AAS Economics
From Money Supply to Markets

# WEEKLY MACRO

## NOTES FROM OUR WEEKLY STRATEGY MEETING

## 17 DECEMBER 20

### World Review – Key Points

- **As world economies recover from the Covid-policy-induced downturn we reassess global growth prospects focusing on PMIs and import growth**
- **We examine the likely impact of recent explosions of money supply on the economies of the US, China, Japan, Eurozone and Australia**
- **Much depends on the time lags between money supply changes and economic changes and these may have changed since the GFC**
- **Our expectation for the first half of 2021 is for continued global recovery**
- **If we switch to more recent time lags then the US economy becomes an underperformer for much of 2021**
- **The risk of stagflation is beginning to increase for early-mid 2022**

**The helicopter view**

Clients have asked us to once again revisit the overall outlook for world growth over the coming year. We have reviewed various elements of the global growth outlook in recent editions of the *Weekly Notes* but here we shall put some of these pieces together once again. As before we shall proceed by major economies: US, Eurozone, Japan, China. We also include Australia. Our economic growth proxies will be Manufacturing PMI and import growth.

**The importance of policy effects**

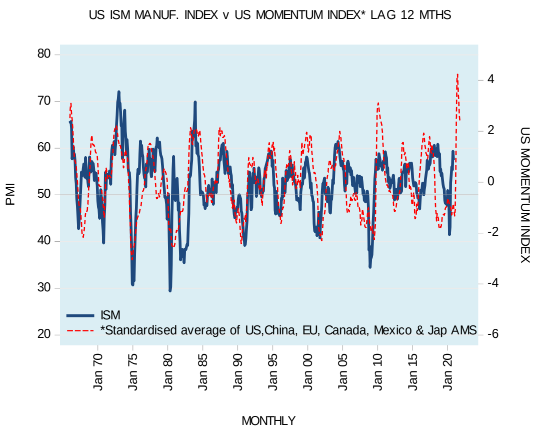
Readers will know that we both theorise and model the causal links between, on the one hand, central and commercial bank money creation/destruction and, on the other hand, the responses of the economy and markets to that process. We apply this framework through our economic forecasts and our business cycle asset allocation modelling.

As we have shown in the past, our monetary variable *Adjusted Money Supply* (AMS) has been a reliable tool for capturing these linkages, both leading the economy and providing the basis for business cycle determination. Given the truly enormous scale of the money printing that has dominated the Covid policy response it is vital to place this monetary explosion into a theoretical framework which has empirical validation that predates the current period.

For our PMI projections we combine lagged AMS growth of both the host country and its major trading partners to derive a composite AMS Momentum Index for each country. For imports we use lagged changes in real AMS growth as our predictor.

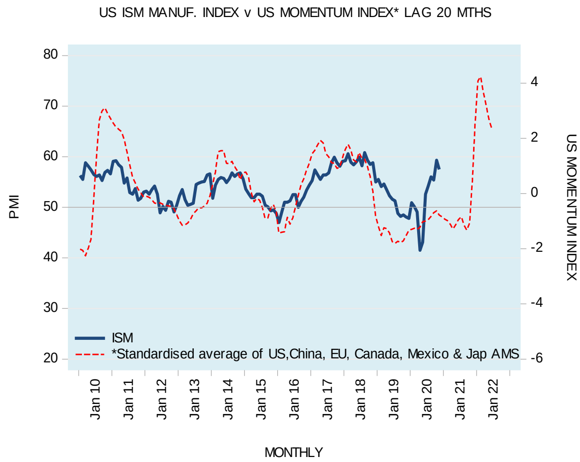
**United States**

In the US we have seen the Manufacturing PMI rise from 41.5 at the nadir of the Covid policy recession to a most recent value of 57.5. This is in line with our AMS Momentum Index forecast as shown below, where the transmission lags between composite AMS changes and movements in the PMI have, over the long term, been around 12 months.



