

REPORT PREPARED FOR Worcestershire Pension Fund

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Independent Investment Advisor's report for the Pension Investment Sub Committee meetings

29 September 2022

Global overview

The Fund had another difficult quarter. Global markets continued to face the challenges of the ongoing war in Ukraine, lockdowns in China, continued supply chain disruptions, rising inflation, slowing economic growth and accelerated interest rate hikes. Inflation moved higher in many major economies over the quarter, with both equities and fixed income markets under pressure with the increased risk of recession. Global equities markets significantly declined, falling -16.1% over the quarter following the respective rate hikes across regions. US equities suffered the most (-16.1%); followed by Emerging Markets and European equities (-11.4% and -9.4% respectively); whilst UK equities registered a slightly negative return (-3.8%). Value-oriented stocks experienced a smaller decline than growth stocks (-12.2% for the MSCI World Value Index vs -21.4% for the MSCI World Growth Index). Corporate and government bond indices also sharply declined (for the UK indices, both by - 7.4%), while the hard currency emerging market bond index fell -11.4%. Real assets such as commodities and real estate continued the volatility experienced last quarter, and the US dollar strengthened against most currencies, benefiting from broad risk aversion.

GDP growth: Despite the ongoing recovery of the UK economy from the pandemic, the impact of the Russia/Ukraine war is expected to slow growth in the UK alongside other advanced economies. The UK is expected to hit an inflation peak of 11%, with the expected fall in real wages positioned at 2%. The war is expected to hinder growth through higher commodity prices and supply chain disruption. The US is forecast to post a GDP growth rate of 2.4% for 2022, following a 1.6% slump in Q1. China's growth has been disrupted by another COVID-19 wave. Real GDP growth is expected to slow sharply to 4.3% in 2022, largely reflecting the damage caused by the Omicron outbreak.

It is worth highlighting the following themes, impacting investment markets:

Inflation – becoming entrenched?: For the first half of this year, surging energy prices resulting from the Russia-Ukraine war and global supply-chain disruptions from China's zero-tolerance COVID-19 lockdowns have pushed inflation even higher. In the US, the May CPI showed an increase of 8.6% YoY, marking a new 40-year high, while inflation in the Eurozone rose to a record high of 8.6% in June, and the BoE has forecast UK inflation may peak at c.11% October. With labour markets remaining remarkably tight, average earnings are starting to rise faster (to 4% in the US in May), industrial action is increasingly common and even the normally moderate German IG Metall union is asking for a >7% pay rise. Together with the likelihood of further energy price rises this winter, it seems likely that inflation will not fall back to Central Banks' targets as quickly as they currently forecast.

Tighter monetary policy - are we approaching some limits?: Monetary policies continued to tighten, with the Fed increasing interest rates by 75 basis points on 15th June - the biggest

rate hike since 1994 - to seek to tame inflation: It is expected to continue reducing its balance sheet and hiking rates until mid-2023, with figures forecast to lie within the 3.5-3.75% range. The BoE also increased interest rates for a fifth successive time to 1.25%, and even the ECB is poised to raise interest rates in July. However, 10 Year rates weakened before the quarter-end, both as markets factored in increased risk of a global recession, and as widening Italian Government Bond spreads (over German Bonds) reminded markets that many Developed Market Government debt/GDP ratios are well above their levels in the runup to the Eurozone crisis. Increasing rates will put a severe strain on many Government finances and may constrain central banks' policy choices.

Rising fears of recession: During the second quarter, the market discounted an increased chance of global recession as a result of the high inflation, the sharp increase in interest rates, rising geopolitical uncertainty, and the sharp drop in economic activity in China (Shanghai, the world's busiest port, operated far below capacity during the lockdowns). The bond market flashed recession warning lights as the yield curve between the 10-year Treasury yield and the 2-year yield has become inverted again during the quarter. However, corporate profits have so far remained broadly resilient, and consumer leverage is much lower than in 2007, so markets are currently discounting a relatively mild recession.

