

MULTI-ASSET SPOTLIGHT

BNPP AM – Multi Asset, Quantitative and Solutions (MAQS)

By **Guillermo Felices**, Head of Research and Strategy, MAQS | **Colin Harte**, Head of Research, MAQS | **Richard Barwell**, Senior Economist, Macro Research |

A ROAD MAP FOR NAVIGATING PROTECTIONISM: THE ELEVATOR AND THE STAIRCASE

- Financial markets have experienced another bout of volatility, this time related to an escalation in protectionism involving the US and China. An escalation of such tensions towards a full-blown trade war would be very damaging for global growth and certainly for global financial markets. We therefore describe two risk scenarios associated with such an escalation and present a road map to navigate them.
- Globalisation – the increasingly free movement of goods, services, labour and capital – has been a key driver of increased prosperity around the world. However, not all have benefited from this process and some governments, notably that of the US, have started to address trade imbalances as a way to support their dissatisfied electorates.
- A significant reversal in the globalisation pendulum would be very damaging for global growth and for financial markets. But it is still unclear how far back the pendulum will swing as there are institutional hurdles – such as the US Congress, the World Trade Organization (WTO) and financial markets themselves – that may slow down, limit or even stop the current initiatives by the Trump Administration.
- We envisage two possible escalation scenarios. The first is a multilateral trade war, between the United States and the rest of the world. The second is a bilateral trade conflict, between the United States and China. In both cases we envisage a prolonged period of tension. Crucially, we still see the risks of full-blown trade wars as low probability-high impact scenarios.
- What is important for investors is how to navigate an escalation or de-escalation of those risk scenarios. For instance, these situations could escalate rapidly leading to sudden market moves as investors quickly reassess the probability of a trade war. Alternatively, the risks could escalate in steps, for example, if markets perceive that trade tensions may lead to tit-for-tat retaliation. We therefore provide certain signposts that should help investors assess potential shifts in markets as protectionism evolves.
- We also delineate the likely economic impact of trade wars. The combination of tariffs and quotas and the reversal of the globalisation of production and supply chains would likely lead to higher prices, lower productivity, and ultimately lower output. We also examine the likely response of central banks including how they view possible second-round- effects such as workers pushing for higher wages and higher inflation expectations.
- We also gauge the asset price implications of trade wars. We look at financial markets' responses to oil shocks (used as proxies for supply shocks) as well as recent episodes of protectionist escalation. We conclude that equities are the asset class at most risk. The performance of other asset classes is usually mixed, suggesting that the macroeconomic and policy backdrops matter in terms of shaping markets' responses.
- As for strategy, we are not altering our base case scenario of strong growth and contained inflation. But while we may believe that the probability of full-blown trade wars is still low (below 10%), we do expect further outbreaks of protectionist tension as the globalisation pendulum continues to oscillate back and forth, and that makes the trading environment riskier. With higher uncertainty or 'fatter tails', market volatility and risk premia should move higher. If the trade war scenarios remain at a low probability, it makes sense to hedge portfolios against them with assets that do well in risk-off situations but that do not underperform if these risks fail to materialise.



BNP PARIBAS
ASSET MANAGEMENT

The asset manager
for a changing
world

TRADE WARS

WHAT THE ISSUE IS AND WHY IT MATTERS

The decision by the Trump Administration to impose tariffs on US imports of steel and aluminium has unsettled politicians, commentators, investors and financial markets – and with good reason. It could be the opening salvo in what turns out to be full-blown trade war. Globalisation – by which we mean the increasingly free movement of goods, services, labour and capital across borders – has been one of the defining features of recent decades and is widely believed to be a key driver of greater prosperity around the globe. National borders have become more porous and the barriers which once prevented the efficient allocation of resources across countries have fallen. The impact on production has been profound. Companies are better able to source labour, outsource production, locate suppliers and service customers across borders. Global value chains have emerged with the production, distribution and post-sale support of goods and services spanning multiple sites in multiple countries. In simple terms, a trade war threatens to throw this entire process into reverse, unwinding the hard won gains in efficiency that globalisation facilitated. Costs and prices will rise and productivity, profitability and prosperity will fall. The impact on financial markets will likely be equally profound.

Although we naturally tend to think about trade wars in terms of the imposition of tariffs on traded goods of the kind announced by the Trump Administration on aluminium and steel, a full-blown trade war could also involve quantity-based restrictions on trade, including imposing barriers on limits, as well as broader protectionist policies covering financial flows, such as influencing the cross-border investment decisions of domestic private and public-sector institutions or ruling against cross-border mergers. In particular, we do not – in the event a severe trade war instigated by the Trump Administration – view as sacrosanct or secure the US dollar's status in general, and US government debt's status in particular, as the world's FX reserve of choice and pre-eminent safe asset. After all, America's strong dollar policy was always about maintaining the US government's artificially low cost of servicing debt and it would be naïve to assume that other countries will not use all the levers at their disposal to punish the United States into a full-blown trade war. Our point is simply that trade wars can be about a lot more than just increases in tariffs – and hence even more worrisome.

