London Borough of Havering Pension Fund

Q3 2022 Investment Monitoring Report

Simon Jones – Partner
Mark Tighe – Associate Investment Consultant
Meera Devlia – Investment Analyst

HYMANS ROBERTSON

- This section outlines the key points included in this report.
- The tactical benchmark in the Fund performance table represents the aggregate performance target of the Fund's assets and is a measure of relative outperformance / underperformance from the asset managers.
- The strategic benchmark represents the expected rate at which the Fund's liabilities are growing (or falling) in value. The asset performance relative to the strategic benchmark performance gives an indication of whether the Funding level has improved or weaken over a given period.

Key takeaways

Equity markets were largely flat, but gilts and bonds fell significantly	The government's 'mini-budget' pushed gilt yields up significantly (meaning bond prices fell). The Fund was largely immune from the impact of this as it holds few assets which are directly sensitive to interest rates.
Short term inflation hit 10% but longer term inflation expectations only rose slightly	Energy prices continued to feed through into inflation although it is expected that this will be relatively short lived. Higher inflation increases the benefits being paid to Fund members next year by more than expected. A significant proportion of the assets have either a direct or indirect link to inflation providing a level of protection
Asset values didn't change much over the course of the quarter, adding about £1m to end at £866m	Whilst asset values were stable, the increase in gilt yields mean that the value placed on the liabilities fell significantly. The funding position (the ratio of the value of assets to the value of the liabilities) has therefore increased, meaning that the security of members benefits has improved
Property and bond managers underperformed over the quarter, but there are no immediate concerns	Absolute returns in both markets were negative. The small remaining allocation to corporate bonds was sold completing the strategy change. UBS underperformed over the quarter although have a good long-term track record albeit the overall outlook for UK property over the near term is weak. No immediate changes are proposed.
A weak pound meant returns from non-sterling assets were very positive. Cash was needed to settle currency hedging contracts	Many of the Fund's private market assets are non-sterling investments, meaning that they demonstrated a strong positive return when converted to sterling terms. Strategic currency hedging largely negated this but Fund did benefit from non-sterling exposures in equity assets.

Fund performance

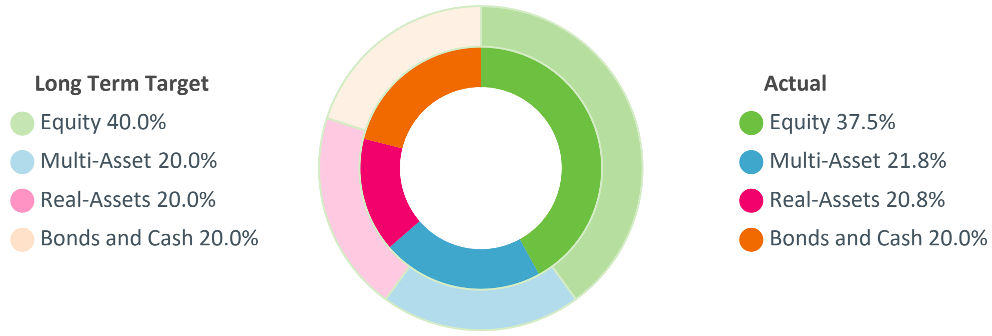
	Last 3 months (%)	Last 12 months (%)	Last 3 years (%)	Last 5 years (%)
Total Fund performance	**-0.7**	**-6.8**	**4.0**	**4.9**
Tactical benchmark	0.4	0.0	4.7	5.5
Strategic benchmark	-8.6	-23.9	-7.4	-0.3

Fund asset valuation

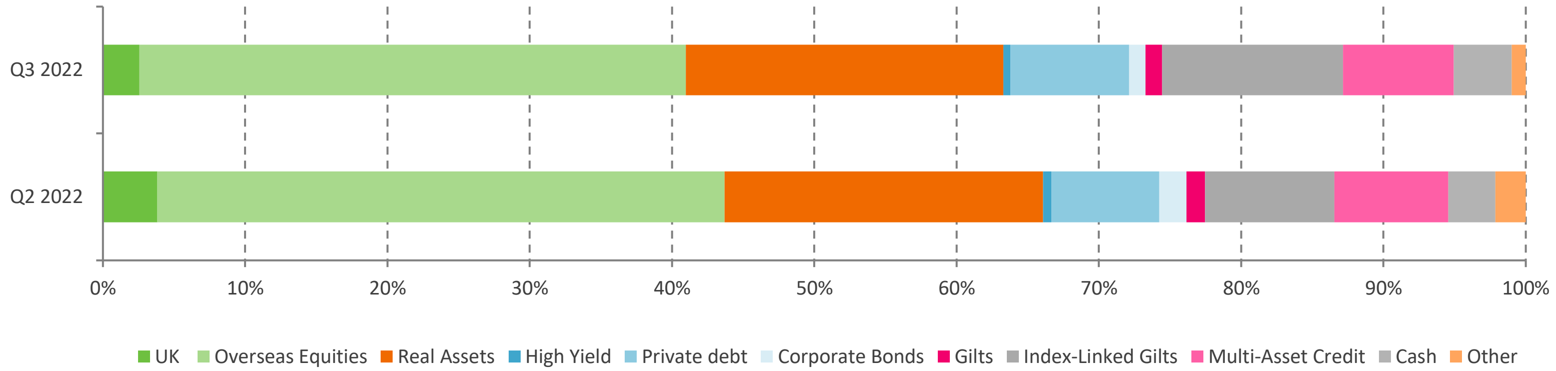
	Fund value (£m)
Q2 2022	**864.8**
Q3 2022	**865.7**

- The Fund's investment strategy is implemented through the London Collective Investment Vehicle ("LCIV"), and retained assets including life funds (with fee structures aligned with LCIV).
- The target allocation to LCIV and life funds totals 62.5% of Fund assets. Other retained assets will be delivered through external managers, with the position reviewed periodically.
- The chart below right illustrates the underlying asset allocation of the Fund, i.e. taking account of the underlying holdings in the multi-asset funds on a 'look through' basis.
- The Fund's overall allocation to equities slightly decreased over the quarter to c.41.0% as at 30 September 2022 (c.43.7% at 30 June 2022) – this was due to the LCIV Absolute Return Fund decreasing their equity allocation from 28.3% to 14.8% and increasing their index linked gilt allocation from 43.1% to 70.3% over the quarter.
- The allocation to private debt increased to c.8.4% as at 30 September 2022 (c.7.6% as at 30 June 2022) – this was due to the Fund's overall private debt assets performing positively over the quarter, weakened sterling and the continued drawdown over the period, coupled with the fall in value of other assets.
- The allocation to real assets marginally fell to c.22.3% as at 30 September 2022 (c.22.4% as at 30 June 2022) – this was due to the LCIV Diversified Growth Fund decreasing their allocation to infrastructure and property from 28.5% to 20.2% over the quarter.

