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AAS Economics
From Money Supply to Markets

FOREX
FORECAST

*"Combining sound economic theory
with momentum timing tools."*

January, 2023

AAS Economics
From Money Supply to Markets

Contents

AAS Economics
From Money Supply to Markets

Summary of Current FX Positioning

Key Position Information for Next Month: **February 2023**

	Current Month	Next Month	Comment
EUR/USD	LONG	LONG	Both our monetary model & momentum as well as both technicals favour a Long EUR/USD. Overall weighting means our signal remains Long EUR/USD.
USD/JPY	SHORT	SHORT	Our monetary model and a technical continue to favour a Short USD/JPY signal, whereas momentum along with the other technical favour a Long USD/JPY. Our signal remains unchanged at Short USD/JPY.
AUD/USD	FLAT	LONG	For the upcoming month, both fundamentals are generating a Long signal, whereas technicals continue to favour a Short AUD/USD. The higher weighting towards fundamentals means the signal for February now becomes Long
GBP/USD	SHORT	SHORT	There is no change for the upcoming month with the monetary model, momentum and one technical favouring a Short signal, whereas the second technical remains in favour towards a Long signal. Net position though remains Short GBP/USD.
USD/CAD	FLAT	LONG	The only change from the previous month is the monetary model now joins all other signals in favouring a Long USD/CAD. The respective weightings mean that the net position for February now becomes Long USD/CAD.
USD/CHF	LONG	LONG	One technical now joins momentum for the upcoming month in favouring a Short signal, although the monetary model and the other technical continue to favour a strengthening USD. The weighting allocation described at the beginning of this report means that the net position for February still remains Long USD/CHF.

AAS Economics
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|	Current Month	Next Month	Comment
USD/KRW	LONG	FLAT	The monetary model is alone for the upcoming month in favouring a Long signal, with now momentum and both technicals indicating a Short USD/KRW signal. Allocated weightings means that the signal for the upcoming month becomes Flat.
USD/SEK	LONG	LONG	The monetary model and one technical remain aligned with favouring a Long USD/SEK position, whereas momentum and the other technical have now reversed in favouring a Short signal. The position for February though remains Long USD/SEK
USD/CNY	LONG	LONG	With the exception of one technical, all other inputs continuing to signal a tendency for the USD to strengthen. As such the overall position for the upcoming month remains Long USD/CNY.
USD/BRL	LONG	LONG	For the upcoming month, both monetary and momentum models are now joined by both technical in favouring a Long USD/BRL signal. There is no change in position from last month as net position remains Long USD/BRL.
USD/INR	SHORT	FLAT	For the upcoming month our monetary model remains alone in signalling a preference for a strengthening INR. In contrast momentum and both technical favour a preference for the USD. This means on account of the allocated weightings to each signal the net position for February is now Flat.
USD/ZAR	LONG	LONG	Both fundamentals are now joined by both technical in favouring a strengthening USD for the upcoming month. Net position remains unchanged at Long USD/ZAR.

UNDERSTANDING OUR FX ANALYSIS

Our forex forecasting model consists of three components:

1.   The Excess Money Supply (AMS) Model

In our framework movements in exchange rates are a product of movements in the relative growth rates of "excess" money supply (properly defined). It is the relative purchasing power of various monies that sets the underlying exchange rate. The purchasing power of money is in turn a product of the supply of money and the demand for money and the difference between these we call "excess money supply".

When the excess money supply in Country A is growing at a faster rate than the excess money supply in Country B, this creates a situation where goods and services in Country B are becoming relatively cheaper over time, setting up the desire to purchase the output of Country B. This in turn creates an increase in demand for the currency of Country B versus that of Country A, leading to an increase in the relative exchange rate in Country B.
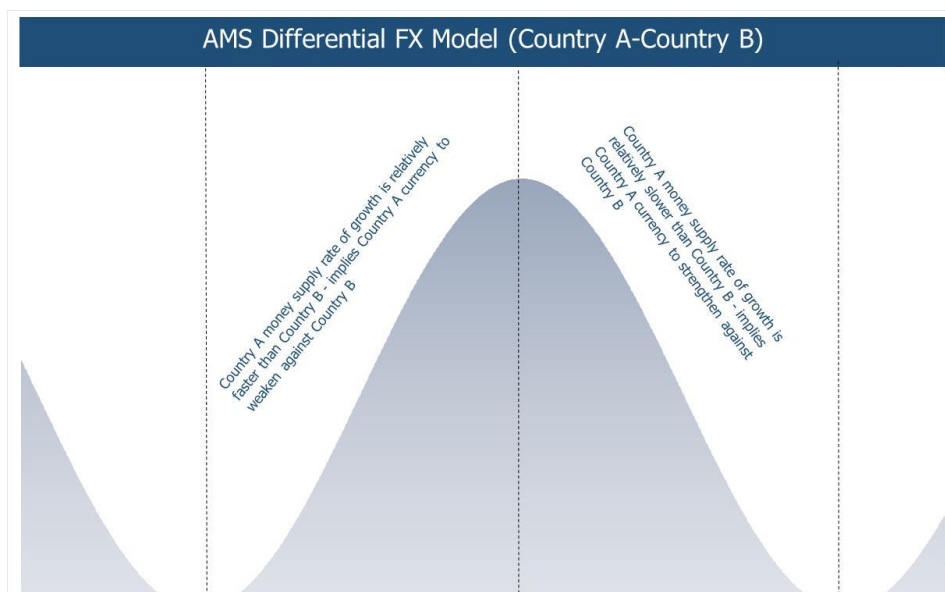
We segregate our excess money supply differential indicator into 2 stages as illustrated above. When the rate of growth of Country A's money supply growth (second derivative) is increasing faster than Country B's then this is a signal that Country A's currency will weaken. When Country A's money supply growth rate (second derivative) is slower than Country B's then this is indicative that Country A's currency will strengthen. We lag this differential and use this as our core fundamentals-based predictor.

2.   AMS Difference Momentum

This second fundamental indicator measures the *momentum* of the excess money supply differential between two countries and is also a great leading indicator providing turning points in advance of the momentum of the respective currency pairs themselves.

3.   Technicals

We use two momentum-based technical indicators which act as trend filters to reduce timing risks.

COMBINING THE MODEL SCORES

Combining both monetary and technical signals into a single leading indicator delivers a strong tool to capture pivotal turning points in the currency pair.

Long, Short and Flat signals are generated by weighting and combining the signals of the **Excess Money Supply (AMS) Model**, the **AMS Diff Index Momentum Signal** model (these being the two fundamental models) and the two technical **Momentum Signal** models. A majority of weighted signals are required to align before a Long or Short position is initiated. An equal balance among these results in a Flat signal.

The **Excess Money Supply (AMS) Model** is the most important input in our scorecard analysis. As such **its weighting is 3 times that** of the other three inputs.

Transitory and other short-term factors can and do impact movements in the currency pairs. In this report however we are focused on presenting the key fundamentals – slightly filtered by momentum – in order to validate the importance of the excess money supply differential as a leading tool for determining trends in exchange rate movements.

EUROZONE EURO

EUR/USD

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

Since mid-2020 the relative monetary dynamics of the US and the Eurozone have favored the Euro as the lagged excess Adjusted Money Supply of the US has increased at a faster pace than it has in the Eurozone. In November the EUR/USD jumped by 5.3%.

Based on the excess AMS (USA minus Eurozone) differential (chart left) and its rate of change (chart right), we generate our leading signal which continues to suggest a tendency for the Euro to strengthen.
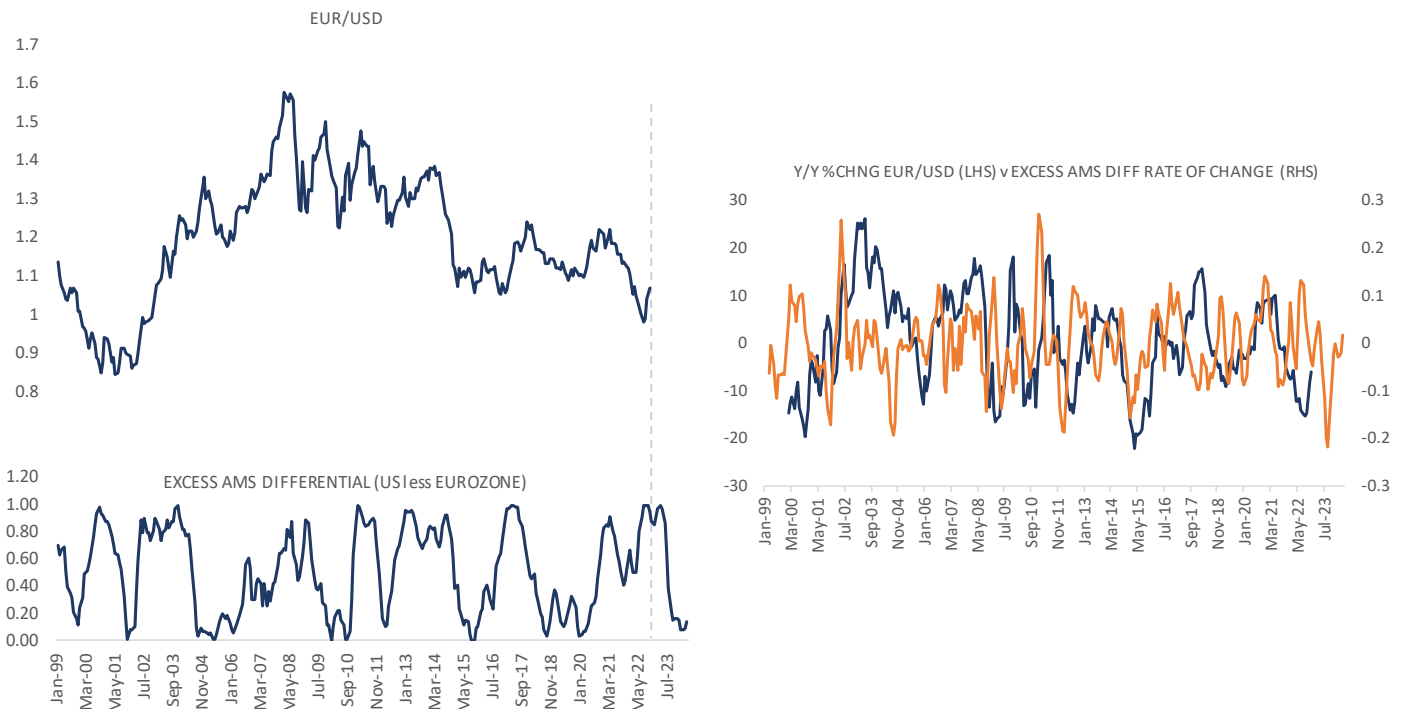
EUR/USD

EXCESS AMS DIFFERENTIAL (US less EUROZONE)

Y/Y %CHNG EUR/USD (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

![AAS Economics logo — From Money Supply to Markets]

Fundamentals – The Excess Money Supply (AMS) Model Signals

	AMS Differential
Oct-22	Monetary Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	SHORT
Apr-23	SHORT

AMS Diff Index Momentum Signal

The AMS differential momentum indicator for the time being continues to favor strengthening momentum of the EUR/USD.

GROWTH MOMENTUM EUR/USD v AMS DIFFERENTIAL INDEX LAG 28 MTHS

MONTHLY

![AAS Economics logo - From Money Supply to Markets]
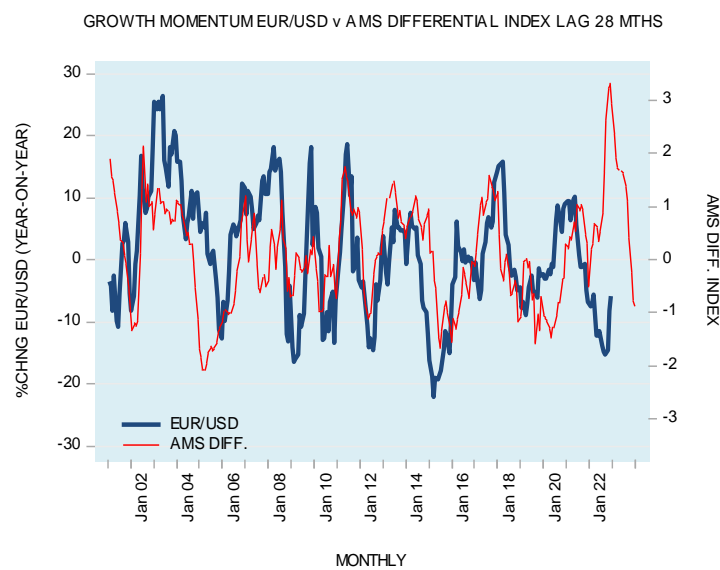
EUR/USD Signal Scoreboard (Combining Fundamentals and Technicals)

There is no change from the previous month with both our monetary model and monetary momentum indicator continuing to favour a Long signal in the upcoming month. In contrast, both technicals remain in favour a Short EUR/USD signal. Given the weighting allocated to each signal discussed at the beginning of this report, our combined Euro signal below suggests that for the upcoming month the signal remains at Long EUR/USD.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Long x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD
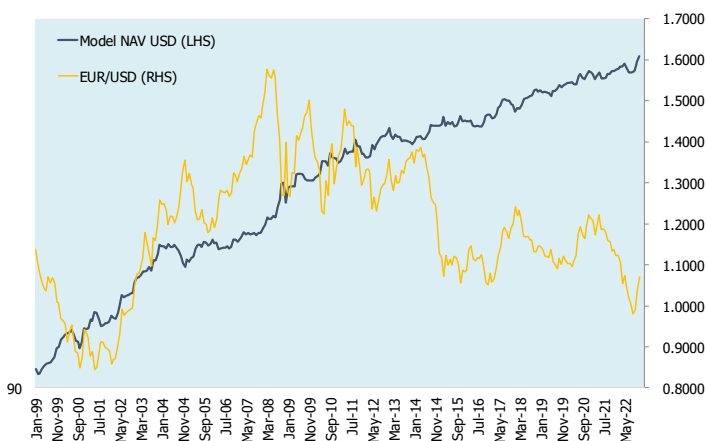
	AASE Strategy (USD)	EUR/USD
2013	-5.86%	4.18%
2014	10.92%	-11.99%
2015	2.36%	-10.23%
2016	3.78%	-3.20%
2017	5.29%	14.11%
2018	7.95%	-4.39%
2019	3.85%	-2.26%
2020	7.89%	8.95%
2021	-0.11%	-6.92%
2022	8.91%	-5.86%

JAPANESE YEN

USD/YEN

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Short**
February Signal:	**Short**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics of Japan and the US continue to favour the Yen in the months ahead as the lagged excess Adjusted Money Supply for Japan has increased at a slower pace than in the US (the US money printer is now working faster). 2022 saw the USD visibly strengthen against the Yen with the USD/YEN rising to 144.75 by October – an increase of over 29% YTD. Thereafter the Yen strengthened ending the year at 131.11 – seeing the USD strengthen overall by 13.9% against the Yen in 2022.