Valuations – approaching reasonable levels?: With global equities over 20% off their peak and credit markets 10-15% down, valuations are now looking more in-line with long term averages. US equities are trading on 16x forward P/E, while most other regions are nearer 10x, and global investment grade indices yield c. 4%. However, bear markets often overreact to the downside, there is little sign of investor "capitulation" in most markets, and it is worth remembering that corporate earnings/defaults have not yet shown much sign of the weakness / peaks (respectively) which would typically occur in a recession.

Worcestershire Pension Fund

Summary and Market Background

The value of the Fund in the quarter fell slightly to £3.3bn, a decrease of £233m compared to the end March value of £3.5bn. The Fund produced a return of -4.7% over the quarter, which was -1.2% behind the benchmark. The main reason for the underperformance was due to the active equity mandates performing poorly against benchmark along with the property and fixed income investments. The equity protection strategy has made a positive contribution to performance. Over a 12-month period the Fund recorded a negative relative return against the benchmark of -2.6% (-2.5% v. 0.1%). The Fund has performed at or near the benchmark over the three, five and ten year periods, details of which can be found in Portfolio Evaluation Limited's report.

Some changes to report concerning the equity protection strategy mandate. The division of River & Mercantile that included the derivates team has been taken over by Schroders. Despite assurances at the time that it would be "business as usual", the three key members of the team either did not transfer or are now leaving the business. It is therefore appropriate that our arrangements should be reviewed. The strategy has been successful, particularly once the management of it was moved to be on a more dynamic basis, ensuring the protection offered remained appropriate as markets moved. A key element has been that one of the options available in managing the strategy would include removing protection if it was felt that markets were at a level that it was no longer required. If that does occur it is important that the capability to implement protection again is maintained, given that the asset allocation continues to have a relatively high percentage of the Fund's assets (70%) invested in equities. The equity protection strategy forms part of the overall risk management arrangements, with the objective of continuing to provide some protection to the funding level in the event of future significant falls in equity markets.

Thankfully the rather frenetic activity of recent periods has quietened down somewhat, with a number of changes made to boost our Alternatives allocation and also resulting from the Environmental, Social and Governance (ESG) and Climate review work now completed and bedding down. Outstanding is the provisional allocation of £30m made to the LGPS Central Infrastructure Fund, subject to detailed proposals being forthcoming. Further progress has been made with the investment of a minimum of £150m into Gresham House Forestry Funds. The first tranche of £50m committed and already substantially drawn down is into the Gresham House Forestry Growth & Sustainability Fund, with £75m committed to the Gresham House Forest Fund VI, also substantially drawn down. A further commitment of £10m to Fund VI was approved in June, as part funding for an attractive diversifying acquisition in Wales. Consideration will be given to the options available for the final tranche within this current allocation.

Now it is time to pause, while the Triennial valuation is undertaken and the outcomes from that are considered in the Strategic Asset Allocation Review later in the year. This will be supported by a review of the Fund's investments being undertaken by Hymans Robertson, which will be presented at the PISC meeting in September.

Performance during Q2 2022 has again been a bit of a mixed bag, although on this occasion we have succeeded in being in some of the right places, like UK equities. The repercussions of the invasion of Ukraine continue to weigh heavily on markets, mainly due now to the economic implications. Clearly there are some major inflationary issues to consider around commodities, not just energy related but food and materials as well. This feeds through to not only a rapidly increasing rate of inflation (CPI), but also to the actual cost of living. This will restrict discretionary expenditure, so this will impact the wider economy. Most equity and bond markets had another challenging quarter, with an increase in volatility. Our active equity managers certainly struggled, but to be fair to them this was to be expected, given the challenge to fundamentals based investing. In performance terms Nomura (Pacific) showed an underperformance of -3.2%, LGPS Central (Emerging Markets) underperformed by -0.5%, with two out of three managers contributing to that. There was a first time contribution from the LGPS Central Global Sustainable Active Funds, sadly negative, with the Targeted strategy at -7.2% and the Thematic strategy at -1.8% relative. LGPS Central (Corporate Bonds) were -1.6% behind their benchmark. The total property fund showed an underperformance against our own benchmark of -0.3%, but that is showing a continuing improvement. Infrastructure performed well, which given our heavier weighting versus property enhanced the total alternatives performance.