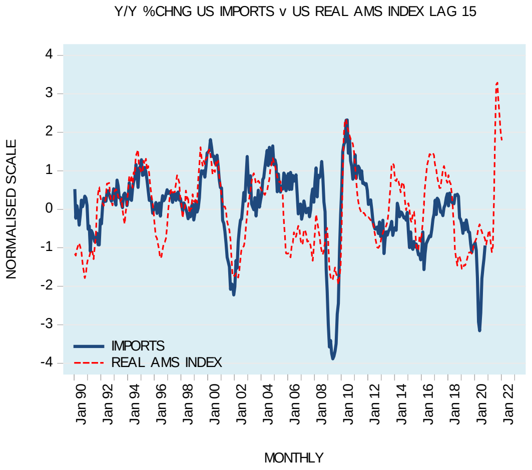

On this analysis we are in the midst of a strong cyclical recovery in the US

However, as we have noted in previous reports there is the possibility, on closer examination of the years since the Global Financial Crisis, that this one-year lag may have lengthened quite significantly to around 20 months, for reasons that are not completely clear. Given that this extended time lag has become manifest since the devastation caused by the GFC, it is possible that it may be related to the damage done to the economy from that and previous crises, to regulatory changes, to changes in the willingness of borrowers to actually spend or of the willingness of banks to lend at the same pace as before.

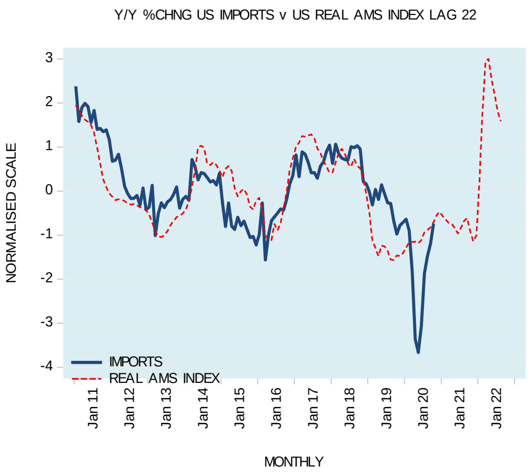



Whatever the reasons, this potential change in lag implies that the steep recovery in the US PMI shown in the first chart would now be postponed until towards last quarter of 2021 and suggests that most of 2021 should be a year of consolidation with a strengthening only towards the latter part of the year.

From an import growth perspective we see a similar picture. Our longer term chart shows that real AMS changes have typically preceded changes in import growth by around 15 months:



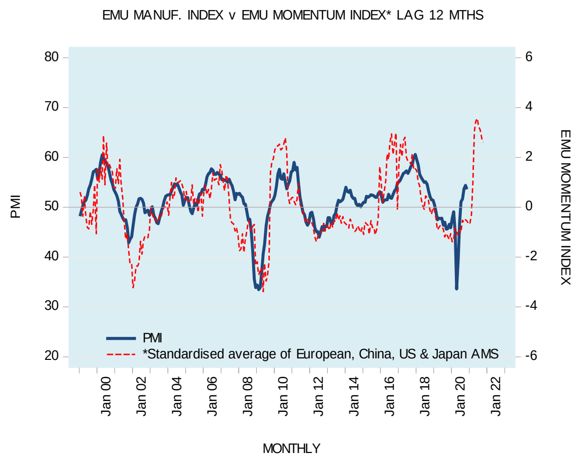

Once again, however, the lags may have lengthened since around 2012 or so and may now be closer to 22 months.



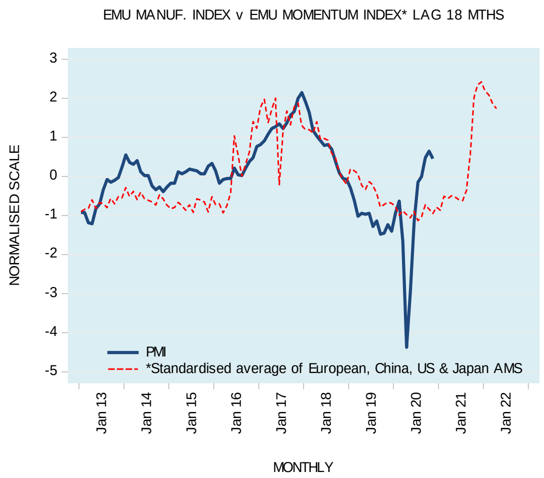

If this is the case then the continued strong short term upward trajectory that would be expected under the older lags may morph into a much more gradual, perhaps even declining rate of import growth for most of the year with an uptick towards year-end. This would be consistent with the picture presented earlier in the PMI discussion and thus consistent with overall US economic growth moderating until around the last quarter of 2021, with an acceleration in growth at that time.