There are of course a wide range of alternative visualisations of a trade war, which vary not only in terms of probability and severity but also in terms of which parties are involved, the dimensions along which tensions escalate and how persistent the disruptions to trade and transactions may become. In this note we deliberately focus on a couple of tail scenarios that capture two realisations of a severe trade war: one multilateral and one bilateral. Both should be considered highly unlikely to occur, but both would have a significant macroeconomic and market impact if they did occur.

The rest of this note is organised as follows: first, we discuss the ongoing reversal in globalisation in order to answer the fundamental challenge: how could a significant trade war possibly break out if it is crystal clear that it is a lose-lose proposition?; second, we outline the basic narrative of our two tail scenarios and how we consider our base case view; third, we introduce a road-map for navigating these tail risk scenarios that suggests we can adjust portfolios in real-time in response to news; fourth, we discuss the macroeconomic consequences of a severe trade war, focusing in particular on the critical response of central banks to the shock; fifth, we discuss the asset price and portfolio implications of severe trade wars.

WHY IS THE PENDULUM OF GLOBALISATION SWINGING BACK?

HOW WE END UP IN LOSE-LOSE SCENARIOS

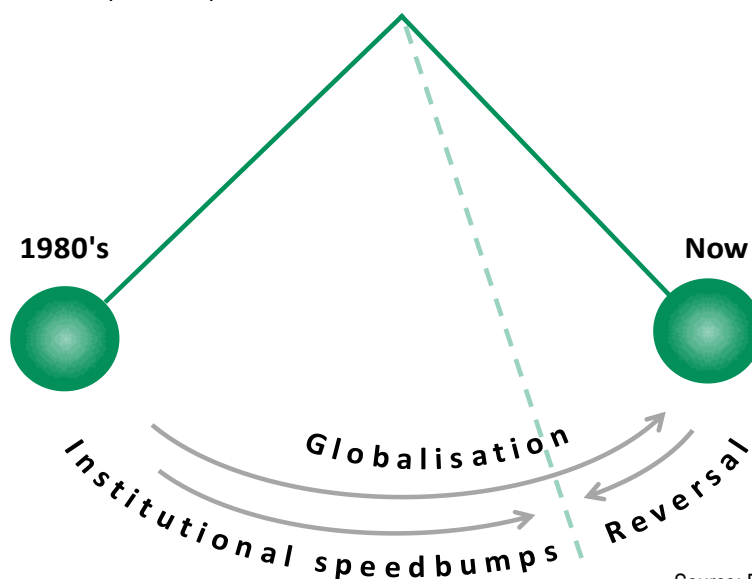
There is a broad and deep consensus among almost all policymakers and government officials that trade wars are destructive and should be avoided, which helps to explain why trade deals and not trade wars are the norm. We therefore need to provide a rational explanation for how a severe trade war scenario could crystallise if it is so clear that it is a lose-lose proposition.

Although economists are by and large convinced that globalisation is a good thing, it is also clear that a significant fraction of the population disagrees. Many people feel that they have not benefited from globalisation. In part, that reflects the fact that workers do not always associate the improvement in their cost of living from cheap imported goods with globalisation, but it also inevitably reflects the fact that some workers in developed economies have lost out as a consequence of globalisation. Indeed, there is compelling evidence that the negative impact of globalisation (specifically, increased trade with China) on a subset of the US workforce played a pivotal role in determining the outcome of the 2016 US presidential election. In the end, it makes little difference whether overseas workers with similar skills to you start searching for work in your local labour market, or those workers remain overseas but the output they produce can be more easily exported and sold in your local product markets or your employer relocates overseas to take advantage of a plentiful supply of cheap labour. Immigration, trade and outsourcing are just different faces of the same globalisation phenomenon that can leave some workers in the advanced economies worse off.

It is precisely the rise in social discontent that has led to the threat of protectionism. Social discontent is being reflected in political outcomes in the developed world and in particular in the rise of populism. To the extent that policymakers and political leaders address these issues with trade protectionism, then the globalisation process that has accelerated via, among other things, advances in

information technology (IT) since the 1980s could start swinging in reverse (Figure 1). Indeed, the election of President Trump is the catalyst that helps explain how a trade war could start. Trump has held a broadly constant and negative view for several decades now on the impact of international trade on the United States, which makes him probably the only major figure on the global stage who does not share the global consensus that trade wars are damaging (“When a country (USA) is losing many billions of dollars on trade with virtually every country it does business with, trade wars are good, and easy to win. Example, when we are down USD 100 billion with a certain country and they get cute, don’t trade anymore - we win big. It’s easy!”). It is therefore no great surprise that Trump has instigated a trade dispute. But for a trade war to escalate we need to explain how all the key economic players respond now that he has lit the fuse, and why the path of escalation rather than of de-escalation is pursued.