Based on the AMS differential (chart left) and its rate of change (chart right) our (Japan less USA) leading signal continues to indicate a preference for a stronger Yen (i.e. for USD/JPY to decline).
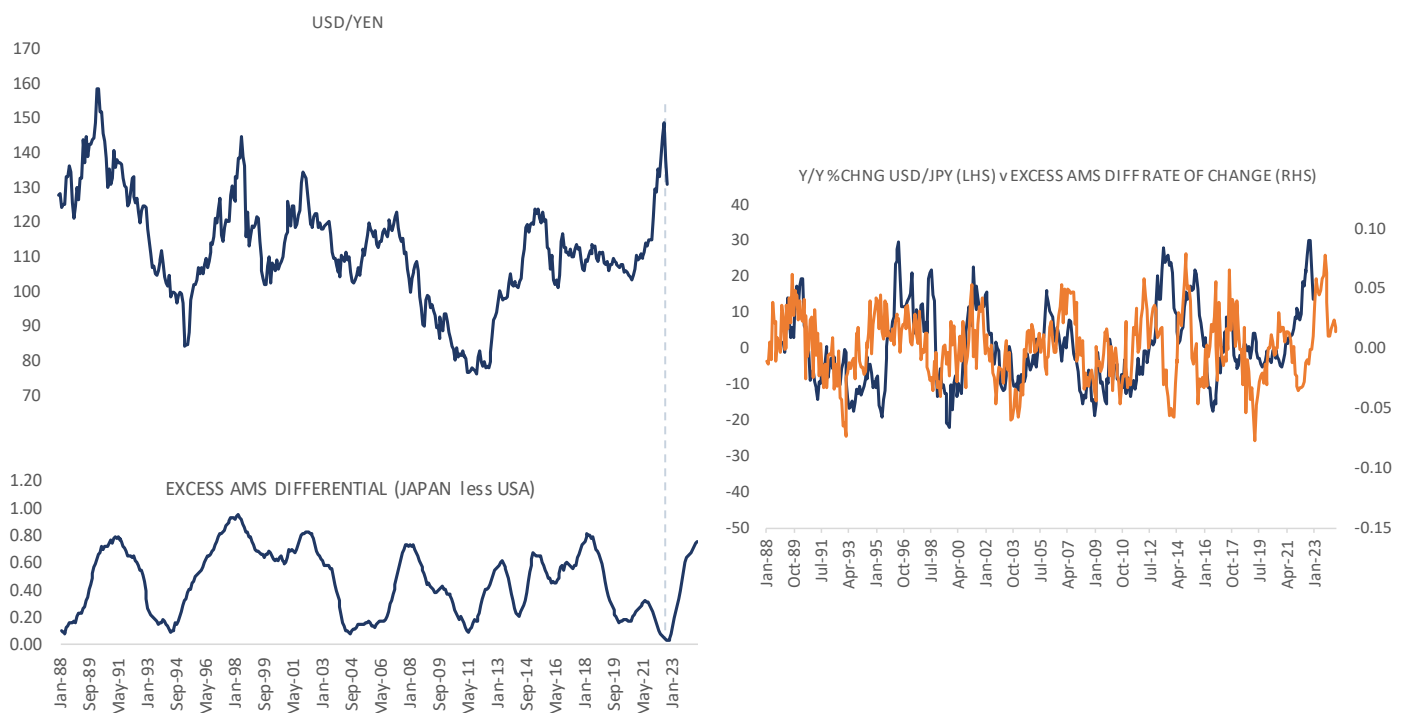
USD/YEN

Y/Y %CHNG USD/JPY (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

EXCESS AMS DIFFERENTIAL (JAPAN less USA)

Fundamentals – The Excess Money Supply (AMS) Model Signals

	AMS Differential
Oct-22	Monetary Signal
Nov-22	SHORT
Dec-22	SHORT
Jan-23	SHORT
Feb-23	SHORT
Mar-23	LONG
Apr-23	LONG

AMS Diff Index Momentum Signal

The momentum indicator below indicates we are at the peak and in the short term the signal favours the USD.

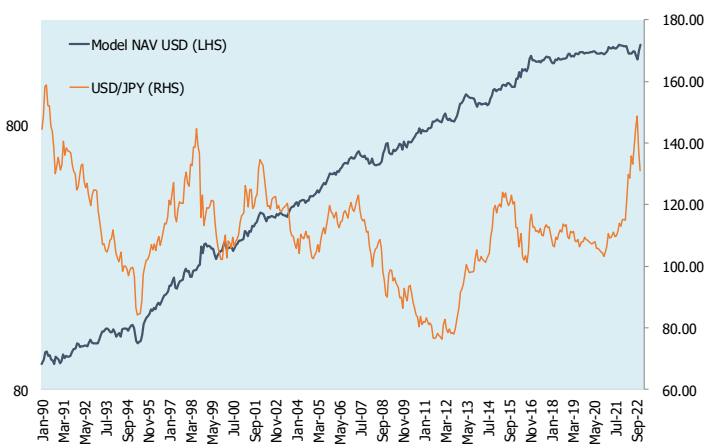GROWTH MOMENTUM USD/JPY v AMS DIFFERENTIAL INDEX LAG 36 MTHS
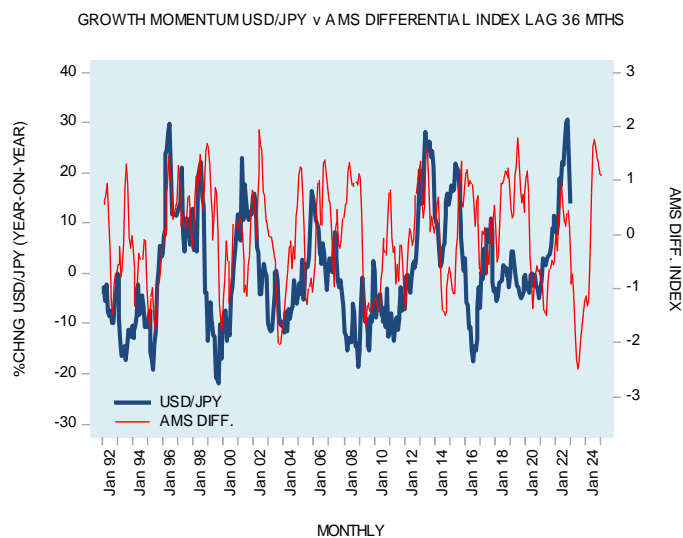
USD/YEN Signal Scoreboard (Combining Fundamentals and Technicals)

For the upcoming month our monetary model and one technical continue to favour a strengthening Yen (i.e. USD/YEN to decline). Our momentum signal and the other technical in contrast favour a strengthening USD in the month ahead. The higher weighting towards our monetary model means the Net Position for the USD/YEN for February remains Short.

Next Month's Excess AMS Model Signal:	**Short x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Short x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Short**

Historical model performance and returns are expressed in USD below

	AASE Strategy (USD)	JPY/USD
2013	2.95%	-17.63%
2014	16.52%	-12.02%
2015	1.94%	-0.52%
2016	30.78%	2.93%
2017	-0.91%	3.73%
2018	2.46%	2.84%
2019	1.17%	0.87%
2020	-1.45%	5.20%
2021	8.06%	-10.29%
2022	0.64%	-12.23%

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AUSTRALIAN DOLLAR

AUD/USD

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Flat**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

Since November the monetary signal has reversed in favour of the AUD and remains the case for the upcoming months.

Based on the excess AMS differential (chart left) and its rate of change (chart right) we generate our (Australia less USA) leading signal which now suggests that there is a tendency for the AUD to strengthen against the USD.
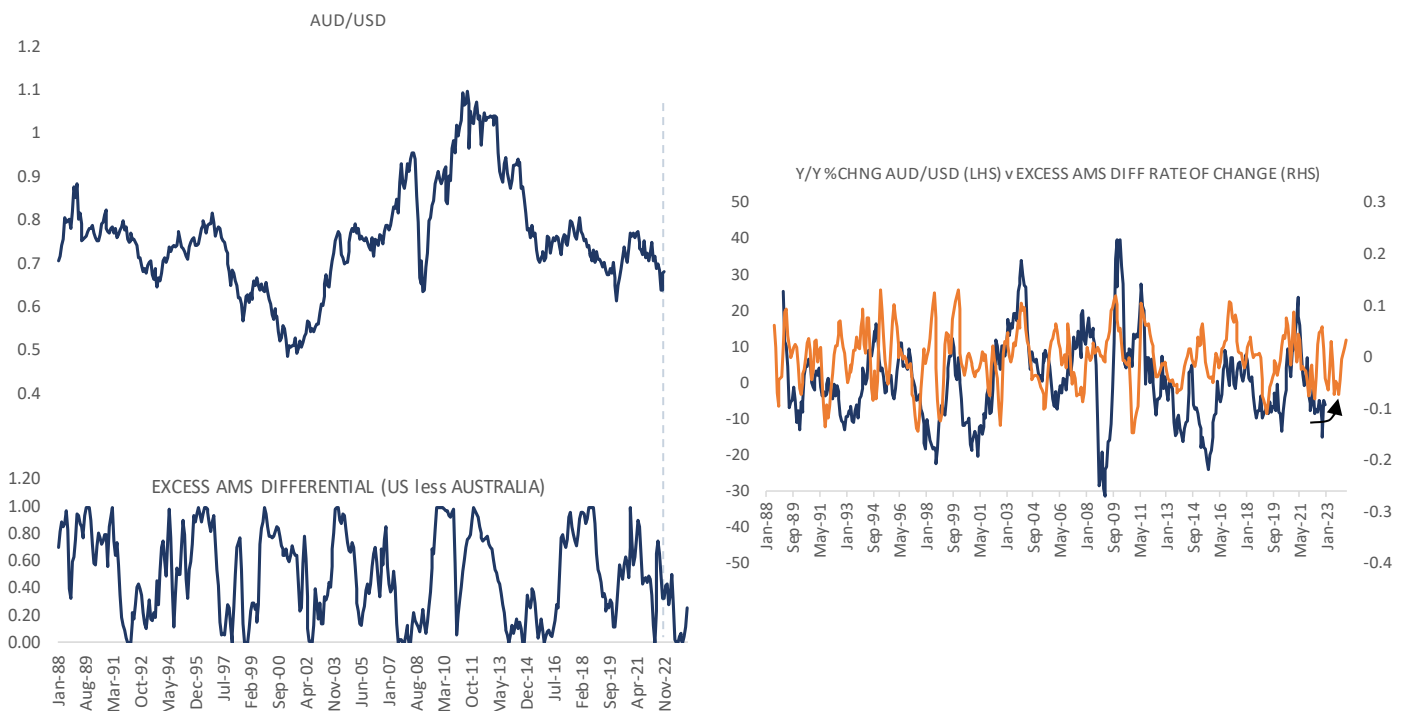
AUD/USD

EXCESS AMS DIFFERENTIAL (US less AUSTRALIA)

Y/Y %CHNG AUD/USD (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

Fundamentals – The Excess Money Supply (AMS) Model Signals

AMS Differential	
Oct-22	Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	SHORT

AMS Diff Index Momentum Signal

Similarly, to the monetary model, we can now observe a reversal and strengthening in the momentum indicator suggesting now that the AUD momentum to strengthen.

GROWTH MOMENTUM AUD/USD v AMS DIFFERENTIAL INDEX LAG 20 MTHS

![AAS Economics — From Money Supply to Markets]
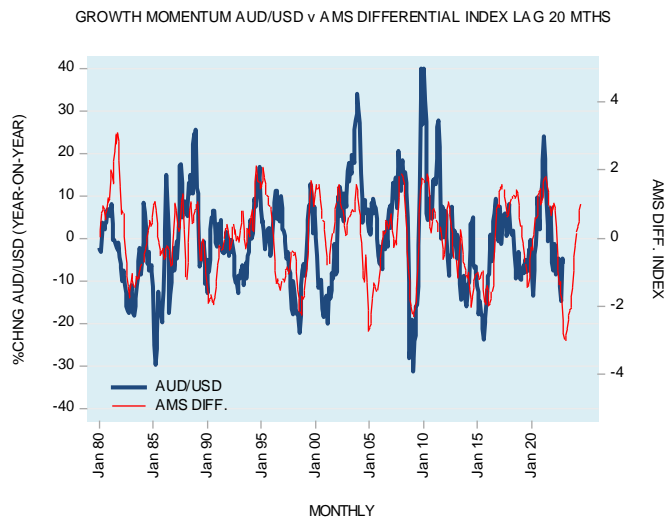
AUD/USD Signal Scoreboard (Combining Fundamentals and Technicals)

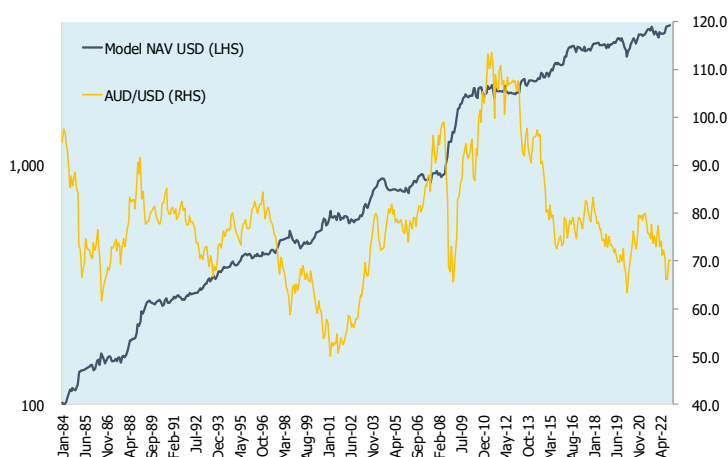For the upcoming month the momentum signal now joins the monetary model in indicating a tendency for the AUD to strengthen. This is in contrast with both technicals which continue to favour a Short AUD/USD signal . Thus the higher weighting given to fundamentals means that the overall net position for the AUD/USD now becomes Long.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Short x 1**
Next Month's Technical Signal 2:	**Short x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD below

	AASE Strategy (USD)	AUD/USD
2013	13.38%	-14.24%
2014	3.32%	-8.36%
2015	12.54%	-10.93%
2016	13.76%	-0.82%
2017	4.72%	8.12%
2018	2.87%	-9.64%
2019	1.59%	-0.40%
2020	8.20%	9.59%
2021	-0.14%	-5.64%
2022	9.10%	-6.53%

BRITISH POUND

GBP/USD

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Short**
February Signal:	**Short**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics of the UK and the US support the USD as the lagged excess Adjusted Money Supply for the UK is now increasing at a faster pace than that of the US.