**Eurozone**

In the Eurozone the monetary explosion that has taken place over the last year is already adding significant momentum to the overall economy. Last week we examined inter-country differences in this picture but for the overall economic bloc the outlook is one of continued expansion over the first half of 2021. The apparent turndown in lagged AMS Momentum Index growth would normally be expected to hit the Eurozone economy around the third quarter of 2021.

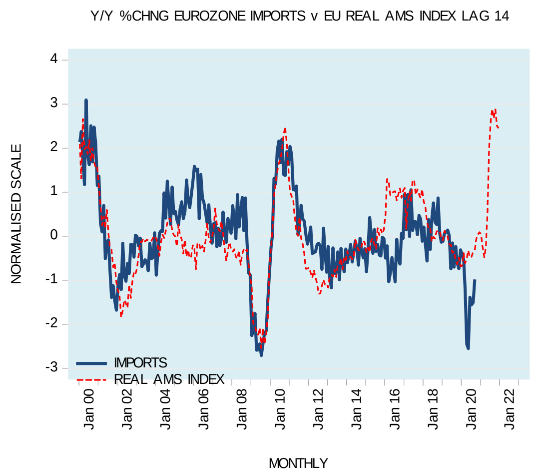


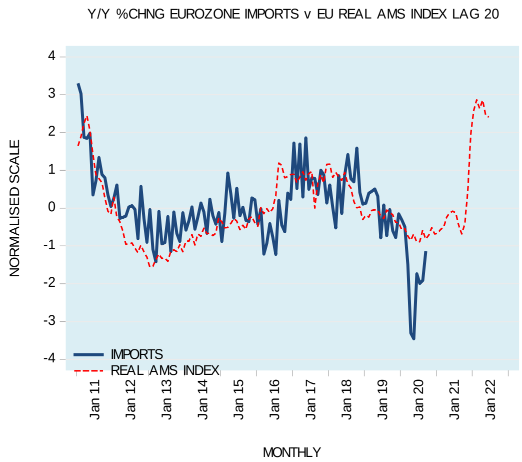

As with the US, it is possible that longer lags between monetary changes and economic changes have evolved in recent years, as shown in the chart below. Even if this were the case, however, the outlook for 2021 is still positive with the difference being that with the longer lag the recovery may be extended further to the last few months of the year.




Once again, however, is that of concern is the formation of a visible top in lagged AMS growth that is now baked in. Should the annual AMS growth rate continue this decline then the last few months of 2021 could see macroeconomic conditions begin to soften, perhaps markedly.

When we look at the outlook for import growth we see a similar picture to that outlined above: the prospects are for a very short term pullback followed by a significant spike in import growth (first chart). However if the possibility of more recent and longer lags are considered (second chart) the timing of the recovery curve slows.

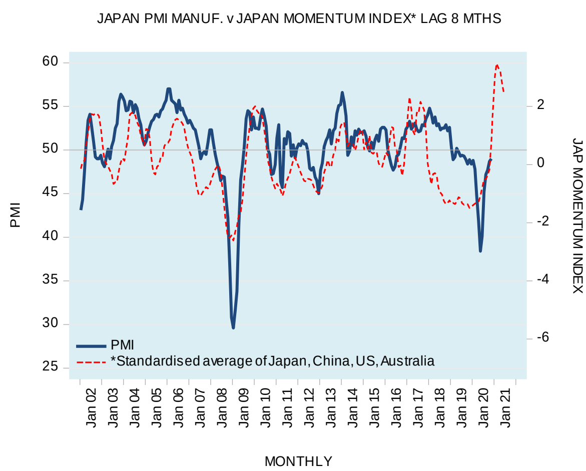



Once again this is pointing to a positive but more subdued economic environment next year. Note again the ominous Damocles-like AMS growth pattern at the end of the forecasting period, which bodes ill for developments from early 2022 if AMS growth continues to decelerate from current levels.

