding process. In drug development, the key is to ensure there are no side effects, which is what Nimbus has been focusing on. Many investors were hoping for Takeda to do "a deal", and this one has been well-received.

Vaccine biotech **Icosavax** (+151%) announced that its virus-like particle (VLP) vaccine against RSV exhibits solid durability in a phase 1/1b trial. We see great potential for Icosavax's VLP technology to develop combination vaccines in the future. Recently, Icosavax shares traded below the company's cash balance, and we have been building our position.

Commentary

During the quarter, Prometheus Biosciences announced solid phase 2 data for its anti-TL1A antibody² in ulcerative colitis (UC) and Crohn's disease (CD) patients. In addition, Prometheus also showed that its proprietary genetic marker algorithm increases the likelihood of responders, something payers will see as an advantage. These results essentially show that Prometheus has a very competitive drug. The company subsequently raised US\$500 million, double the amount it initially set out to raise. It was a highlight for us this quarter.

We have been interested in gastric diseases for some time, and through our current investments in Takeda and Galapagos and previous investments in JNJ and Morphosys, we have become well aware of the limitations of current IBD therapies. Current therapies hit a certain level of response and remission rates but are far from curative. We also know that pharma and large biotechs are interested in this space,

Disposition of Assets

REGION	31 DEC 2022
North America	25%
Europe	22%
Japan	5%
Asia	4%
Cash	43%

See note 4, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Sector Exposures

SECTOR	31 DEC 2022
Biotechnology	28%
Pharmaceuticals	23%
Life Sciences Tools & Serv	5%
Other	1%
TOTAL NET EXPOSURE	57%

See note 5, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

Net Currency Exposures

CURRENCY	31 DEC 2022
United States Dollar (USD)	69%
Euro (EUR)	17%
Japanese Yen (JPY)	5%
Chinese Renminbi (CNY)	4%
UK Pound Sterling (GBP)	3%
Danish Krone (DKK)	1%
Swedish Krona (SEK)	1%

See note 6, page 28. Numerical figures have been subject to rounding.
Source: Platinum Investment Management Limited.

² Tumor necrosis factor-like cytokine 1A is a protein that sits in the membrane of a variety of cells.

paying significant money for differentiated assets (such as the recent Takeda/Nimbus deal). Different mechanisms are required, and it would be ideal to have a test that could predict who is likely to respond. Prometheus meets that profile.

The company traces its origins back two decades ago, when one of its founders at the Cedars-Sinai Medical Center started a biobank collecting patient samples from IBD patients. Over the years, this biobank has matured and is now at the core of Prometheus' R&D engine. This means Prometheus is not just a one-asset company; there is more beyond its anti-TL1A antibody.

TL1A was identified through the database, but it is clinically less validated, and at the time of the IPO, only Pfizer and Teva were pursuing it. Prometheus' antibody exhibits features that could make it superior to the Pfizer and Teva drug; recently, Pfizer and Roivant formed a new "vant" around Pfizer's TL1A antibody. This is an interesting move by Pfizer and something we are watching carefully.

The team in charge of Prometheus continues to tick many boxes, with the right combination of science, clinical development and commercial acumen. CEO Mark McKenna is not your typical scientific executive; McKenna has strong experience managing commercial companies, particularly in the gastric field, having turned around Salix Pharma (a division of Bausch Health). His commercial and operational focus makes this company different from many other biotechs. The board, until his passing, was led by Tachi Yamada, who has been a visionary, particularly at Takeda when he ran R&D and saw the potential in Entyvio, the leading UC and CD treatment today. Prometheus now has to repeat the data in larger clinical trials.

Outlook

As is the custom every year, in early January, healthcare companies and investors gather in San Francisco to kick off the new year. This year, 2023 guidance will be watched carefully, and business development teams will be busy. The coming year is very important for healthcare, given that we could see the approval of further gene therapy products to treat haemophilia A and Duchenne muscular dystrophy, as well as the launch of beta-amyloid antibody lecanemab, an antibody medication that slows the cognitive decline in Alzheimer's disease. It will be crunch time for many smaller companies. Expectations are for a more volatile first half of the year, while the latter part of the year should see further consolidation of this industry.

Top 10 Holdings

COMPANY	COUNTRY	INDUSTRY	WEIGHT
Takeda Pharmaceutical	Japan	Pharmaceuticals	4.5%
Bayer AG	Germany	Pharmaceuticals	3.4%
Sanofi SA	France	Pharmaceuticals	3.4%
Galapagos NV	Belgium	Biotechnology	2.8%
Gilead Sciences Inc	US	Biotechnology	2.7%
Exscientia Plc	UK	Biotechnology	2.5%
Hutchmed China Ltd	China	Pharmaceuticals	2.3%
Quanterix Corp	US	Life Science Tools	2.2%
Zai Lab Ltd	China	Biotechnology	2.1%
UCB SA	Belgium	Pharmaceuticals	2.1%

As at 31 December 2022. See note 7, page 28.