Based on the excess AMS differential (chart left) and its rate of change (chart right) our (UK less USA) leading signal continues to suggests support for the USD.
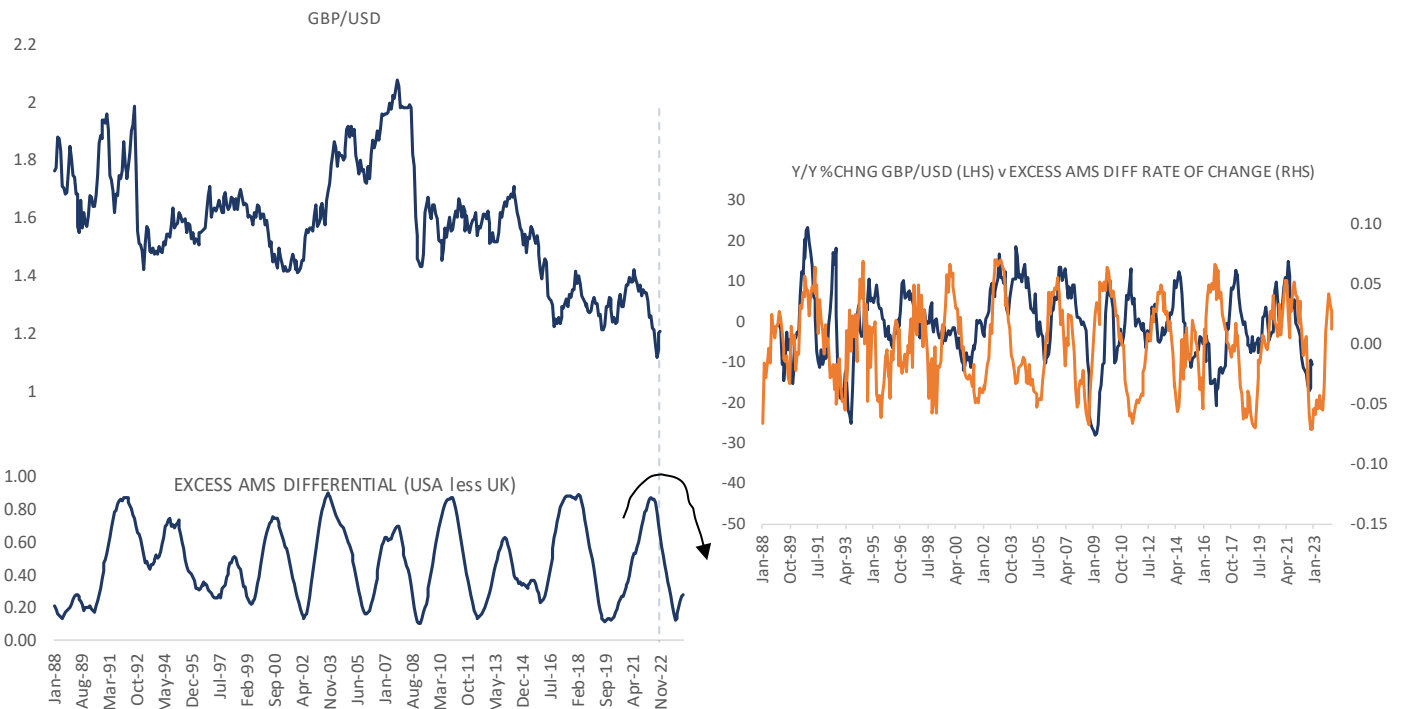
GBP/USD

Y/Y %CHNG GBP/USD (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

EXCESS AMS DIFFERENTIAL (USA less UK)

Fundamentals – The Excess Money Supply (AMS) Model Signals
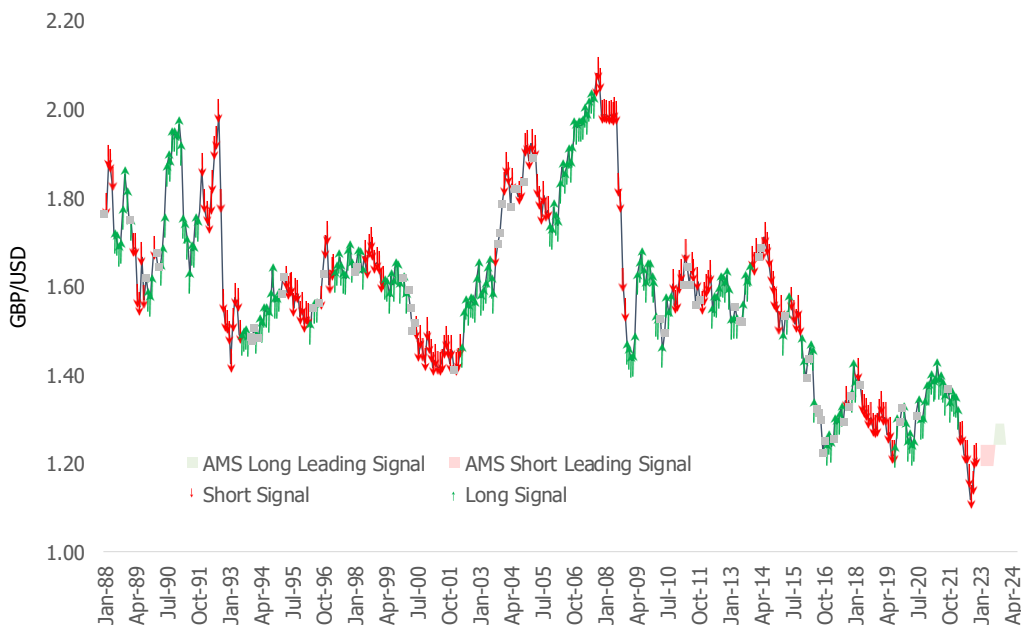
AMS Differential	
Oct-22	Signal
Nov-22	SHORT
Dec-22	SHORT
Jan-23	SHORT
Feb-23	SHORT
Mar-23	SHORT
Apr-23	SHORT

AMS Diff Index Momentum Signal

For the upcoming month our momentum indicator now displays a tendency for the momentum to weaken (ie Short GBP/USD momentum).

GROWTH MOMENTUM GBP/USD v AMS DIFFERENTIAL INDEX LAG 18 MTHS
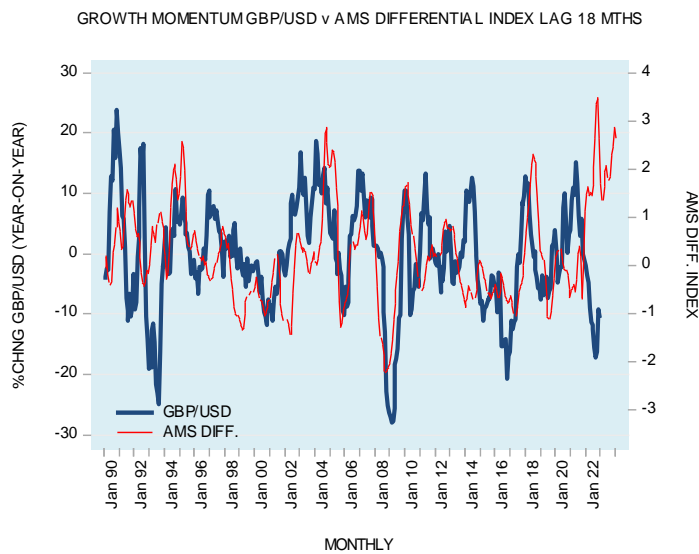
GBP/USD Signal Scorecard (Combining Fundamentals and Technicals)

There is no change from the prior month with our monetary model, momentum and one technical indicating a Short GBP/USD signal. Summarizing the four components for our Pound signal below, the net position of the GBP/USD for February remains Short GBP/USD.

Next Month's Excess AMS Model Signal:	**Short x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Short x 1**
Next Month's AMS Diff Index Momentum Signal:	**Short x 1**
Net Position February:	**Short**

Historical model performance and returns are expressed in USD below

	AASE Strategy (USD)	GBP/USD
2013	1.86%	1.88%
2014	6.50%	-5.94%
2015	17.05%	-5.36%
2016	-14.71%	-16.30%
2017	2.12%	9.53%
2018	9.78%	-5.59%
2019	8.73%	3.94%
2020	1.26%	3.12%
2021	1.79%	-1.05%
2022	-4.27%	-10.58%

CANADIAN DOLLAR

USD/CAD

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Short**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics of Canada and the US continue to weaken which favours a strengthening CAD (i.e. US excess money growth is faster than Canada's).

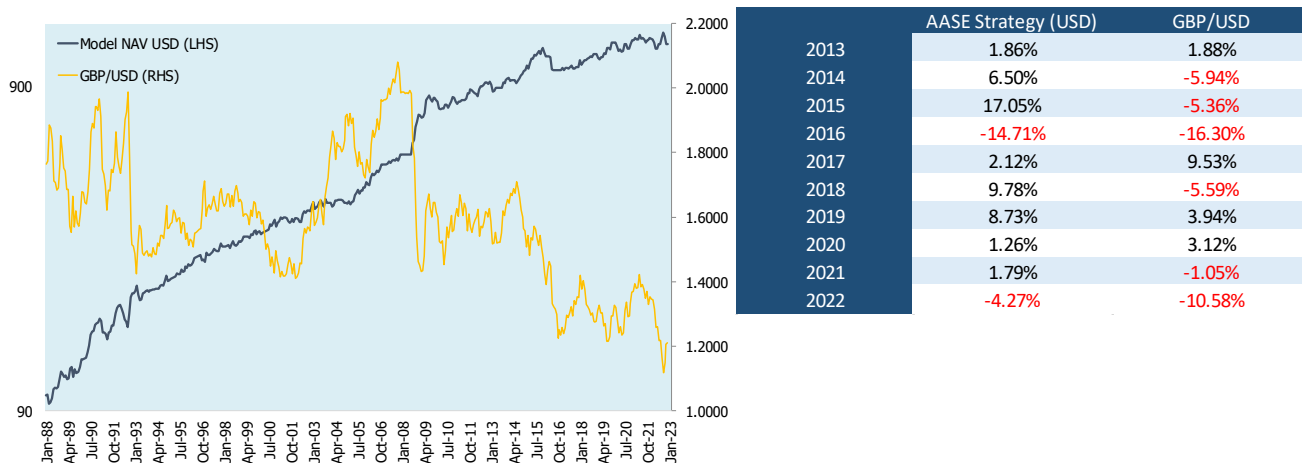Based on the excess AMS differential (chart left) and its rate of change (chart right) our (Canada less USA) leading signal now suggest a LONG signal for the USD/CAD (i.e USD to strengthen).
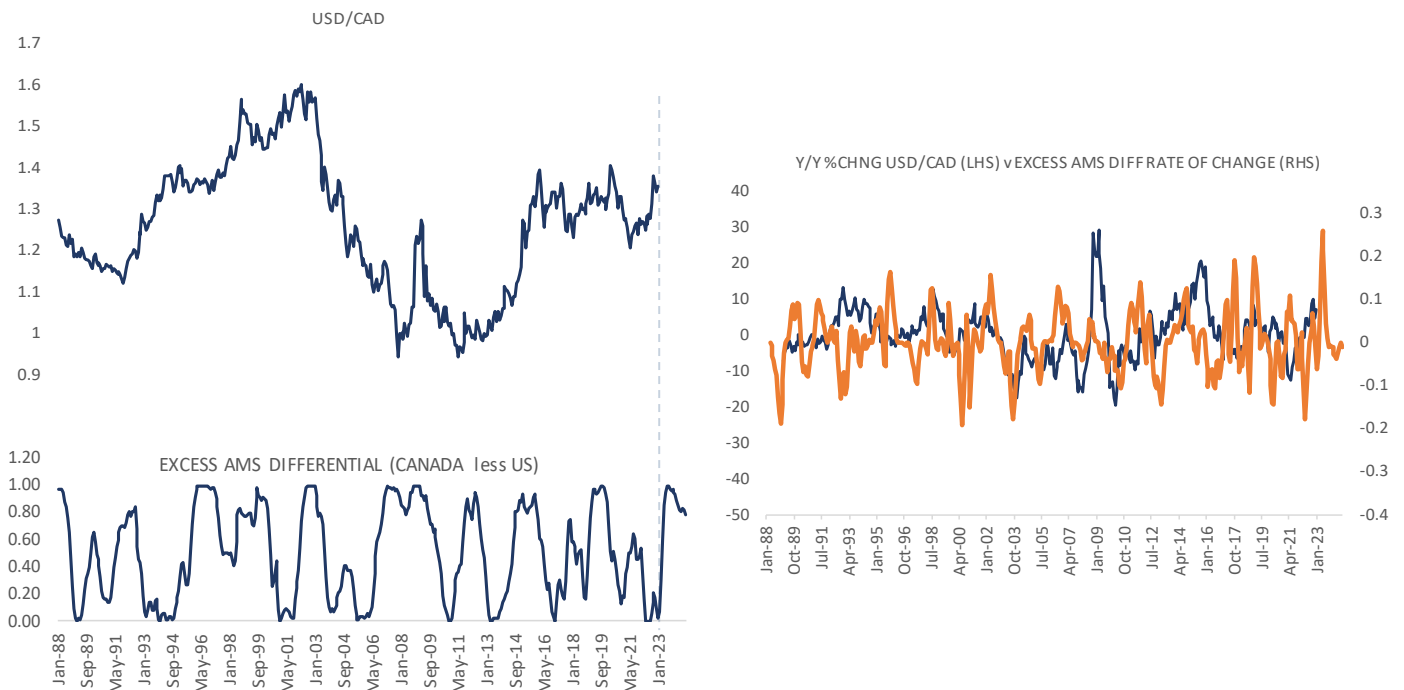
USD/CAD

Y/Y %CHNG USD/CAD (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

EXCESS AMS DIFFERENTIAL (CANADA less US)

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Fundamentals – The Excess Money Supply (AMS) Model Signals

