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AAS Economics
From Money Supply to Markets

BUSINESS CYCLE ASSET ALLOCATION

A Novel Business Cycle Multi-Asset Allocation Strategy

January, 2023

"Our method allows investors to apply economic fundamentals in a disciplined manner to help optimize asset allocation. This is made possible by our ability to predict with considerable accuracy the future stages of the business cycle using our proprietary leading index."

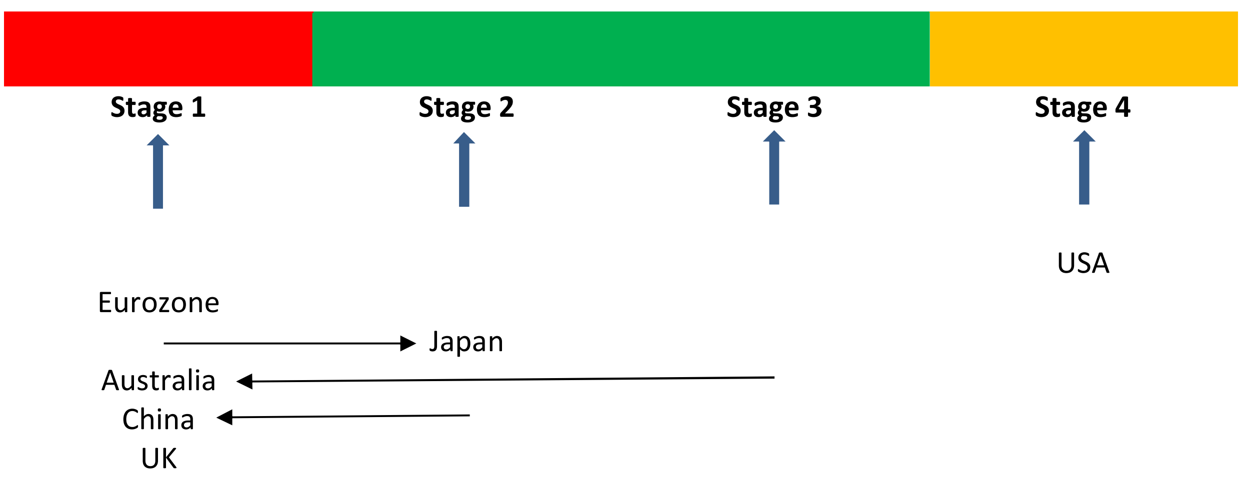
Contents

Summary Matrix

AASE Business Cycle Country Asset Allocations- February 2023

		USA	Eurozone	Japan	Australia	China	UK
	Business Cycle Stage	4	1	2	1	1	1
Equities	Consumer Discretionary			●			
	Consumer Staples	●	●		●	●	●
	Financials						
	Industrials			●			
	IT			●		●	
	Telecom Services			●			
	Healthcare	●	●		●	●	●
	Utilities	●			●	●	
Commodities (or commodity related equity sectors	Materials			●			
	Energy			●			
Government Bonds		●	●		●	●	●
Property REITs							

Business Cycle Risk Spectrum[1]



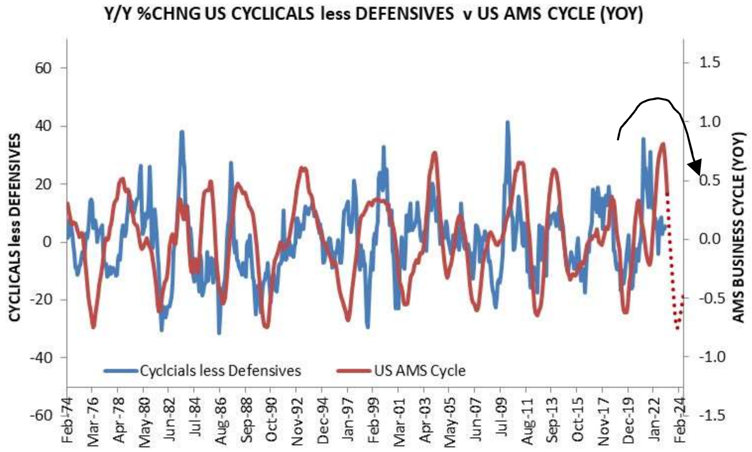
[1]Red denotes the most defensive stage and thus the highest risk aversion. Orange denotes moving into defensive stage and the Green stages denotes a more beneficial environment for equities & commodities in general

U.S.

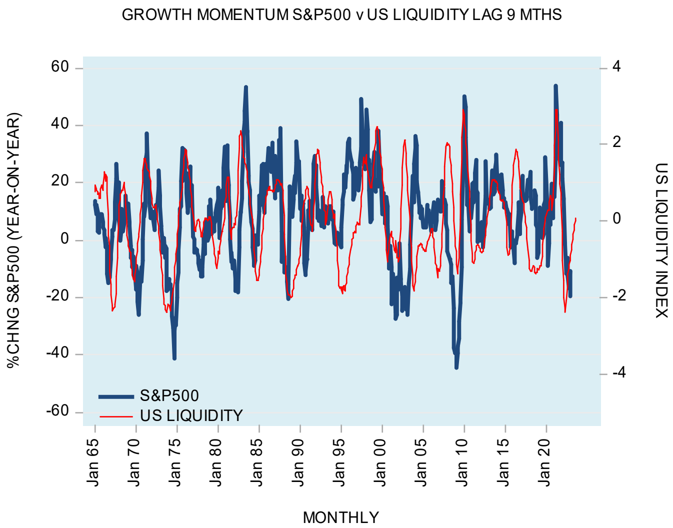
US Business Cycle for February - Stage 4

Stage 4 Characteristics- Monetary headwinds –the business cycle has peaked and the deceleration has begun.

Equities – The rotation into Stage 4 now means a preference for defensives relative to cyclicals.



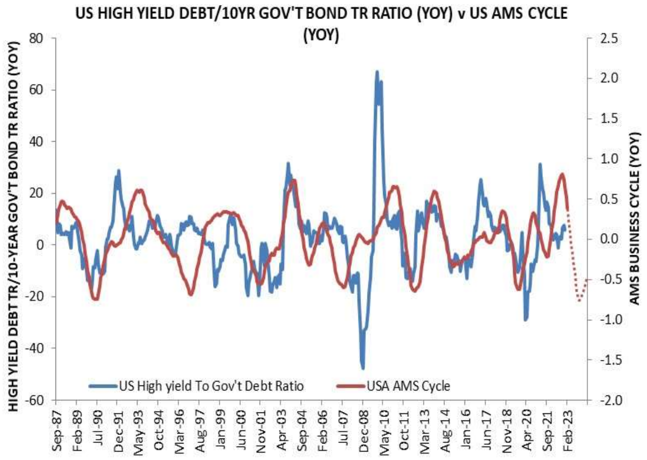
Our lagged monetary liquidity (see the chart below) has bounced slightly in recent months although still remains at low levels. Whilst the liquidity indicator suggest that momentum may improve marginally, the rotation into stage 4 suggests adopting a defensive stance regardless.

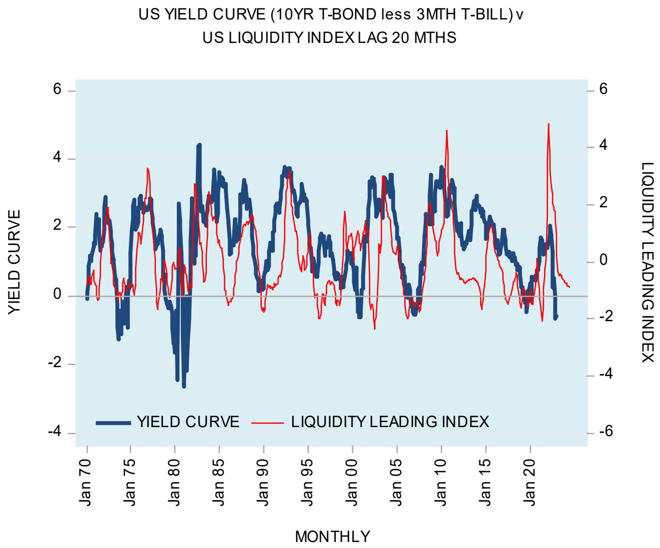


Historical Average Returns in Stage 4		
		Stage 4
US Equities (Sectors) TR		
(1973-)	Consumer Staples	1.58%
	Health	1.64%
	Utilities	1.53%
	Technology	0.53%
	Consumer Discretionary	1.13%
	Industrials	1.33%
	Basic Materials	1.19%
	Oil & Gas	1.09%
	Telecom	0.78%
	Financials	1.09%
US Equities (Style) TR		
(1975-)	Value	1.34%
	Growth	0.99%
US Equities (Size) TR		
(1987-)	Small Cap Wilshire)	0.95%
(1973-)	Large Cap (S&P 500)	1.05%

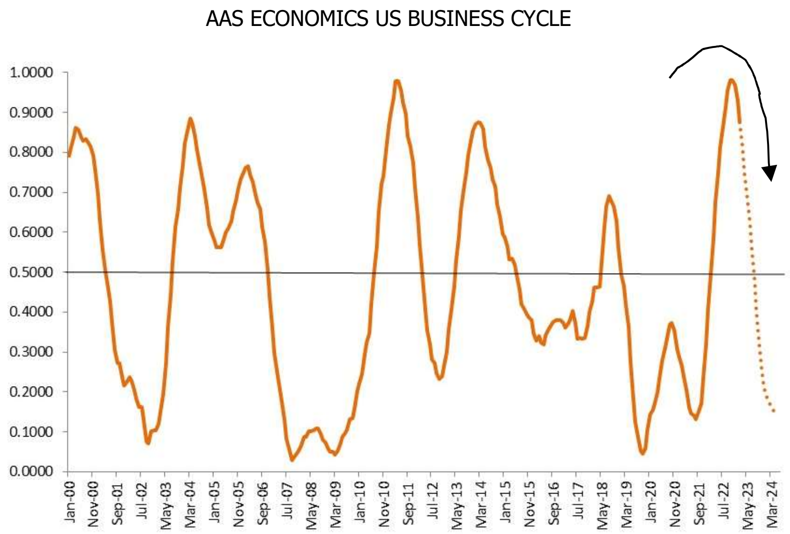
Fixed Income – 2022 was a tough year for safe havens. The 10yr government bond total return index fell by **17**% for the year, slightly better than the S&P500 which declined by **18**% although worse than US high yield debt which fell by just over **11**%. However, entering the new year in the more defensive Stage 4 of the cycle means we now have a relative preference for safe havens such as government debt relative to higher risk debt. With inflation appearing to have also peaked in the US, nominal debt may now be preferred to inflation protected securities.

The narrowing yield curve remains in line with our lagged liquidity measure. See the charts below.





Mid-term outlook – The deceleration of the US business cycle has begun and it is now in the defensive **Stage 4** reflecting the fact that (lagged) monetary headwinds lie ahead.



Below we can observe how, on average, various equity sectors and asset classes have performed in different phases of the cycle.

The table illustrates that, on average, defensive sectors and asset classes tend to perform relatively better in the more defensive phases of the cycle. With respect to equities, defensive sectors have fared relatively better in prior Stage 4 phases.

US Cycle February 2023 - **Stage 4**

	ASSET	Historical Average Returns in each Stage: Stage 1 Defensive	Stage 2 Cyclical	Stage 3 Cyclical	Stage 4 Defensive	Sharpe Ratio in each Stage: Stage 1 Defensive	Stage 2 Cyclical	Stage 3 Cyclical	Stage 4 Defensive
US Equities (Sectors) TR									
(1973-)	Consumer Staples	1.13%	1.16%	0.33%	1.58%	0.04	0.06	0.01	0.06
	Health	0.93%	1.13%	0.68%	1.64%	0.03	0.05	0.03	0.06
	Utilities	0.68%	0.79%	0.64%	1.53%	0.02	0.04	0.02	0.05
	Technology	0.44%	2.14%	0.86%	0.53%	-0.00	0.09	0.03	0.01
	Consumer Discretionary	0.39%	1.68%	0.58%	1.13%	-0.01	0.07	0.03	0.02
	Industrials	0.33%	1.32%	0.91%	1.33%	-0.01	0.06	0.04	0.03
	Basic Materials	0.35%	0.89%	1.29%	1.19%	-0.01	0.02	0.04	0.03
	Oil & Gas	0.72%	0.67%	1.68%	1.09%	0.01	0.01	0.07	0.03
	Telecom	1.05%	0.96%	0.56%	0.78%	0.03	0.04	0.02	0.01
	Financials	0.70%	1.18%	0.96%	1.09%	0.01	0.04	0.03	0.03
US Equities (Style) TR									
(1975-)	Value	0.62%	0.99%	1.23%	1.34%	0.00	0.04	0.06	0.04
	Growth	0.61%	1.46%	1.08%	0.99%	0.01	0.07	0.04	0.02
US Equities (Size) TR									
(1987-)	Small Cap Wilshire)	0.35%	1.45%	1.67%	0.95%	0.01	0.07	0.06	0.03
(1973-)	Large Cap (S&P 500)	0.63%	1.21%	0.88%	1.05%	0.01	0.06	0.04	0.03
Fixed Income TR									
(1973-)	Government (10-Yr Bond)	0.74%	0.50%	0.29%	0.72%	0.04	0.02	-0.01	0.03
(2001-)	Gov't (10-Yr Bond) TIPS	0.58%	0.47%	-0.01%	0.49%	0.07	0.07	0.00	0.05
(1973-)	Corporates	0.78%	0.67%	0.38%	0.52%	0.04	0.05	0.00	0.02
(1986-)	High Yield	0.56%	0.86%	0.58%	0.47%	0.03	0.10	0.06	0.03
Commodities PR									
(1973-)	Gold price	0.25%	0.46%	1.72%	0.29%	-0.00	0.01	0.02	0.01
	Oil (WTI)	0.74%	1.12%	2.35%	-0.29%	-0.00	0.00	0.02	-0.01
	Copper price	-0.26%	0.49%	1.96%	0.11%	-0.02	0.00	0.04	-0.00
Property TR									
(1978-)	US REITs	0.70%	0.94%	1.49%	1.07%	0.02	0.04	0.04	0.03

PR = Price Return/TR=Total Return

		Performance Rank - Historical Average Returns: Stage 1	Stage 2	Stage 3	Stage 4	Performance Rank -Sharpe Ratio: Stage 1	Stage 2	Stage 3	Stage 4
US Equities	Consumer Staples	1	5	16	2	2	5	15	2
	Health	3	6	10	1	6	7	10	1
	Utilities	10	12	11	3	9	12	11	4
	Technology	13	1	9	12	14	2	7	16
	Consumer Discretionary	14	2	13	6	17	3	9	12
	Industrials	16	3	8	4	16	6	6	5
	Basic Materials	15	10	6	5	15	14	5	10
	Oil & Gas	7	13	4	8	10	15	1	9
	Telecom	2	8	14	10	7	9	14	14
	Financials	9	4	7	7	11	11	8	6
Fixed Income	Government	5	15	17	11	3	13	18	11
	Government (TIPS)	11	17	18	14	1	4	17	3
	Corporates	4	14	15	13	4	8	16	13
	High Yield	12	11	12	15	5	1	2	7
Commodities	Gold	17	18	3	16	12	16	12	15
	Oil	6	7	1	18	13	18	13	18
	Copper	18	16	2	17	18	17	3	17
Property	USA Listed Property	8	9	5	9	8	10	4	8

Notional Portfolio: U.S. Multi-Asset Strategy

In order to demonstrate the approach of a top-down overlay to asset allocation, we present an example of this rule-based approach which is consistent with the Austrian business cycle and systematically allocates to the asset classes below as well as equity sectors in each phase of the cycle.