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 www.platinumworldportfolios.ie/The-Funds/PWP-Health-Sciences-Fund

Disclaimers: This publication was prepared by Platinum Investment Management Limited (ABN 25 063 565 006) (AFSL 221935), trading as Platinum Asset Management (Platinum), as the Investment Manager for, and on behalf of, Platinum World Portfolios PLC (the "Company"), an open-ended investment company with variable capital incorporated with limited liability in Ireland with registered number 546481 and established as an umbrella fund with segregated liability between sub-funds pursuant to the European Communities (Undertakings for Collective Investment in Transferable Securities) Regulations 2011, as amended. Platinum World Portfolios - International Fund, Platinum World Portfolios - Asia Fund, Platinum World Portfolios - Japan Fund and Platinum World Portfolios - Health Sciences Fund (each a "Fund", as the context requires, and together the "Funds") are sub-funds of the Company.

This is a marketing communication. This is not a contractually binding document. Prior to making any investment in the Company, please refer to the Company's prospectus and to the relevant key investor information document ("KIID") and do not base any final investment decision on this communication alone. This publication has been approved by Mirabella Advisers LLP. Platinum UK Asset Management Limited (Company No. 11572258) is an appointed representative of Mirabella Advisers LLP, which is authorised and regulated by the Financial Conduct Authority - number 606792. Platinum UK Asset Management Limited is a subsidiary of Platinum and the appointed sub-distributor of the Company in the United Kingdom.

This publication contains general information only and is not intended to provide any person with investment advice. Acquiring shares in the Company may expose an investor to a significant risk of losing all of the amount invested. The Company is a limited liability company and any person who acquires shares in the Company will not thereby be exposed to any significant risk of incurring additional liability. Any person should consider their own financial position, objectives and requirements and seek professional advice before making any financial decisions. Any person should also read the prospectus before making any decision to acquire shares in the Company. The prospectus and KIIDs, which further detail the risks relating to investment in the Company, can be obtained online at www.platinumworldportfolios.ie.

Neither the Company nor any company in the Platinum Group, including any of their directors, officers or employees (collectively "Platinum Persons"), guarantee the performance of any of the Funds, the repayment of capital, or the payment of income. Past performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred, due to currency fluctuations. The Platinum Group means Platinum Asset Management Limited ABN 13 050 064 287 and all of its subsidiaries and associated entities (including Platinum). To the extent permitted by law, no liability is accepted by any Platinum Person for any loss or damage as a result of any reliance on this information. This publication reflects Platinum's views and beliefs at the time of preparation, which are subject to change without notice. No representations or warranties are made by any Platinum Person as to their accuracy or reliability. This publication may contain forward-looking statements regarding Platinum's intent, beliefs or current expectations with respect to market conditions. Readers are cautioned not to place undue reliance on these forward-looking statements. No Platinum Person undertakes any obligation to revise any such forward-looking statements to reflect events and circumstances after the date hereof.

This publication is aimed solely at professional clients within the meaning of Article 4.1(10) of the Markets in Financial Services Directive 2014/65/EU (MiFID II) ("Relevant Persons"). This document is an informational document and does not constitute an offer or invitation to subscribe for shares in the Company or in any other product or fund referenced herein, and no person other than a Relevant Person should act or rely on this presentation.

This Quarterly Report includes hyperlinks to other sites created and maintained by other public and/or private sector organisations. Platinum Asset Management UK provides these links solely for your information and convenience. When you link to an outside website, you are leaving this our Quarterly Report and our information management policies no longer apply.

Additional information for Qualified Investors in Switzerland

This is an advertising document. The state of the origin of the Company is Ireland. In Switzerland, this document may only be provided to qualified investors within the meaning of art. 10 para. 3 and 3ter CISA. In Switzerland, the representative is ACOLIN Fund Services AG, Leutschenbachstrasse 50, 8050 Zürich, Switzerland, whilst the paying agent is Helvetische Bank AG, Seefeldstrasse 215, 8008 Zürich, Switzerland. The basic documents of the Company as well as the annual and, if applicable, semi-annual report may be obtained free of charge from the representative. Past performance is no indication of current or future performance. The performance data do not take account of the commissions and costs incurred on the issue and redemption of units. Please be aware that this document may include funds for which neither a representative nor a paying agent in Switzerland have been appointed. These funds cannot be offered in Switzerland to qualified investors as defined in art. 5 para 1 FinSA.

Platinum World Portfolios PLC 2023. All rights reserved.

Notes: Unless otherwise specified, all references to "Platinum" in this report are references to Platinum Investment Management Limited (ABN 25 063 565 006, AFSL 221935). 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.