AMS Differential	
Oct-22	Signal
Nov-22	SHORT
Dec-22	SHORT
Jan-23	SHORT
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG
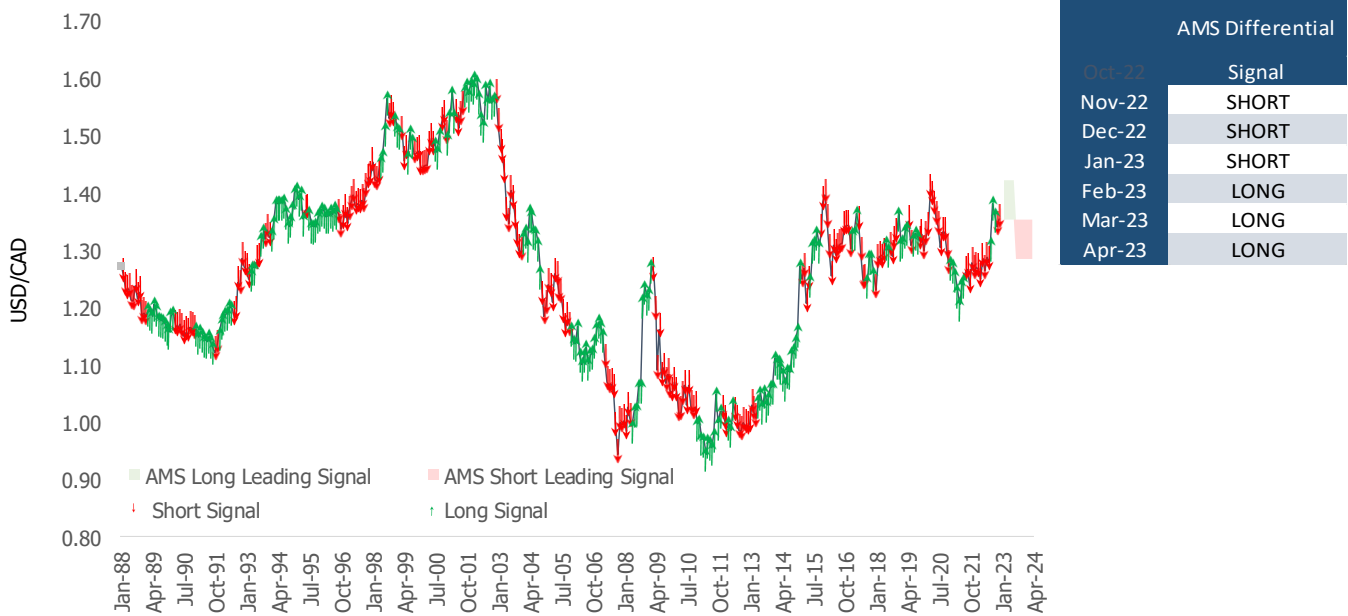
AMS Diff Index Momentum Signal

Similarly, the momentum indicator also suggests a preference for the USD (i.e. Long USD/CAD momentum).

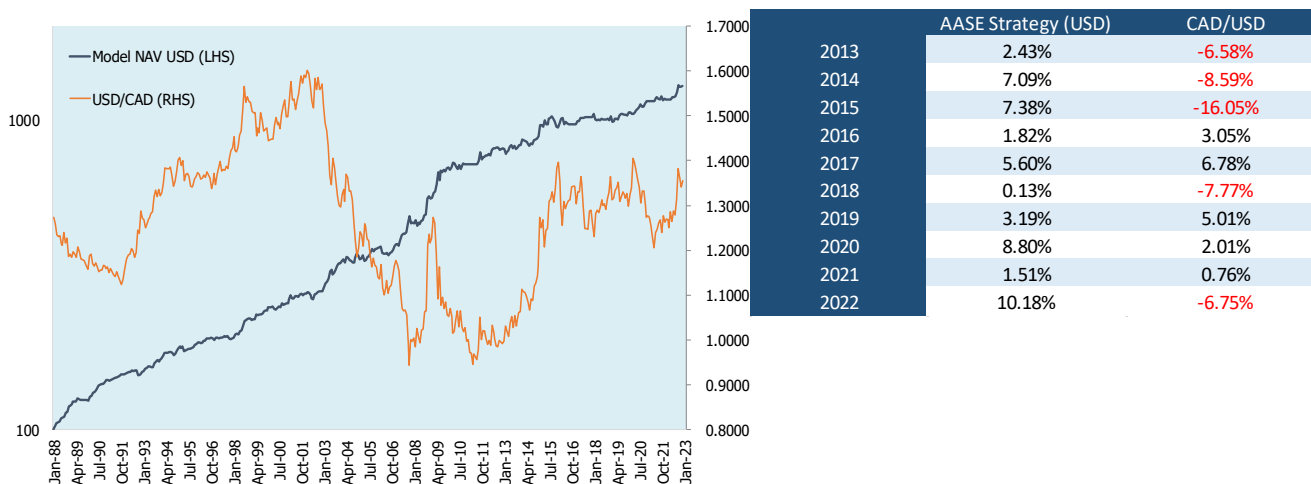GROWTH MOMENTUM USD/CAD v AMS DIFFERENTIAL INDEX LAG 20 MTHS
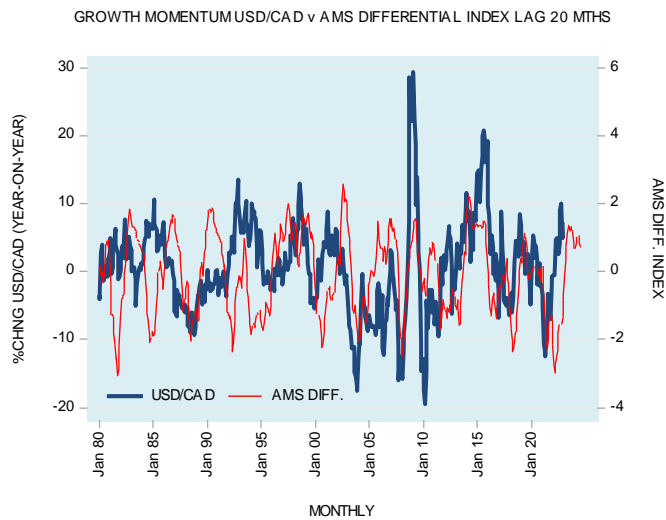
USD/CAD Signal Scorecard (Combining Fundamentals and Technicals)

Our Monetary Model now joins momentum and both technicals in favouring a Long USD/CAD. The overall weighting allocation means that the net position for February now changes to Long USD/CAD.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Long x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD below

	AASE Strategy (USD)	CAD/USD
2013	2.43%	-6.58%
2014	7.09%	-8.59%
2015	7.38%	-16.05%
2016	1.82%	3.05%
2017	5.60%	6.78%
2018	0.13%	-7.77%
2019	3.19%	5.01%
2020	8.80%	2.01%
2021	1.51%	0.76%
2022	10.18%	-6.75%

SWISS FRANC

USD/CHF

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics of Switzerland and the US favour the USD as the lagged excess Adjusted Money Supply differential is starting to strengthen (implying that the Swiss excess money growth rate is faster than its US counterpart).

Based on the excess AMS differential (chart left) and its rate of change (chart right) our (Swiss minus USA) leading signal shows an uptrend, favouring a stronger USD.
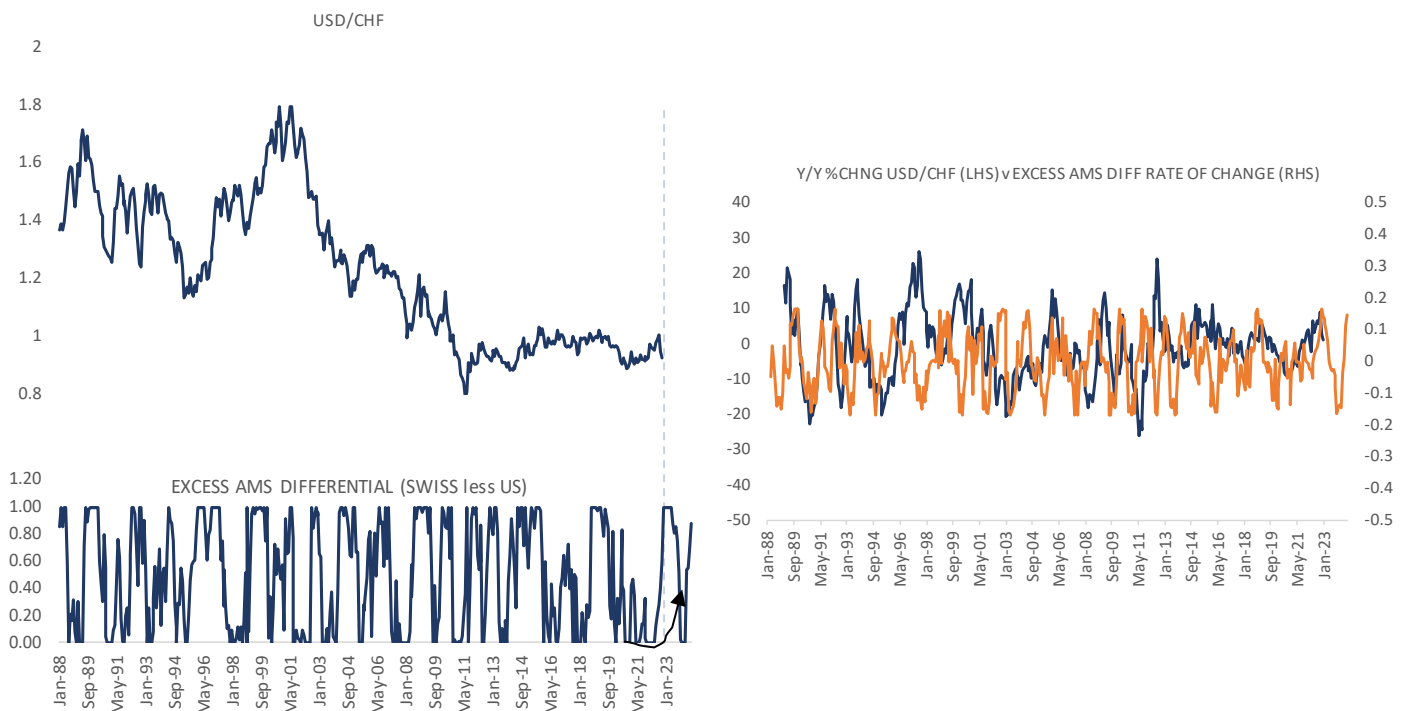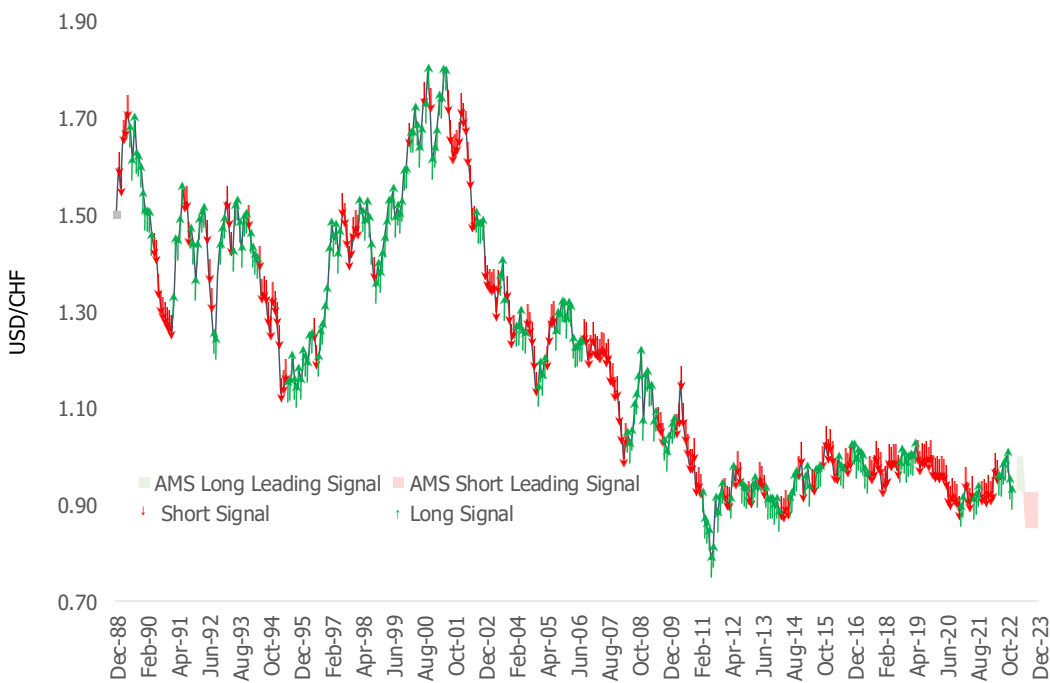
USD/CHF

EXCESS AMS DIFFERENTIAL (SWISS less US)

Y/Y %CHNG USD/CHF (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

Fundamentals – The Excess Money Supply (AMS) Model Signals

	AMS Differential Signal
Oct-22	
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG

AMS Diff Index Momentum Signal

In contrast to our monetary model, for the upcoming month our momentum signal suggests a downward tendency for the momentum of USD/CHF (CHF to strengthen).

GROWTH MOMENTUM USD/CHF v AMS DIFFERENTIAL INDEX LAG 16 MTHS

MONTHLY

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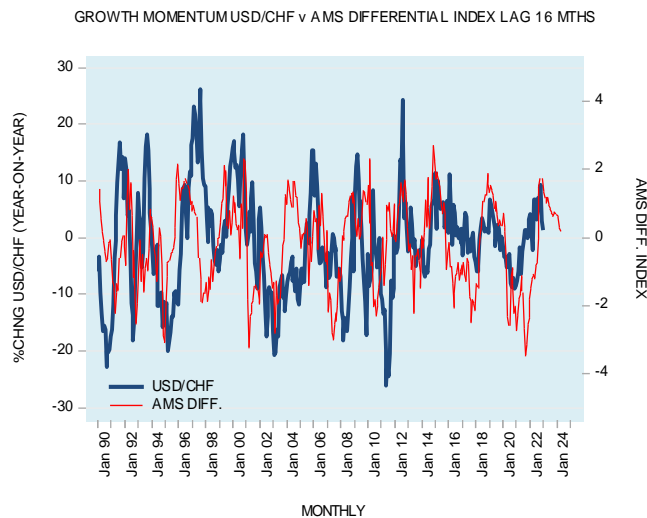
USD/CHF Signal Scorecard (Combining Fundamentals and Technicals)

The only change for the upcoming month is momentum is now joined by one technical in indicating a Short USD/CHF signals, whereas the momentary model and 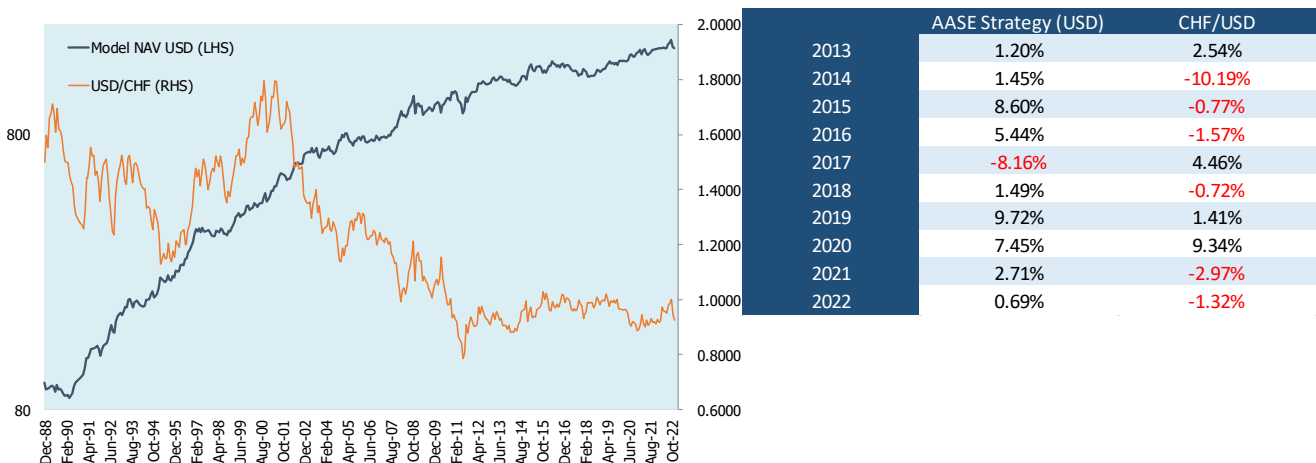the other technical continue to signal a long USD/CHF position i.e. a strengthening USD. This means that for the month of February the net position remains Long USD/CHF

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Short x 1**
Next Month's AMS Diff Index Momentum Signal:	**Short x 1**
Net Position February:	**Long**

Historical model performance and returns are <u>expressed in USD</u> below.