In the strategy below we focus on **equities, fixed income, commodity sectors and listed US property**, although other asset classes can be incorporate in a more diversified strategy.

The table below illustrates that Stage 1 and Stage 4 are associated with the more defensive phases of the cycle. This is driven by the decline in the momentum of lagged US money supply which drives our business cycle indicator. Being in these more defensive phases of the cycle indicates a more cautious stance by increased weighting towards defensive assets.

Stage 2 is associated with the trough and turning point of the cycle and as such a reintroduction of or greater emphasis towards cyclicals.

Stage 3, being the more mature phase of our business cycle upswing, suggests an increased allocation towards commodities or commodity related sectors.

Equities	Stage 1	Stage 2	Stage 3	Stage 4
Consumer Staples	10%			16.67%
HealthCare	10%			16.67%
Utilities	10%			16.67%
Consumer Discretionary		35%		
Technology		35%		
Telecom			10%	
Financials			10%	
Industrials			10%	
Materials				
Energy				
Commodity Sectors				
Oil		5%	25%	
Gold		5%	25%	
Property				
US REITs			10%	
Fixed Income				
Long-term Gov't Bonds	50%			40%
Corporate Bonds	20%			10%
High Yield		20%	10%	

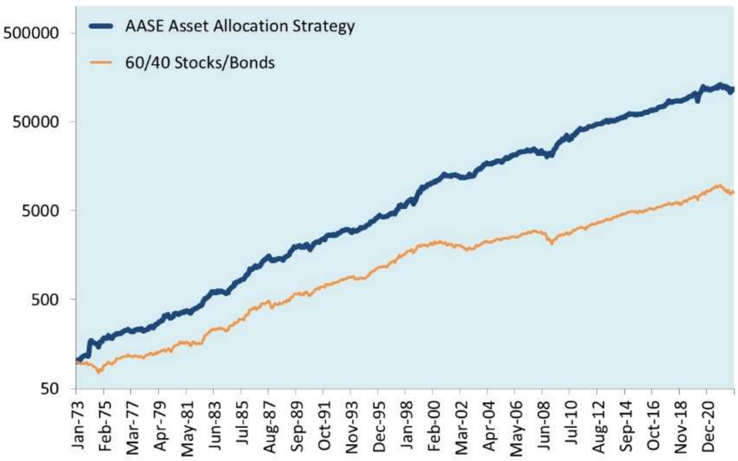
For the month of December, this AASE US Strategy (Stocks/Bonds/Commodities/REITs) notional portfolio decreased in value by **1.4**%.

This compares to the S&P500 which fell by **5.8**% and to a decline of **3.7**% in the 60/40 stock/bond portfolio. For the year, the AASE strategy declined by **11.8**% compared to **17.3**% for a 60/40 strategy

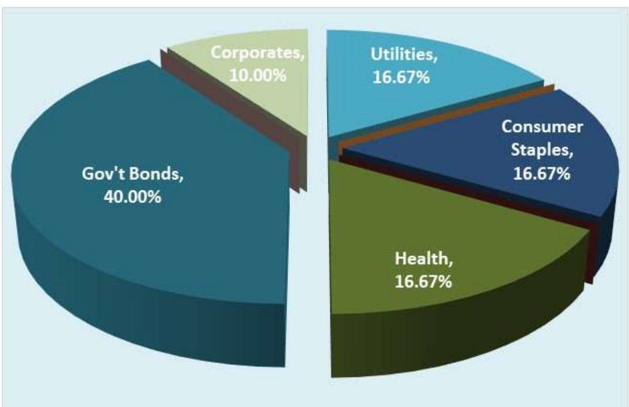
Strategy Allocation February **– remains in Stage 4**

ALLOCATIONS			
December 2022			**Stage 4**
Stocks	**50%**	Consumer Staples	16.7%
		Health	0.0%
		Utilities	0.0%
REITs			
High Yield Bonds		High Yield Bonds	0.00%
Government Bonds	**40%**	10-yr Gov't Bond	40.00%
Corporate Bonds	**10%**	Corporate Bonds	10.00%
Commodities		Oil	0.0%
		Gold	0.0%
January 2023			**Stage 4**
Stocks	**50%**	Consumer Staples	16.7%
		Health	16.7%
		Utilities	16.7%
REITs			
High Yield Bonds		High Yield Bonds	0.00%
Government Bonds	**40%**	10-yr Gov't Bond	40.00%
Corporate Bonds	**10%**	Corporate Bonds	10.00%
Commodities		Oil	0.0%
		Gold	0.0%
February 2023			**Stage 4**
Stocks	**50%**	Consumer Staples	16.7%
		Health	16.7%
		Utilities	16.7%
REITs			
High Yield Bonds		High Yield Bonds	0.00%
Government Bonds	**40%**	10-yr Gov't Bond	40.00%
Corporate Bonds	**10%**	Corporate Bonds	10.00%
Commodities		Oil	0.0%
		Gold	0.0%

Proforma Performance Comparison
AASE Strategy v 60/40 Stock/Bond Portfolio



Proforma Asset Allocation



Proforma Performance

ANALYSIS* Feb-1973 to Dec-2022	AASE Approach*	60/40 Stocks/Bonds
CAGR	15.18%	9.18%
Max Drawdown	-18.8%	-29.1%
Std Dev	11.9%	10.0%
Return/Drawdown	0.81	0.32
Sharpe 3%	1.03	0.62
% Positive Years	90.0%	78.0%
2022	-11.8%	-17.3%
2021	11.1%	15.5%
1 Year Return	-11.8%	-17.3%
3 Year Return	12.7%	12.0%

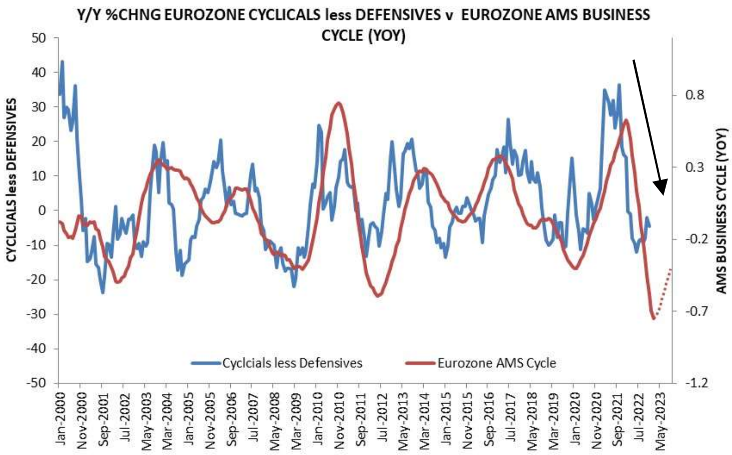
*Compound Annual Growth Rate

Eurozone

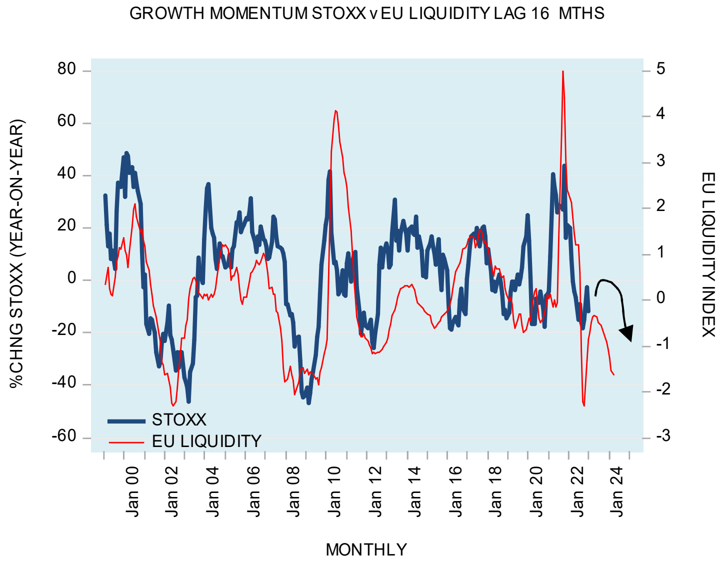
Eurozone Business Cycle for February - Stage 1

Stage 1 Characteristics- Monetary headwinds – most defensive stage of the business cycle.

Equities – preference for Defensives relative to Cyclicals remain.

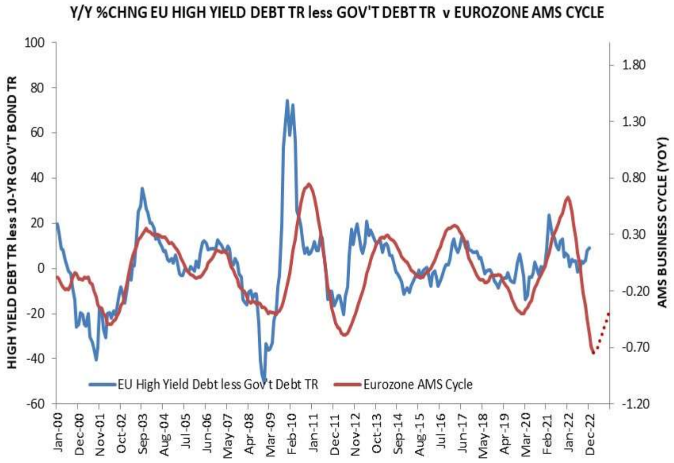


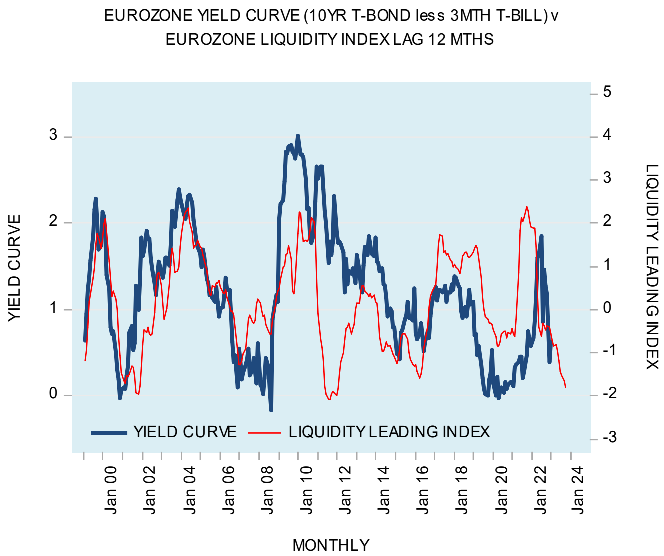
From a Liquidity perspective (which is a different indicator to the cycle as such) the rally in liquidity has been short-lived and the trend has now begun to weaken once again. Although there may still be a modest short-term rally this does not bode well for the momentum of equities in the months ahead.



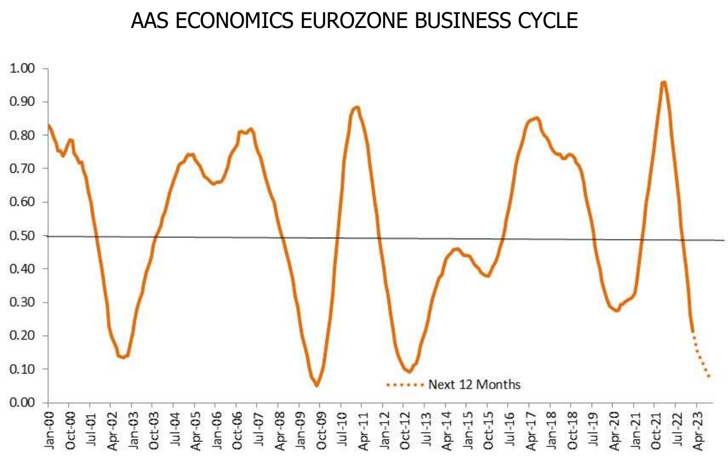
Fixed Income – Historically safe havens have relatively outperformed high yield and riskier bonds in the defensive phase of the cycle. With our view that inflation in the Eurozone is around its peak a preference may be now be had for nominal securities. This follows a horrid year for Eurozone government debt with the 10yr government bond total return plunging by over 20% in 2022, compared to high yield total return falling by 11.4% and the Stoxx equity index total return declining by 8.8%

With the ECB raising short term rates, the yield curve has visibly narrowed, something our liquidity indicator suggested many months in advance (see chart below). This downward pressure on the curve remains in place in the months ahead.





Mid-term outlook – The Eurozone business cycle remains in **Stage 1** of the cycle as the deceleration continues.



Below we can observe how on average various equity sectors and asset classes have performed in different phases of the Eurozone cycle.

The table also illustrates that, on average historically, in this more risk averse environment defensive sectors and assets have performed relatively better.