Figure 1 - Globalisation pendulum: reversal has started but should be limited by institutional speedbumps



Source: BNPP AM

The key policymaker to understand remains President Trump. He may be the instigator-in-chief of the trade war and he may be the policymaker most inclined to escalation. However, it is also true that, up to this point, President Trump has not followed through on his long-standing views on world trade, which suggests that up until now he believed, or had been persuaded, that the private (President Trump’s assessment) costs of a trade war would exceed the private benefits (or perhaps that it just takes time to implement this pivot to protectionism). We need to understand this private cost/benefit analysis and how it might change through time if we want to predict the actions of the players involved. In other words, we need to understand his motivations but also the constraints that he is likely to face, as these determine the costs he would face were he to provoke a trade war.

The costs to Trump might come in the form of lack of progress on other aspects of his domestic policy agenda, which would be much harder to implement if he starts a trade war, thanks to a loss of support on Capitol Hill or among the business community (similar points could be made about his international policy agenda – for example, resolving tensions with North Korea – and loss of support from leading world figures). It follows that the more of that policy agenda that is delivered, or becomes unachievable for other reasons, the smaller the perceived costs of launching a trade war. If, for example, the Republicans lose control of Congress in the mid-terms and if President Trump’s approval ratings fall such that he perceives his chances of re-election are remote, then Trump may conclude he has little left to lose by acting on his long-standing beliefs on trade.

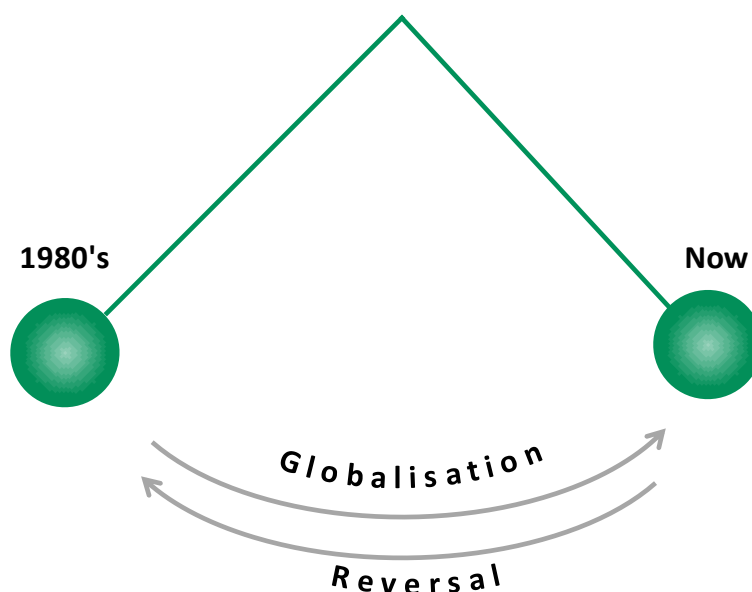
Trump could change his mind about the benefits of a trade war as events unfold. We are sceptical that domestic politicians will have much influence on the president. Indeed, once the retaliation from other countries begins, it may become increasingly difficult for politicians to attack the president for fear of being accused of being unpatriotic. This concern is likely to be uppermost in the minds of all of the House of Representatives and a third of the Senate, given that they are up for election later this year. Business leaders may be circumspect in their criticism for similar reasons. The opinion of the general public may have more traction, as rising prices squeeze disposable incomes. However, that increase in prices is an inevitable by-product of Trump’s *Make America Great Again* agenda: if you want to wean the American consumer off cheap imports and encourage domestic production then the price of those imports has to go up. In any case, it is perfectly possible that a significant fraction of Trump’s base may approve of the trade war. Trump is probably most sensitive to the financial markets themselves – that is, he is probably most likely to be persuaded to de-escalate if his actions precipitate a sharp downturn in the stock market, although even here he may choose to blame other countries rather than reverse

course. Finally, evidence that other countries are responding in kind to his policies by escalating tensions rather than capitulating might lead Trump to revise his belief that (threatening) a trade war is the best way to negotiate a better trade deal.

The behaviour of policymakers in the rest of the world is probably easier to explain. The objective of the key decision makers in Europe and Japan will be to discourage the US Administration from pursuing this path. That will require a carefully calibrated response which inflicts sufficient economic pain on the United States to prompt influential figures in there to put pressure on the president to change course without legitimising a retaliatory escalation by Trump.

Realistically, politicians in the rest of the world may also see little political advantage in standing up to Trump as it may increase the risk of escalation, whereas failure to retaliate might be punished by the electorate even if turning the other cheek might be the best way for politicians in the rest of the world to minimise the economic damage on their electorates. Moreover, the forward-looking politician may realise that this could be a recurring situation or, in academic jargon, a 'repeated game', and failure to retaliate against the US protectionist provocation now will be perceived as weakness by Trump and therefore invite further measures. Or framed in the terminology of game theory, you have an incentive to punish your opponent for bad behaviour today to teach him to play by the rules tomorrow when you are playing a repeated game.

Figure 2 - Globalisation pendulum reversal under trade wars



Source: BNPP AM

One final consideration to keep in mind in the case of a generalised trade war is the problems that policymakers will almost certainly face in orchestrating a coordinated response. Countries will be affected in different ways and to different degrees by any given protectionist measure announced by the United States. Moreover, politicians in different countries facing different circumstances and with differing degrees of leverage over the United States could view the cost/benefit analysis of appeasement versus aggression differently. However, a heterogeneous global response will not necessarily be met by a symmetrical US response, with further measures calibrated to punish countries according to the scale of their response. Instead, retaliation in whatever form by the rest of the world could lead to further indiscriminate counter measures.