Asset Allocation



Asset Class Exposures



The total value of the Fund's assets marginally increased by £1.0m over the quarter to £865.7m as at 30 September 2022.

Despite a rally in July 2022, global equities fell in the second half of the quarter as high inflation and subsequent higher interest rate expectations weighed on equity valuations.

The Fund's RLAM mandates continued to fall in value due to growing concerns about sustained high inflation and this being met with more aggressive action from central banks. As the UK government unveiled a substantial unfunded fiscal package in late September 2022, increases in UK government bond yields accelerated, causing the value of Index-Linked Gilts to fall.

UK investment-grade credit spreads rose from 0.4% p.a. to 2.4% p.a. due to rising UK government bond yields, which saw pension schemes liquidate their liquid assets in order to meet collateral calls on their interest-rate hedging programmes – negatively impacting the RLAM MAC and Corporate bond mandates.

The Fund paid the following capital calls during the quarter:

- c.£3.3m, c.£0.7m and c.£1.5m to the Stafford IV Fund
- c.£0.4m, c.£0.2m and c.£0.8m to the LCIV Renewable Energy Infrastructure Fund
- c.£1.4m, c.£1.3m and c.£1.0m to the Churchill IV Fund

Asset Allocation

Manager		Valuation (£m) Q2 2022	Valuation (£m) Q3 2022	Actual Proportion	Benchmark	Relative
Equity		**322.1**	**324.5**	**37.5%**	**40.0%**	**-2.5%**
LGIM Global Equity	LCIV aligned	32.1	32.5	3.8%	5.0%	-1.2%
LGIM Emerging Markets	LCIV aligned	36.8	35.9	4.1%	5.0%	-0.9%
LGIM Future World Fund	LCIV aligned	87.0	87.0	10.0%	10.0%	0.0%
LCIV Global Alpha Growth Paris Aligned Fund	LCIV	126.1	128.1	14.8%	15.0%	-0.2%
LCIV PEPPA Passive Equity	LCIV	40.2	40.9	4.7%	5.0%	-0.3%
Multi-Asset		**192.2**	**188.5**	**21.8%**	**20.0%**	**1.8%**
LCIV Absolute Return Fund	LCIV	114.3	116.4	13.4%	12.5%	0.9%
LCIV Diversified Growth Fund	LCIV	77.9	72.2	8.3%	7.5%	0.8%
Real-Assets		**172.3**	**179.9**	**20.8%**	**20.0%**	**0.8%**
UBS Property	Retained	63.8	60.2	7.0%	6.0%	1.0%
CBRE	Retained	36.0	38.8	4.5%	4.0%	0.5%
JP Morgan	Retained	38.3	39.9	4.6%	4.0%	0.6%
Stafford Capital Global Infrastructure SISF II	Retained	20.1	20.5	4.0%	3.5%	0.5%
Stafford Capital Global Infrastructure SISF IV	Retained	8.1	13.7			
LCIV Renewable Energy Infrastructure Fund	LCIV	6.1	6.7	0.8%	2.5%	-1.7%
Bonds and Cash		**178.1**	**172.8**	**20.0%**	**20.0%**	**0.0%**
RLAM Index Linked Gilts	Retained	32.1	29.0	3.4%	5.0%	-1.6%
RLAM Multi-Asset Credit	Retained	57.2	56.8	6.6%	7.5%	-0.9%
RLAM Corporate Bonds	Retained	16.7	10.1	1.2%	0.0%	1.2%
Churchill Senior Loan Fund II	Retained	23.8	25.6	4.6%	3.0%	1.6%
Churchill Senior Loan Fund IV	Retained	9.2	14.1			
Permira IV	Retained	28.0	27.9	3.2%	4.5%	-1.3%
Permira V	Retained	0.2	0.0			
Cash at Bank	Retained	14.5	15.0	1.7%	0.0%	1.7%
Currency Hedging P/L	Retained	-3.6	-5.7	-0.7%	0.0%	-0.7%
Total Fund		**864.8**	**865.7**	**100.0%**	**100.0%**	

Source: Northern Trust, Investment Managers

- Please note the early stage performance of the Fund's private market investments can be very volatile using this method of performance measurement. This is to be expected and should not provide cause for concern.
- The Fund's assets returned -0.7% over the quarter, underperforming its 0.4% benchmark return by -1.1%.
- The LGIM mandates continued to broadly track their respective benchmarks over the quarter.
- The LCIV Global Alpha Growth Paris Aligned Fund marginally underperformed its benchmark. However, in absolute terms the Fund returned positively as growth stocks marginally outperformed value stocks over the quarter. The Fund's 19.0 % allocation to the healthcare sector (its second largest sectoral allocation) dragged on the Fund's performance in a period when healthcare stocks returned negatively.
- The LCIV DGF underperformed its Cash + 3.5% p.a. benchmark over the quarter. This was primarily due to the Fund's allocation to infrastructure and property (due to decreasing capital values and a weaker outlook on growth forecasts), as well as UK government bonds (as yields significantly rose).
- The RLAM mandates delivered negative returns in both absolute and relative terms due to further increases in interest rates and UK government bond yields, as well as credit spreads continuing to widen over the quarter.
- Please note that all asset performance is in GBP terms and does not make an allowance for currency fluctuations. The total Fund performance includes the impact of the Russell currency overlay mandate. Please note the separate slide for further detail on the Russell mandate, along with asset performance excluding the impact of currency fluctuations.