Eurozone Cycle February - **Stage 1**

		Historical Average Returns in each Stage				Sharpe Ratio in each Stage			
	ASSET	Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)	Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)
Eurozone Equities (Sectors) TR (1999-)	Consumer Staples	0.21%	1.02%	0.89%	0.06%	0.013	0.045	0.075	-0.006
	Health	0.38%	0.58%	0.99%	0.17%	-0.004	0.017	0.051	0.004
	Utilities	-0.51%	0.96%	1.45%	0.29%	-0.051	0.041	0.105	0.008
	Technology	-0.02%	1.99%	1.42%	-0.46%	0.008	0.030	0.040	-0.018
	Consumer Discretionary	0.34%	1.69%	1.47%	-0.60%	0.020	0.083	0.071	-0.037
	Industrials	0.16%	2.06%	1.77%	-0.33%	0.000	0.065	0.099	-0.022
	Basic Materials	0.02%	1.30%	2.03%	-0.24%	-0.003	0.042	0.096	-0.023
	Oil & Gas	-0.68%	1.00%	1.88%	0.67%	-0.032	0.032	0.082	0.028
	Telecom	-0.36%	1.17%	1.60%	-1.01%	-0.007	0.025	0.035	-0.033
	Financials	-0.50%	1.42%	1.61%	-0.84%	-0.020	0.028	0.096	-0.056
Eurozone Equities (Style) TR (1999-)	Growth	0.01%	1.12%	1.27%	-0.41%	0.05	0.04	0.06	-0.03
	Value	-0.41%	1.43%	1.75%	-0.43%	0.03	0.05	0.12	-0.04
Eurozone Equities (Size) TR (1999-)	Large Cap	-0.21%	1.24%	1.46%	-0.43%	-0.03	0.03	0.07	-0.04
	Small Cap	0.44%	1.92%	1.67%	-0.74%	0.06	0.10	0.11	-0.05
Fixed Income TR (1999-)	Government	0.64%	0.53%	0.14%	0.29%	0.06	0.05	0.01	0.04
	Corporates	0.43%	0.52%	0.14%	0.03%	0.05	0.11	0.02	-0.03
	High Yield	0.33%	1.52%	0.64%	-0.49%	0.01	0.09	0.08	-0.07
Commodities PR (1999-)	Gold (EUR)	0.52%	0.11%	0.40%	1.31%	0.03	0.02	0.02	0.07
	Oil (EUR)	-0.53%	0.62%	2.58%	1.57%	-0.03	0.03	0.06	0.06
Property PR (1999-)	Eurozone REITs	0.09%	0.88%	1.36%	-0.46%	-0.00	0.05	0.11	-0.05

PR = Price Return/TR=Total Return

		Performance Rank - Historical Average Returns				Performance Rank -Sharpe Ratio			
		Stage 1	Stage 2	Stage 3	Stage 4	Stage 1	Stage 2	Stage 3	Stage 4
Eurozone Equities	Consumer Staples	7	8	12	7	5	7	8	7
	Health	4	13	11	6	11	16	11	6
	Utilities	14	10	8	4	16	9	2	5
	Technology	11	2	9	11	7	12	12	8
	Consumer Discretionary	5	3	7	14	4	3	9	13
	Industrials	8	1	4	10	8	4	3	9
	Basic Materials	10	6	2	9	9	8	4	10
	Oil & Gas	16	9	3	3	15	11	6	4
	Telecom	12	7	6	16	12	14	13	11
	Financials	13	5	5	15	13	13	5	15
Fixed Income	Government	1	14	16	5	1	6	16	3
	Corporates	3	15	15	8	2	1	15	12
	High Yield	6	4	13	13	6	2	7	16
Commodities	Gold (EUR)	2	16	14	2	3	15	14	1
	Oil (EUR)	15	12	1	1	14	10	10	2
Property	EU Listed Property	9	11	10	12	10	5	1	14

Notional Portfolio: Eurozone Multi-Asset Strategy

In the strategy below we focus on **equities, fixed income and commodity related sectors**, although REITs and other asset classes can be incorporated in a more diversified strategy.

The table below illustrates that Stage 1 and Stage 4 are associated with the more defensive phases of the cycle.

This is due to the decline in the momentum of lagged money supply which drives our business cycle indicator.

Being in these more defensive phases of the cycle would indicate a more cautious stance by an increased weighting towards defensive assets.

Stage 2 is associated with the trough and turning point of the cycle and as such a reintroduction of or greater emphasis towards cyclicals.

Stage 3, being the more mature phase of our business cycle upswing, suggests an increased allocation towards commodities or commodity related sectors.

Equities	Stage 1	Stage 2	Stage 3	Stage 4
Consumer Staples	10%			16.67%
HealthCare	10%			16.67%
Utilities				16.67%
Consumer Discretionary		23.33%	12%	
Technology		23.33%		
Telecom			12%	
Financials			12%	
Industrials		23.33%	12%	
Commodity Sectors				
Energy		5%	15%	
Materials		5%	27%	
Fixed Income				
Long-term Gov't Bonds	60%			40%
Corporate Bonds	20%			10%
High Yield		20%	10%	

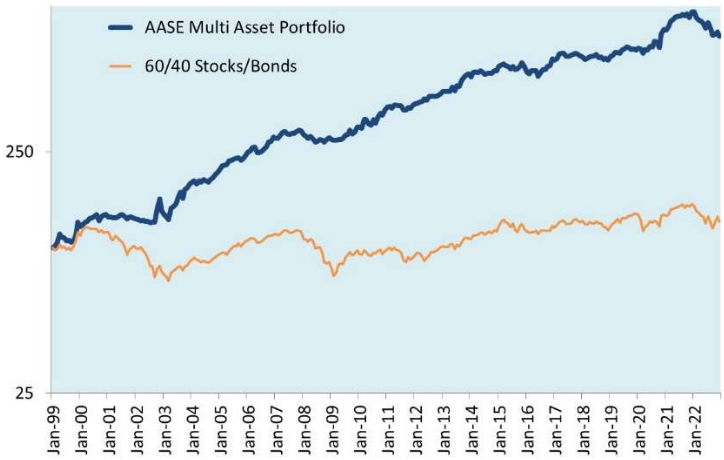
For the month of December, the AASE Eurozone Strategy (Stocks/Bonds/Commodities Sectors) notional portfolio decreased in value by **4.1**%.

This compares to the Stoxx 50E index which fell by **4.3**% and a 60/40 stock/bond portfolio decrease of **4.7**%.

Strategy Allocation February – **Remains in Stage 1.**

ALLOCATIONS (Commodities reflected in Oil & Gas and Basic Materials)			
December 2022			**Stage 1**
Stocks	**20%**	Consumer Staples	10.00%
		Health	10.00%
Corporate Bonds	**20%**	Corporate Bonds	20.00%
Government Bonds	**60%**	10-yr Gov't Bond	60.00%
High Yield Bonds			
Commodity Sectors		Basic Materials	
		Oil & Gas	
January 2023			**Stage 1**
Stocks	**20%**	Consumer Staples	10.00%
		Health	10.00%
Corporate Bonds	**20%**	Corporate Bonds	20.00%
Government Bonds	**60%**	10-yr Gov't Bond	60.00%
High Yield Bonds			
Commodity Sectors		Basic Materials	
		Oil & Gas	
February 2023			**Stage 1**
Stocks	**20%**	Consumer Staples	10.00%
		Health	10.00%
Corporate Bonds	**20%**	Corporate Bonds	20.00%
Government Bonds	**60%**	10-yr Gov't Bond	60.00%
High Yield Bonds			
Commodity Sectors		Basic Materials	
		Oil & Gas	

Proforma Performance Comparison
AASE Eurozone Strategy v 60/40 Stock/Bond Portfolio

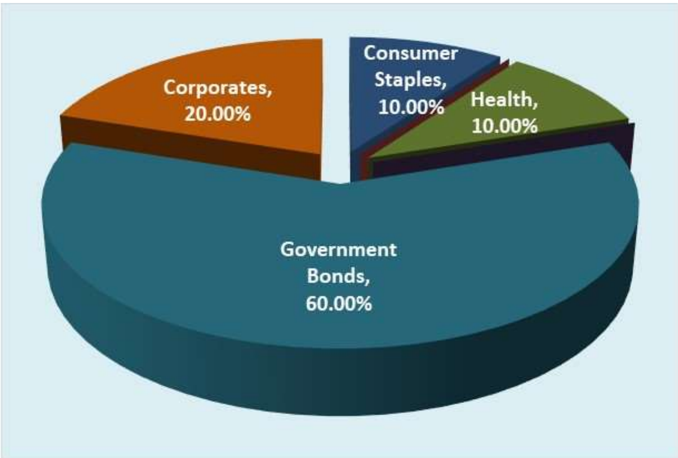


Proforma Performance

ANALYSIS* Jan-1999 to Dec-2022	AASE Approach*	60/40 Stocks/Bonds
CAGR	8.8%	1.1%
Max Drawdown	-20.4%	-40.0%
Std Dev	10.8%	10.9%
Return/Drawdown	0.43	0.03
Sharpe 3%	0.54	-0.18
% Positive Years	83.3%	62.5%
2022	-20.4%	-15.4%
2021	18.2%	11.0%
1 Year Return	-20.4%	-15.4%
3 Year Return	14.2%	-6.6%

*Compound Annual Growth Rate

Proforma Asset Allocation

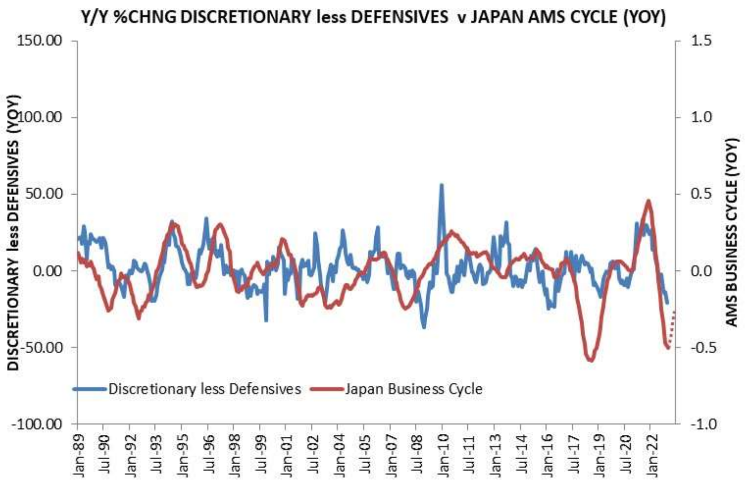


Japan

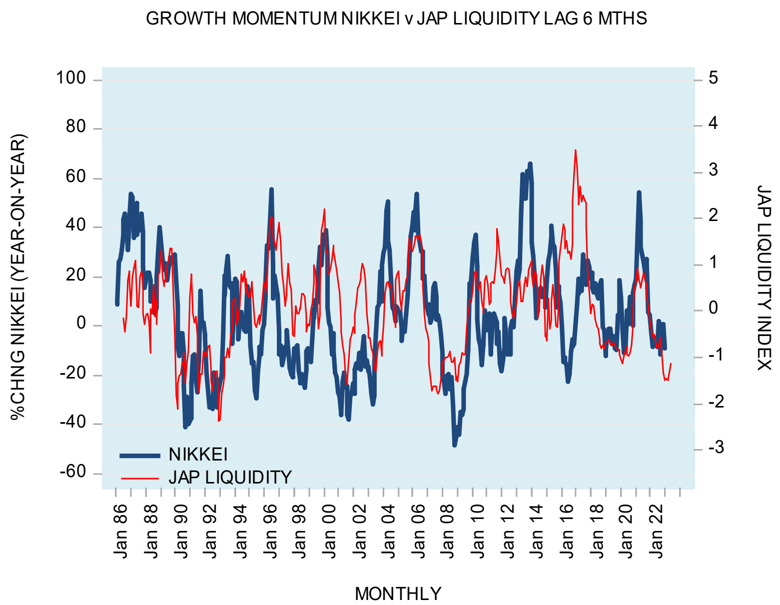
Japanese Business Cycle for February - Stage 2

Stage 2 Characteristics- Monetary tailwinds. Risk assets are preferred to defensives.

Equities – preference now for cyclicals versus defensives (see table page 16).

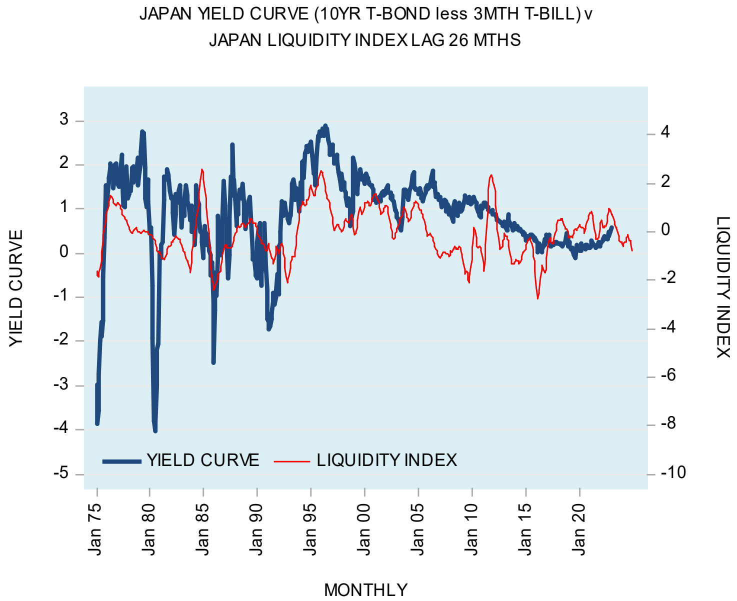


Liquidity momentum has visibly declined in recent months and the momentum of the Nikkei has followed suit. However liquidity appears to have now bottom and may provide some support to the momentum of equities.

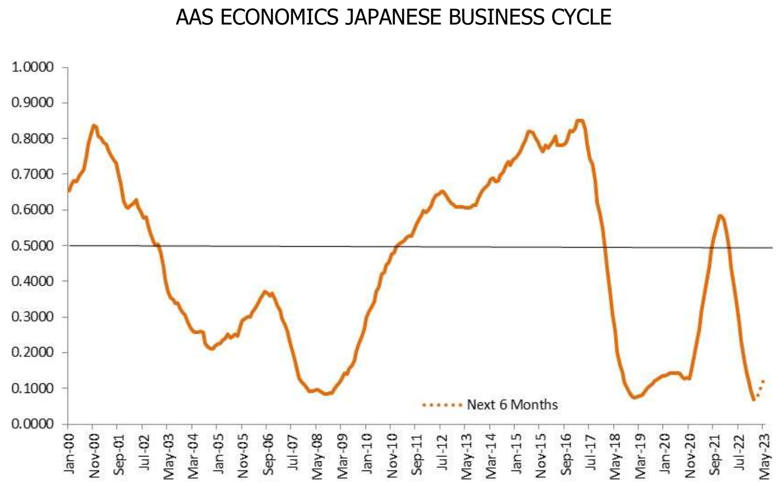


Fixed Income – Rotating into the more cyclical phase of the cycle, historical performance suggests a preference for high yield relative to safe havens and high grade investment debt. The BoJ has also widened the band for the 10-year JGBs to **50** basis points. In absolute terms yields still remain at low levels (capped at 0.5%) and in this volatile environment may still offer a certain amount of protection relative to other asset classes.

Whilst in the short term we may continue to see a tendency for the yield curve to rise, as we move further into 2023 there is a rising likelihood that we may begin to observe a flattening in the curve.



Mid-term outlook – The recent strengthening in the momentum of the Japanese money supply now sees monetary tailwinds emerging which moves the Japanese business cycle into **Stage 2**. We need to monitor the money supply ahead to see if this strengthening consolidates or reverts back to weakening.



Below we can observe how, on average, various equity sectors and asset classes have performed in different phases of the cycle.

The table also illustrates that, on average, "risk" assets such as equities have historically fared well in prior Stage 2 episodes (in terms of average returns).