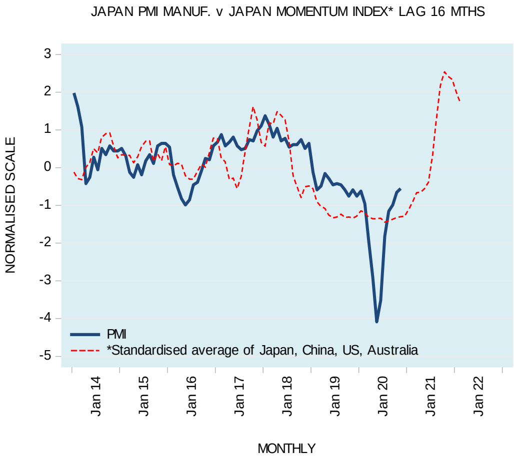
**Japan**

As mentioned in previous weeks the monetary transmission lags in Japan have historically been relatively short – in this case around eight months.



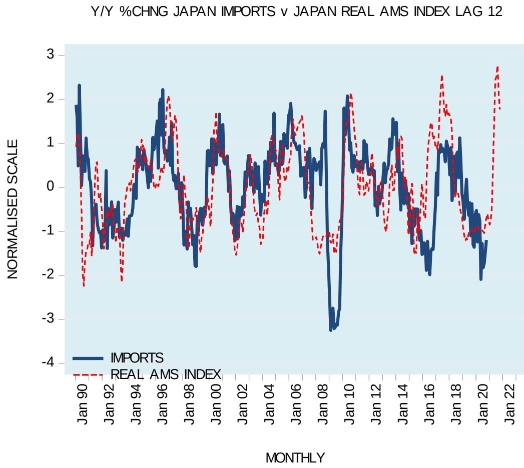

This relationship implies that Japan's PMI should continue to improve for the next few months but then start to lose steam from around March onwards.

When we examine the possibility of changed lags – which is a phenomenon becoming more frequent around the world since the 2008 crisis – we can see the possibility that the lag may have lengthened to around 16 months.

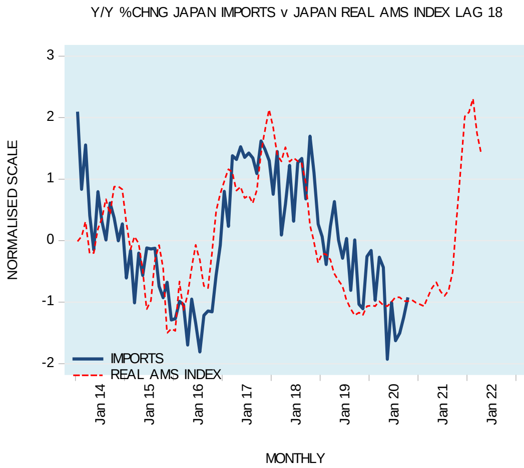



If this lag were indeed to be the more appropriate one to use then the PMI recovery is extended out to December.

Looking at import growth, we see that with the historical AMS lags of around 12 months the prognosis is strongly positive for the immediate future.




However, again consistent with the structural changes that may have taken place over recent years, these lags may have lengthened out to around 18 months (see chart).



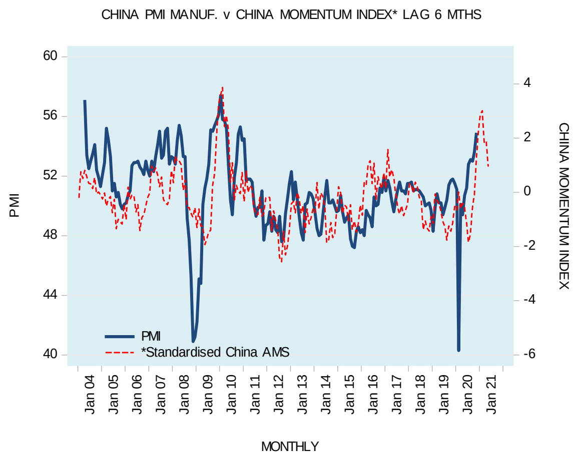

This still implies a positive growth rate through 2021, indicative of recovering economic growth, but the recovery is not as steep in the early months of 2021 as that implied by the previous, shorter lags. However the second half of 2021 is looking particularly strong.