	AASE Strategy (USD)	CHF/USD
2013	1.20%	2.54%
2014	1.45%	-10.19%
2015	8.60%	-0.77%
2016	5.44%	-1.57%
2017	-8.16%	4.46%
2018	1.49%	-0.72%
2019	9.72%	1.41%
2020	7.45%	9.34%
2021	2.71%	-2.97%
2022	0.69%	-1.32%

AAS Economics
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KOREAN WON

USD/KRW

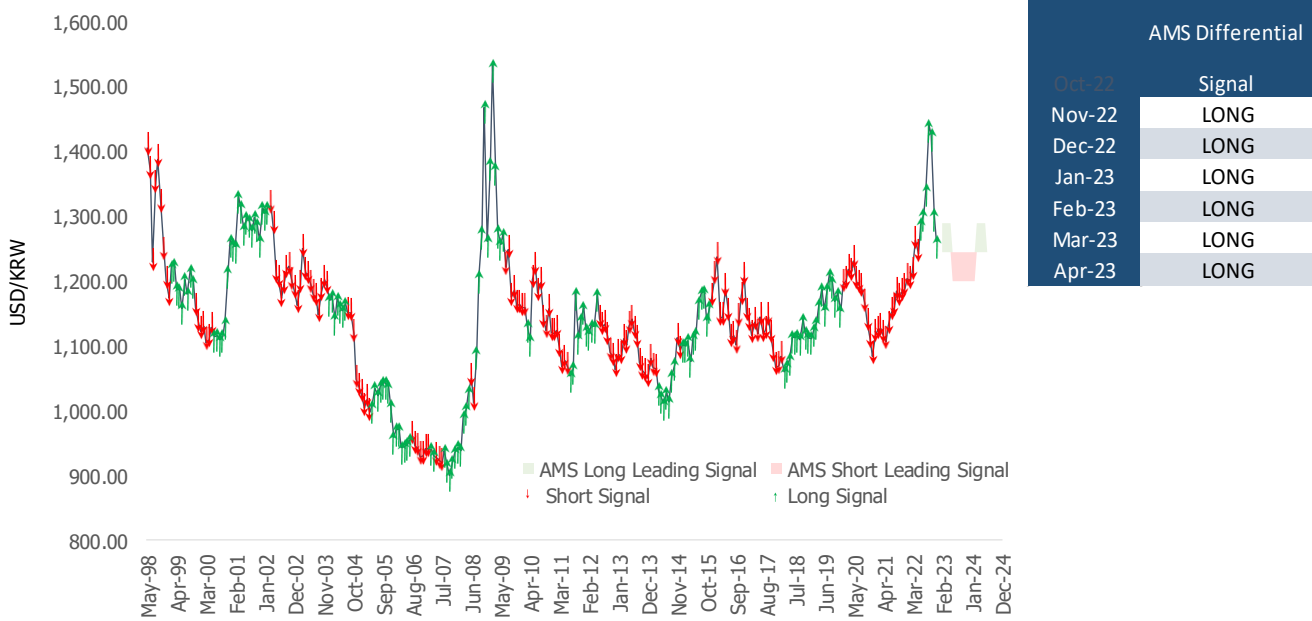| OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Flat**

Fundamentals – The Excess Money Supply (AMS) Model

The relative excess money growth differential between South Korea and the US is now in an uptrend suggesting that the monetary printer in South Korea is now working faster than that in the US.

Thus for January, the uptrend in the excess AMS (South Korea minus USA) differential (chart left), and its rate of change (chart right) continue to suggests support for the USD against the Won (i.e. Long USD/KRW).

USD/KRW

EXCESS AMS DIFFERENTIAL (S.KOREA less US)

Y/Y %CHNG USD/KRW (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

Fundamentals – The Excess Money Supply (AMS) Model Signals

AMS Differential	
Oct-22	Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG
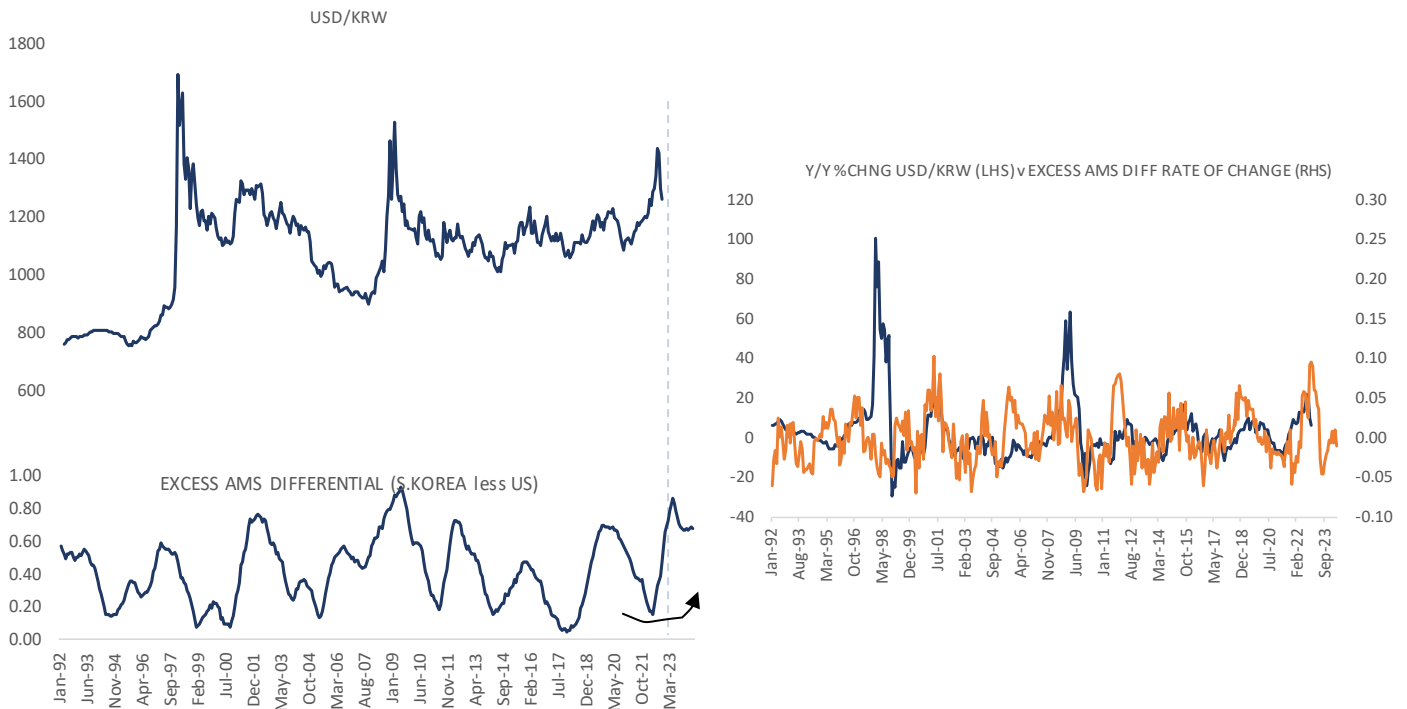
AMS Diff Index Momentum Signal

Our momentum indicator has been quite choppy in recent months although we can observe that the underlying trend is for it to strengthen. For the upcoming month however, momentum favors the Won (i.e. Short USD/KRW).
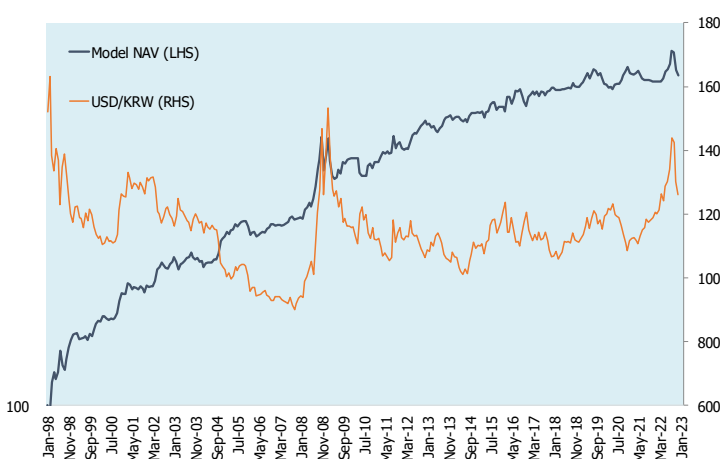

GROWTH MOMENTUM USD/KRW v AMS DIFFERENTIAL INDEX LAG 24 MTHS

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From Money Supply to Markets
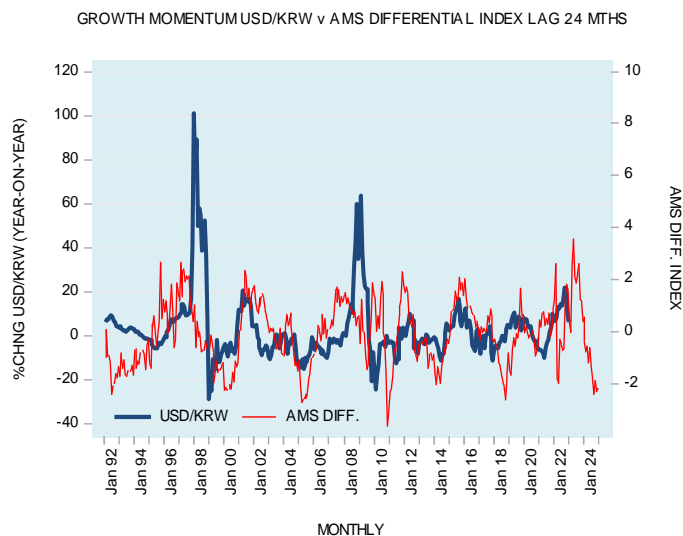
USD/KRW Signal Scorecard (Combining Fundamentals and Technicals)

For the upcopming month the monetary model is alone in signaling a tendency for the USD to strengthen (Long USD/KRW), whereas now momentum shows both technicals towards a Short USD/KRW signal. The allocated weightings thus means the net position for the month February becomes Flat.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Short x 1**
Next Month's Technical Signal 2:	**Short x 1**
Next Month's AMS Diff Index Momentum Signal:	**Short x 1**
Net Position February:	**Flat**

Historical model performance and returns are expressed in USD below

	AASE Strategy (USD)	KRW/USD
2013	3.07%	1.31%
2014	0.97%	-3.97%
2015	3.44%	-6.98%
2016	0.56%	-2.59%
2017	10.58%	13.12%
2018	0.35%	-4.22%
2019	5.12%	-3.53%
2020	5.84%	6.42%
2021	-7.69%	-8.71%
2022	3.71%	-5.79%

AAS Economics
From Money Supply to Markets

SWEDISH KRONA

USD/SEK

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary differential between Sweden and the US has now bottomed (US printing slower than Sweden) indicating now an expectation for the USD to strengthen in the coming months.

Based on the excess AMS differential (chart left) and its rate of change (chart right) which generates our (Sweden minus USA) leading signal, we see a tendency for the USD/SEK to rise – i.e. the Krona to weaken against the USD.
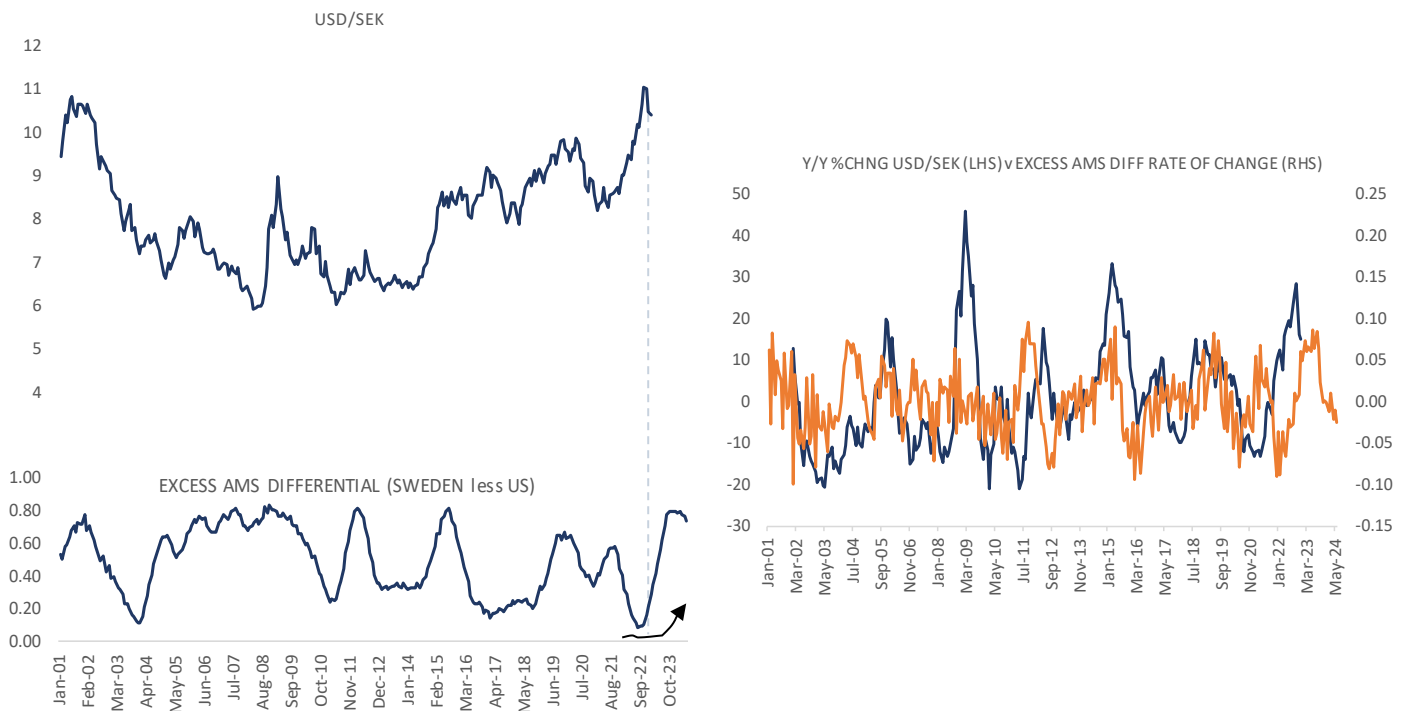
USD/SEK

Y/Y %CHNG USD/SEK (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

EXCESS AMS DIFFERENTIAL (SWEDEN less US)

Fundamentals – The Excess Money Supply (AMS) Model Signals

	AMS Differential
Oct-22	Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG

AMS Diff Index Momentum Signal

In contrast, our momentum indicator now suggests that the momentum of the USD/SEK should weaken.