The response of the Chinese to a trade war is harder to calibrate, and is likely to depend on whether US policy is viewed as an indiscriminate move or measures specifically designed to target China. In the case of the former, the Chinese may be willing to follow the response of the other major economies. In the case of the latter view, China will have to calibrate the response herself. It is not implausible that China could attempt to defuse the situation by announcing a modest response. Of course, one advantage the Chinese have in the bilateral trade war scenario is that it is much easier for both parties to navigate towards a rational outcome.

Although an appeasement strategy might make sense for China in the short run, we are far from convinced that President Xi will be willing to follow this course in the long run. He is now in a very secure position and his long-term vision is for China to be second to no-one on the world stage. The Chinese will surely understand the thought process which motivates the US strategy (fear of Chinese hegemony) and that raises at the very least a question about whether President Xi will view appeasement as a rational strategy in a repeated game with the United States. The Chinese may instead conclude that a well-targeted response could force the US president to change course.

TWO TAIL SCENARIOS

MULTILATERAL AND BILATERAL TRADE WARS ARE RISKS AND TRADE TENSIONS THE NEW NORMAL

We have two stylised tail risk trade war scenarios in mind. Both should be thought of as low probability-high severity variants of a trade war with different narratives. The first is a classical multilateral trade war, between the United States and the rest of the world. The second is essentially a bilateral affair, between the United States and China. In both cases we envisage a prolonged period of tension. A temporary trade war could still influence the economy and financial markets but companies may be far more willing to ride out the short term pain in the form of margin compression without making major adjustments to their production process or pricing strategy. A permanent pivot towards protectionism will prove, and will be perceived to be, far more economically destructive and therefore have a far more profound impact on markets (Figure 2).

The broad contours of the multilateral trade war are clear, with the initial US intervention on steel and aluminum and the obfuscation on exemptions leading to a concerted and coordinated response by America's major trading partners. The Trump administration views that retaliation as a provocation and escalates tensions with a further series of counter-measures. Neither side is willing or able to back down, leading to a tit-for-tat increase in tariffs and other protectionist measures.

The key moment in the multilateral trade war is probably the point at which the United States is taken to the World Trade Organization (WTO). The judgement is not what matters here (in reality, the process of reaching a conclusion is likely to take months if not years); it is the immediate US response. Trump has threatened before to withdraw from the WTO in this eventuality. If that were to happen in this scenario then it would mark a sudden and significant escalation of the trade war, with the US effectively opting out from a key pillar of the international economic order, and that is likely to prompt a further coordinated response by the rest of the world.

The narrative of the bilateral trade war is likely somewhat different. The motivation for the protectionist measures lies in part in national security concerns within certain policy circles in the United States and in part in a desire to coerce China into opening up its markets to US exports. The immediate catalyst for the confrontation is the US Treasury Department's investigation into the use and abuse of American intellectual property within China, and the resulting announcement of tariffs on USD 60 billion of Chinese exports to the United States.

China has already responded by announcing tariffs on USD 3 billion worth of US imports, including 15% tariffs on US fresh/dried fruits, nuts, wine, American ginseng, and a 25% tariff on pork and processed agricultural products. However, this response seems more tailored to the aluminium and steel tariffs than the China-specific measures announced by the Trump administration. More could follow.

Once again, a retaliatory tit-for-tat cycle can all too easily begin – only this time between the world's two largest economies. We suspect that these retaliatory measures could quickly spread beyond tariffs. China, for example, might consider adjusting the denomination of its war-chest of FX reserves to fire a warning shot across the bows, even if doing so would carry a financial cost. Unfortunately, an economic confrontation between the world's two super powers is likely to have wider geopolitical ramifications, which could weigh on both market sentiment and risk premiums.

As far as the rest of the developed world is concerned, the bilateral trade war may look more appealing than the multilateral scenario. However, while Europe and Japan may be bystanders where the direct effect of protectionist measures are concerned, they will still suffer in the cross-fire as asset price, activity and goods prices respond. For example, consider Japan: first, a non-trivial proportion of Japanese exports to China represent intermediate inputs in the production of goods that are ultimately (re-)exported to the United States and the demand for those Japanese exports will therefore be indirectly impacted by tariffs on Chinese imports; and second, the yen may well appreciate sharply on a risk-off move in this scenario.

In both cases – the multilateral and bilateral trade wars – we envisage an escalation of tensions leading to further punitive measures as the lose-lose scenario plays out. But to repeat, we view the severe manifestations of both the multilateral and bilateral trade war scenarios as highly unlikely. That is not to say that we believe that a return to the *status quo ante* of zero trade tensions and further globalisation is the most likely scenario.