Japanese Cycle February - **Stage 2**

Historical Average Returns in each Stage

		Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)
Japan Equities (Sectors) PR					
(1988-)	Consumer Staples	-0.41%	0.73%	0.95%	-0.27%
	Health	-0.14%	0.95%	1.11%	-0.36%
	Utilities	-0.16%	0.27%	-0.05%	-0.37%
	Technology	-1.08%	1.75%	1.39%	-0.30%
	Consumer Discretionary	-0.80%	1.40%	1.01%	-0.21%
	Industrials	-0.70%	1.52%	0.98%	-0.97%
	Basic Materials	-0.87%	1.45%	0.89%	-0.84%
	Oil & Gas	-1.16%	1.18%	0.77%	-0.34%
	Telecom	-0.48%	1.04%	0.94%	-1.13%
	Financials	-0.77%	1.08%	0.56%	-0.93%
Japan Equities (Style) PR					
(1988-)	Growth	-0.97%	1.12%	0.67%	-0.95%
	Value	-0.67%	1.31%	0.86%	-0.74%
Japan Equities (Size) PR					
(1994-)	Large Cap	-0.37%	1.03%	0.47%	-0.65%
(1993-)	Small Cap	-0.17%	1.27%	0.42%	-0.88%
Fixed Income PR					
(1988-)	10yr Government Bond	0.20%	0.00%	0.14%	0.24%
(2001-)	Corporate Bond +7yr	0.13%	0.13%	0.28%	0.31%
Commodities PR					
(1988-)	Nikkei TOCOM Commodity	0.69%	0.83%	0.77%	0.01%
Property TR					
(2003-)	Japan REITs	-0.40%	1.82%	0.71%	-1.17%

PR = Price Return/TR=Total Return

Sharpe Ratio in each Stage

	Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)
Consumer Staples	-0.01	0.03	0.05	-0.02
Health	-0.01	0.05	0.06	-0.02
Utilities	-0.01	-0.00	-0.03	-0.01
Technology	-0.03	0.06	0.05	-0.01
Consumer Discretionary	-0.03	0.06	0.03	-0.02
Industrials	-0.03	0.06	0.04	-0.04
Basic Materials	-0.03	0.05	0.01	-0.12
Oil & Gas	-0.03	0.03	0.01	-0.01
Telecom	-0.01	0.02	0.04	-0.04
Financials	-0.03	0.04	0.00	-0.04
Growth	-0.04	0.05	0.02	-0.04
Value	-0.03	0.05	0.03	-0.04
Large Cap	-0.02	0.06	0.02	-0.03
Small Cap	-0.01	0.05	0.01	-0.03
10yr Government Bond	0.01	-0.03	0.01	-0.00
Corporate Bond +7yr	0.03	0.01	0.08	0.06
Nikkei TOCOM Commodity	0.01	0.03	0.05	-0.02
Japan REITs	-0.01	0.06	0.01	-0.02

Performance Rank - Historical Average Returns

		Stage 1	Stage 2	Stage 3	Stage 4
Japan Equities	Consumer Staples	6	10	5	4
	Health	3	9	2	7
	Utilities	4	11	13	8
	Technology	12	2	1	5
	Consumer Discretionary	10	5	3	3
	Industrials	8	3	4	11
	Basic Materials	11	4	7	9
	Oil & Gas	13	6	8	6
	Telecom	7	8	6	12
	Financials	9	7	10	10
Fixed Income	Government	1	13	12	2
	Corporates	2	12	11	1
Property	Japan REITs	5	1	9	13

Performance Rank -Sharpe Ratio

		Stage 1	Stage 2	Stage 3	Stage 4
Japan Equities	Consumer Staples	9	8	4	8
	Health	6	5	2	9
	Utilities	5	14	15	6
	Technology	14	3	3	7
	Consumer Discretionary	15	2	7	11
	Industrials	13	4	6	12
	Basic Materials	12	6	9	15
	Oil & Gas	10	9	8	5
	Telecom	8	10	5	14
	Financials	11	7	12	13
Fixed Income	Government	2	15	11	4
	Corporates	1	11	1	1
Property	Japan REITs	7	1	10	10

Notional Portfolio: Japanese Multi-Asset Strategy

In the strategy below we focus on **equities, government debt and commodity related sectors**, although corporate debt, high yield debt, REITs and other asset classes can be incorporated in a more diversified strategy.

The table below illustrates that Stage 1 and Stage 4 are associated with the more defensive phases of the cycle.

This is on account of the decline in the momentum of lagged US money supply which drives our business cycle indicator.

As such, being in these more defensive phases of the cycle would indicate a more cautious stance by an increased weighting towards defensive assets.

Stage 2 is associated with the trough and turning point of the cycle and therefore a reintroduction of or greater emphasis towards cyclicals.

Stage 3, being the more mature phase of our business cycle upswing, suggests an increased allocation towards commodities or commodity related sectors.

Equities	Stage 1	Stage 2	Stage 3	Stage 4
Consumer Staples	6.7%		26.7%	16.67%
HealthCare	6.7%		26.7%	16.67%
Utilities	6.7%			16.67%
Consumer Discretionary		22.5%		
Technology		22.5%		
Telecom		22.5%		
Financials			26.7%	
Industrials		22.5%		
Commodity Sectors				
Energy		5%	10%	
Materials		5%	10%	
Fixed Income				
Long-term Gov't Bonds	80%			50%

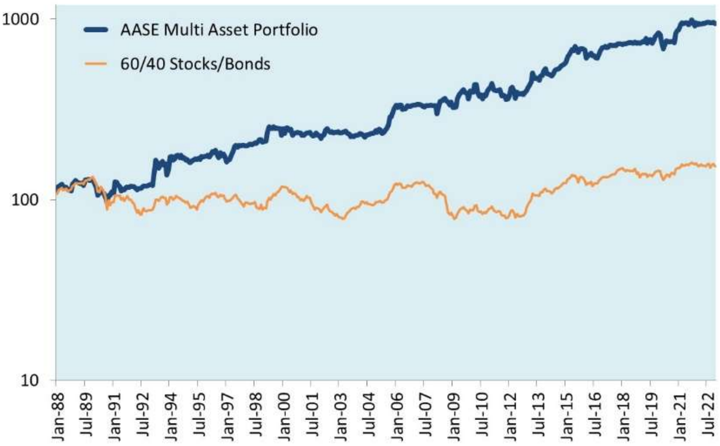
For the month of December, the AASE Japanese Strategy (Stocks/Bonds/Commodities Sectors) notional portfolio decreased in value by **1.5**%.

This compares to the Topix index which fell by **4.7**% and a 60/40 stock/bond portfolio which decreased by **3.5**%.

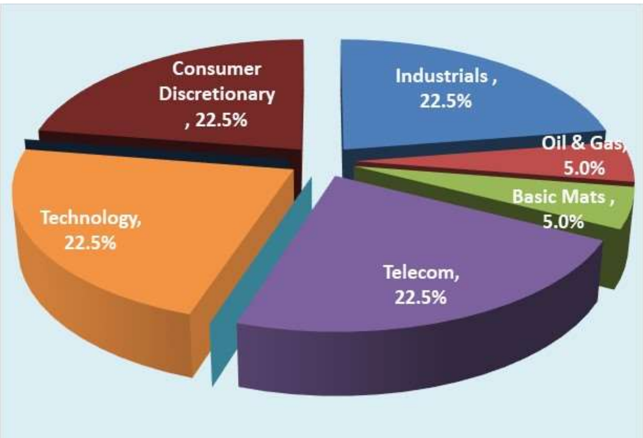
Strategy Allocation February **– rotates into Stage 2.**

ALLOCATIONS (Commodities reflected in Oil & Gas and Basic Materials)			
December 2022			**Stage 1**
Stocks	**20%**	Consumer Staples	6.67%
		Health	6.67%
		Utilities	6.67%
Government Bonds	**80%**	10-yr Gov't Bond	80%
Commodity Sectors			
January 2023			**Stage 1**
Stocks	**20%**	Consumer Staples	6.67%
		Health	6.67%
		Utilities	6.67%
Government Bonds	**80%**	10-yr Gov't Bond	80%
Commodity Sectors			
February 2023			**Stage 2**
Stocks	**90%**	Consumer Discretionary	22.50%
		Technology	22.50%
		Industrials	22.50%
		Telecom	22.50%
Government Bonds			
Commodity Sectors	**10%**	Oil & Gas	5.00%
		Basic Materials	5.00%

Proforma Performance Comparison
AASE Japan Strategy v 60/40 Stock/Bond Portfolio



Proforma Asset Allocation



Proforma Performance

ANALYSIS Jan-1988 to Dec-2022	AASE Approach*	60/40 Stocks/Bonds
CAGR	6.62%	1.22%
Max Drawdown	-25.3%	-41.4%
Std Dev	13.7%	11.0%
Return/Drawdown	0.26	0.03
Sharpe 3%	0.26	-0.16
% Positive Years	82.9%	62.9%
2022	-1.4%	-3.9%
2021	10.1%	6.2%
1 Year Return	-1.4%	-3.9%
3 Year Return	12.5%	5.5%

*Compound Annual Growth Rate

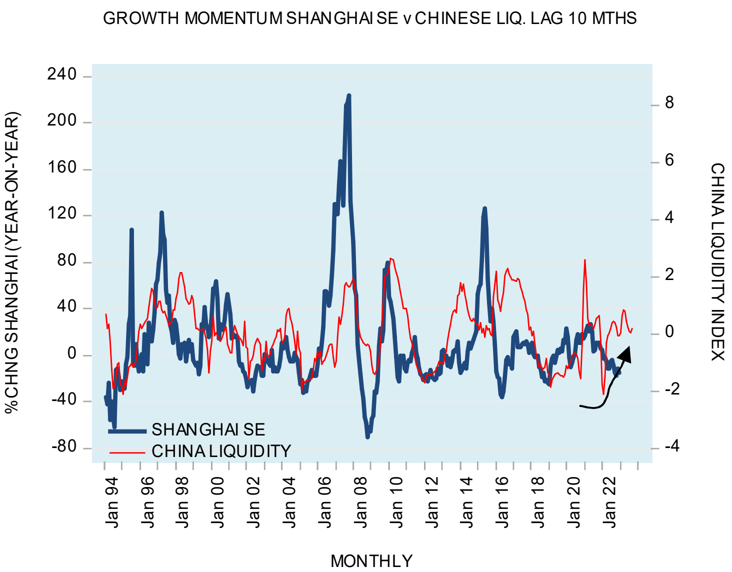
China

China Business Cycle for February - Stage 1

Stage 1 Characteristics- Monetary headwinds – rotating into a defensive phase of the business cycle.

Equities – preference for Defensives relative to Cyclicals for the time being.

Our Liquidity measure momentum seems to be supportive of the momentum of Chinese equities.



Fixed Income – The more defensive phase of the cycle means that on a relative basis the monetary environment is more beneficial for risk averse debt such as government debt or high grade corporate relative to risk on debt such as high yield debt.

Mid-term outlook – The Chinese business cycle has now rotated into **Stage 1** with slight headwinds emerging but the outlook for the first half of 2023 remains choppy.

Below we can observe how, on average, various equity sectors and asset classes have performed in different phases of the cycle. The table below also illustrates that, on average, “defensive” assets tend historically to do better in Stage 1 of the cycle.

Chinese Cycle February - **Stage 1**

		Historical Average Returns in each Stage				Sharpe Ratio in each Stage			
		Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)	Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)
China Equities (Sectors) PR (2005-)	Consumer Staples	1.33%	3.37%	2.03%	0.00%	0.04	0.12	0.03	-0.01
	Health	0.71%	3.07%	1.58%	0.14%	0.03	0.11	0.02	-0.01
	Utilities	0.04%	3.01%	0.23%	-0.79%	0.02	0.09	0.00	-0.03
	Technology	-0.25%	4.81%	-0.25%	-1.26%	0.00	0.15	-0.03	-0.03
	Consumer Discretionary	0.51%	3.65%	0.19%	-1.26%	0.03	0.13	0.00	-0.04
	Industrials	0.02%	3.30%	1.03%	-1.42%	0.01	0.11	0.02	-0.05
	Basic Materials	-0.03%	3.09%	1.60%	-0.90%	0.02	0.11	0.02	-0.03
	Oil & Gas	0.51%	1.60%	2.72%	-1.27%	0.03	0.06	0.02	-0.04
	Telecom	-0.69%	3.92%	2.89%	-1.59%	0.01	0.11	0.04	-0.04
	Financials	1.57%	2.21%	1.19%	-0.89%	0.09	0.07	0.02	-0.03
China Equities (Style) PR (1996-)	Growth	-0.77%	0.71%	2.22%	-0.94%	-0.02	0.05	0.04	-0.01
	Value	-0.25%	1.23%	2.76%	-1.01%	-0.02	0.03	0.07	-0.02
China Equities (Size) PR (1994-)	Large Cap	-0.53%	1.24%	2.33%	-0.86%	-0.02	0.02	0.05	-0.01
	Small Cap	-0.83%	2.24%	2.03%	-0.97%	-0.03	0.07	0.06	-0.03
Fixed Income TR (2003-)	Treasury	0.38%	0.30%	0.09%	0.46%	0.07	0.05	-0.03	0.03
	Corporates	0.44%	0.36%	0.07%	0.62%	0.11	0.12	-0.02	0.04
Commodities PR (1999-)	Iron (CNY)	1.07%	-0.33%	3.00%	0.92%	-0.52	-0.02	0.05	-2.18
	Copper (CNY)	0.78%	0.76%	1.56%	-0.09%	0.03	0.04	0.05	0.00
	Oil (CNY)	1.88%	1.39%	2.49%	0.43%	0.01	0.00	0.05	0.01
Property PR (1999-)	China Property	0.65%	2.81%	-0.20%	-0.71%	0.03	0.08	-0.01	-0.04

PR = Price Return/TR=Total Return

		Performance Rank - Historical Average Returns				Performance Rank -Sharpe Ratio			
		Stage 1	Stage 2	Stage 3	Stage 4	Stage 1	Stage 2	Stage 3	Stage 4
China Equities	Consumer Staples	3	4	5	6	4	3	5	6
	Health	6	7	7	5	5	6	9	5
	Utilities	12	8	11	9	11	9	11	10
	Technology	15	1	16	12	15	1	16	8
	Consumer Discretionary	9	3	12	13	8	2	12	12
	Industrials	13	5	10	15	13	8	10	15
	Basic Materials	14	6	6	11	10	7	7	9
	Oil & Gas	8	11	3	14	7	12	6	13
	Telecom	16	2	2	16	14	5	4	14
	Financials	2	10	9	10	2	11	8	7
Fixed Income	Government	11	15	13	3	3	13	15	2
	Corporates	10	14	14	2	1	4	14	1
Commodities	Iron (CNY)	4	16	1	1	16	16	2	16
	Copper (CNY)	5	13	8	7	6	14	3	4
	Oil (CNY)	1	12	4	4	12	15	1	3
Property	China Property	7	9	15	8	9	10	13	11

Notional Portfolio: Chinese Multi-Asset Strategy

In the strategy below we focus on **equities, government debt and commodity related sectors**, although corporate debt, high yield debt, REITs and other asset classes can (where available) be incorporated in a more diversified strategy.

The table below illustrates that Stage 1 and Stage 4 are associated with the more defensive phases of the cycle.

This is on account of the decline in the momentum of lagged US money supply which drives our business cycle indicator.

As such being in these more defensive phases of the cycle would indicate a more cautious stance by an increased weighting towards defensive assets.

Stage 2 is associated with the trough and turning point of the cycle and a reintroduction of or greater emphasis towards cyclicals.

Stage 3, being the more mature phase of our business cycle upswing, suggests an increased allocation towards commodities or commodity related sectors.