Once again we see the top-like pattern in AMS growth towards the end of the series, pointing to a deceleration in import growth from around

March of 2022 using the longer, more recent time lags.

**China**

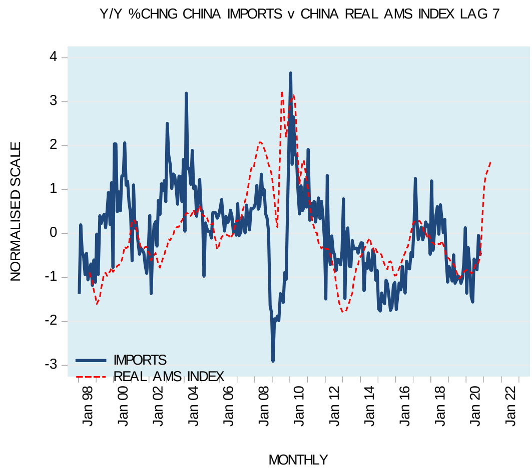
In the Chinese economy the monetary transmission lags between our composite AMS Momentum Index and the economy are quite short by global standards – around six months or so.




This short lag means that not only is global money printing very effective in stimulating the Chinese economy (largely through imports) but it also means that the effect of such printing can be very short-lived i.e. once the rest of the world takes its foot off the monetary accelerator the Chinese economy does not have long to wait before it feels the effects.

This appears to be the case at present. We see that the global AMS stimulus of the most recent half year is almost spent in terms of its impact on China's PMI and that the nearly-ubiquitous topping pattern in global monetary growth should reduce momentum in the Chinese economy before many others.

For imports the lags between domestic AMS growth and import growth are around the same (here, seven months) and we can see the tailwind clearly visible below.

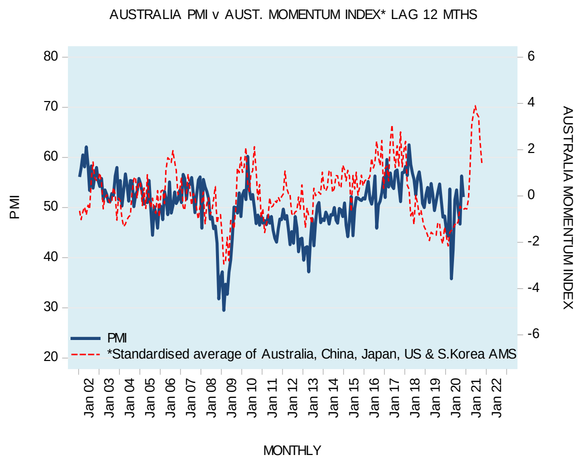


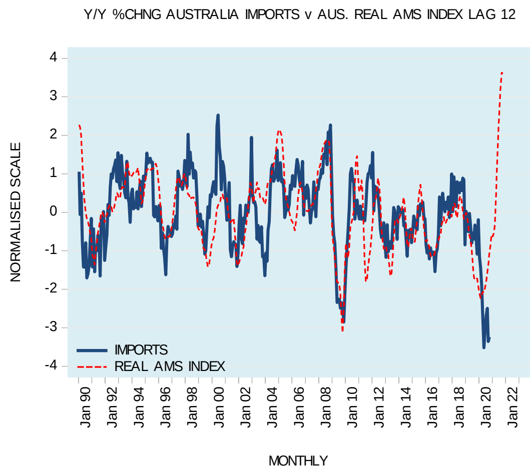

Note that Chinese domestic AMS growth does not have the same topping pattern (yet) as that of most other economies that trade with China and generate demand for Chinese exports.