GROWTH MOMENTUM USD/SEK v AMS DIFFERENTIAL INDEX LAG 24 MTHS

AAS Economics
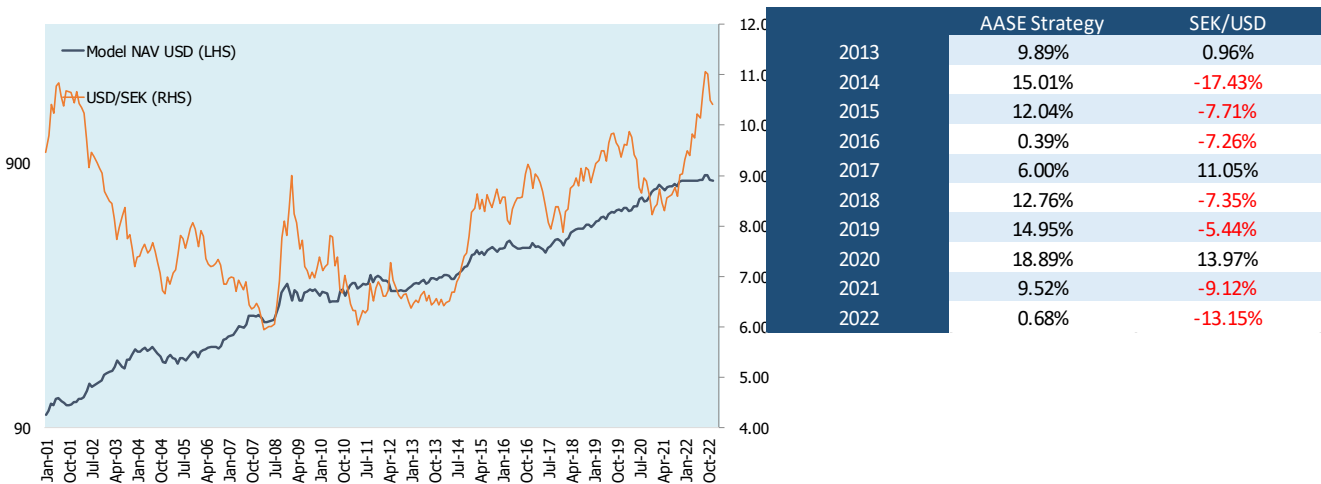## From Money Supply to Markets
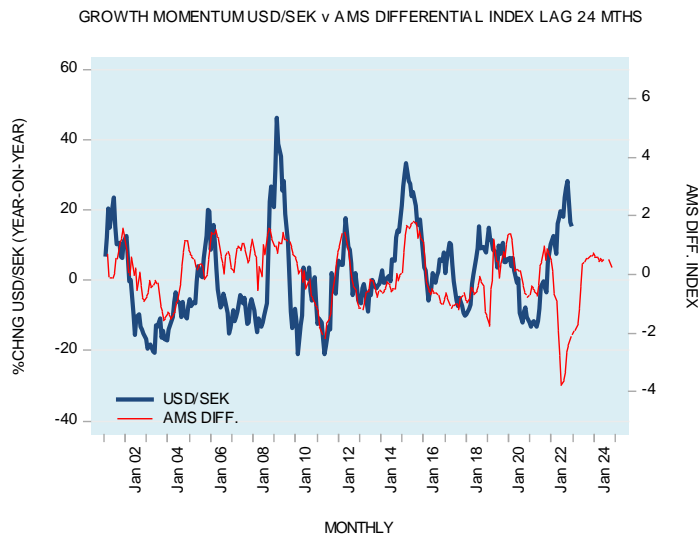
USD/SEK Signal Scorecard (Combining Fundamentals and Technicals)

There main change from the prior month, is now the momentum and a technical now suggest a Short USD/SEK signal. In contrast our monetary model and one technical continue to favouring a Long signal. Within the context of our weighting allocation, the USD/SEK Long signal remains for the upcoming month.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Short x 1**
Next Month's AMS Diff Index Momentum Signal:	**Short x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD below.

	AASE Strategy	SEK/USD
2013	9.89%	0.96%
2014	15.01%	-17.43%
2015	12.04%	-7.71%
2016	0.39%	-7.26%
2017	6.00%	11.05%
2018	12.76%	-7.35%
2019	14.95%	-5.44%
2020	18.89%	13.97%
2021	9.52%	-9.12%
2022	0.68%	-13.15%

CHINESE YUAN

USD/CNY

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics between China and the US display a visible uptrend and favour a strengthening USD.

Based on the excess AMS (China minus USA) differential (chart left) and its rate of change (chart right) we generate our leading signal which is rising, favoring a strengthening USD against the Yuan (i.e. Long USD/CNY).
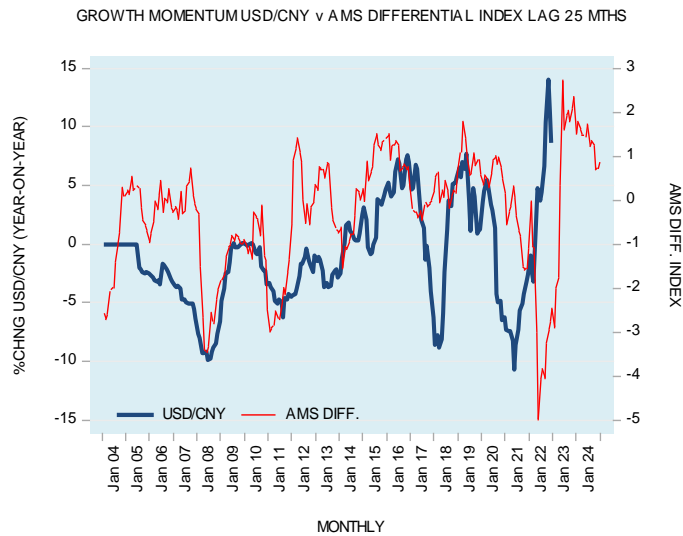

USD/CNY

Y/Y %CHNG USD/CNY (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

EXCESS AMS DIFFERENTIAL (CHINA less US)

Fundamentals – The Excess Money Supply (AMS) Model Signals

	AMS Differential
Oct-22	Monetary Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG
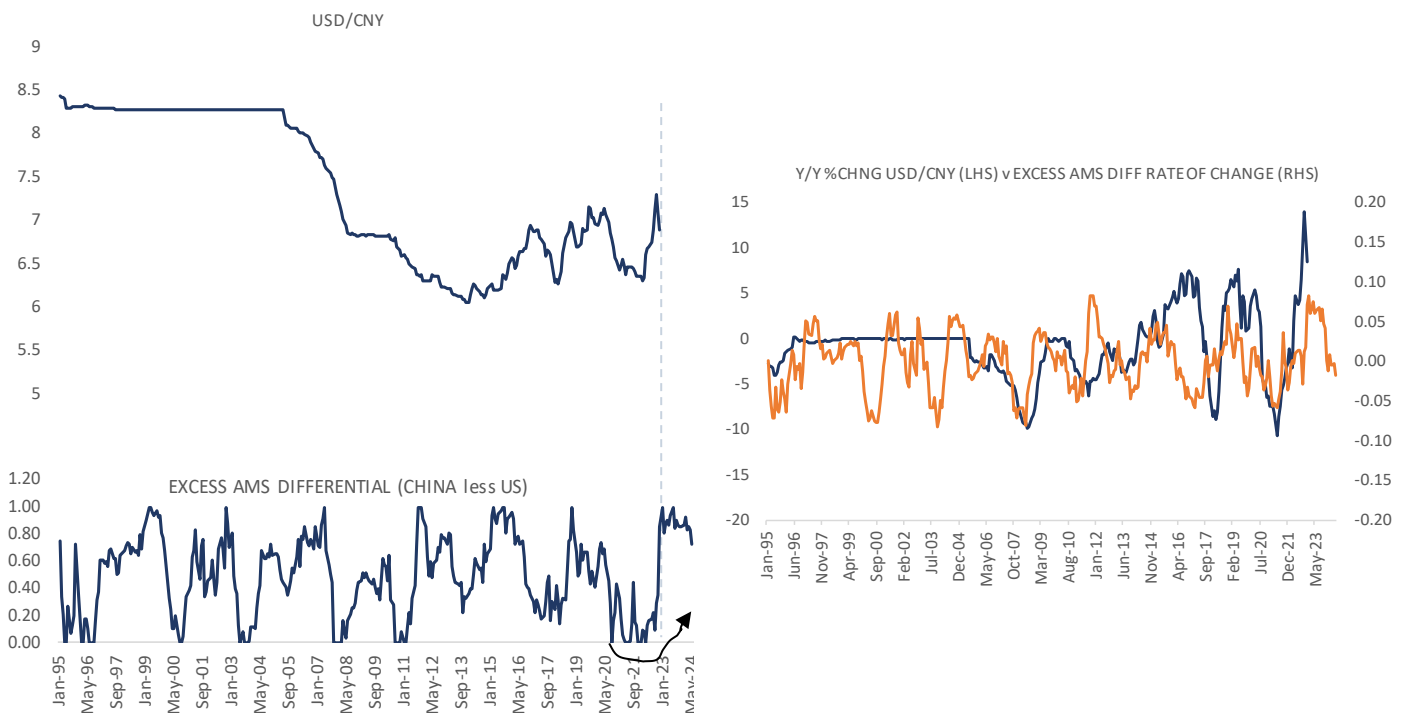
AMS Diff Index Momentum Signal

Whilst we can observe we are close to the peak in the lagged uptrend in our momentum indicator, for the time being it continues to support a strengthening in the momentum in the USD/CNY. For the upcoming month momentum continues to favour the USD.

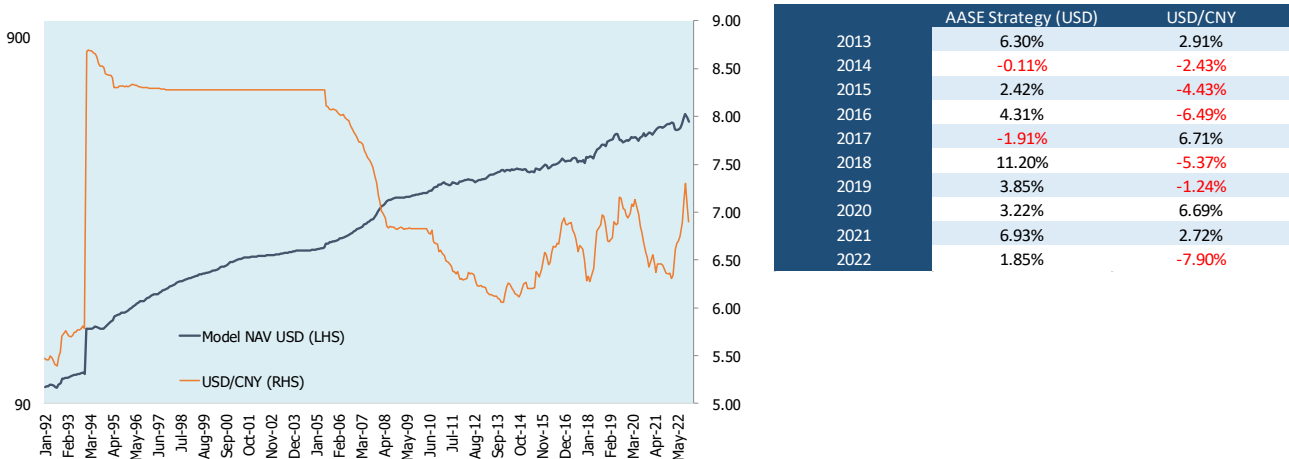GROWTH MOMENTUM USD/CNY v AMS DIFFERENTIAL INDEX LAG 25 MTHS

USD/CNY Signal Scorecard (Combining Fundamentals and Technicals)

We can now observe for the upcoming month that with the exception of one technical all other indicators – our monetary model, momentum and one technical – continue to favour a Long USD/CNY signal. The net position therefore remains unchanged in favour of Long USD/CNY.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Short x 1**
Next Month's Technical Signal 2:	**Long x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD below.

