Inflation Series Part 4: Cyclical inflation

Introduction

This is the 4th instalment of our series on assessing inflation. In the previous edition the concept of structural inflation was analysed. In this segment, the attention turns to cyclical inflation. As done previously, we will suggest some cyclical indicators of inflation that we believe are important to look at in order to assess inflation over the business cycle.

Cyclical inflation: what is it and why it matters

Cyclical inflation, unlike structural inflation, is influenced by factors that correspond to the business cycle. This makes cyclical inflation shorter term and less prone to trending behaviour. Cyclical indicators usually also respond quicker to changing business conditions over the cycle. They are therefore likely to be associated with current demand activity, particularly consumer spending rather than supply side factors which are usually slower changing. The greater correspondence with demand activity is particularly useful as this can provide adequate warning before inflation emerges over the cycle.

As with the structural indicators in the previous instalment, we limit the set of cyclical signals here by testing a sufficiently broad set of indicators. There are usually more indicators available to signal cyclical inflation and therefore the list in table 4.1 below, is more extensive. Whichever ones are selected, they should possess similar core attributes: they should move in accordance to the business cycle, respond quicker to changed conditions and be transitory in impact.

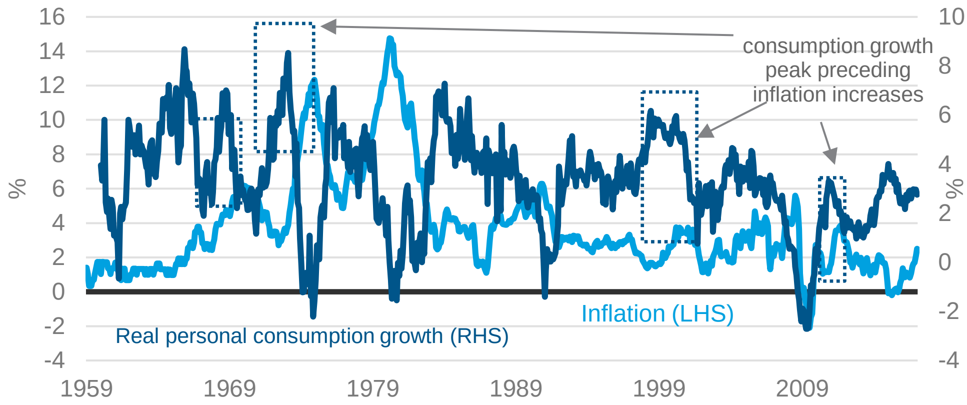
While it is useful to distinguish between cyclical and structural inflationary pressures, there is also another reason to be aware of the degree of cyclical inflation. This is because the factors that influence cyclical inflation could escalate to such a high threshold that they affect the long term demand trends of the economy. This will likely lead to changes in long term net demand and hence impact structural inflation. (Remember in Part 3, any significant change to the long term balance of demand and supply can cause structural inflation to change.)

Indicators of cyclical inflation

We settled on three cyclical indicators as our primary guiding signals. However to be prudent, we suggest monitoring the other ones on our expanded list in Table 4.1 as well, to affirm the findings of the recommended signals or as a point of feedback to enable further analysis or testing.

Given that inflation is associated with consumer spending, a natural starting point is to parse through consumption related indicators. One of our preferred measures after extensive testing is the volume of personal consumption reported monthly. As can be seen in Chart 4a its growth rate tends to be cyclical. More importantly, its movements especially key turning points, appear to precede similar phases for inflation. When comparing cyclical indicators with cyclical inflation it can be difficult to detect the pattern on charts alone because it is only the cyclical components (short term peaks and troughs) that correspond. That is why additional testing with quantitative methods such as econometric analysis can be helpful.