Manager Performance

	Last 3 months (%)			Last 12 months (%)			Last 3 years (% p.a.)			Since Inception (% p.a.)		
	Fund	B'mark	Relative	Fund	B'mark	Relative	Fund	B'mark	Relative	Fund	B'mark	Relative
Equity												
LGIM Global Equity	1.4	1.4	**0.0**	-3.7	-3.6	**0.0**	7.6	7.7	**-0.1**	11.2	11.3	**0.0**
LGIM Emerging Markets	-2.3	-2.2	**-0.1**	-8.8	-8.5	**-0.3**	2.7	3.0	**-0.2**	4.2	4.4	**-0.2**
LGIM Future World Fund	-0.1	-0.1	**0.0**	-3.1	-3.0	**0.0**	-	-	**-**	-5.1	-5.1	**-0.1**
LCIV Global Alpha Growth Paris Aligned Fund	1.6	2.1	**-0.4**	-22.9	-2.9	**-20.6**	5.2	7.8	**-2.4**	12.1	11.5	**0.5**
LCIV PEPPA Passive Equity	1.9	1.9	**0.1**	-13.4	-13.8	**0.5**	-	-	**-**	-13.4	-13.8	**0.5**
Multi-Asset												
LCIV Absolute Return Fund	1.8	1.4	**0.4**	3.3	4.7	**-1.4**	7.6	4.5	**3.0**	5.2	4.8	**0.5**
LCIV Diversified Growth Fund	-3.3	1.3	**-4.5**	-14.0	4.3	**-17.6**	-1.6	4.0	**-5.4**	2.3	4.0	**-1.6**
Real-Assets												
UBS Property	-5.2	-4.0	**-1.2**	14.0	13.2	**0.7**	8.4	7.6	**0.7**	7.2	7.8	**-0.6**
CBRE	7.8	2.8	**4.9**	30.8	15.2	**13.6**	14.4	9.5	**4.5**	12.5	8.8	**3.4**
JP Morgan	4.7	2.8	**1.9**	23.1	15.2	**6.9**	13.0	9.5	**3.2**	10.8	8.8	**1.8**
Stafford Capital Global Infrastructure SISF II	9.2	2.8	**6.3**	20.4	15.2	**4.5**	11.1	9.5	**1.4**	9.6	8.7	**0.8**
Stafford Capital Global Infrastructure SISF IV	2.0	2.8	**-0.8**	2.6	15.2	**-11.0**	-	-	**-**	22.8	11.6	**10.0**
LCIV Renewable Energy Infrastructure Fund	0.0	2.8	**-2.7**	1.1	15.3	**-12.3**	-	-	**-**	0.5	13.8	**-11.7**
Bonds												
RLAM Index Linked Gilts	-9.6	-10.6	**1.1**	-29.5	-29.3	**-0.3**	-	-	**-**	-9.9	-9.9	**0.0**
RLAM Multi-Asset Credit	-0.7	-0.3	**-0.4**	-12.3	-9.9	**-2.7**	-1.0	-1.1	**0.1**	6.3	5.8	**0.4**
RLAM Corporate Bonds	-18.0	-16.9	**-1.3**	-34.2	-34.1	**-0.2**	-	-	**-**	-11.9	-12.0	**0.2**
Churchill Senior Loan Fund II	9.2	1.4	**7.7**	25.6	4.7	**19.9**	11.1	4.5	**6.3**	8.7	4.6	**3.9**
Churchill Senior Loan Fund IV	9.1	1.4	**7.6**	-	-	**-**	-	-	**-**	23.6	3.7	**19.2**
Permira IV	0.6	1.4	**-0.8**	5.2	4.7	**0.5**	3.5	4.5	**-1.0**	3.5	4.5	**-1.0**
Permira V	0.1	1.4	**-1.3**	-	-	**-**	-	-	**-**	0.1	0.0	**0.1**
Total	-0.7	0.4	**-1.1**	-6.8	0.0	**-6.8**	4.0	4.7	**-0.7**	7.8	-	**-**

Source: Northern Trust, investment managers. Please note that benchmark performance for Baillie Gifford DGF and Ruffer Absolute Return funds is inclusive of outperformance targets. In addition, longer term performance for Baillie Gifford Global Equity, Baillie Gifford DGF and Ruffer Absolute Return funds is inclusive of performance prior to their transfer in to the London CIV. LGIM Global and Fundamental Equity mandates were managed by SSGA prior to November 2017 and we have retained the performance history for these allocations. Performance figures for CBRE, Stafford and JP Morgan has been taken from the managers rather than Northern Trust. The Fund performance figure includes the effect of the currency hedging mandate managed by Russell. Permira V performance has been calculated by Hymans Robertson as End of Quarter Capital/Start of Quarter Capital (allowing for cashflows).

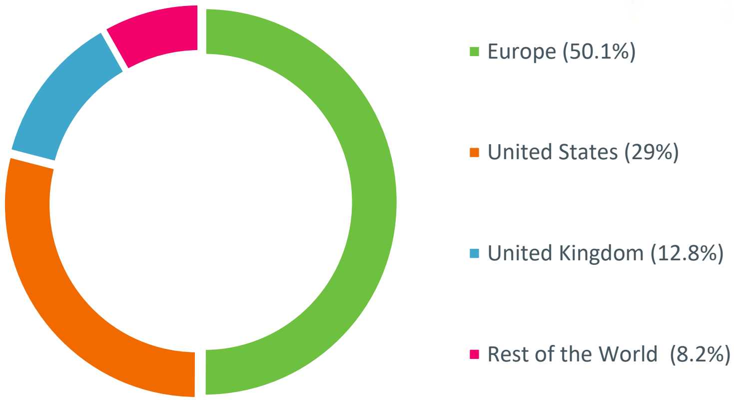
RLAM – Bond Mandates

- Royal London Asset Management (RLAM) was appointed in February 2005 to manage the Fund's bond mandate.
- RLAM now manage three separate portfolios: the existing portfolio consisting of index linked gilts, the addition of the MAC portfolio and a separate corporate bond portfolio currently being sold down to fund strategic changes across the rest of the Fund's wider asset allocation.
- The Fund's strategic allocation to corporate bonds is 0.0%, with allocations to index linked gilts and multi-asset credit of 5.0% and 7.5% respectively.
- The charts right compare the credit rating breakdown of the multi-asset credit and corporate bond portfolios at the end of the quarter.
- Concerns of sustained high inflation met with aggressive action by central banks (i.e. the Bank of England raising interest by a total of 1.0% p.a.), in addition to the UK government's unfunded fiscal package announced in late September 2022 as part of the mini budget) resulted in UK government bonds yields significantly rising over the period, alongside credit spreads continuing to widen, and as such portfolios contributed negative returns in absolute terms.