Both the Brexit referendum result and the 2016 US Presidential election underline that a significant fraction of the population no longer believes that the current economic model works for them and we expect people to continue to vote that way at the ballot box. For the moment at least, we might be past peak globalisation and the pendulum will swing back from unfettered movement of goods, services, labour and capital towards some level of protectionism. Further political convulsions and trade tensions seem probable.

A ROAD MAP FOR NAVIGATING THE SCENARIOS

THE ELEVATOR AND THE STAIRCASE

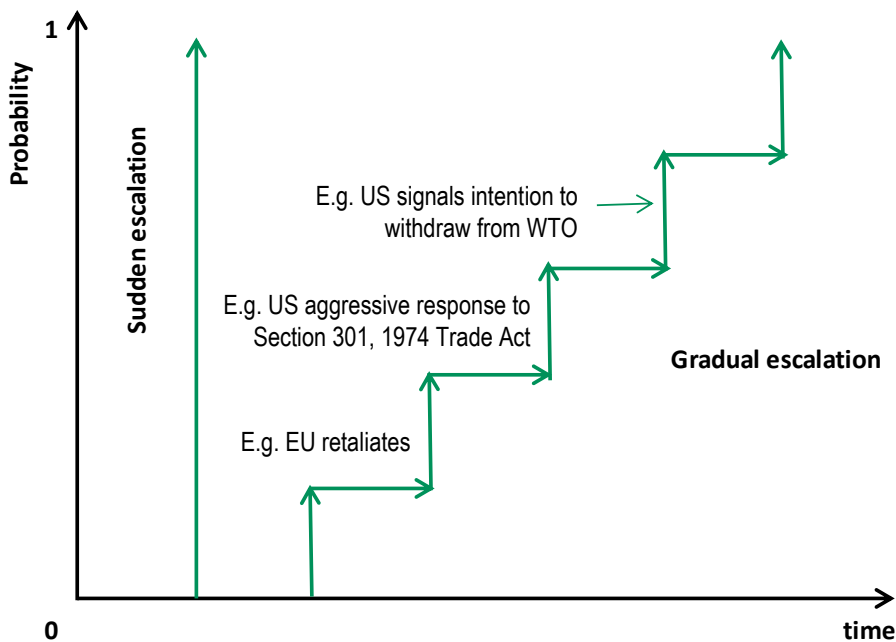
We have outlined two alternative narratives for a severe trade war scenario: one multilateral and one bilateral. Both should be considered tail risks - that is, high impact but low probability events. If either risk were to crystallise we would expect to see a marked correction in asset prices and a radically different set of returns on positions to the one we expect in our base case scenario. But just because you can identify a new high impact/low probability tail risk on the horizon it does not necessarily follow that you should immediately adjust your portfolio so that it would perform better in that scenario. In order to understand whether, when and how to adjust portfolios, we need more information and in particular we need to think hard about the road map for the scenarios.

The starting point in this discussion is the stylised cost/benefit analysis of any potential hedge – that is, a static comparison of returns in the two states of the world – the good state (in our case, no trade war) and the bad state (a trade war) – weighted by the perceived probabilities of the two states, which informs the required adjustment in portfolios. This static calculation implicitly makes a number of simplifying assumptions about how a trade war evolves: that there is a sudden and discrete shift between the states (so once the trade war breaks out, there is an immediate correction of asset prices to the new equilibrium) and that adjustment could happen in the near future. Under these assumptions there is no opportunity to take corrective action once the trade war has broken out, it is too late. Either you adjust now, or you don't.

These assumptions may not be realistic. It is true that asset prices can sometimes jump, with the investment community rapidly revising its view and prices to reflect a completely different scenario. But markets can also adjust gradually, incrementally responding to news. In the latter case, investors are not forced to take a 'once and for all' decision on portfolios; there is an opportunity to take corrective actions as time passes and prices and beliefs adjust as more information arrives.

Decisions on portfolio construction therefore hinge on how we believe a severe trade war scenario would play out, and in particular how asset prices arrive at the end point that reflects the bad state – will they travel in an elevator and make the full adjustment in one straight jump, or will they take a staircase, and adjust in a series of steps? (Figure 3)

Figure 3 - Probability of trade wars can evolve in different ways: elevator versus staircase



Source: BNPP AM

We believe that the latter is the more realistic description of the way that most tail scenarios play out. We note that, for example, there was more than a year between the outbreak of the Global Financial Crisis in summer 2007 and the denouement in autumn 2008, and there were several episodes of relief in the interim before the final collapse in asset prices. In the case of our trade war scenarios, we believe that the staircase scenario is particularly plausible, since a number of obvious escalation points (or steps on the staircase) suggest themselves:

- Economic policy, like most government decisions, is subject to **implementation lags**, which means that there is a time lag between the date on which the policy measure is first discussed in public and the date on which it is eventually implemented, which transforms a single event (e.g. US government imposes tariffs) into a sequence of related pieces of news which speak to the likelihood of that event occurring (in our terminology, transforming one large jump in asset prices into a set of steps). This argument is particularly compelling when one of the key policymakers in this scenario communicates directly to investors using messages 140 characters long before there is full clarity on the decisions that his administration will take
- A trade war will tend to evolve through a series of tit-for-tat escalations in terms of the size and scope of tariffs that either side introduces, rather than both sides simultaneously implementing peak tariffs on the maximum range of products at one point in time
- At some point one party (most likely the Europeans) is likely to take the dispute to the World Trade Organization (WTO) at which point the US administration may – again with a lag – threaten to withdrawal from the WTO in response
- Finally, the evidence that the trade war is having a negative impact on markets and the macroeconomy will gradually emerge over time, thus presenting a series of opportunities for both sides to reconsider their strategy and de-escalate. Should both sides choose not to do so on every occasion – which is what is assumed in our tail scenarios – then we have a further set of signposts that the probability of a severe trade war is playing out, and hence cause for asset prices to adjust further towards the end state.