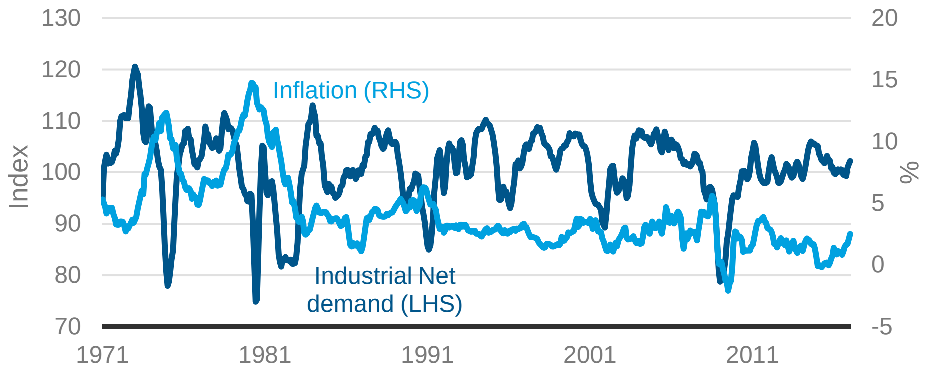
Chart 4a. Real personal consumption growth and cyclical inflation



Source: Thomson Reuters, Macquarie, June 2017

Our second cyclical indicator is based on the concept that inflation is ultimately a function of net demand imbalances. The indicator chosen measures the extent of demand in excess of supply by combining new orders (demand) with the utilisation rate of industrial capacity (supply, see Chart 4b). Although capacity available, being a supply factor, will tend to change slowly, the degree of how it is utilised reacts more in line with the business cycle. We believe this net measure will provide a more effective signal than the individual gross constituents alone. For example, rising new orders might not raise net demand sufficiently to impact inflation if industrial utilisation is low. Conversely even below average rates of new orders could push up cyclical inflation if production capacity is already heavily used in the short term.

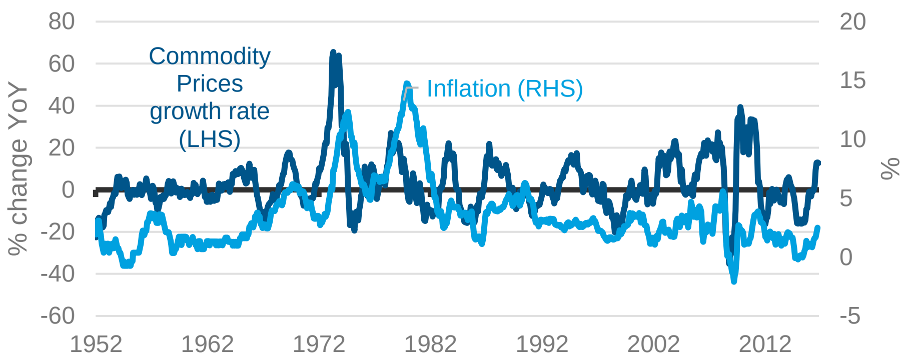
Chart 4b. Industrial net demand and cyclical inflation



Source: Thomson Reuters, Macquarie, June 2017

Our final cyclical indicator is global commodity prices. In the previous instalment of our series, we discussed how sudden sharp changes in the supply of these indicators tend to affect inflation structurally. On the other hand, cyclical movements tend to be more gradual and reflect the natural balance between normal demand and supply forces. Our selected cyclical indicator, commodity prices, was found to be highly informative in guiding our assessment of cyclical inflation (see Chart 4c). Our preferred measure is the CRB's[1] composite index of world commodity spot prices.

Chart 4c. Global commodity price growth and cyclical inflation



Source: Thomson Reuters, June 2017

1 Commodity Research Bureau http://www.crbtrader.com/

Table 4.1 Suggested list of cyclical Inflation Indicators

Demand side	Supply side
Real consumption growth Consumer credit growth Retail sales Consumer durable goods orders Business surveys e.g. ISM prices Consumer confidence surveys	**Global commodity price growth** Labour Force indicators — Hourly wage growth — Employment growth
Net Demand	
Net industrial demand **(**Industrial new orders combined with Industrial utilisation rate**)**	

Conclusion

As we have done with structural indicators we have combined these indicators into a composite cyclical inflation indicator – in our case combining real personal consumption, net industrial demand and global commodity prices. Obviously a weighting system had to be designed. This cyclical inflation indicator also has a place in our inflation scorecard.

Further readings

With the preceding discussion completed, you can now read more on how we apply this framework to guide our investment process. But before that, we need to address some concerns that tend to be raised whenever a discussion on assessing inflation arises. This will be in Part 5 of our inflation series.

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