	Stage 1	Stage 2	Stage 3	Stage 4
Equities				
Consumer Staples	10%		14%	
HealthCare	10%			25%
Utilities	10%			25%
Consumer Discretionary		45%		
Technology		45%		
Telecom			14%	
Financials			14%	
Industrials			14%	
Commodity Sectors				
Energy		5%	29%	
Materials		5%	15%	
Fixed Income				
Long-term Gov't Bonds	70%			50%

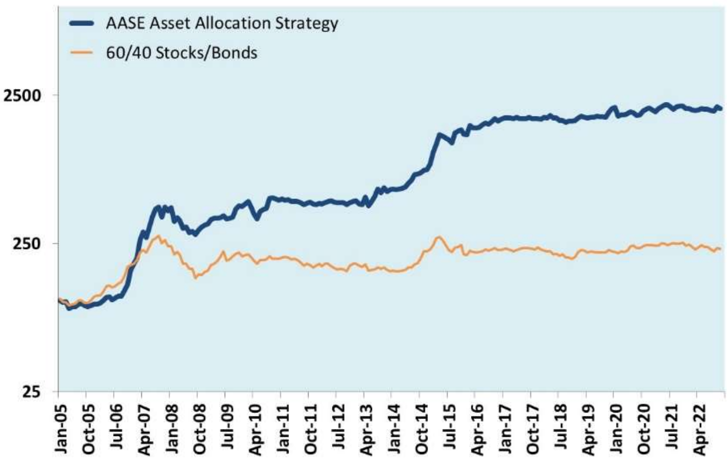
For the month of December, the AASE Chinese Strategy (Stocks/Bonds/Commodities Sectors) portfolio declined by **2.5**%.

This compares to the SSE Composite Index which decreased by **2**% and a 60/40 stock/bond portfolio fall of **1**%.

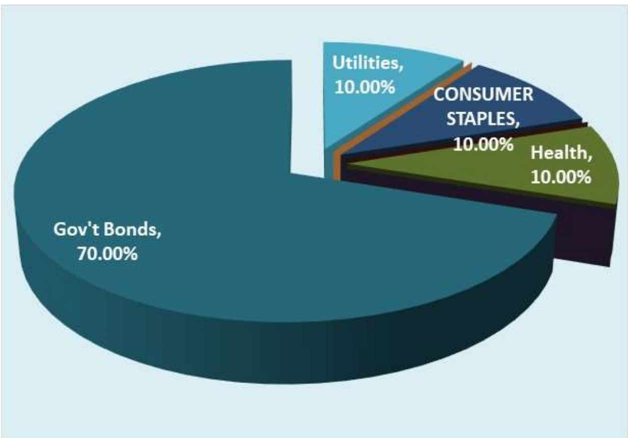
Strategy Allocation February – **Rotates into Stage 1**

ALLOCATIONS (Commodities reflected in Oil & Gas and Basic Materials)				
December 2022				**Stage 2**
Stocks	**90%**	Consumer Discretionary	45.00%	
		Technology	45.00%	
Government Bonds			0.00%	
Commodity Sectors	**10%**			
		Basic Materials	5.00%	
		Oil & Gas	5.00%	
January 2023				**Stage 2**
Stocks	**90%**	Consumer Discretionary	45.00%	
		Technology	45.00%	
Government Bonds			0.00%	
Commodity Sectors	**10%**			
		Basic Materials	5.00%	
		Oil & Gas	5.00%	
February 2023				**Stage 1**
Stocks	**30%**	Consumer Staples	10.00%	
		Health	10.00%	
		Utilities	10.00%	
Government Bonds	**70%**	10-yr Gov't Bond	70.00%	
Commodity Sectors				
		Basic Materials	0.00%	
		Oil & Gas	0.00%	

Proforma Performance Comparison
AASE China Strategy v 60/40 Stock/Bond Portfolio



Proforma Asset Allocation



Proforma Performance

ANALYSIS* Jan-2005 to Dec-2022	AASE Approach*	60/40 Stocks/Bonds
CAGR	18.34%	4.76%
Max Drawdown	-35.2%	-48.2%
Std Dev	21.72%	15.56%
Return/Drawdown	0.52	0.10
Sharpe 3%	0.71	0.11
% Positive Years	72.2%	61.1%
2022	-3.36%	-9.29%
2021	4.4%	4.0%
1 Year Return	-3.36%	-9.29%
3 Year Return	6.7%	2.3%

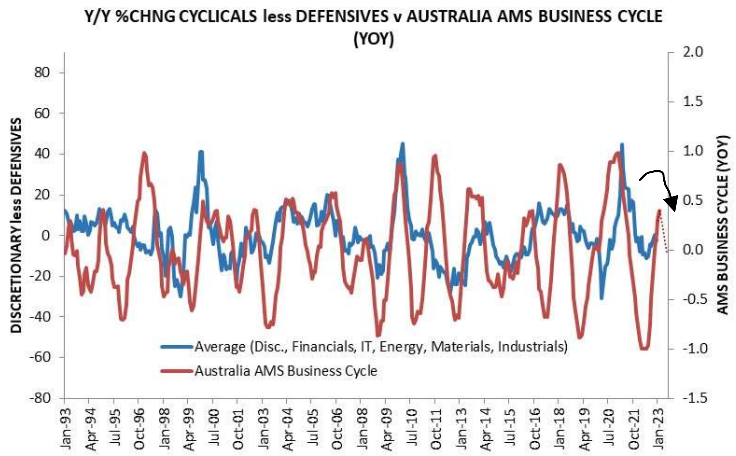
*Compound Annual Growth Rate

Australia

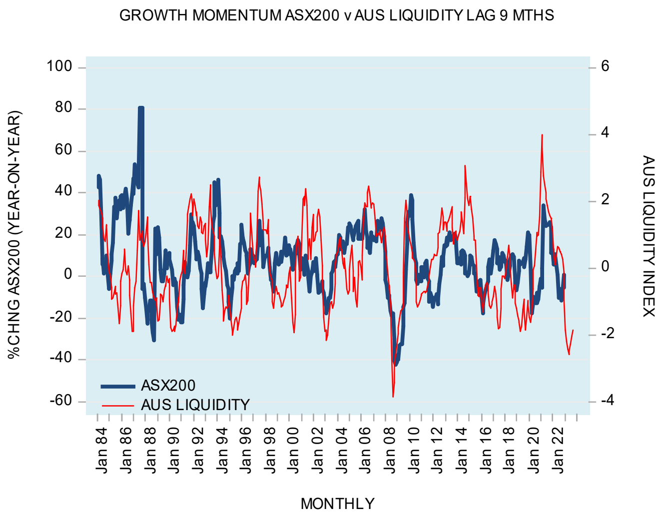
Australia Business Cycle for February - Stage 1

Stage 1 Characteristics- Monetary headwinds head.

Equities – Preference for Defensives relative to Cyclicals.



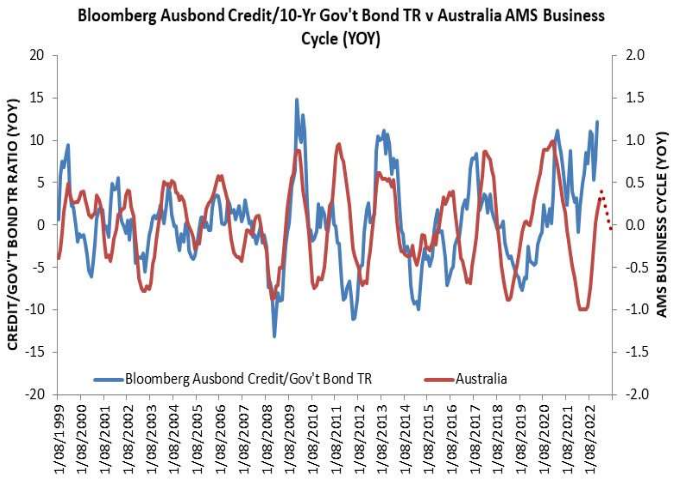
The decline in Liquidity indicates the possible amplified combination of index-level downward pressure (Liquidity) with the deceleration phase of the cycle. This could translate to lower returns compared to previous Stage 1 periods.

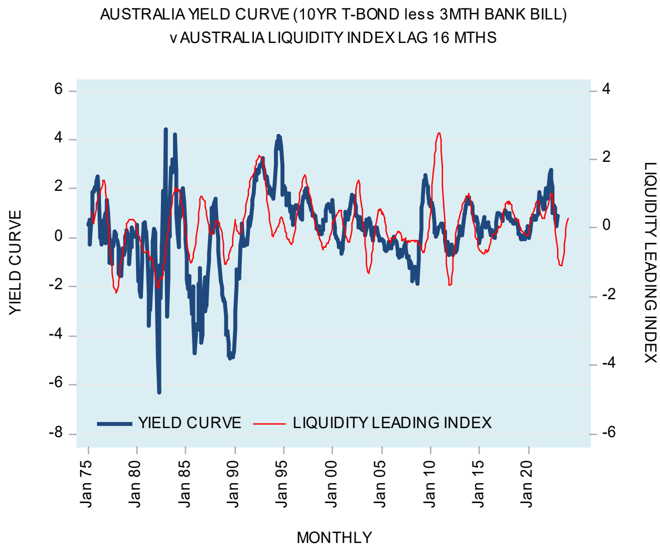


Historical Average Returns in Stage 1 and when Liquidity is declining		Stage 1 Defensive	Stage 1 & Liquidity Declining
Australia Equities (Sectors) PR			
(1991-)	Consumer Staples	0.17%	-0.13%
	Health	0.89%	0.20%
	Utilities	0.50%	-0.16%
	Technology	-0.32%	-0.81%
	Consumer Discretionary	-0.95%	-0.79%
	Industrials	-0.40%	0.14%
	Basic Materials	-0.24%	-0.07%
	Oil & Gas	0.02%	0.06%
	Telecom	0.20%	-0.53%
	Financials	-0.41%	-0.47%
Australia Equities (Style) PR			
(1991-)	Growth	-0.29%	-0.46%
	Value	-0.31%	-0.28%
Australia Equities (Size) PR			
(1991-)	Large Cap	-0.27%	-0.36%
(1993-)	Small Cap	-0.63%	-0.27%

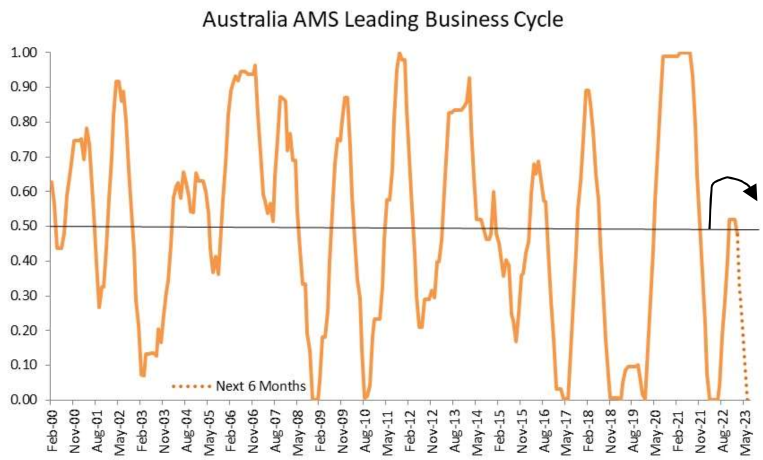
Fixed Income – Relative preference for safe havens versus credit or high yield. This follows a dismal year for safe havens in 2022 where the performance of the total return of the 10yr government bond index was down by 16.8% for the year compared to the Bloomberg Ausbond credit index which was down by 6.7%.

Our Liquidity indicator for Australia suggest that the yield curve should continue to narrow after peaking in March last year.





Mid-term outlook – From a monetary perspective, the Australian business cycle has peaked and we can now observe monetary headwinds moving further into 2023 (see chart below).



Below we observe how, on average, various equity sectors and asset classes have performed in different phases of the cycle.

The table also illustrates that, on average, "defensive" assets tend to perform relatively better in Stage 1 of the cycle.

Australian Cycle February - **Stage 1**

		Historical Average Returns in each Stage				Sharpe Ratio in each Stage			
		Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)	Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)
Australia Equities (Sectors) PR (1991-)	Consumer Staples	0.17%	0.51%	0.88%	0.69%	-0.02	0.01	0.04	0.02
	Health	0.89%	2.08%	0.90%	0.98%	0.02	0.06	0.04	0.03
	Utilities	0.50%	0.32%	0.85%	1.20%	0.01	-0.01	0.01	0.03
	Technology	-0.32%	3.15%	1.19%	1.95%	0.01	0.07	0.04	0.03
	Consumer Discretionary	-0.95%	1.21%	1.14%	1.14%	-0.05	0.03	0.05	0.03
	Industrials	-0.40%	0.80%	0.63%	0.24%	-0.04	0.02	0.02	-0.01
	Basic Materials	-0.24%	0.93%	1.33%	0.66%	-0.02	0.03	0.05	0.01
	Oil & Gas	0.02%	0.92%	0.84%	1.05%	-0.01	0.06	0.02	0.02
	Telecom	0.20%	-0.29%	0.56%	1.00%	-0.01	-0.03	0.02	0.03
	Financials	-0.41%	0.72%	1.45%	0.42%	-0.04	0.02	0.08	-0.00
Australia Equities (Style) PR (1991-)	Growth	-0.29%	0.90%	0.75%	0.61%	-0.03	0.04	0.03	0.01
	Value	-0.31%	0.47%	1.35%	0.53%	-0.03	0.01	0.08	0.00
Australia Equities (Size) PR (1991-)	Large Cap	-0.27%	0.69%	1.05%	0.57%	-0.04	0.02	0.06	0.01
(1993-)	Small Cap	-0.63%	1.25%	1.03%	0.78%	-0.04	0.05	0.05	0.03
Fixed Income TR (1991-)	Government	0.70%	0.00%	0.79%	0.81%	0.04	-0.01	0.07	0.04
(1998-)	Corporates	0.47%	0.29%	0.49%	0.46%	0.07	0.01	0.09	0.01
Commodities PR (1991-)	Gold (AUD)	1.13%	-0.03%	0.69%	0.23%	0.05	-0.03	0.03	-0.01
	Copper (AUD)	0.11%	0.35%	1.43%	0.09%	-0.00	-0.01	0.05	-0.02
	Iron Ore (AUD)	0.63%	-0.62%	1.76%	0.67%	-0.01	-0.04	0.07	0.00
Property PR (1992-)	Australia REITs	-0.35%	-0.30%	0.97%	0.42%	-0.05	-0.04	0.06	-0.00

PR = Price Return/TR=Total Return

		Performance Rank - Historical Average Returns				Performance Rank -Sharpe Ratio			
		Stage 1	Stage 2	Stage 3	Stage 4	Stage 1	Stage 2	Stage 3	Stage 4
Australia Equities	Consumer Staples	8	8	9	8	11	8	9	8
	Health	2	2	8	6	4	3	11	5
	Utilities	5	10	10	2	5	11	16	3
	Technology	12	1	5	1	6	1	10	2
	Consumer Discretionary	16	3	6	3	15	4	7	6
	Industrials	14	6	14	14	13	6	15	14
	Basic Materials	11	4	4	10	12	5	6	9
	Oil & Gas	10	5	11	4	9	2	13	7
	Telecom	7	14	15	5	8	13	14	4
	Financials	15	7	2	12	14	7	2	13
Fixed Income	Government	3	12	12	7	3	12	3	1
	Corporates	6	11	16	11	1	9	1	10
Commodities	Gold (AUD)	1	13	13	15	2	14	12	15
	Copper (AUD)	9	9	3	16	7	10	8	16
	Iron Ore(AUD)	4	16	1	9	10	16	4	11
Property	EU Listed Property	13	15	7	13	16	15	5	12

Notional Portfolio: Australian Multi-Asset Strategy

In the strategy below we focus on **equities, government debt & commodity related sectors**, although corporate debt, high yield debt, REITs and other asset classes can be incorporated in a more diversified strategy.