The passive equities outperformed the alternative passive strategies by 1.6% (-7.1% v. - 8.7%). Passive equities outperformed active market equities by 1.7% (-7.1% v. -8.8%), which reflects the underperformance of the active managers, rather than individual regions. Out of the passive geographies, the UK won again (-5.1%), falling less than North America (-9.5%) and Europe down -8.6%.

Equities

Global equities fell sharply in Q2. All tracked indexes suffered significant declines. In addition to the continued Ukraine war, the impacts from slowing economic growth, tightening monetary policy, rising interest rates, and high inflation have all significantly hit the market. Unsurprisingly, the VIX increased by 39.6% in Q2, from 20.6 to 28.7.

US equities, measured by the S&P 500, fell sharply over the quarter by -16.1% and the NASDAQ fell by -22.4% QoQ in response to the more aggressive path of interest rate hikes, with the Fed raising rates by 0.5% in May and 0.75% in June, in an effort to slow inflation, reaching a target range of between 1.50% and 1.75%. This is the greatest rate increase since 1994. The Consumer discretionary sector slumped -26.3% QoQ due to rising consumer concerns over the effect of inflation on households. All sectors experienced declines, although consumer staples and utilities were comparatively resilient.

UK equities continued to be impacted by the war in Ukraine, and the BoE raised the base rate to 1.00% in May, with a further rise to 1.25% in June - the highest level for 13 years. The UK market was more downbeat with both the FTSE 100 (-3.8%) and FTSE All-Share (-5.1%) falling over the quarter. Large-cap companies held up relatively well as traditionally defensive areas of the market outperformed, including the telecoms, healthcare and consumer staples sectors. Small and mid-caps (SMIDs) suffered significant valuation declines as the growth companies in general have suffered against the backdrop of rising rates. The Euro Stoxx 50 declined by -9.4% over the quarter. The ECB's President signalled the first rate hike was likely to come in July 2022, and will pave the way for the end of negative rates. Concerns over the higher cost of living and the possibility of recession saw the European Commission's consumer confidence reading fall to -23.6 in June, the lowest level since the early stages of the pandemic in April 2020.

Japanese equities registered a decline of -5.0% from the end of March. While the latest annual consumer inflation figure (for May) rose above the Bank of Japan's (BoJ) target of 2%, it remained very low by international standards. Japan's equity market in the quarter was primarily driven by news flow on monetary policy and currency markets, together with concerns over the growing possibility of a US recession. The yen weakened sharply against the US dollar, breaching the 130 level for the first time in 20 years.

Emerging market (EM) equities aligned with the global equities markets and delivered a negative 11.4% over the quarter, with US dollar strength a key headwind.

Global Equity Markets Performance



Source: Bloomberg. All in local currency.

FTSE All-Share Index (Ticker: ASX Index) S&P 500 Index (Ticker: SPX Index) STOXX Europe 600 (Ticker: SXXP Index) Nikkei 225 Index (Ticker: NKY Index) MSCI World Index (Ticker: MXWO Index) MSCI Emerging Markets (Ticker: MXEF Index

Fixed Income

Global bonds continued to sell off sharply in Q2 sending yields higher amid elevated inflation and rising interest rates. Global bonds rallied into quarter-end amid rising growth concerns, slightly curtailing the negative returns. Within corporate bonds, high-yield credit was hardest hit, with mounting concerns over the economic outlook. Emerging market bonds also suffered similar declines.

The US 10-year bond yield rose from 2.35% to 2.98% and the 2-year yield from 2.33% to 2.93%. Treasuries provided a total Q2 return of -3.8%. The unemployment rate also edged down, bolstering the case for the Fed to speed up the tightening of monetary policy in the fight against inflation. The Michigan Consumer Sentiment index declined to 50.0 in June, a record low in its 70-year history, going back to 1952.

The UK 10-year Gilt yield increased from 1.61% to 2.23% and 2-year yield rose from 1.36% to 1.88%. This occurred despite concerns around the UK economic outlook and particularly the cost-of-living pressures on households which is causing a significant purchasing power squeeze. Unemployment remained low in the UK, but consumer confidence has hit a record low with the negative real wage growth.