A keen understanding of these and other potential escalation points can guide portfolio construction. There is no immediate need to adjust portfolios to a fully defensive strategy if there is time to correct one's course as events play out. Indeed, we do not expect these severe tail risk scenarios to play out. Instead, we think it more likely that a combination of a clear understanding of the benefits of trade, on one side, and institutional constraints and market discipline on the other will temper the desire for further escalation. In other words, at some point we expect the probability of a severe scenario to fall back; asset prices should then step down and there might at that point be an opportunity to take more risk.

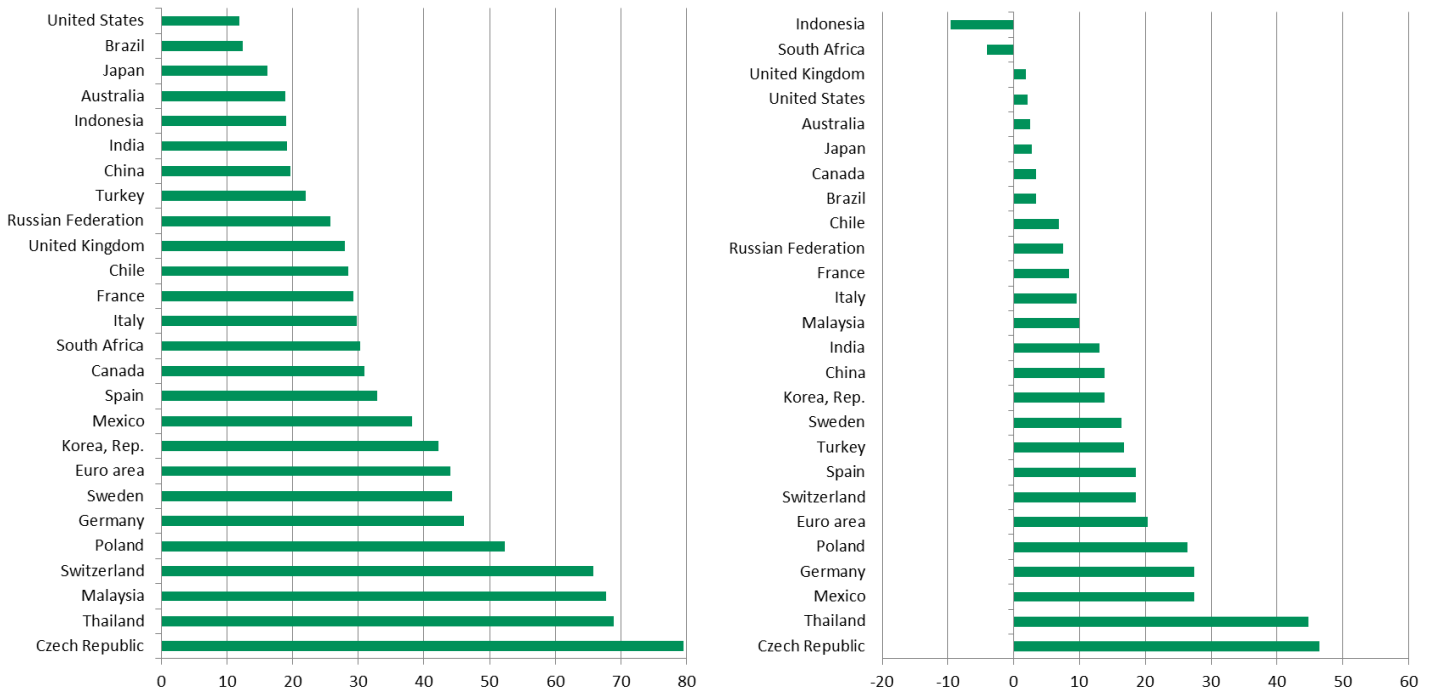
MACROECONOMIC IMPLICATIONS

HIGHER PRICES AND LOWER PRODUCTIVITY

There are very few examples of severe and sustained trade wars in recent history to inform our calibration of the tail scenarios we are considering. However, we believe that the broad contours of the macroeconomic consequences are reasonably clear. We model these trade wars as disruptive cost shocks, such that a combination of tariffs and quotas permanently raises the price of traded goods and services and leads to an inefficient reversal of the globalisation of production and supply chains that has occurred over recent decades. The end result is higher prices, lower productivity, and ultimately lower output.