The table below illustrates that Stage 1 and Stage 4 are associated with the more defensive phases of the cycle.

This is on account of the decline in the momentum of lagged US money supply which drives our business cycle indicator.

As such being in these more defensive phases of the cycle would indicate a more cautious stance by an increased weighting towards defensive assets.

Stage 2 is associated with the trough and turning point of the cycle and a reintroduction of or greater emphasis towards cyclicals.

Stage 3, being the more mature phase of our business cycle upswing, suggests an increased allocation towards commodities or commodity related sectors.

	Stage 1	Stage 2	Stage 3	Stage 4
Equities				
Consumer Staples	10%		17.5%	16.7%
HealthCare	10%		17.5%	16.7%
Utilities	10%			16.7%
Consumer Discretionary		30%		
Technology		30%		
Telecom			17.5%	
Financials			17.5%	
Industrials		30%		
Commodity Sectors				
Energy		5%	15%	
Materials		5%	15%	
Fixed Income				
Long-term Gov't Bonds	70%			50%

For the month of December, the AASE Australian Strategy (Stocks/Bonds/Commodities Sectors) notional portfolio decreased in value by **2.9**%.

This compares to the All Ords which declined by **3.5**% and a 60/40 stock/bond portfolio fall of **3.7**%.

Strategy Allocation February – **Rotates into Stage 1**

ALLOCATIONS (Commodities reflected in Oil & Gas and Basic Materials)			
December 2022			**Stage 3**
Stocks	**70%**	Telecom	17.50%
		Financials	17.50%
		Consumer Staples	17.50%
		Health	17.50%
Government Bonds			0.00%
Commodity Sectors	**30%**	Basic Materials	15.00%
		Oil & Gas	15.00%
January 2023			**Stage 3**
Stocks	**70%**	Telecom	17.50%
		Financials	17.50%
		Consumer Staples	17.50%
		Health	17.50%
Government Bonds			0.00%
Commodity Sectors	**30%**	Basic Materials	15.00%
		Oil & Gas	15.00%
February 2023			**Stage 1**
Stocks	**30%**	Consumer Staples	10.00%
		Health	10.00%
		Utilities	10.00%
Government Bonds	**70%**	10-yr Gov't Bond	70.00%
Commodity Sectors		Basic Materials	0.00%
		Oil & Gas	0.00%

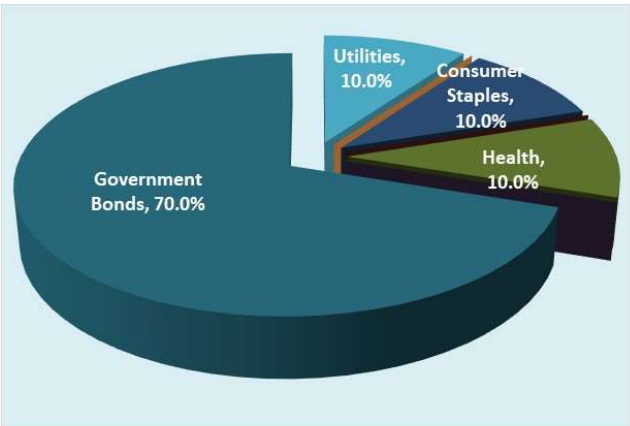
Proforma Performance Comparison
AASE Australian Strategy v 60/40 Stock/Bond Portfolio

Proforma Performance

ANALYSIS* Apr-2000 to Dec-2022	AASE Approach*	60/40 Stocks/Bonds
CAGR	7.83%	2.79%
Maximum Drawdown	-32.4%	-30.3%
Standard Deviation	12.8%	8.3%
Return/Drawdown	0.24	0.09
Sharpe 3%	0.38	-0.02
% Positive Years	78.3%	73.9%
2022	-6.4%	-11.4%
2021	10.5%	5.6%
1 Year Return	-6.4%	-11.4%
3 Year Return	-2.3%	-3.7%

*Compound Annual Growth Rate

Proforma Asset Allocation

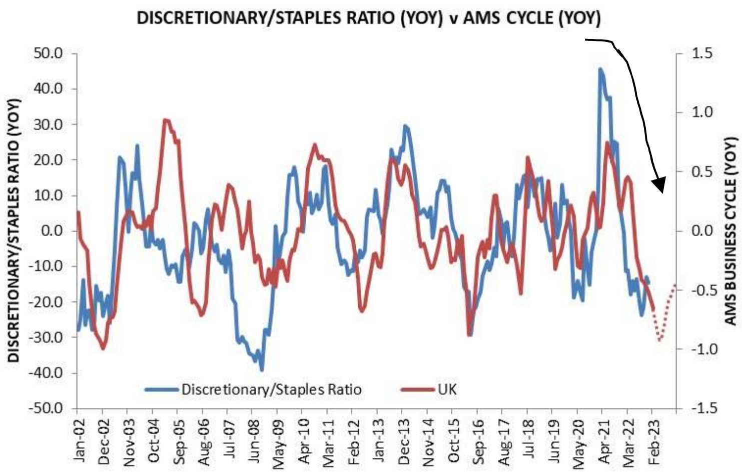


UK

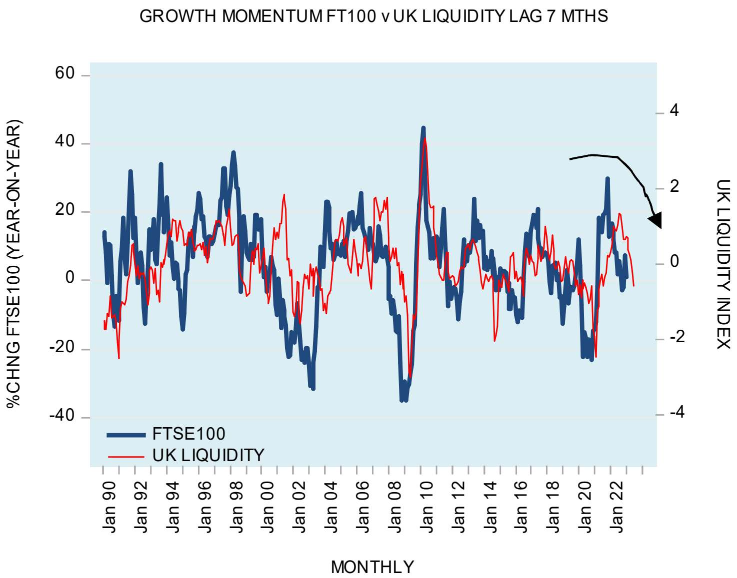
UK Business Cycle for February- Stage 1

Stage 1 Characteristics- Monetary headwinds strengthening - the business cycle is weakening further.

Equities – The most defensive phase of the cycle suggests a preference for Defensives relative to Cyclicals.

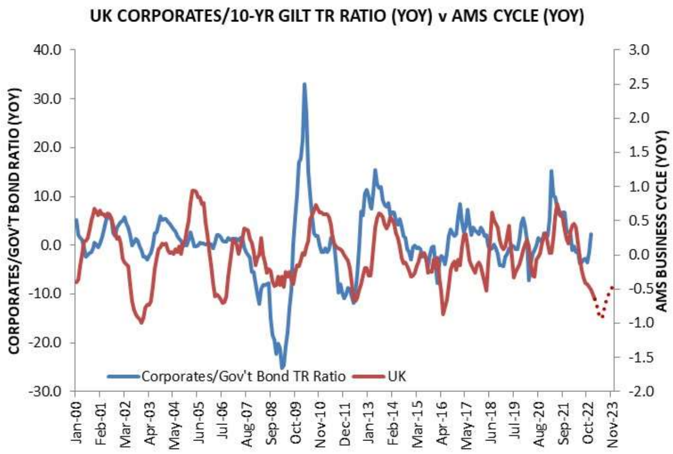


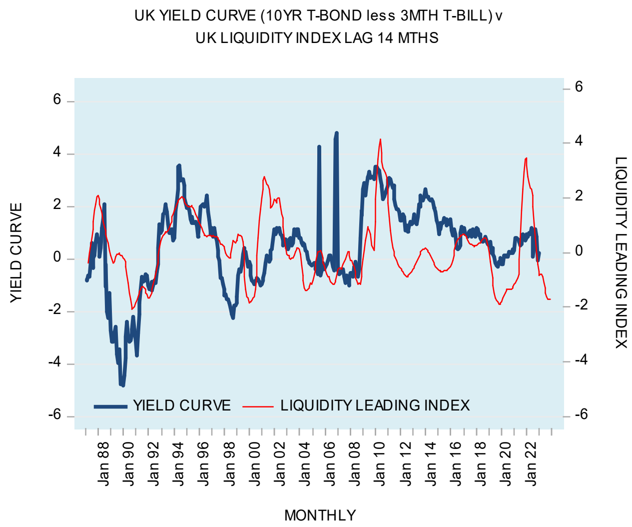
Liquidity momentum in the UK continues to soften. This may put downward pressure on the momentum of UK equities, although the decline in UK liquidity is not as steep as in other developed nations (see above).



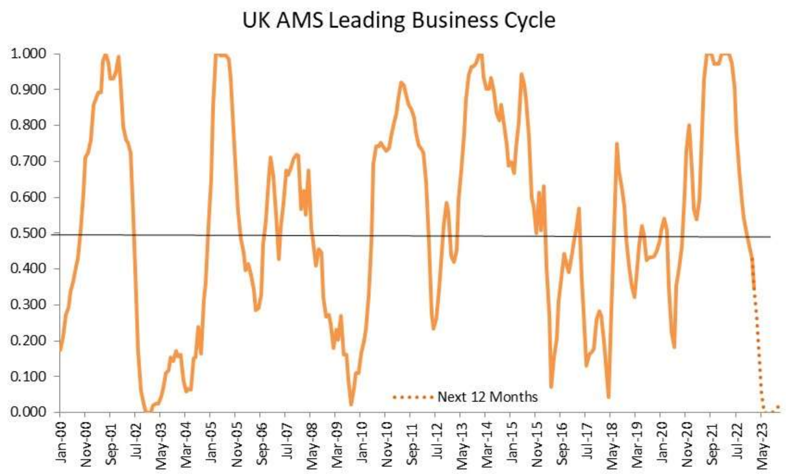
Fixed Income – In Stage 1, safe havens such as government debt or investment grade corporates have historically tended to outperform high yield. With inflation around its peak in the UK, a reversion back to nominal government debt rather than inflation protected securities is preferable.

Yield curve appears to have peaked and from a liquidity perspective may come under further pressure ahead.





Mid-term outlook – The UK business cycle remains entrench in **Stage 1** until the final quarter of this year.



Below we can observe how on average various equity sectors and asset classes have performed in different phases of the cycle.

The table below also illustrates that on average, risk averse assets tend to historically do well in Stage 1 of the cycle, where the cycle is decelerating at its fastest pace.

UK Cycle February - **Stage 1**

		Historical Average Returns in each Stage				Sharpe Ratio in each Stage			
		Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)	Stage 1 (Defensive)	Stage 2 (Cyclical)	Stage 3 (Cyclical)	Stage 4 (Defensive)
UK Equities (Sectors) PR (2005-)	Consumer Staples	0.20%	1.21%	0.37%	0.99%	-0.00	0.04	0.00	0.04
	Health	0.82%	0.54%	0.75%	0.16%	0.03	0.01	0.03	-0.01
	Utilities	0.13%	0.41%	0.97%	0.59%	-0.00	0.01	0.06	0.02
	Technology	0.23%	4.22%	-1.91%	0.12%	0.01	0.07	-0.05	-0.00
	Consumer Discretionary	0.14%	1.26%	0.09%	0.12%	-0.00	0.05	-0.02	-0.01
	Industrials	-0.03%	1.57%	0.13%	0.30%	-0.01	0.05	-0.01	0.01
	Basic Materials	0.03%	1.83%	0.77%	-0.06%	-0.02	0.06	0.02	0.01
	Oil & Gas	0.05%	0.56%	0.79%	0.58%	-0.01	0.01	0.01	0.01
	Telecom	0.20%	0.58%	0.31%	-0.22%	0.00	0.01	-0.00	-0.03
	Financials	-0.28%	0.89%	0.81%	0.16%	-0.03	0.03	0.02	0.01
UK Equities (Style) PR (1990-)	Growth	0.12%	0.89%	0.39%	0.37%	-0.00	0.04	0.02	0.01
	Value	-0.07%	0.73%	0.51%	0.04%	-0.01	0.03	0.02	0.01
UK Equities (Size) PR (1999-)	Large Cap	0.05%	0.82%	0.40%	0.20%	-0.01	0.03	0.00	-0.00
	Small Cap	0.45%	1.72%	0.22%	0.12%	0.02	0.06	0.00	0.02
Fixed Income TR (2003-)	Treasury	0.26%	0.20%	0.01%	0.30%	0.00	-0.02	-0.04	0.01
	Corporates	0.34%	0.44%	-0.50%	-0.29%	0.00	0.03	-0.09	-0.05
	High Yield	0.48%	0.58%	-0.44%	-0.34%	0.01	0.06	-0.08	-0.06
Commodities PR (1990-)	Gold (GBP)	0.75%	0.67%	-0.09%	1.03%	0.02	0.02	-0.03	0.05
	Copper (GBP)	1.05%	1.54%	-0.62%	0.88%	0.02	0.04	-0.04	0.02
	Oil (GBP)	1.70%	2.02%	0.13%	0.29%	0.01	0.03	-0.01	-0.00
Property PR (1999-)	UK Property	-0.33%	0.29%	0.67%	0.39%	-0.03	0.00	0.02	0.00

PR = Price Return/TR=Total Return

		Performance Rank - Historical Average Returns				Performance Rank -Sharpe Ratio			
		Stage 1	Stage 2	Stage 3	Stage 4	Stage 1	Stage 2	Stage 3	Stage 4
UK Equities	Consumer Staples	7	5	7	1	8	6	7	1
	Health	1	10	5	7	1	11	2	11
	Utilities	9	12	1	2	7	12	1	2
	Technology	5	1	14	10	3	1	12	9
	Consumer Discretionary	8	4	10	9	9	4	10	10
	Industrials	12	3	9	5	11	5	9	4
	Basic Materials	11	2	4	11	12	2	4	5
	Oil & Gas	10	9	3	3	10	10	6	3
	Telecom	6	8	8	12	6	9	8	12
	Financials	13	6	2	8	13	8	5	6
Fixed Income	Government	4	14	11	6	4	14	11	7
	Corporates	3	11	13	13	5	7	14	13
	High Yield	2	7	12	14	2	3	13	14
Property	UK Property	14	13	6	4	14	13	3	8

Notional Portfolio: UK Multi-Asset Strategy

In the strategy below we focus on **equities, government debt & commodity related sectors**, although corporate debt, high yield debt, REITs and other asset classes can be incorporated in a more diversified strategy.