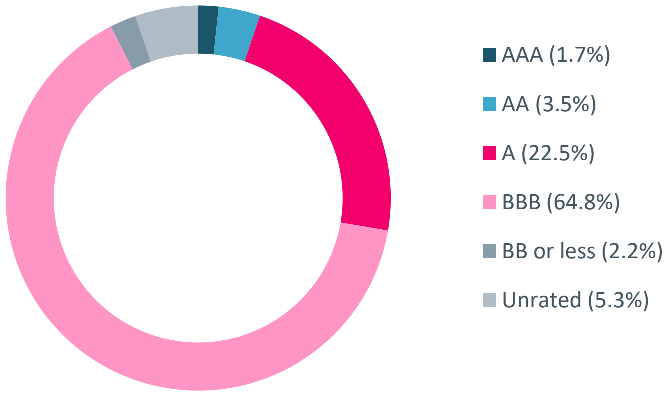
RLAM Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
RLAM ILGs	-9.6	-29.5	-9.9
Benchmark	-10.6	-29.3	-9.9
Relative	1.1	-0.3	0.0
RLAM MAC	-0.7	-12.3	6.3
Benchmark	-0.3	-9.9	5.8
Relative	-0.4	-2.7	0.4
RLAM Corporate Bonds	-18.0	-34.2	-11.9
Benchmark	-16.9	-34.1	-12.0
Relative	-1.3	-0.2	0.2

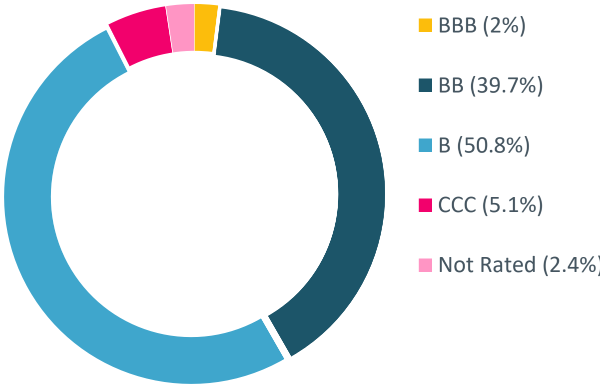
Regional Allocation (MAC)



Credit Allocation (Corporate Bonds)



Credit Allocation (MAC)



MAC and ILGs Benchmark: FTSE Index Linked over 5 Year 50%, ICE BAML BB-BBB Index 25%, Credit Suisse US Leveraged Loan GBP Hedged 25%.
Corporate Bonds Benchmark: iBoxx Sterling Non-Gilt Over 10 year Index.

Churchill Private Debt

- The strategic allocation to the Churchill mandate is 3.0%. With the actual allocation being overweight to this by 1.6% as at 30 September 2022.
- Over the quarter, both the Churchill II and Churchill IV funds outperformed their respective benchmarks and contributed positively to the overall Fund return – with Churchill II contributing a relative return of 7.7% and Churchill IV contributing a relative return of 7.6%.
- Over the longer periods of 12 months and since inception, both Churchill II and Churchill IV also continued to outperform their respective benchmarks.
- As at 30 June 2022, Churchill II had 101 loan commitments and Churchill IV had 94 loan commitments.
- Over the second quarter of 2022, Churchill II completed 6 new transactions totalling $38.2m (c.£34.4m) and Churchill IV completed 16 new investments totalling $250.3m (c.£224.2m).

Churchill II Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Churchill Senior Loan Fund II	9.2	25.6	8.7
Benchmark	1.4	4.7	4.6
Relative	7.7	19.9	3.9

Churchill II Sector Allocation*

Churchill IV Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Churchill Senior Loan Fund IV	9.1	-	23.6
Benchmark	1.4	-	3.7
Relative	7.6	-	19.2

Churchill IV Fund Sector Allocation*

Source: Northern Trust, Churchill
** As at 30 June 2022*

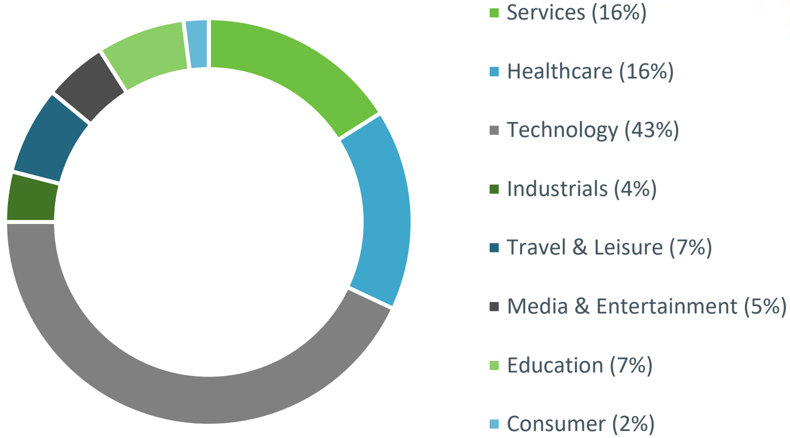
Permira Private Debt

- The strategic allocation to the Permira mandate is 4.5%. With the actual allocation being underweight to this by 1.3% as at 30 September 2022.
- Over the quarter, both the Permira IV and Permira V funds underperformed their respective benchmarks and contributed slightly negatively to the overall Fund return – with Permira IV contributing a relative return of -0.8% and Permira V contributing a relative return of -1.3%.
- However over the period of 12 months, Permira IV outperformed its respective benchmark. But over the longer period since inception, both Permira IV and Permira V continued to slightly underperform their respective benchmarks.