The reversal of globalisation would naturally impact most heavily upon the countries that have been benefiting the most from it in the recent decades. This is the case of small open emerging market (EM) economies, where corporates established their production plants to take advantage of low labour costs while applying their managerial know-how. Figure 4 shows the countries whose exports/GDP ratios are the largest (i.e. the most exposed to reversals in globalisation) as well as the change in the ratio since 1980.

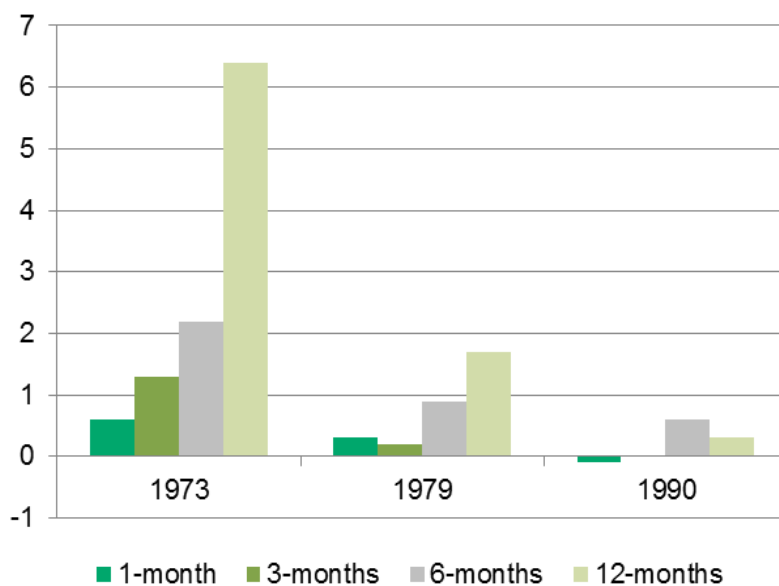
Figure 4 - Countries whose exports/GDP ratios are the largest, i.e. the most exposed to reversals in globalisation (lhs) as well as the change in the ratio since 1980 (rhs)



Source : World Bank. BNPP AM as of Dec 2016

As always with economics, the macroeconomic implications of the trade war will reflect the interaction of demand and supply. The news on supply will reflect the immediate impact of the erection of trade barriers, which raise the cost of final output, and the more pervasive impact of the impairment of productivity that follows from the disruption to global value chains at the macroeconomic level and the production process at the microeconomic level. Demand could also weaken as the trade war breaks out, given the knock to consumer and business confidence and concomitant increase in uncertainty, and should then respond to the news on productivity and prices (Figure 5).

Figure 5 – Change in inflation after oil shocks (pp)



Source: Bloomberg, BNPP AM, as of March 2018

As always, the response of central banks – and the extent to which they support or suppress demand and employment as the scenario unfolds – will prove critical in determining whether the shock is primarily manifested through higher prices or through weaker activity and employment. We therefore use the central bank reaction function as the lens through which we examine the macroeconomic consequences of a trade war.

The central bank playbook is pretty clear on how policymakers should respond to negative cost shocks like a stylised trade war. The mantra is: accommodate the first round effects but lean against the second round effects by tightening policy. In simple terms that means allowing the initial tariff-induced increase in the price of traded goods to pass through into the price level but do not allow other prices to respond. If central banks choose not to do the former then they would have to force domestic costs and prices lower to compensate for the tariff-induced increase in the price of tradeables. If central banks choose not to do the latter they potentially risk a more sustained increase in inflation.

The second round effects through which a trade war could lead to persistently higher inflation come in various forms.

- *Real wage resistance*: workers push for higher wages in response to rising consumer prices to protect living standards, or are automatically entitled to them thanks to indexation clauses. Structural changes in the labour market have tended to reduce the extent of real wage resistance over recent decades.
- *Protectionism is inefficient*: production becomes less efficient as companies are compelled to scale back their consumption of more expensive imported inputs and reconfigure their production process towards the available local inputs, leading global value chains to start to unravel, all of which implies rising costs and prices until the central bank drives the level of aggregate demand down to the new level of supply, or it falls of its own accord.
- *Higher inflation expectations*: expectations of inflation are based on households' and companies' experiences so a sustained period of above-target inflation as the first round effects pass-through could dislodge expectations leading to a further round of cost, wage and price increases.

The behaviour of costs and prices may hinge on the state of the economy when the cost shock hits. One reason why the first oil shock in the 1970s might have had such a profound impact on inflation is that the global economy was operating above normal capacity levels at that time. Companies and workers may have felt more secure in pushing for higher prices (to defend profit margins and real wages) in response to the initial price shock on oil and energy-intensive products when the level of activity and employment were high. Alternatively, they were perhaps simply less able to discriminate between a) a one-off adjustment in relative prices to which they should not respond (the real price of oil) and b) a generalised increase in prices (higher inflation) to which they should respond when the inflation rate was already high.

