

# Pension funds under stress

Mapping uncertainty for  
pension fund managers

A report for Ortec Finance  
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## INTRODUCTION

The World Bank warned about the risks of stagflation and its “potentially harmful consequences for middle- and low-income economies alike” as it cut its global economic growth forecast to 2.9% for this year, compared with its previous forecast of 4.1% for 2022. World Bank President David Malpass believes that: “For many countries, recession will be hard to avoid.”

The World Bank is one voice among many warning of the deteriorating macroeconomic picture worldwide triggered by a range of issues including the fallout from the pandemic, the Russian invasion of Ukraine, rising energy prices, rising inflation, and rising interest rates.

In addition, pension fund managers are having to cope with market volatility while searching for yield and the need to address climate change risks now and in the future. The range of challenges adds to the uncertainty and makes risk management more challenging.

### **Our client**

Ortec Finance commissioned Pureprofile to find out the views of pension fund managers. We have interviewed 201 pension fund managers in the US, UK, Australia, Canada, the Netherlands, Switzerland, Denmark, Finland, Norway, and Sweden using an online methodology during June 2022.

*Ortec Finance models and maps the relevant uncertainties in order to help pension funds monitor their goals and decisions. It designs, builds, and delivers high-quality software models for asset-liability management, risk management, climate scenario modelling, portfolio construction, performance measurement and attribution, and financial planning. As a leading global provider of risk and return management solutions for pension funds and other institutions they wanted to research the challenges facing pension fund managers via a third-party research agency.*

The managers we interviewed are collectively responsible for \$1.946 trillion assets under management, so their views are based on real life experience of running major funds. The study focused on issues including: what they are doing about stress testing and scenario modelling; how they see the longer-term risk of climate change compared with the immediate risks of inflation and potentially stagflation; and how are they coping with investment complexity and what tools do they need and want?

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## 1. SPENDING ON STRESS TESTING AND SCENARIO MODELING WILL RISE

Pension fund managers are predicting spending on stress testing and scenario modeling to increase across the industry as a whole and at their own funds, in response to increased levels of uncertainty and growing risks.

Our international study with pension fund managers found one in three (33%) expect industry spend on stress testing and scenario modeling to increase dramatically over the next three years while another 54% expect a slight increase.

At their own funds, there is even more support for increased spending – 92% of the pension funds interviewed say they will devote more resources to stress testing and scenario modeling.

The biggest factor driving this increased spend is the growing focus by pension funds on illiquid, unlisted, and esoteric assets as the search for yield intensifies.

The second and third rated reasons for increasing spending are climate risk scenarios and increased regulatory pressure leading to a demand for more reporting. The growing focus on transparency, increasing risks for schemes and technological advances were rated fourth, fifth and sixth, respectively.

The table on the next page shows how pension funds managers rank the reasons driving increased spending on stress testing and scenario modeling.

REASON	RANK
Growing focus on more esoteric/illiquid/unlisted asset classes as the search for yield intensifies	1
Climate risk/scenarios	2
Increasing regulatory pressure and the level of reporting that is required	3
Growing focus on transparency and reporting	4
The risks facing pension schemes are increasing	5
Advances in technology mean that pension schemes can develop a much better picture of the risks and challenges they face	6

Technological advances are having an impact in another way; however, our study shows. Almost all funds (97%) agreed that the ever more sophisticated range of investment strategies pension funds can deploy due to enhanced technology requires improvements in stress testing and scenario modeling as well as more frequent monitoring of assets, liabilities, and funding levels.



## 2. THE CHANGING ROLE OF CONSULTANTS AND SPECIALISTS

Not only is spending increasing, but pension fund managers are currently relying on investment consultants and specialist companies to undertake stress testing and scenario modelling, rather than carrying it out inhouse – although this looks set to change in the future.

The research found that 57% of pension fund managers currently source more than half of their stress testing and scenario modelling from pension fund investment consultants and 53% use specialist companies for more than half the time. By contrast only 40% of pension funds say they carry out more than half of their stress testing and scenario modelling inhouse.

However, this looks set to change, with firms wanting to play a more active role in the future. Within three years, 52% of pension fund managers surveyed estimate they will carry out more than half of their stress testing inhouse – an increase of 30%. The shift is unlikely to be dissatisfaction with their current stress testing and scenario modelling as 43% rate the accessibility, user friendliness and general usefulness as excellent and 44% say it is good. Just 12% say the service they receive is average.

The table below shows where pension fund managers say they currently source stress testing and scenario modelling and the percentage provided.

<b>PERCENTAGE OF STRESS TESTING AND SCENARIO MODELLING PROVIDED</b>	<b>None</b>	<b>Up to 25%</b>	<b>25% to 50%</b>	<b>50% to 75%</b>	<b>75% to 100%</b>
Pension fund	0.5%	23.4%	36.3%	25.4%	14.4%
Pension fund investment consultants	3.5%	14.4%	25.4%	40.8%	15.9%
Specialist firms	2.0%	10.9%	34.3%	38.8%	13.9%
Other advisers	16.4%	22.4%	37.3%	19.4%	4.5%

### 3. THE CLIMATE CHANGE CHALLENGE

Climate change is seen as one of the biggest drivers in the increased spending on scenario modelling and stress testing by pension funds.

However just 41% of managers interviewed believe pension schemes in general are well-prepared for securing the yield they need in order to be fully funded or buy-out ready in the face of climate change challenges.

The study found 91% expect to see a rise in investment complexity and the challenges facing their funds over the next two years with almost all funds (97%) saying technological advances are enabling them to invest in more sophisticated strategies.

That is translating into increased allocations to green bonds and climate-specific funds – 62% plan to do so in their own funds over the next two years with 27% intending to dramatically increase allocations to green bonds and 24% expecting to dramatically increase allocations to climate-specific funds.