Permira IV Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Permira IV	0.6	5.2	3.5
Benchmark	1.4	4.7	4.5
Relative	-0.8	0.5	-1.0

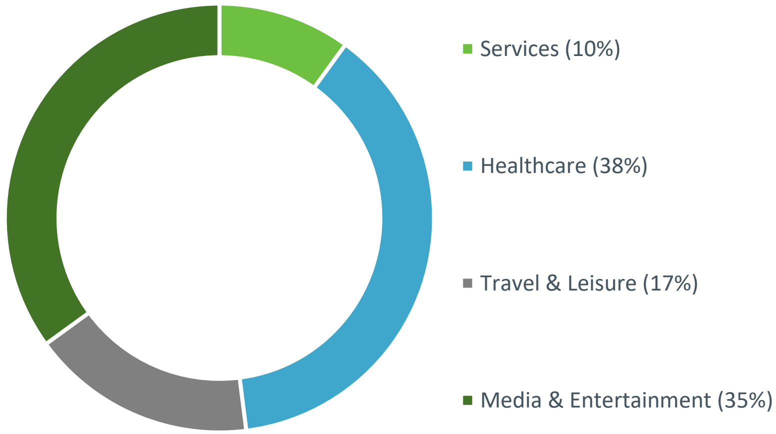
Permira IV Sector Allocation*



Permira V Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Permira V	0.1	-	0.1
Benchmark	1.4	-	1.4
Relative	-1.3	-	-1.3

Permira V Sector Allocation*



Source: Northern Trust, Permira
** As at 30 June 2022*

Russell Currency Hedging

- Russell Investments have been appointed to manage the Fund's currency overlay mandate.
- The current policy is to hedge non-sterling exposures in the Fund's private markets mandates. Currency exposure in equity mandates is retained.
- At present, 100% of the exposure to USD, EUR and AUD from the private market investments is hedged within any residual currency exposure retained on a de-minimis basis.
- The volatility of returns (measured as the standard deviation of quarterly returns since inception) is 4.8% to date when the impact of currency fluctuations is included and only 3.8% when currency movements are stripped out by the Russell currency overlay mandate. This continues to indicate that the Russell mandate is reducing overall volatility and increasing the predictability of returns, as intended.

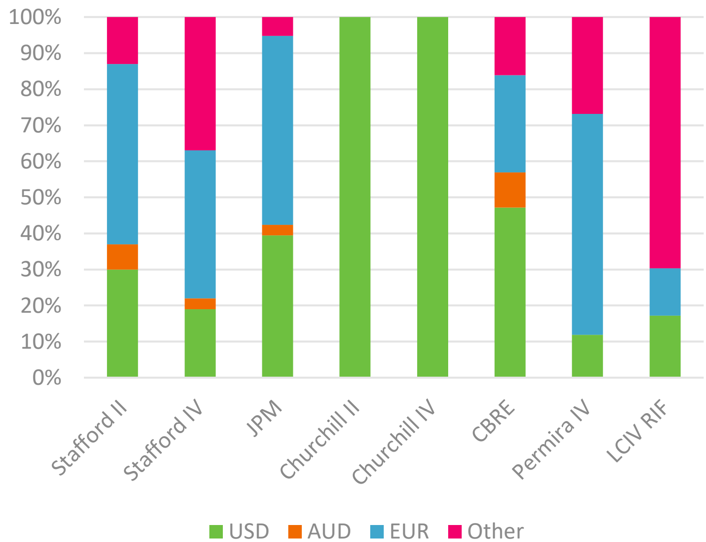
Q3 2022 Performance

	Asset Return (inc. FX impact)	Currency Return (via Russell mandate)	Asset Return (ex. FX impact)	BM Return	Relative Return (ex. FX impact)
Stafford II	9.2	-4.8	4.5	2.8	1.7
Stafford IV	2.0	-4.6	-2.6	2.8	-5.3
JPM	4.7	-5.5	-0.8	2.8	-3.5
Churchill II	9.2	-10.1	-0.9	1.4	-2.2
Churchill IV	9.1	-10.8	-1.7	1.4	-3.0
CBRE	7.8	-5.9	1.8	2.8	-0.9
Permira IV	0.6	-2.6	-2.0	1.4	-3.4
LCIV RIF	0.0	-2.0	-2.0	2.8	-4.6

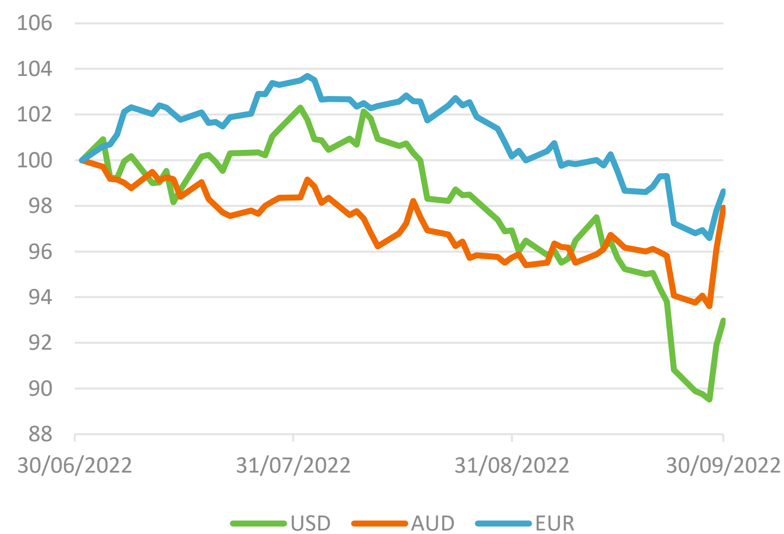
Performance Since Mandate Inception*

	Asset Return (inc. FX impact)	Currency Return (via Russell mandate)	Asset Return (ex. FX impact)	BM Return	Relative Return (ex. FX impact)
Stafford II	11.1	-3.1	8.0	8.7	-0.6
Stafford IV	22.8	-5.8	17.0	11.6	4.8
JPM	13.0	-4.0	9.0	8.8	0.1
Churchill II	11.1	-7.2	3.9	4.6	-0.7
Churchill IV	23.6	-18.4	5.2	3.7	1.4
CBRE	14.4	-4.1	10.4	8.8	1.4
Permira IV	3.5	-3.7	-0.2	4.5	-4.6
LCIV RIF	0.5	-5.6	-5.2	13.8	-16.7

Hedged Currency Exposure **



Sterling Performance vs. Foreign Currencies (Rebased to 100 at 30 June 2022)



Source: Northern Trust, Investment managers
** Since inception performance is since individual fund inception of inception of the currency hedging mandate, whichever is more recent. ** As at Q2 2022 (latest available).*

- Since March 2018, the Fund has made commitments to seven private markets funds as outlined right. The table provides a summary of the commitments and drawdowns to 30 September 2022.
- There are outstanding commitments of approximately £55m to the remaining funds which will be funded from the RLAM corporate bond mandate and the LCIV Diversified Growth Fund alongside capital being returned from other mandates.