	AASE Strategy (USD)	USD/CNY
2013	6.30%	2.91%
2014	-0.11%	-2.43%
2015	2.42%	-4.43%
2016	4.31%	-6.49%
2017	-1.91%	6.71%
2018	11.20%	-5.37%
2019	3.85%	-1.24%
2020	3.22%	6.69%
2021	6.93%	2.72%
2022	1.85%	-7.90%

BRAZILIAN REAL

USD/BRL

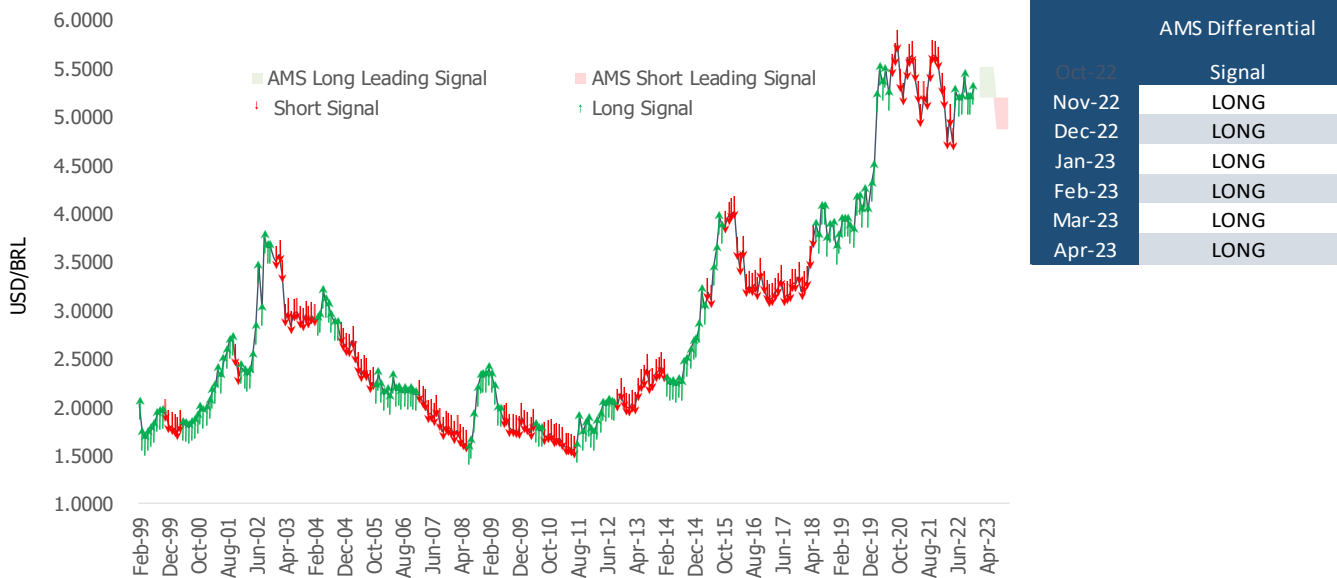| OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

Our monetary model continues to suggests a tendency for the USD/BRL to increase. In other words, the uptrend in the excess money differential between Brazil and US implies that in essence the Brazilian money printer is working at a faster pace than US, which fundamentally provides support to the USD.

The excess AMS (Brazil minus USA) differential (chart left) and its rate of change (chart right) generate our leading signal and this continues to suggest a tendency for the USD/BRL to rise – i.e. the USD to strengthen.
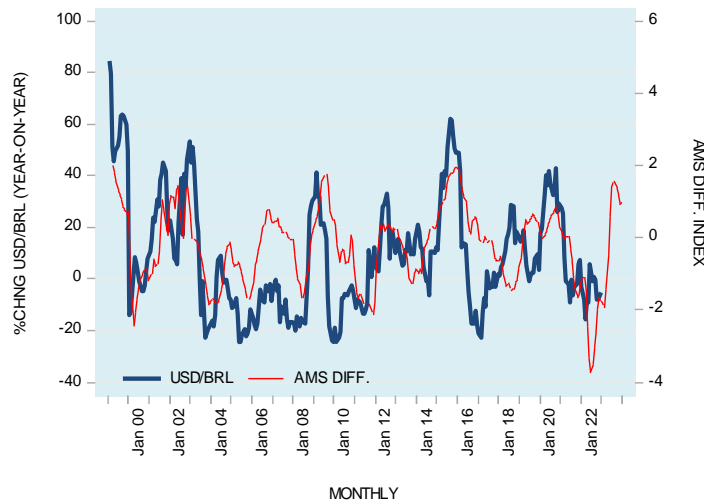

USD/BRL

Y/Y %CHNG USD/BRL (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

EXCESS AMS DIFFERENTIAL (BRAZIL less US)

Fundamentals – The Excess Money Supply (AMS) Model Signals

AMS Differential	
Oct-22	Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG
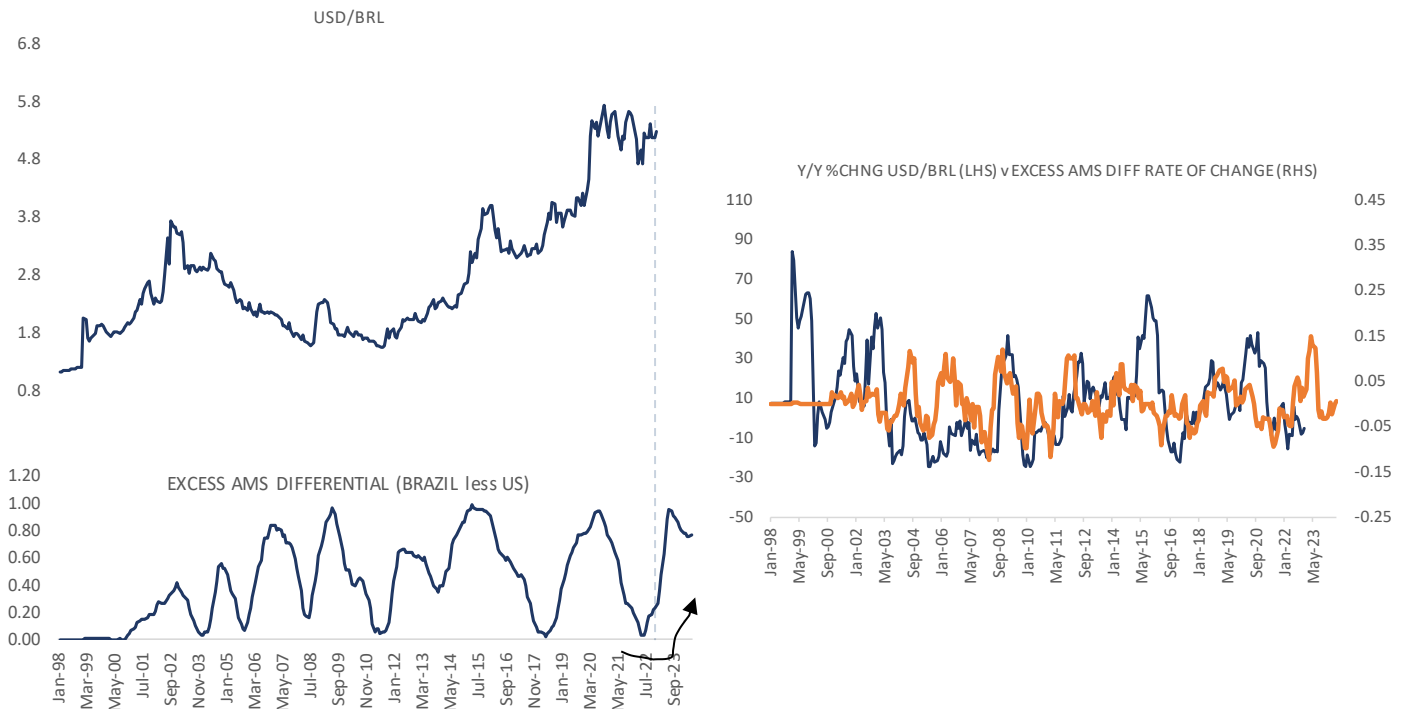
AMS Diff Index Momentum Signal

With the underlying trend rising, for the upcoming month our lagged momentum indicator indicates a preference for the USD to strengthen (i.e. Long USD/BRL).

GROWTH MOMENTUM USD/BRL v AMS (MONEY SUPPLY) DIFFERENTIAL INDEX LAG 24 MTHS
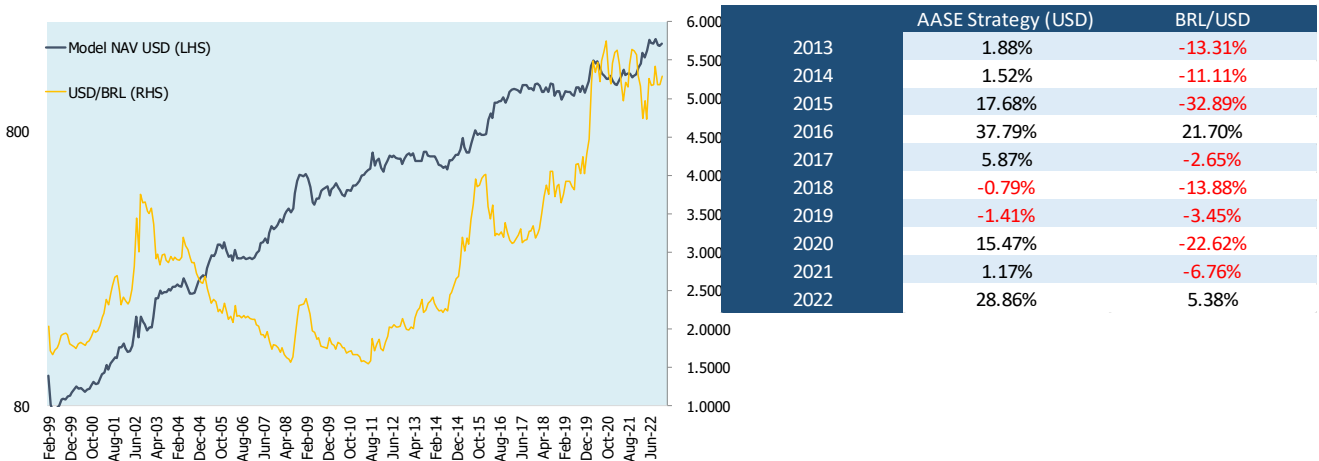
USD/BRL Signal Scorecard (Combining Fundamentals and Technicals)

For the upcoming month both momentum and the monetary model are now joined by both technicals in favouring a strengthening USD. Thus for the upcoming month our net position remains Long USD/BRL.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Long x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD below.

	AASE Strategy (USD)	BRL/USD
2013	1.88%	-13.31%
2014	1.52%	-11.11%
2015	17.68%	-32.89%
2016	37.79%	21.70%
2017	5.87%	-2.65%
2018	-0.79%	-13.88%
2019	-1.41%	-3.45%
2020	15.47%	-22.62%
2021	1.17%	-6.76%
2022	28.86%	5.38%

INDIAN RUPEE

USD/INR

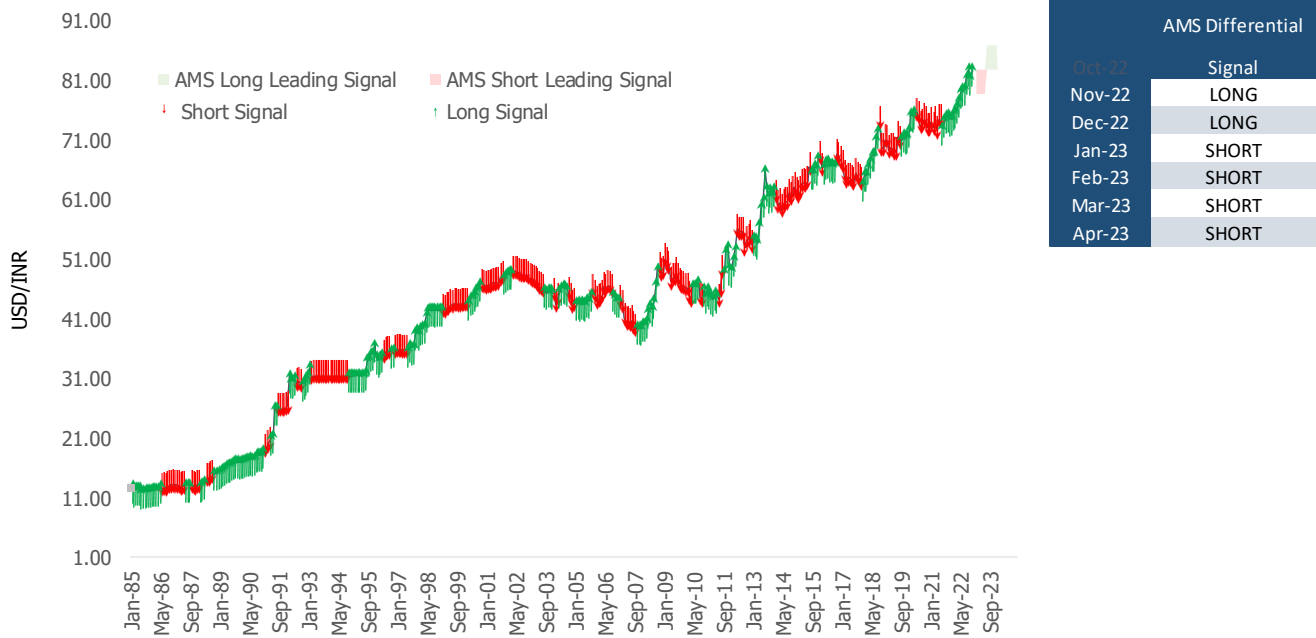| OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	Short
February Signal:	Flat

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics between India and the US have now peaked and for the upcoming month they have now reversed and favour a strengthening in the INR. The decrease in the excess AMS differential implies that lagged excess money supply in India is growing at a slower rate than that in the US.