1. Fund returns are calculated by Platinum using the Fund's net asset value per share (i.e. excluding the anti-dilution levy) attributable to the specified share class. Where a share class is not denominated in USD, the net asset value per share in USD, being the Fund's base currency, is converted into the denomination currency of that share class using the prevailing spot rate. Fund returns are net of fees and expenses, pre-tax, and assume the accumulation of the net income and capital gains, each as attributable to the specified share class. The MSCI index returns are in USD, are inclusive of net official dividends, but do not reflect fees or expenses. MSCI index returns are sourced from FactSet Research Systems. Platinum does not invest by reference to the weightings of the specified MSCI index. As a result, the Fund's holdings may vary considerably to the make-up of the specified MSCI index. MSCI index returns are provided as a reference only. The investment returns shown are historical and no warranty is given for future performance. Historical performance is not a reliable indicator of future performance. Returns could be reduced, or losses incurred due to currency fluctuations. 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.
2. The portfolio inception dates for each active share class of the relevant Fund are as follows:
 - Platinum World Portfolios - International Fund:
 - Class A USD (Accumulating) (ISIN: IE00BYRGQX37): 27 April 2016
 - Class B USD (Accumulating) (ISIN: IE00BYRGR076): 2 December 2016
 - Class D USD (Accumulating) (ISIN: IE00BYRGQZ50): 16 November 2015
 - Class E EUR (Accumulating) (ISIN: IE00BYRGR415): 16 October 2020
 - Class F EUR (Accumulating) (ISIN: IE00BYRGR183): 4 April 2017
 - Class G GBP (Accumulating) (ISIN: IE00BYRGR290): 27 April 2016
 - Platinum World Portfolios - Asia Fund:
 - Class A USD (Accumulating) (ISIN: IE00BYRGR522): 10 March 2017
 - Class B USD (Accumulating) (ISIN: IE00BYRGR639): 27 January 2021
 - Class D USD (Accumulating) (ISIN: IE00BYRGRD06): 16 November 2015
 - Class E EUR (Accumulating) (ISIN: IE00BYRGR852): 16 October 2020
 - Class F EUR (Accumulating) (ISIN: IE00BYRGR969): 3 February 2020
 - Class G GBP (Accumulating) (ISIN: IE00BYRGRB81): 19 February 2019
 - Class I USD (Accumulating) (ISIN: IE00BYMJ5524): 19 January 2017
 - Platinum World Portfolios - Japan Fund:
 - Class A USD (Accumulating) (ISIN: IE00BYRGRF20): 11 January 2016
 - Class D USD (Accumulating) (ISIN: IE00BYRGRJ67): 16 November 2015
 - Class F EUR (Accumulating) (ISIN: IE00BYRGRJ89): 18 October 2017
 - Platinum World Portfolios - Health Sciences Fund
 - Class D USD (Accumulating) (ISIN: E0000SJFC91): 28 October 2022

For the purpose of calculating the "since inception" returns of the MSCI index, the inception date of Class D of the Fund is used (as Class D was the first share class activated).

3. The investment returns depicted in this graph are cumulative on US\$100,000 invested in Class D of the specified Fund over the specified period relative to the specified net MSCI Index in US Dollars.
4. The geographic disposition of assets (i.e. other than "cash" and "shorts") shows the Fund's exposures to the relevant countries/regions through its long securities positions and long securities/index derivative positions, as a percentage of its portfolio market value. Country classifications for securities reflect Bloomberg's "country of risk" designations. "Shorts" show the Fund's exposure to its short securities positions and short securities/index derivative positions, as a percentage of its portfolio market value. "Cash" in this table includes cash at bank, cash payables and receivables and cash exposures through long derivative transactions.
5. The table shows the Fund's net exposures to the relevant sectors through its long and short securities positions and long and short securities/index derivative positions, as a percentage of its portfolio market value. Index positions (whether through ETFs or derivatives) are only included under the relevant sector if they are sector specific, otherwise they are included under "Other".
6. The table shows the Fund's net exposures to the relevant currencies through its long and short securities positions, cash at bank, cash payables and receivables, currency forwards and long and short securities/index derivative positions, as a percentage of its portfolio market value. Currency classifications for securities reflect the relevant local currencies of the relevant Bloomberg country classifications. The table may not exhaustively list all of the Fund's currency exposures and may omit some minor exposures.
7. The table shows the Fund's top ten positions as a percentage of its portfolio market value taking into account its long securities positions and long securities derivative positions.

MSCI Inc. Disclaimer: The MSCI information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each other person involved in or related to compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages. (www.msci.com)



PLATINUM WORLD PORTFOLIOS PUBLIC LIMITED COMPANY

An umbrella fund with segregated liability between sub-funds
Company Registration Number: 546481

BOARD OF DIRECTORS

Stephen Menzies (Australian)
Tony McPoland
Kevin Molony

REGISTERED OFFICE

Arthur Cox Building
Earlsfort Terrace
Dublin 2
Ireland

WEBSITE

www.platinumworldportfolios.ie



INVESTMENT MANAGER

Platinum Investment Management Limited
Level 8, 7 Macquarie Place
Sydney NSW 2000
Australia

GPO Box 2724
Sydney NSW 2001
Australia

TELEPHONE

+61 2 9255 7500

EMAIL

invest@platinum.com.au