Mandate	Infrastructure			Private Debt		
Vehicle	Stafford Infrastructure Secondaries Fund II	Stafford Infrastructure Secondaries Fund IV	LCIV Renewable Energy Infrastructure Fund	Churchill Middle Market Senior Loan Fund II	Churchill Middle Market Senior Loan Fund IV	Permira Credit Solutions IV Senior Fund
Commitment Date	25/04/2018	18/12/2020	30/06/2021	12/2018	29/09/2021	12/2018
Fund Currency	EUR	EUR	GBP	USD	USD	EUR
Gross Commitment	€28.5m	€30m	£25m	$31.0m	$26.5m	£36 m
Gross Commitment (GBP estimate)	£25.0m	£26.3m	-	£27.8m	£23.7m	-
Net Capital Called During Quarter (Payments Less Returned Capital)	-	£5.5m	£1.4m	-	£3.8m	-
Net Capital Drawn To Date	£26.3m	£12.3m	£6.9m	£23.7m	£12.6m	£28.3m
Distributions/Returned Capital To Date (Includes Income and Other Gains)	£12.1m	£0.4m	-	£4.0m	£0.5m	£3.4m
NAV at Quarter End	£20.5m	£13.7m	£6.7m	£25.6m	£14.1m	£27.9m
Net IRR Since Inception *	9.9% p.a. (v. 8-9% target)	-	-	7.22%**	11.49%**	7.0%
Net Cash Yield Since Inception*	4.5% p.a. (v. 5% target)	-	-	-	-	-
Number of Holdings*	22 funds	10 funds	-	101 investments	94 investments	83 investments

**as at 30/06/2022 (latest available) **Refers to IRR of realised assets in the portfolio*

Source: Investment Managers

Global investment-grade spreads ended the quarter slightly wider, while UK investment-grade credit spreads rose 0.4% p.a., to 2.4% p.a., as rising government bond yields saw pension schemes liquidate liquid assets to meet collateral calls on their interest-rate hedging programmes. US and European speculative grade credit spreads ended the quarter 0.4% p.a. and 0.2% p.a. below end June levels, at 5.4% p.a. and 6.3% p.a., respectively.

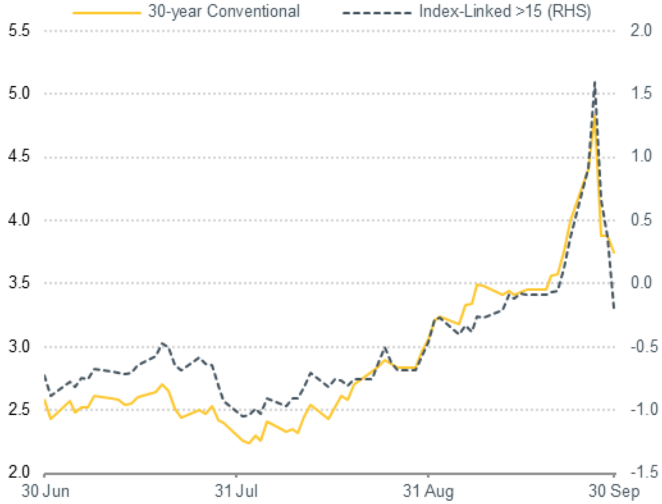
Despite a rally in July, global equities fell sharply in the second half of the quarter as high inflation, and subsequent higher interest rate expectations, weighed on both equity valuations and the fundamental outlook. The FTSE All World Index fell 4.8% (in local terms). Depreciation of sterling over the period resulted in a 1.4% return to unhedged UK investors. Performance was varied between cyclicals and defensives with telecoms, technology, and healthcare underperforming, while the energy and consumer discretionary sectors notably outperformed.

Regionally, Japanese and UK markets outperformed, both supported by currency weakness flattering the international earnings profile of their markets, and the UK also benefitting from an above-average exposure to the energy sector. Emerging and Asian markets once again underperformed.

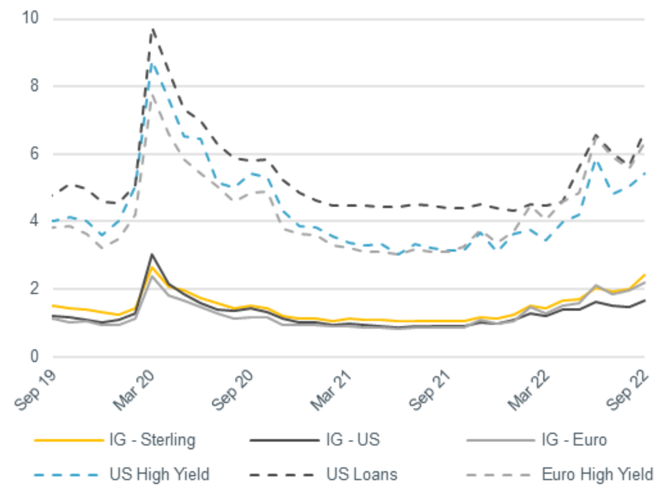
Global growth concerns were reflected in commodity markets, where energy and industrial metals prices led declines.

The MSCI UK Monthly Property Index has returned 13.5% in the 12 months to the end of September, although monthly returns entered negative territory in the third quarter. Capital value declines have been observed across the three main commercial sectors but have been more pronounced in the industrial sector.

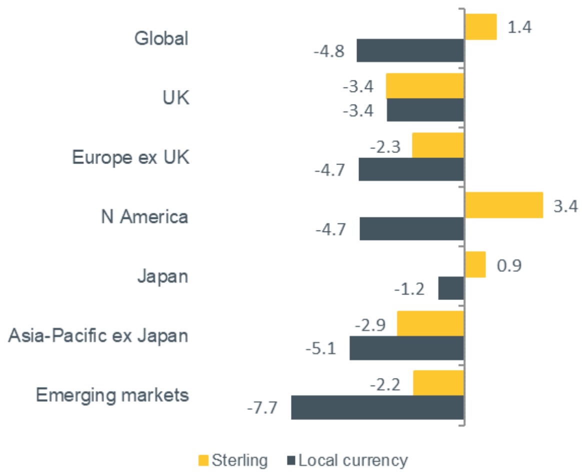
Gilt yields chart (% p.a.)