## 4. THE INFLATION CHALLENGE NOW

Almost six in ten (57%) pension fund managers are predicting further dramatic increases in inflation over the next 12 months. A further quarter (26%) predict a slight increase over the next 12 months.

However, pension fund managers say they have already taken steps to protect their schemes against inflation by increasing allocations to specific asset classes. Over half (56%) have switched investments to commodities, inflation linked bonds (56%) and infrastructure (51%).

The action taken means almost all (98%) pension fund managers believe their scheme is already well hedged against inflation with over half (54%) saying they are 'very well hedged' against this risk. Pension fund managers say schemes are set to further change allocations in the year ahead to continue to improve hedging against inflation. Over half (53%) plan to increase allocations to inflation linked bonds while nearly half (49%) will switch to commodities and 49% to real estate investment trusts (REITs) over the next 12 months.

The table below shows action taken by pension fund managers on asset allocation to hedge against inflation over the past 12 months and plans for the next 12 months.

<b>ASSET CLASS</b>	<b>PERCENTAGE THAT HAS ALREADY INCREASED ALLOCATION TO HEDGE AGAINST INFLATION</b>	<b>PERCENTAGE THAT PLANS TO INCREASE ALLOCATION IN THE NEXT 12 MONTHS TO HEDGE AGAINST INFLATION</b>
Gold	29%	24%
Commodities	56%	49%
Equities	40%	43%
Inflation linked bonds	56%	53%
Infrastructure	51%	44%
Real Estate Investment Trusts (REITs)	45%	49%
Direct investment into real estate	20%	28%



## 5. STAGFLATION COULD COMPLICATE MATTERS

Pension fund managers are increasingly worried about the risk of global stagflation.

Around six in ten (57%) pension fund manager are 'very concerned' about the threat of stagflation while another 40% are 'quite concerned' about the risk of high inflation combining with low economic growth.

The international study reveals that this concern is very real, with 34% of pension fund managers predicting that the USA will enter a recession within the next six months. This rises to almost nine in ten (89%) within the next 12 months.

Many pension fund managers believe the Eurozone and the UK won't be far behind. Almost half (47%) predict a recession in these regions within the next nine months, rising to 73% predicting a recession within the next 12 months in the Eurozone and 73% in the UK.

There is less concern about China and Emerging Markets in the short term with only 9% and 10% of pension fund managers respectively predicting they will enter a recession within the next six months. However, 62% expect China to be in recession within 12 months and 70% believe Emerging Markets will be in recession during the same period.

The table below shows when pension fund managers expect major economies to go into recession.

REGION	Within six months	Between six and nine months	Between nine and 12 months	Between 12 and 18 months	Between 18 and 24 months	After 24 months
USA	34%	21%	33%	8%	2%	2%
Eurozone	13%	34%	26%	17%	6%	1%
UK	21%	26%	25%	20%	5%	0%
Switzerland	10%	24%	32%	20%	7%	2%
China	9%	26%	27%	20%	6%	4%
Japan	11%	24%	27%	19%	9%	1%
Emerging Markets	10%	22%	38%	21%	5%	1%

## 6. CONCLUSION

Pension funds need to manage their balance sheet effectively in order to achieve long-term objectives while dealing with short-term risks. That includes identifying major risk sources as well as looking at future pensions, contributions, and funded levels.

Climate change risks are currently dominating the agenda for pension funds having a major impact on scenario modelling and stress testing while also making the search for yield more complicated. The research shows how confident pension fund managers are about the impact of inflation on pension schemes over the next year, particularly as so many predict that inflation will continue its dramatic rise.

Many schemes have already reallocated to certain asset classes in order to help inflation-proof their portfolio, and more are looking to do so in the next 12 months, as they predict future turbulence and inflation increases in the next 12 months. By modelling and mapping ahead, schemes are able to weather the storm, and overcome any short-term risks while still achieving their long-term objectives.

Pension fund managers have real concerns about stagflation and looking at their predictions for when regions will enter a recession, these are not only justified, but could become real very soon.

As we experience significant volatility in the markets and with major economic events predicted in the not-too-distant future, pension funds need to keep one step ahead and manage allocations carefully to minimise the impact that inflation and even a period of stagflation could have. Carrying out detailed mapping and modelling can help pension fund managers to navigate these uncertainties to achieve their long-term objectives while dealing with short-term risks.

Stress testing and scenario modeling seems clearly vital for pension funds and there is widespread recognition that the industry as a whole and funds themselves have to spend more to meet their goals. It is interesting to see that the main reason spending will rise is because funds have had to widen the range of assets, they invest in so that they can deliver the yield required to meet their obligations. Technology is however available which can help pension funds balance the demands of rising investment complexity while implementing strategies to address the issue.

# About

## About this research

- Ortec Finance commissioned Pureprofile to conduct the research. We have interviewed 201 pension fund managers responsible for a collective \$1.946 trillion assets under management based in the US, UK, Australia, Canada, the Netherlands, Switzerland, Denmark, Finland, Norway, and Sweden using an online methodology during June 2022
- World Bank forecasts **Global Economic Prospects June 2022** ([worldbank.org](https://www.worldbank.org))

## About Ortec Finance

Ortec Finance is the leading provider of technology and solutions for risk and return management. It is our purpose to enable people to manage the complexity of investment decisions.

We do this through delivering leading technologies and solutions for investment decision-making to financial institutions around the world. Our strength lies in an effective combination of advanced models, innovative technology and in- depth market knowledge. This combination of skills and expertise supports investment professionals in achieving a better risk-return ratio and thus better results.

Headquartered in Rotterdam, The Netherlands, we also have offices in Amsterdam, London, Toronto, Zurich, New York, and Melbourne.

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