The table below illustrates that Stage 1 and Stage 4 are associated with the more defensive phases of the cycle.

This is on account of the decline in the momentum of lagged US money supply which drives our business cycle indicator.

As such being in these more defensive phases of the cycle would indicate a more cautious stance by an increased weighting towards defensive assets.

Stage 2 is associated with the trough and turning point of the cycle and a reintroduction of or greater emphasis towards cyclicals.

Stage 3, being the more mature phase of our business cycle upswing, suggests an increased allocation towards commodities or commodity related sectors.

Equities	Stage 1	Stage 2	Stage 3	Stage 4
Consumer Staples	15%		17.5%	16.7%
HealthCare	15%		17.5%	16.7%
Utilities				16.7%
Consumer Discretionary		30%		
Technology		30%		
Telecom			17.5%	
Financials			17.5%	
Industrials		30%		
Commodity Sectors				
Energy		5%	15%	
Materials		5%	15%	
Fixed Income				
Long-term Gov't Bonds	70%			50%

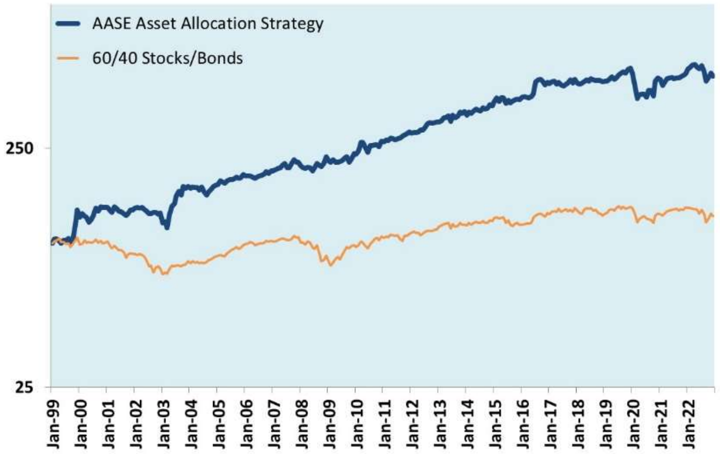
For the month of December, the AASE UK Strategy (Stocks/Bonds/Commodities Sectors) notional portfolio decreased in value by **3.1**%.

This compares to the FTSE100 which fell by **1.6**% and a 60/40 stock/bond portfolio decrease of **2.5**%.

Strategy Allocation February – **Remains in Stage 1**

ALLOCATIONS (Commodities reflected in Oil & Gas and Basic Materials)				
December 2022				**Stage 1**
Stocks	**30%**	Consumer Staples	15.00%	
		Health	15.00%	
Government Bonds	**70%**	10-yr Gov't Bond	70%	
Commodity Sectors				
January 2023				**Stage 1**
Stocks	**30%**	Consumer Staples	15.00%	
		Health	15.00%	
Government Bonds	**70%**	10-yr Gov't Bond	70%	
Commodity Sectors				
February 2023				**Stage 1**
Stocks	**30%**	Consumer Staples	15.00%	
		Health	15.00%	
Government Bonds	**70%**	10-yr Gov't Bond	70%	
Commodity Sectors				

Proforma Performance Comparison
AASE UK Strategy v 60/40 Stock/Bond Portfolio

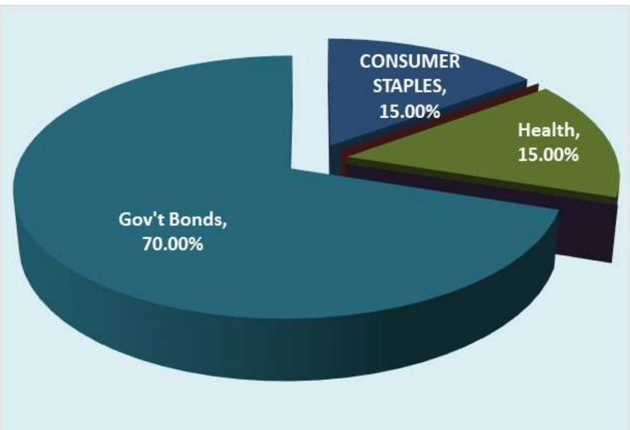


Proforma Performance

ANALYSIS* Jan-1999 to Dec-2022	AASE Approach*	60/40 Stocks/Bonds
CAGR	6.95%	1.10%
Max Drawdown	-25.3%	-29.8%
Std Dev	12.00%	8.43%
Return/Drawdown	0.27	0.04
Sharpe 3%	0.33	-0.22
% Positive Years	79.2%	62.5%
2022	-2.3%	-8.0%
2021	4.0%	5.9%
1 Year Return	-2.3%	-8.0%
3 Year Return	-7.7%	-8.4%

*Compound Annual Growth Rate

Proforma Asset Allocation



Notional Global Portfolio

For the Global model each constituent country's business cycle stage is determined using the methodology described at the end of this report. This delivers the asset allocation at the country level.

The individual country allocations are then weighted by the relative market capitalizations of their respective stock markets, expressed in US dollars. This then delivers the asset allocations by country, asset class and sector.

Country Weights			
USA	59.0%	SWISS	2.3%
EUROZONE	6.8%	AUSTRALIA	2.7%
JAPAN	9.2%	BRAZIL	1.1%
CHINA	9.6%	INDIA	2.5%
UK	4.3%	S.KOREA	2.5%

Global Asset Allocations* - Country Breakdown (Proportion of Total Portfolio) February 2023 (Numbers rounded)

INDIVIDUAL COUNTRY ALLOCATIONS*		USA	Japan	Eurozone	UK	China	Brazil	India	S.Korea	Switzerland	Australia
Equities Sectors											
	Consumer Staples	**9.8%**		**0.7%**	**0.6%**	**1.0%**	**0.2%**	**0.6%**	**0.2%**		**0.3%**
	Consumer Discretionary		**2.1%**				**0.2%**			**0.3%**	
	Industrials		**2.1%**							**0.3%**	
	Financials						**0.2%**			**0.7%**	
	Technology		**2.1%**								
	Telecommunications		**2.1%**				**0.2%**			**0.3%**	
	Health	**9.8%**		**0.7%**	**0.6%**	**1.0%**		**0.6%**	**0.2%**		**0.3%**
	Utilities	**9.8%**				**1.0%**			**0.2%**		**0.3%**
	Oil & Gas		**0.5%**				**0.2%**			**0.4%**	
	Basic Materials		**0.5%**				**0.2%**			**0.4%**	
	Construction										
	Retail										
Fixed Income											
	10-Yr Government Bonds	**23.6%**		**4.1%**	**3.0%**	**6.7%**		**1.3%**	**1.7%**		**1.9%**
	Corporate Bonds (US & EU)	**5.9%**		**1.4%**							
	High Yield Bonds (US & EU)										
REITs											
	US REITs										
Commodities											
	Oil & Gas										
	Gold										

Notional Global Portfolio Asset Allocation

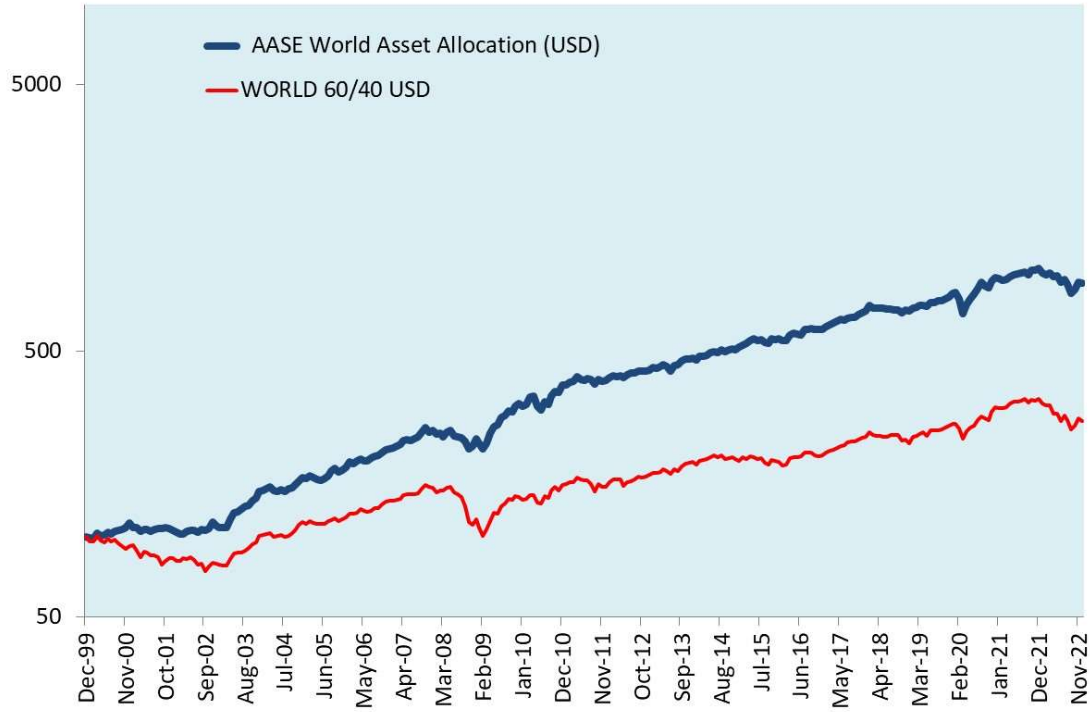
Global Asset Allocations* - Asset Breakdown (Proportion of Total Portfolio)
(Numbers rounded)

Fixed Income		49.6%
DM Government		34.3%
EM Government		8.0%
Corporates (US & EU)		7.3%
High Yield (US & EU)		0.0%
Equities		50.4%
Developed Markets		44.5%
United States		29.5%
	Consumer Staples	9.8%
	Consumer Discretionary	
	Industrials	
	Financials	
	Technology	
	Telecommunications	
	Health	9.8%
	Utilities	9.8%
	Oil & Gas	
	Basic Materials	
Eurozone		1.4%
Japan		9.2%
UK		1.3%
Switzerland		2.3%
Australia		0.8%
Emerging Markets		6.0%
China		2.9%
India		1.3%
South Korea		0.7%
Brazil		1.1%
Commodities		0.0%
Oil		
Gold		
US REITs		

Notional Global Performance

AASE Global Asset Allocation Approach*
(Jan 2000-Dec 2022; Rebased to 100); USD

A market cap weighted strategy example incorporating the individual countries above. Allocation across equities, fixed income, commodities & US REITs



ANALYSIS Jan-2000 to Dec-2022	AASE Global Asset Allocation Index USD	World 60/40 USD**
CAGR*	10.00%	4.44%
Maximum Drawdown	-19.64%	-35.54%
Standard Deviation	9.77%	10.57%
Return/Drawdown	0.51	0.12
Sharpe 3%	0.72	0.14
% Positive Years	83%	65%
2022	-12.69%	-17.89%
1 Year Return	-12.7%	-17.9%
3 Year Return	8.42%	1.88%
Correlation	1.00	0.83

*Compound Annual Growth Rate

** Comprised of the MSCI ACWI Index (USD) & FTSE World Government Bond Index

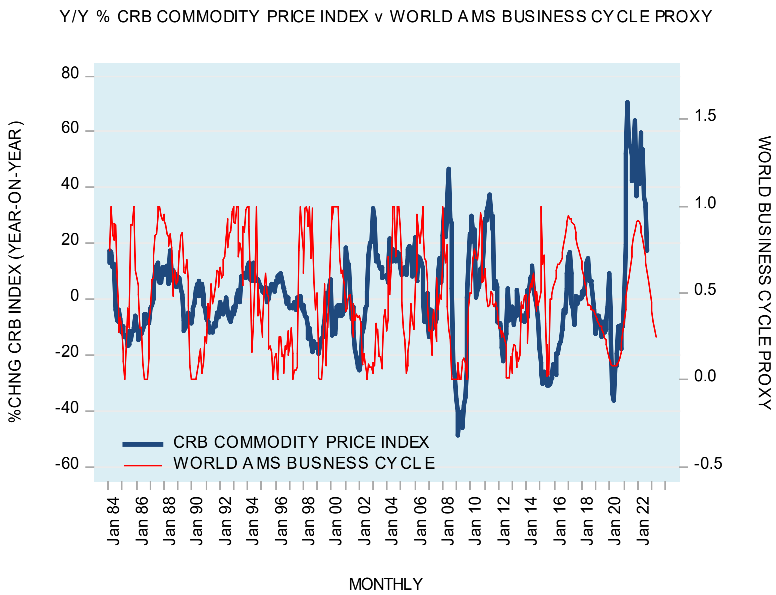
Global Business Cycle – Commodities Corner

With respect to commodities, we focus on our global business cycle proxy in order to determine the preferred commodity allocation. For example, in the more expansive stages of the cycle (e.g. Stage 3) when activity is "strengthening" we would expect capital intensive commodities such as energy and metals to perform relatively better than other commodities. In the more defensive phases of the cycle when the money supply momentum is falling, demand for more "defensive" or "basic" commodities, such as food and grains, should be expected to perform better. This is what we see when we look at the returns to difference commodities in different stages of the cycle:

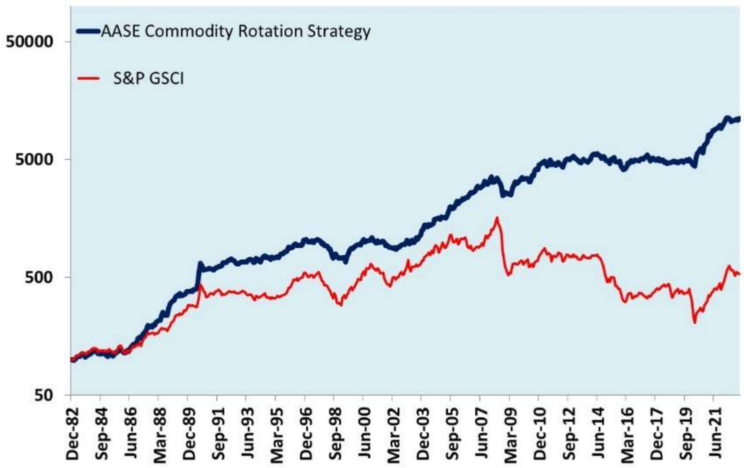
S&P/GSCI COMMODITY SECTOR	Total Returns (1983-Present)			
	Stage 1	Stage 2	Stage 3	Stage 4
Industrial Metals	-1.10%	2.52%	1.84%	1.04%
Energy	-0.62%	3.39%	2.03%	-0.64%
Precious Metals	0.37%	0.40%	0.83%	-0.21%
Grains	0.32%	-0.32%	-0.13%	0.74%
Livestock	0.23%	-0.02%	0.72%	-0.07%
Softs	-0.65%	0.93%	0.56%	-0.19%

The commodity sectors are broken down into their 6 main groups as depicted by the S&P/GSCI classifications and their preferred allocations in different phases of the cycle are presented:

S&P/GSCI	Stage 1	Stage 2	Stage 3	Stage 4
Industrial Metals		●	●	
Energy		●	●	
Precious Metals	●		●	
Grains	●			●
Livestock	●			●
Softs			●	



For the upcoming month the **global business cycle proxy remains in the most defensive Stage 1 of the cycle**, with a preference for less "cyclical" commodities such as **grains & livestock**. With the rising uncertainty in the economic environment an allocation towards **precious metals** may also be warranted.