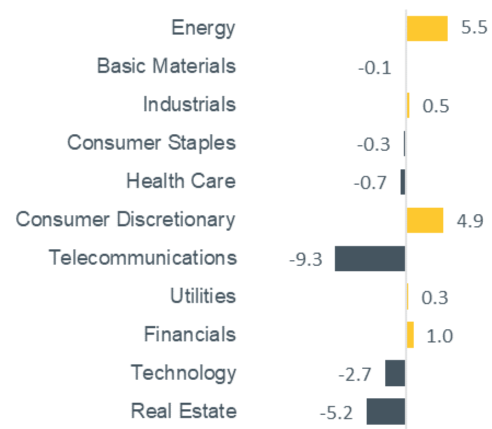
Investment and speculative grade credit spreads (% p.a.)



Regional equity returns [1]



Global equity sector returns (%) [2]



Source: DataStream, Barings, ICE [1] FTSE All World Indices. Commentary compares regional equity returns in local currency. [2] Returns shown in Sterling terms and relative to FTSE All World.

Higher current and forecast inflation, and subsequent expectations of tighter monetary policy, are weighing heavily on consumer and business sentiment, with growth forecasts continuing to see downwards revisions. Recessions are now forecasted in several key European economies and the US economy is also expected to slow substantially, increasing global recession risks.

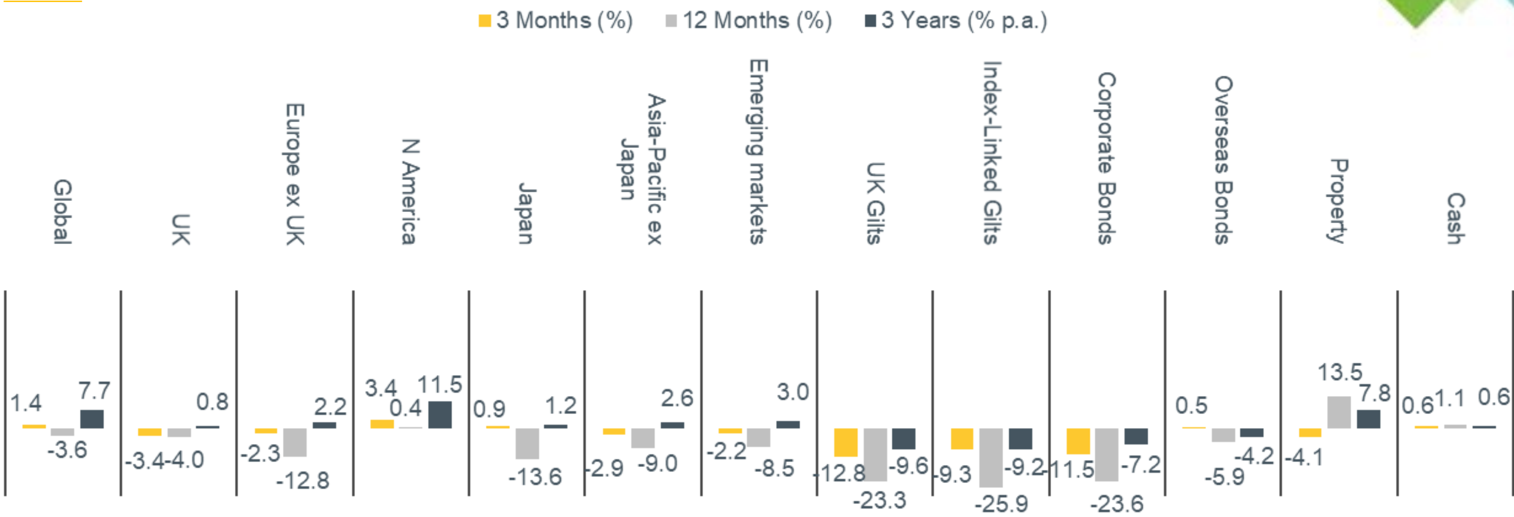
Year-on-year headline CPI inflation is running at 9.9%, 8.3%, and 9.1%, in the UK, eurozone, and US, respectively. Of more concern to central bankers, core inflation, which excludes food and energy prices, is also well above target, at 6.5%, 6.6%, and 4.8% in the UK, US, and eurozone, respectively.

Growing concerns about sustained high inflation were met with more aggressive messaging and action by central banks. The Fed raised interest rates by a cumulative 1.5% p.a. in Q3, while the Bank of England and the ECB raised rates by a total of 1% p.a. and 1.25% p.a., respectively.

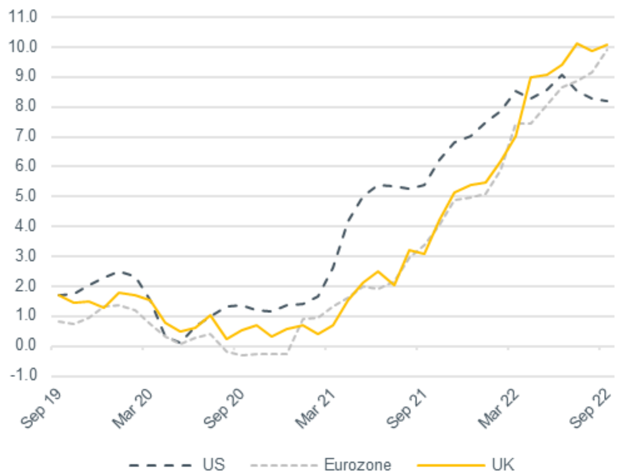
Against a global backdrop of high inflation and rising interest rate expectations, increases in UK government bond yields accelerated as the government unveiled a substantial unfunded fiscal package in late September. 10-year gilt yields ended the quarter at 4.1% p.a., 1.9% p.a. above end-June levels, while equivalent US and German yields both rose 0.8% p.a. over the same period, to 3.8% p.a. and 2.1% p.a., respectively.