European government bonds had a total return of -7.3% in Q2. The selloff in European government bonds gathered momentum as traders priced in a more aggressive pace of tightening from the European Central Bank amid mounting concerns over the deteriorating inflation outlook worldwide. Expectations are for the ECB to conclude its net asset purchases under its asset purchase program in Q3. Once complete, the ECB is expected to begin hiking interest rates, following the same path as the BoE and Fed. The German 10-year yield increased from 0.55% to 1.37% with Italy's up from 2.04% to 3.39%, hitting as high as 4.27% in June.

US high-yield bonds aligned with the global bonds market, returning -9.8%, with -10.7% performance for European high-yield bonds. Investment-grade bonds returned -7.4% in the UK, -7.6% in Europe and -7.3% in the US.

Currencies

In Q2, sterling weakened marginally against the euro (-2.0%) and sharply against the US dollar (-7.3%) as recession fears, rising living costs, public sector strikes, and inflation uncertainty all undermined confidence in the UK's economic outlook and the strength of its currency. Overall, the US dollar (Dollar index +6.5%) had a strong Q2, as investors preferred the US over Europe amid uncertainty among ECB policy makers growth outlook. Notably it also strengthened against the Japanese yen by 11.6%, again reflecting the divergence in policy between the Fed and the BoJ.

Commodities

Energy prices fluctuated in Q2 2022, with the continuation of the Russia-Ukraine conflict putting further pressure on prices from Q1. Increases in price occurred due to tight supply reflecting uncertainties about further sanctions related to Russia's invasion. Precious metals also surged, with investors seeking safe-haven assets – which saw gold prices rise. US natural gas fell over the quarter influenced by rising domestic inventories. The recent explosion at one of the biggest US liquefied natural gas export terminals in Texas-Freeport LNG - means an additional 2 Bcf/d of natural gas remains in the US market despite soaring international demand. This is, however, easing pressure on domestic US prices Freeport LNG said it does not expect the terminal to return to full operations until late 2022. Natural gas prices in Europe rose to the highest level in almost four months due to planned strikes in Norway threatening to further tighten a market, which is already suffering from Russia's supply cuts. Prices in Europe continued to rise to new highs (Dutch TTF Gas Futures +10% to above 160 euros a megawatt-hour) as Germany entered the alert phase of its emergency plan in response to reduced Russian flows and liquefied natural gas (LNG) imports. This follows the suspension of certification of the Nord Stream 2 pipeline. The price of LNG has gained 45% YTD, through strong overseas demand, especially from Europe as it slowly and reluctantly seeks to eradicate Russia as a supplier.

Brent crude oil experienced increasing prices in Q2 (+6.4%). Fluctuations in price stemmed from the fear of a world recession. Oil came close to an all-time high of \$130 in Q1 due to Russia's invasion of Ukraine exacerbating tight supplies following the recent recovery of demand shortly after the Covid pandemic. After reaching a 10-week high at more than \$125/b in Q2, Brent crude futures have fallen as concerns over a global economic slowdown trumped the impact of Western sanctions on Russian oil supplies. Brent closed the quarter at \$115 a barrel.

Gold and Copper prices fell -7.3% and -21.8% respectively in Q2, as fears of a global recession continued to hang over the market. The risk of recession in the US is growing as the Fed tightens monetary policy amid rising inflation and Europe's economic outlook darkens due to soaring gas prices. With the costs of holding Copper rising through Fed

tightening and gold imports from Russia being banned, we may see further fluctuation into Q3. The Generic 1st Gold index and Generic 1st Copper index closed Q2 at 1,807 USD/toz and 371 USD/lb, respectively.

Thinking from a different perspective

At this time of year I attempt to take a view on issues that affect us from a different angle from normal, mainly as a result of talking to local people wherever we have been on holiday. Quite often my preconceived ideas get turned on their head, or as was the case last year studying the recovering hospitality industry in different areas of the UK and finding similar problems but with differing reasons. You will recall that the hospitality industry was facing a perfect storm, with post Brexit issues mixing with Covid restrictions and supply chain challenges, while at the same time trying to take some benefit from the massive lift to local tourism with foreign travel still not realistically possible for most people. While some are relatively short term issues, others will undoubtedly cause longer term change.