Hence, based on the excess AMS (India minus US) differential (chart left) and its rate of change (chart right), our leading signal indicates downward pressure for the USD/INR in the upcoming month.
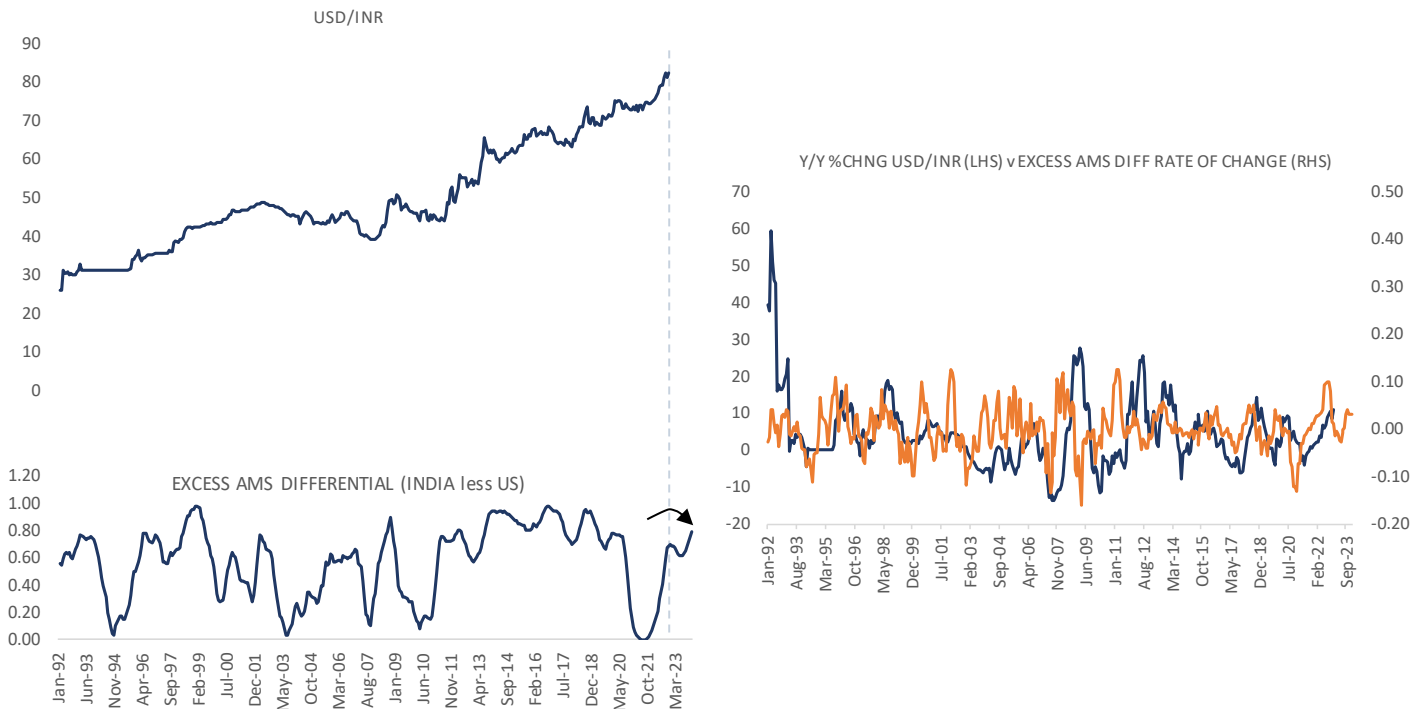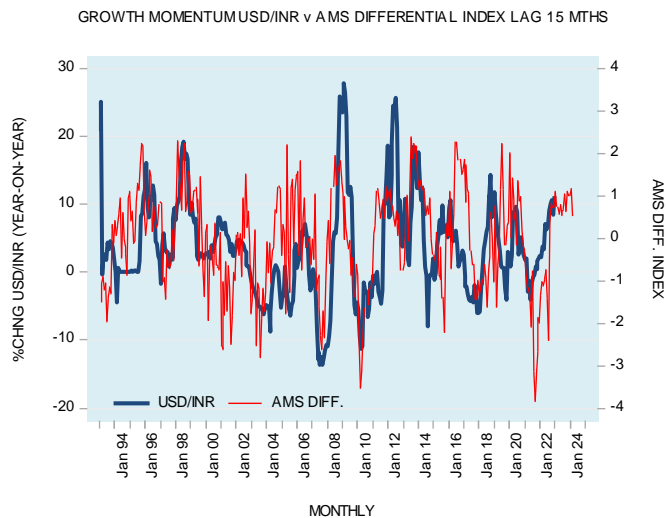
USD/INR

EXCESS AMS DIFFERENTIAL (INDIA less US)

Y/Y %CHNG USD/INR (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

Fundamentals – The Excess Money Supply (AMS) Model Signals

AMS Differential	
	Signal
Oct-22	
Nov-22	LONG
Dec-22	LONG
Jan-23	SHORT
Feb-23	SHORT
Mar-23	SHORT
Apr-23	SHORT

AMS Diff Index Momentum Signal

In contrast, for the time being, the momentum indicator suggests a tendency for the USD to strengthen (ie Long USD/INR).

GROWTH MOMENTUM USD/INR v AMS DIFFERENTIAL INDEX LAG 15 MTHS

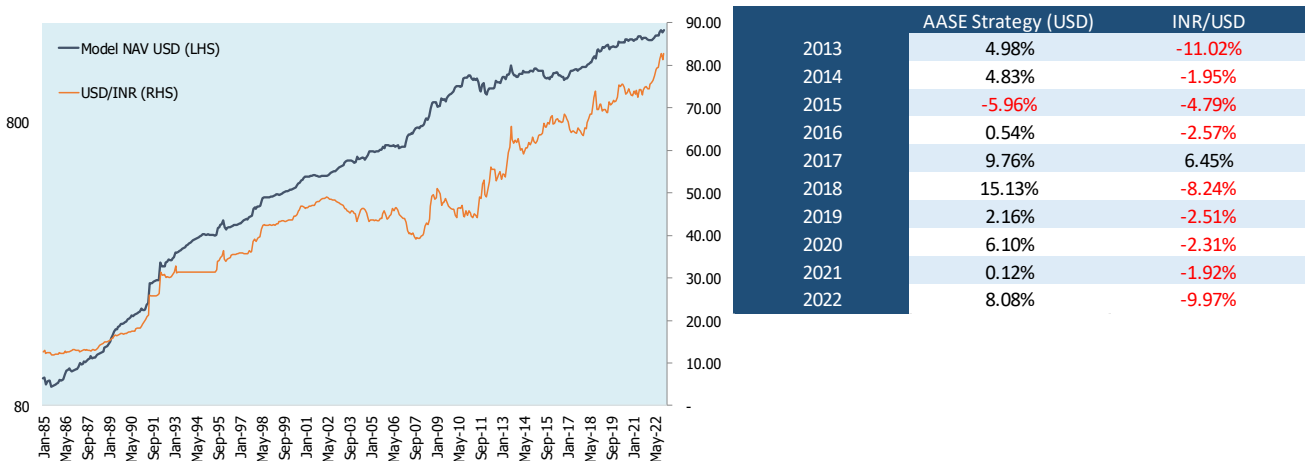![AAS Economics — From Money Supply to Markets]

USD/INR Signal Scorecard (Combining Fundamentals and Technicals)

For the upcoming month our monetary model is now alone in favouring a Short USD/INR signal, with both technicals and momentum now favouing a strengthening USD. As such the net position for the upcoming month is now changed to Flat.

Next Month's Excess AMS Model Signal:	**Short x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Long x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Flat**

Historical model performance and returns are <u>expressed in USD</u> below

	AASE Strategy (USD)	INR/USD
2013	4.98%	-11.02%
2014	4.83%	-1.95%
2015	-5.96%	-4.79%
2016	0.54%	-2.57%
2017	9.76%	6.45%
2018	15.13%	-8.24%
2019	2.16%	-2.51%
2020	6.10%	-2.31%
2021	0.12%	-1.92%
2022	8.08%	-9.97%

SOUTH AFRICAN RAND

USD/ZAR

OVERALL SIGNAL and POSITION SUMMARY:	
January Position:	**Long**
February Signal:	**Long**

Fundamentals – The Excess Money Supply (AMS) Model

The relative monetary dynamics between South Africa and the US suggest a continued uptrend, meaning that South African excess money growth is faster than in the US. Fundamentally this upward pressure on the USD/ZAR should favour a strengthening USD.

Based on the excess AMS (S.Africa minus USA) differential (chart left) and its rate of change (chart right) we currently observe upward pressure on the USD/ZAR– i.e. strengthening USD.
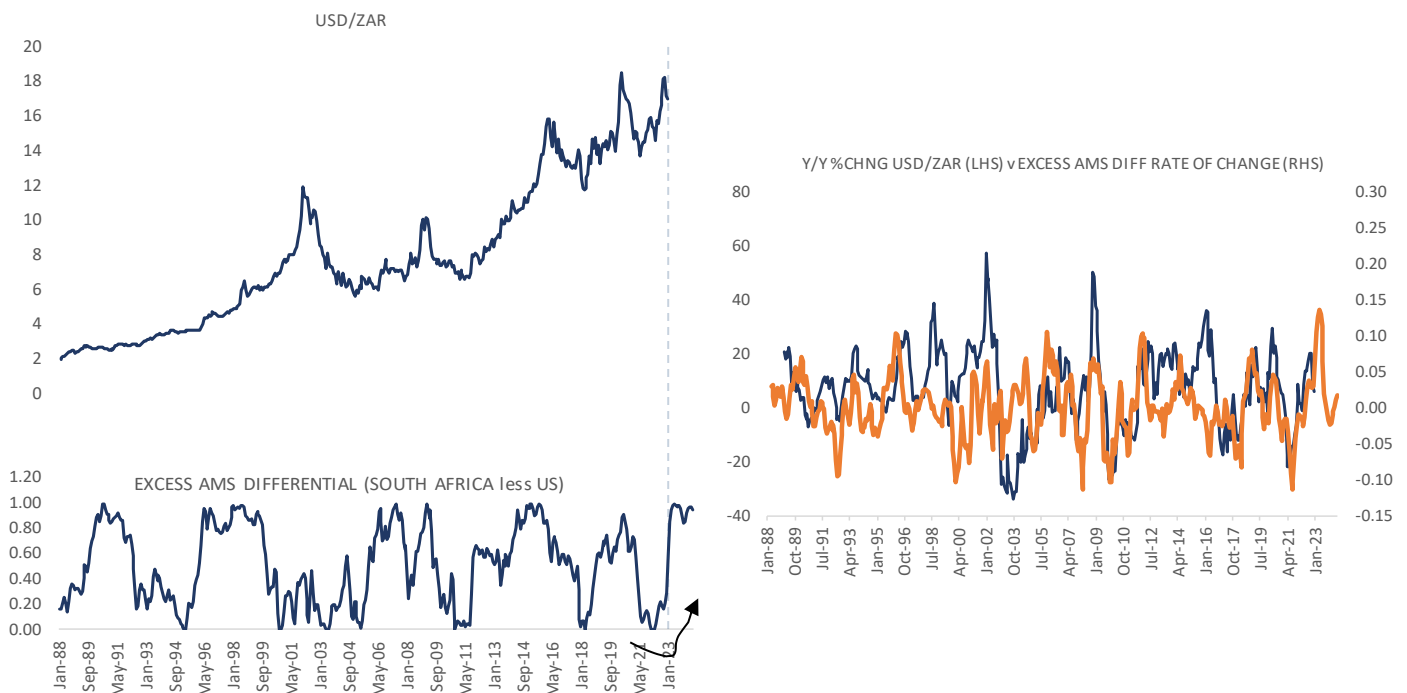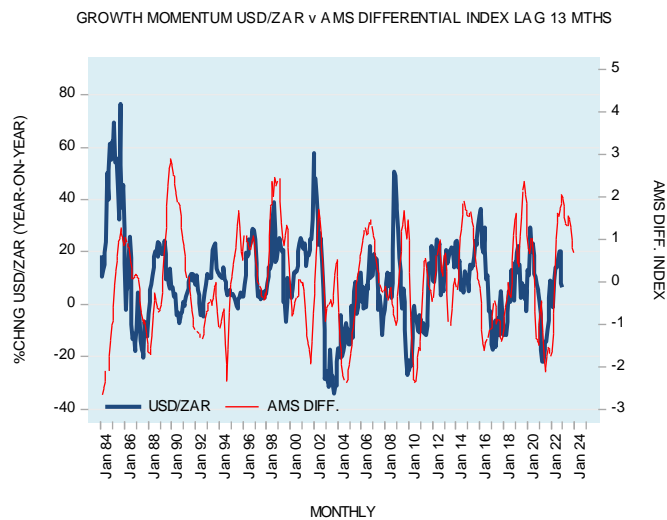

USD/ZAR

EXCESS AMS DIFFERENTIAL (SOUTH AFRICA less US)

Y/Y %CHNG USD/ZAR (LHS) v EXCESS AMS DIFF RATE OF CHANGE (RHS)

Fundamentals – The Excess Money Supply (AMS) Model Signals

AMS Differential	
Oct-22	Signal
Nov-22	LONG
Dec-22	LONG
Jan-23	LONG
Feb-23	LONG
Mar-23	LONG
Apr-23	LONG

AMS Diff Index Momentum Signal

We continue to observe a visible uptrend in the momentum indicator, thus for the upcoming month the signal for momentum suggests a strengthening in the momentum of the USD/ZAR.

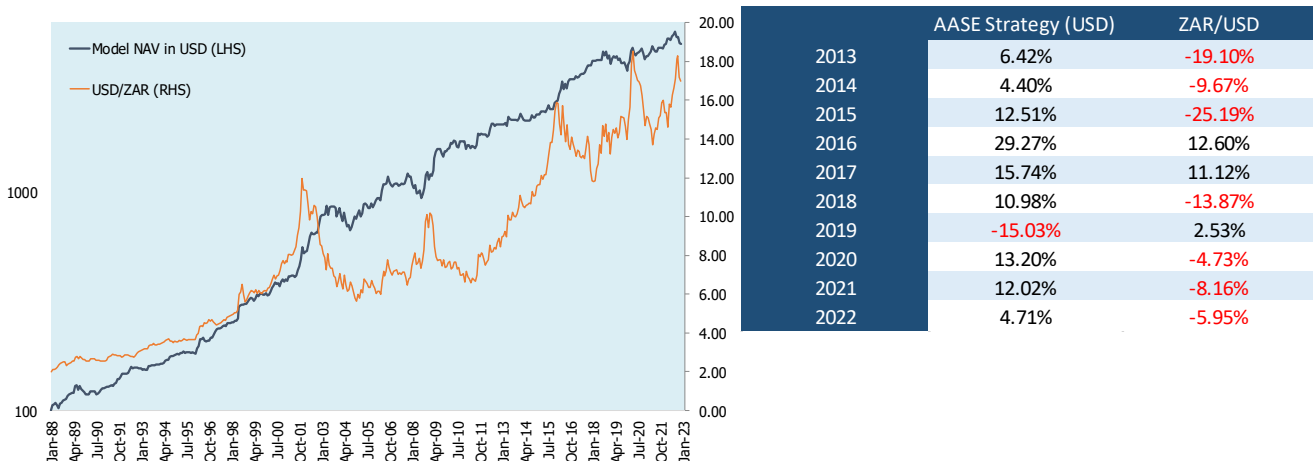GROWTH MOMENTUM USD/ZAR v AMS DIFFERENTIAL INDEX LAG 13 MTHS

USD/ZAR Signal Scorecard (Combining Fundamentals and Technicals)

For the upcoming month both fundamentals are now joined with both technicals with indicating a Long signal for the USD/ZAR. The combined signals means that for February the net position remains Long USD/ZAR.

Next Month's Excess AMS Model Signal:	**Long x 3**
Next Month's Technical Signal 1:	**Long x 1**
Next Month's Technical Signal 2:	**Long x 1**
Next Month's AMS Diff Index Momentum Signal:	**Long x 1**
Net Position February:	**Long**

Historical model performance and returns are expressed in USD below.

	AASE Strategy (USD)	ZAR/USD
2013	6.42%	-19.10%
2014	4.40%	-9.67%
2015	12.51%	-25.19%
2016	29.27%	12.60%
2017	15.74%	11.12%
2018	10.98%	-13.87%
2019	-15.03%	2.53%
2020	13.20%	-4.73%
2021	12.02%	-8.16%
2022	4.71%	-5.95%

This analysis does not represent an actual investment portfolio but rather the application of the AASE process to historical data. This is for information only and is not investment advice. No action should be taken based on this analysis.

MORE INFORMATION

For more information please contact AAS Economics
info@aasecon.com