Thus in China we see two opposing forces. On the one hand the domestic monetary stimulus is supportive for most of the first half of 2021 whereas the international monetary trends begin to lose momentum by the end of the first quarter of the year.

**Australia**

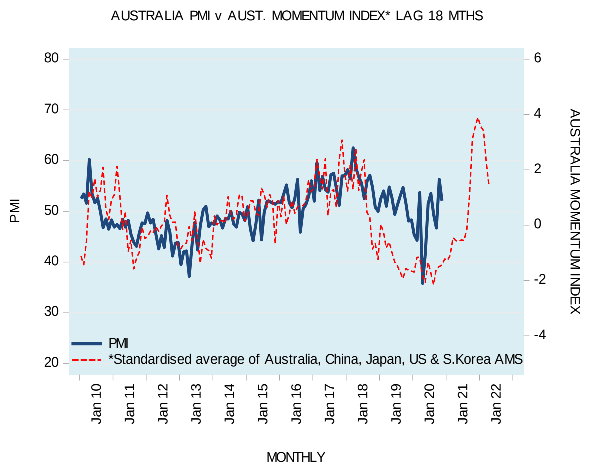
Given the linkages that Australia faces with the rest of the global economy it is not surprising that its economy has followed roughly similar trajectories in terms of global monetary transmission lags.




Here we can see that, with lags of around a year between composite AMS growth and the Australian economy, the first half of 2021 seems to be extremely well supported.

If we examine the possibility of more extended lags as we have done with the other economies, however, then this recovery is extended until the second half of 2021. Both lags are indicating an improvement in 2021 especially when compared to 2020.




Looking at imports we see that transmission lags have been relatively stable at around a year.

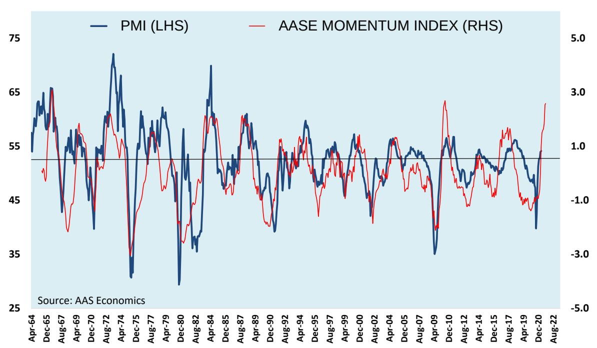
This relationship implies a very significant – indeed dramatic – increase in import growth in Australia over much of the coming year. Note that unlike the situation evident in other major economies there is no sign yet of domestic Australian AMS growth – which is massively higher than at any time in recent economic history – reaching a peak. So the domestic monetary machine is still running at breakneck speed (33.6% p.a. growth).

In other words, for Australia it's "all go" from here and lagged AMS growth has done a good job in predicting movements in the Australian PMI. The biggest risk is the external economy.

**World PMI Composite**

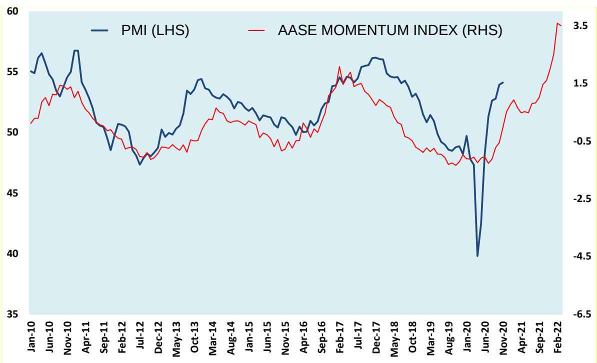
When we combine (average) the PMI models for the US, Japan, Eurozone and China using the previously optimal time lags between money supply changes and economic changes the outlook appears as below:

WORLD PMI v. AASE MOMENTUM INDEX




However if we just look at the most recent decade and use the most recent extended lags then the picture looks a little different.

WORLD PMI v. AASE MOMENTUM INDEX RECENT LAGS




The scenario is still for monetary factors driving recovery.