ANALYSIS* Feb-1973 to Dec-2022	AASE Approach*	GSCI
CAGR	12.48%	4.28%
Max Drawdown	-36.3%	-80.9%
Std Dev	15.0%	20.5%
Return/Drawdown	0.34	0.05
Sharpe 3%	0.63	0.06
% Positive Years	77.5%	67.5%
2021	41.8%	40.4%
2022	14.6%	26.0%

Global Macro Strategy: Stocks, Bonds, Commodities, FX

In this section we present a diverse strategy theme which incorporates the essence of the Global Strategy with Commodities described above using the Commodities module (20%) and also our FX strategy (20%) from our corresponding monthly FX report.

Conventional strategies and portfolios tend to focus on the traditional stock/bond allocation, yet monetary flows affect all markets. We can ascertain relative preference to most assets (stocks, bonds, commodities) using our business cycle staging. The only exception to this is the FX market whose movements are primarily determined by the relative excess money differential between 2 countries (see FX monthly report for an expansion of this approach)

Global Macro Allocations* - Country Breakdown (Proportion of Total Portfolio) February 2023 (Numbers rounded)

INDIVIDUAL COUNTRY ALLOCATIONS*		Global	USA	Japan	Eurozone	UK	China	Brazil	India	S.Korea	Switzerland	Australia
		Stage 1	**Stage 4**	**Stage 2**	**Stage 1**	**Stage 1**	**Stage 1**	**Stage 3**	**Stage 4**	**Stage 1**	**Stage 3**	**Stage 1**
Equities Sectors												
	Consumer Staples		**5.9%**		**0.4%**	**0.4%**	**0.6%**	**0.1%**	**0.4%**	**0.1%**		**0.2%**
	Consumer Discretionary			**1.2%**				**0.1%**			**0.2%**	
	Industrials			**1.2%**							**0.2%**	
	Financials							**0.1%**			**0.4%**	
	Technology			**1.2%**								
	Telecommunications			**1.2%**				**0.1%**			**0.2%**	
	Health		**5.9%**		**0.4%**	**0.4%**	**0.6%**		**0.4%**	**0.1%**		**0.2%**
	Utilities		**5.9%**				**0.6%**			**0.1%**		**0.2%**
	Oil & Gas			**0.3%**				**0.1%**			**0.2%**	
	Basic Materials			**0.3%**				**0.1%**			**0.2%**	
	Construction											
	Retail											
Fixed Income												
	10-Yr Government Bonds		**14.2%**		**2.5%**	**1.8%**	**4.0%**		**0.8%**	**1.0%**		**1.1%**
	Corporate Bonds (US & EU)		**3.5%**		**0.8%**							
	High Yield Bonds (US & EU)											
REITs												
	US REITs											
Commodities												
	Commodity Allocation	**20.0%**										
FX												
	AASE FX Portfolio	**20.0%**										

Global Macro Allocations

Global Macro Asset Allocations* - Asset Breakdown (Proportion of Total Portfolio)

(Numbers rounded)

Fixed Income	29.7%
DM Government	20.6%
EM Government	4.8%
Corporates (US & EU)	4.4%
High Yield (US & EU)	0.0%
Equities	30.3%
Developed Markets	26.7%
United States	17.7%
Eurozone	0.8%
Japan	5.5%
UK	0.8%
Switzerland	1.4%
Australia	0.5%
Emerging Markets	3.6%
China	1.7%
India	0.8%
South Korea	0.4%
Brazil	0.7%
Commodities	20.0%
Precious Metals	6.7%
Grains	6.7%
Livestock	6.7%

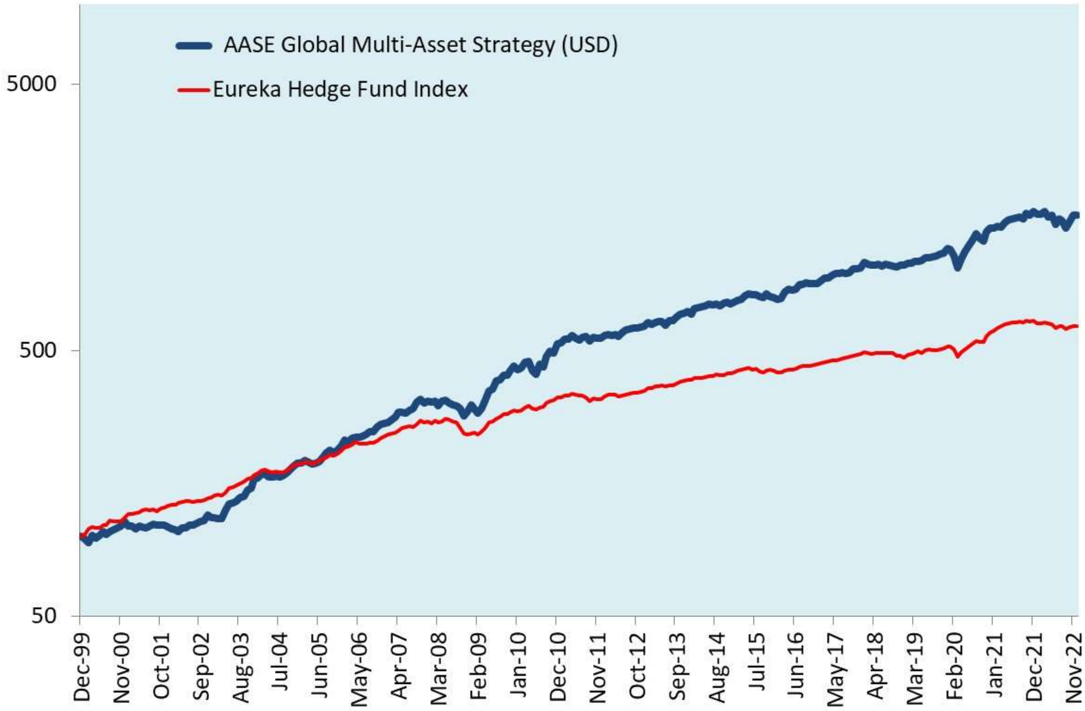
US REITs		
FX		20.0%
AUD/USD	LONG	1.7%
EUR/USD	LONG	1.7%
USD/JPY	SHORT	1.7%
GBP/USD	SHORT	1.7%
USD/CHF	LONG	1.7%
USD/CAD	LONG	1.7%
USD/KRW	FLAT	1.7%
USD/BRL	LONG	1.7%
USD/ZAR	LONG	1.7%
USD/CNY	LONG	1.7%
USD/INR	FLAT	1.7%
USD/SEK	LONG	1.7%

Global Macro Portfolio Performance

AASE Global Macro Approach*

(Jan 2000-Dec 2022; Rebased to 100); USD

A market cap weighted strategy example incorporating the individual countries above. Allocation across equities, fixed income, commodities, FX & US REITs



ANALYSIS Jan-2000 to Dec-2022	AASE Global Multi-Asset Strategy USD	Eureka Hedge Fund Index
CAGR*	12.84%	8.22%
Maximum Drawdown	-15.40%	-12.72%
Standard Deviation	9.99%	5.23%
Return/Drawdown	0.83	0.65
Sharpe 3%	0.98	1.00
% Positive Years	86%	82%
YTD	-3.23%	-4.60%
1 Year Return	-3.2%	-4.6%
3 Year Return	33.51%	19.49%
Correlation	1.00	0.65

*Compound Annual Growth Rate

The Framework

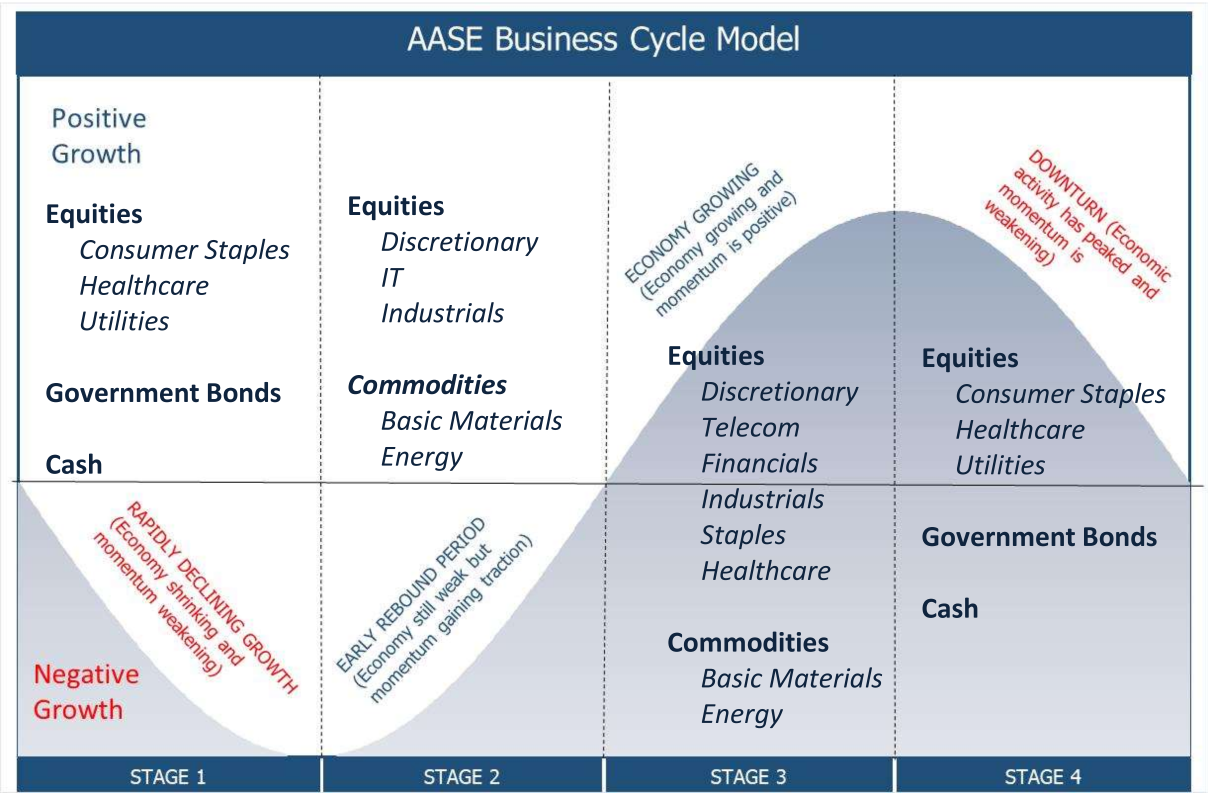
Applying the AASE Business Cycle Approach to Asset Allocation

Some assets of the market tend to perform better in different stages of the economic cycle. Not only is this a non-contentious belief, it is empirically testable. But is it possible to both forecast the stages of the business cycle and simultaneously determine the optimal asset mix for those forecast stages?

We believe that it is.

The central reason for this assertion is that, because money supply is a leading indicator, one can utilize changes in money supply to establish a forward looking view as to which stage of the cycle we anticipate the economy to be entering. By modifying the standard money supply definitions to better reflect the true nature of money we are able to better predict the business cycle and its stages. As can be seen below this approach has delivered reliable forecasts over many decades. If we expect the economy to be in Stage 1, for example, for the next three months then we can position ourselves accordingly in assets which have performed best historically in Stage 1.

A visual representation of our cycle staging approach is shown below along with asset classes which tend to historically outperform in each respective stage.



Cycle Stage 1: *Recessionary conditions – optimal to be defensive*

In Stage 1 of the AASE cycle the economy is declining at a rapid pace and, in general, it is better to adopt a defensive strategy.

This typically entails higher allocations to cash and/or bonds, and perhaps allocations to some very defensive equity sectors.

Cycle Stage 2: *Early rebound period*

In Stage 2 of the AASE cycle the economy is declining at a slower pace or may be starting to show signs of positive growth. The economy at this stage is commonly patchy but with the emergence of some momentum in a number of assets, generally equities and in particular some of the more cyclical sectors. Different economies, with different industrial structures, will have slight variations as to which sectors are, in their cases, more "cyclical" when compared to other economies. There will thus be some differences in asset allocation across countries but the cyclical theme prevails.

On occasions there may be some small pickup in commodity prices (although this is more common in Stage 3) and bond holdings frequently perform badly. Cash is generally not attractive as interest rates have typically been sharply reduced while simultaneously the returns achievable in other assets begin to become more attractive.

Cycle Stage 3: *Late recovery period*

In Stage 3 of the AASE cycle the economy is expanding at a more rapid pace. The conventionally measured end products of the monetary distortions created by the central and commercial banks appear to be strong as the multitudinous micro-bubbles are diffusing across the entire economy and attracting resources.

Now the cyclicals may be performing well but the risks are increasing and some of the more "non-cyclical" sectors come into favour. Often industrials will be performing well, enjoying the pull-up demand from other sectors.

At this stage it is often common to see increases in commodity prices (which may also appear earlier in the cycle in some economies where capacity may be more constrained due to greater destruction during Stage 1). Therefore, direct or indirect (via commodity-related stock sectors) allocations to commodities are more likely in this stage. Property may also perform well over this period. It may even be beneficial to shift weightings towards the overall market (via the index) in order to spread risk.

Cycle Stage 4: *Downturn*

In Stage 4 of the AASE cycle the economy is growing at a slower pace as measured economic activity has peaked and begins to weaken. At this time a defensive posture is warranted. In some economies this can mean switching out of equities altogether or rotating into very defensive sectors such as utilities and healthcare.

Allocations to commodities (either directly or via equities) are typically a liability in this stage as de-stocking in manufacturing industries has dramatic effects on commodity prices, and so weightings here are typically zero.
Bonds and cash generally assume greater importance in this stage.

"For investors what this means is that changes in money supply can indicate – many months ahead – the stages of the economic cycle and those assets that have performed best in those stages."

*Notes

Assumed transactions costs: 0.25%.

Proforma allocations of assets as indicated by the AASE process. Allocations across stock sectors.

Equity Sector Sources:

- S&P500 Sectors (USA)
- MSCI EMU Sectors (Eurozone)
- S&P/Topix Sectors (Japan)
- S&P/ASX200 Sectors (Australia)

No rebalancing unless sector allocations changed.

Sectors defined as:
All Countries
Consumer Discretionary
Consumer Staples
Healthcare
Industrials
Basic Materials
Energy
IT
Telecommunication Services
Financials
Utilities

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