Our travels this year started off just before Easter in Swanage. Over the years we have been frequent visitors to the Isle of Purbeck, so we thought we had a good grasp of most matters there. My wife and I have an aspiration to eventually "retire" to Swanage. The climate is warmer than Cheshire, the sailing is good, it has a lovely heritage railway and the pubs are quite good. Ideal. Except the property prices. It was almost a case of we'd think of a price and then it would be double that. The owner of the B&B that we were staying at confided with us that they had bought it only a few years ago, but were putting it on the market as they felt that the current prices wouldn't hold and they were struggling to get staff anyway. We have continued to keep an eye on prices there, and although still high, actual transactions seem to be few and far between.

We moved on from Swanage to Stratton-on-the-Fosse, near Bath. This was a little pub with a few bedrooms, run solely by an elderly couple, no other staff. We'd stayed there before and enjoyed the quirkiness of it. We arrived to discover that we would be their last guests. Post Covid, their business had fallen considerably. They used to do a very busy Sunday lunch buffet. After reopening, most of their regulars didn't return, being concerned about the ongoing health risks. This is something we have seen frequently on our travels, many small establishments couldn't reopen due to spacing restrictions initially, and if and when they did reopen all the other issues pushed them out of business. The Kings Arms was heaving on their last night, with the local Folk band playing, so at least they got a great send off!

A small diversion. My wife and daughter had a girly week away back in June to Port de Soller in Majorca. Again a place we know well, so comparisons can be made. Rather surprisingly, because there isn't really a Brexit factor to consider, the local hospitality industry is suffering in a similar way to the UK. Restaurants and bars were only opening for limited hours and closed on some days. Others, including the one night club, hadn't reopened at all. Their normal source of seasonal staff is mainland Spain, and many simply had not wished to return post Covid. So we aren't alone. In early August we had a week in the Isle of Man. Despite being so easy to get to from Cheshire, this was the first visit there for my wife and son, for me it was my first trip there for over 25 years. The tourism industry has shrunk massively there, as finance related commerce has replaced disillusioned soggy visitors! By contrast the weather for our visit was more like the Mediterranean, but again staff shortages were widespread. Brewers are still allowed to own pubs there, and the main brewer, Okells, has an extensive pub estate. However, despite this being what passes as peak season there, some were open for wet sales only as they had no kitchen staff, those that were offering food had restricted times and very simplified menus. Even the hotel next to our apartment was only offering bar food on some nights, due to a lack of a chef for the restaurant. This is one of the largest and best hotels in Douglas. Like the Channel Islands, the Isle of Man sets their own immigration rules which is open to casual labour, so clearly pay is an issue here as well. The manager of one of the wet only pubs told us that she is paid £9.50 an hour, has been working long hours without support and was going to move to another pub closer to her home on the island, thus saving some travel expense.

So what's the point of all of this? Quite simply the hospitality industry remains in crisis and will never return to the way that it was. With high employment, why suffer low pay, long and unsociable hours and frankly rude customers on a regular basis? Ultimately the "offer" has to be made more attractive, principally much higher pay. This is were my thesis widens out. This country, and others, has had the benefit of comparitively cheap labour for many years, working in many different spheres which are still labour intensive. That includes transport and agriculture, alongside hospitality and leisure. Those days of cheap labour are effectively over, and the adjustment to a proper living wage will inevitably be inflationary over a considerable period of time. This sits alongside my concern that inflationary issues created by Putin will sadly be with us for some time to come, such that although headline inflation may well fall back from current levels as we work through into next year, we are not going back to 2% anytime soon. The genie is out of the bottle, and staying out.

As a small postscript, in the two weeks since writing this report the concerns over the rapidly increasing cost of living have grown considerably. This will clearly be of particular concern to the pensioners of the Fund, as although their pensions enjoy a CPI related increase each year this will not be sufficient to compensate for the increases that we are all seeing in energy and food prices.