We should caveat this analysis by noting that not all countries covered in this World composite have AMS lags out to 2022.

**Inflation**

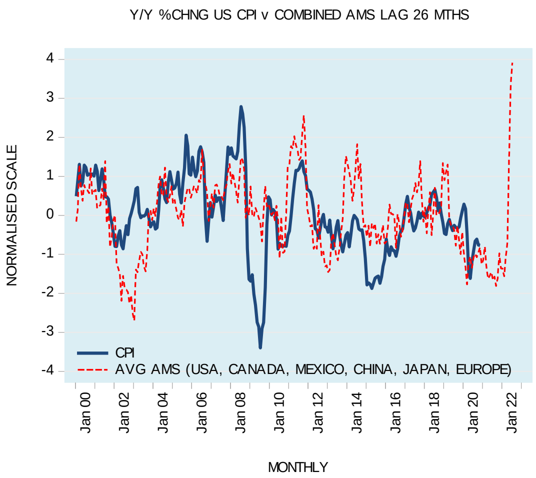
The link between money supply growth and inflation has been debated over decades. There are many issues associated with this discussion, including the core drivers as well as the utility of the basket measures used to measure price changes in heterogeneous collections of goods and services.

From an Austrian perspective inflation is an increase in the money supply, whether or not this is captured by price indices.

From a price index perspective, however, fluctuations in AMS can nonetheless provide insights into the likely future direction of such indices. As background, it should be noted that the current rate of growth of AMS in the US economy is the highest since data have been available (2015) and thus is likely to be higher than at any time in the history of the Federal Reserve system.

Y/Y %CHNG US MONEY SUPPLY (AMS)


Below is the situation with respect to the relationship between a composite of AMS changes incorporating the US and its major trading partners (reflecting imported consumer goods), on the one hand, and changes in the US CPI, on the other:




What we see from the analysis is significant upward pressure on US CPI inflation beginning in late 2021. In the past we have seen that the turning points, but not always the magnitude, of these lagged AMS changes have generally been pretty close to those of the CPI. When we look out to 2022 we see upward pressure on the CPI developing and, despite the caveat as to magnitude, this pressure looks to be significantly greater than at any time over the last 20 years.

More interestingly, this seems to be coinciding with the impact of the longer lags in our PMI and imports scenarios, which are also pointing to possible inflexion points in 2022.

Clearly our monetary analysis is pointing to the possibility of some significant and potentially challenging economic events unfolding in 2022 and if so there could be some quite meaningful impact on financial markets. We shall be monitoring these trends closely over coming months.

**Summary**

Some interesting features are emerging in the dynamic between movements in money supply and subsequent changes in economic variables – in this case PMI and import growth.

Overall we have seen that changes in our monetary variable AMS have been good predictors of changes in PMIs and import growth – both good proxies for the business cycle.

For most of the major economies reviewed here, and over both longer term and more recent monetary transmission lags, the outlook for PMIs and import growth is positive for the first several months of 2021.

If we focus more on the longer term lags that may have become more dominant since the 2008 crisis we see that the US economy becomes an outlier. The lagged monetary cycles are indicating a scenario that the US economy grows relatively more slowly for most of 2021 with a growth pickup only towards year-end while the other economies grow quite strongly in the second half of the year.

What is concerning is that the growth rate of AMS appears to have peaked in all of the major economies bar China, which means that a lagged cycle top could be emerging.

Looking at the outlook for US inflation (which is likely to drive Fed decisions on monetary policy) it appears that there are significant money-induced inflationary pressure in store from the middle of 2022. Although it may be a little early to settle on this conclusion, the spectre of stagflation comes to mind, a most unwelcome situation that many players in the markets have never dealt with before.

The monetary dynamics facing the Australian economy are extremely favourable from a cyclical perspective and, subject to the overall global context outlined above, the economic prognosis is for improving economic growth. The scale of the recent monetary pumping, however, as with all episodes of such intervention, will extend significant asset bubbles (we have discussed the outlook for Australian property in previous editions) which significantly increases the vulnerability of the Australian economy should global stagflation materialise.