UK 10-year implied inflation, as measured by the difference between conventional and inflation-linked bonds of the same maturity, rose 0.4% p.a. to 4.0% p.a. Equivalent US implied inflation fell 0.2% p.a., to 2.2% p.a.

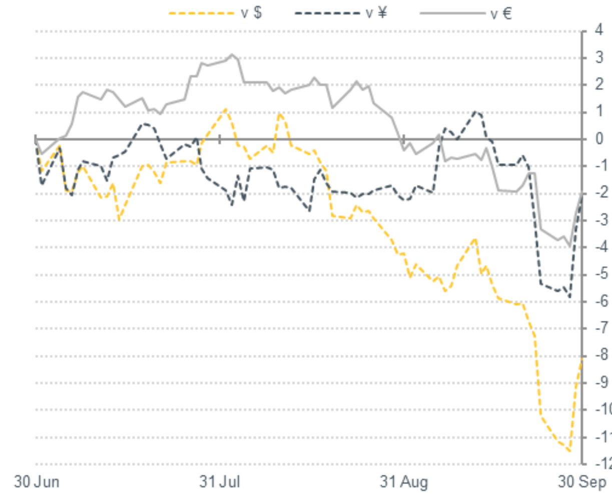
Historic returns for world markets [1]



Annual CPI Inflation (% p.a.)



Sterling trend chart (% change)



Source: DataStream. [1] Returns shown in Sterling terms. Indices shown (from left to right) are: FTSE All World, FTSE All Share, FTSE AW Developed Europe ex-UK, FTSE North America, FTSE Japan, FTSE AW Developed Asia Pacific ex-Japan, FTSE Emerging, FTSE Fixed Gilts All Stocks, FTSE Index-Linked Gilts All Maturities, iBoxx Corporates All Investment Grade All Maturities, ICE BofA Global Government Index, MSCI UK Monthly Property; UK Interbank 7 Day

Capital Markets Outlook

Asset Class	Market Summary
Equities	• Equity valuations have continued to fall, with cyclically adjusted price-to-earnings ratios now modestly below long-term median levels. Earnings forecasts for 2022 and 2023 still point to reasonable real earnings growth, but average earnings momentum is poor, and the level of real earnings has started to fall. Although absolute valuations have improved, relative valuations look much less exciting as real yields move closer to long-term fair value.
Investment Grade Credit	• Investment-grade credit spreads have increased, rising well above long-term median levels. Coupled with higher risk-free rates, this makes all-in credit yields far more enticing. While global spreads may move wider in a recessionary environment, they are at reasonably attractive levels on a longer-term view. Corporate balance sheets are in reasonable shape relative to history but will likely come under pressure as the economic outlook deteriorates.
Emerging Market Debt	• High inflation, faster fed tightening, and dollar strength will continue to weigh on emerging market debt in the near-term. However, as global recession risks grow, a weakening of the US, and developed market, outlook may slow further rises in the US dollar and treasury yields, helping to stabilise EM sentiment.
Liquid Sub-Investment Grade Debt	• Recessions risks surrounding several major global economies warrant a cautious outlook on speculative-grade corporates who will be particularly susceptible to a slowdown. Within speculative grade markets we currently hold a slight preference for high yield bonds over traded loans, particularly considering the susceptibility of loan fundamentals to potential interest rate rises.
Private Lending	• Defaults remain low but, as in the public speculative-grade markets, are expected to increase modestly, with risks to growth and earnings skewed to the downside (to the upside for defaults). Overall, we are more cautious on private loan markets versus high yield, as valuations remain relatively unattractive due to significant increases in margin spreads in the public market.
Core UK Property	• The UK commercial property market retains a degree of fundamental support – rising nominal rents, though lagging inflation, and a still-healthy occupational market. However, technical conditions in investment markets are deteriorating, with transaction volumes declining in the primary market and redemptions from property funds increasing dramatically. Against this backdrop, capital values have been falling since June, with the industrial sector most impacted.
Long Lease Property	• Many contractual long leases come with embedded inflation protection so rental growth should provide better protection against rises in inflation than the broader property market. On a relative basis the yield gap between core property and long lease has compressed as industrial yields across the broader market came down.
Conventional Gilts	• Valuations have improved materially but near-term fundamental challenges remain and technicals have deteriorated sharply, with gilt market volatility at unprecedented levels in the inflation-targeting era. Nominal yields look reasonably attractive relative to our assessment of longer-term fair value and, considering the path of forward nominal yields which fall sharply beyond 15 years, we retain a preference for the front-end of the curve.
Index-Linked Gilts	• A Even adjusting for the additional inflation protection (typically around 1.0% p.a. over the longer-term) afforded to index-linked gilts until RPI is aligned with CPIH in 2030, and high near-term inflation, long-dated implied inflation still looks a little expensive. The front end of the curve looks to offer better value.

The table summarises our broad views on the outlook for markets. The ratings used are Positive, Attractive, Neutral, Cautious and Negative. The ratings are intended to give a guide to our views on the prospects for markets over a period of around three years; although they are updated quarterly, they are not intended as tactical calls. The ratings reflect our expectations of absolute returns and assume no constraints on investment discretion. In practice, they need to be interpreted in the context of the strategic framework within which individual schemes are managed.

Source: Hymans Robertson

Risk Warning

Please note the value of investments, and income from them, may fall as well as rise. This includes equities, government or corporate bonds, and property, whether held directly or in a pooled or collective investment vehicle. Further, investment in developing or emerging markets may be more volatile and less marketable than in mature markets. Exchange rates may also affect the value of an investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.

In some cases, we have commercial business arrangements/agreements with clients within the financial sector where we provide services. These services are entirely separate from any advice that we may provide in recommending products to our advisory clients. Our recommendations are provided as a result of clients' needs and based upon our independent research. Where there is a perceived or potential conflict, alternative recommendations can be made available.

Geometric vs. Arithmetic Performance

Hymans Robertson are among the investment professionals who calculate relative performance geometrically as follows:

$$\frac{(1 + Fund\ Performance)}{(1 + Benchmark\ Performance)} - 1$$

Some industry practitioners use the simpler arithmetic method as follows:

$$Fund\ Performance\ - Benchmark\ Performance$$

The geometric return is a better measure of investment performance when compared to the arithmetic return, to account for potential volatility of returns.

The difference between the arithmetic mean return and the geometric mean return increases as the volatility increases.