These inflationary impulses may be mitigated to a greater or lesser extent by the disinflationary consequences of any slowdown in demand. Theory suggests that an increase in uncertainty will weigh on investment whenever spending is partially irreversible – intuitively it makes sense for companies to wait and see how the trade war plays out before deciding where and how to invest in capital goods and potentially jobs, too. Likewise, we might expect to see an increase in precautionary saving by households in the event of a severe shock to confidence and for the squeeze on disposable income to weigh on consumption. Set against that squeeze on disposable income is at least the option for the fiscal authority to spend the receipts from tariffs, either in the form of tax cuts or increased spending. The sharper the slowdown in demand the more muted the impact of the trade war on inflation, but by the same token, the more severe the outlook for output and employment.

It is difficult to draw definitive quantitative conclusions about the central bank response to a severe trade war scenario. However, we believe that some combination of factors – such as a) a willingness to accommodate the first round effects of the trade war; b) a desire to support demand in the event of a collapse of animal spirits; c) a willingness to err on the side of underestimating the inflationary second-round effects; and d) fear of the political push-back against a hawkish strategy – should lead central banks to choose the path of least resistance: higher prices are preferable to lower activity. In short, the market might have a lot of inflation news to digest, for the first time in several decades. In passing, we note that this would be outside the experience of many investors currently active in financial markets.

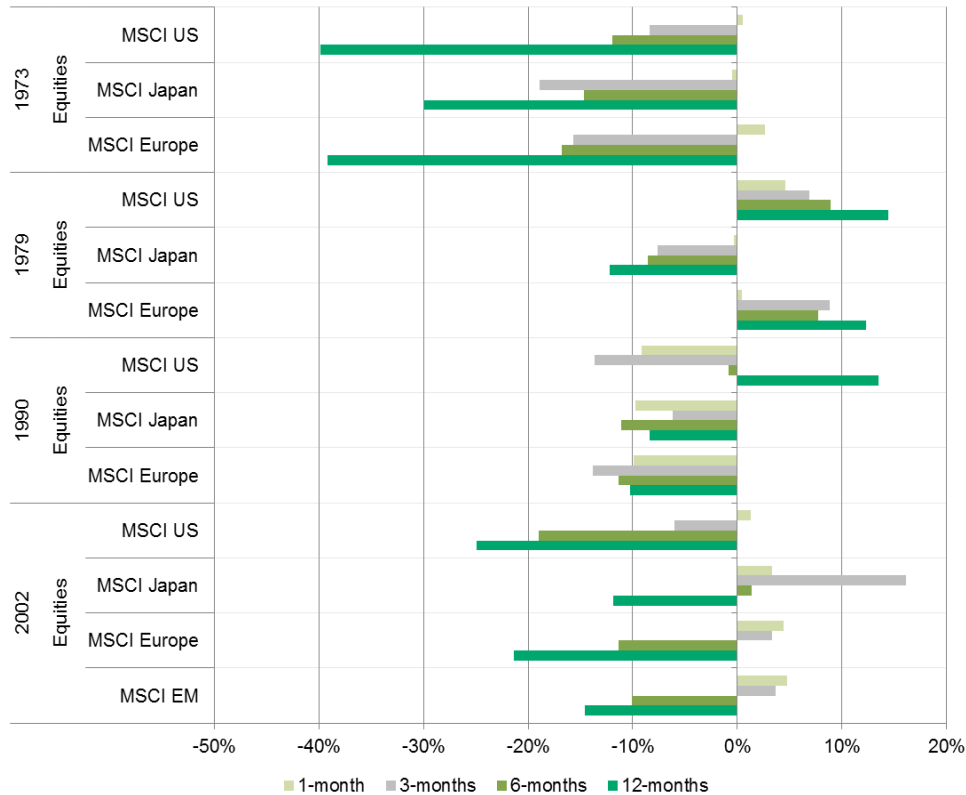
ASSET MARKET IMPLICATIONS

UNAMBIGUOUSLY BAD FOR EQUITIES

Despite the generalised move towards trade liberalisation since the 1980s, there have been a number of periods when major trading economies have temporarily introduced some form of tariff protection (both the Bush junior and Obama administrations introduced such measures and they backed down in the face of WTO objections). However, none of these mini tariff shocks constituted a general attack on the global trading regime which aimed to reduce both tariff and non-tariff barriers. The Reagan administration's tariff actions against Japan in the early 1980s should be viewed as a move to open up trade negotiations and push Japan towards active participation in the

Uruguay round. The Reagan administration was a strong advocate of free trade, whereas the Trump administration lacks this commitment to free trade and views trade in terms of either a zero-sum outcome or a strategic challenge. As such, policy actions by the Trump administration should be seen as major steps back from the liberal global trade regime that we currently operate in. However, the erosion of the dominance of the liberal trade regime is not a new phenomenon stemming from Trump’s election; it has been gradually evolving since the financial crisis of 2007-08. However, such action by the Trump administration can be seen as a significant escalation in the challenges to the liberal global trade regime and risks partially reversing some of the gains from trade from which all economies have benefited since the 1980s. Overall, the gains from trade have been positive for both bonds and equities in terms of boosting growth and reducing the inflation trade-off both within and across economies.

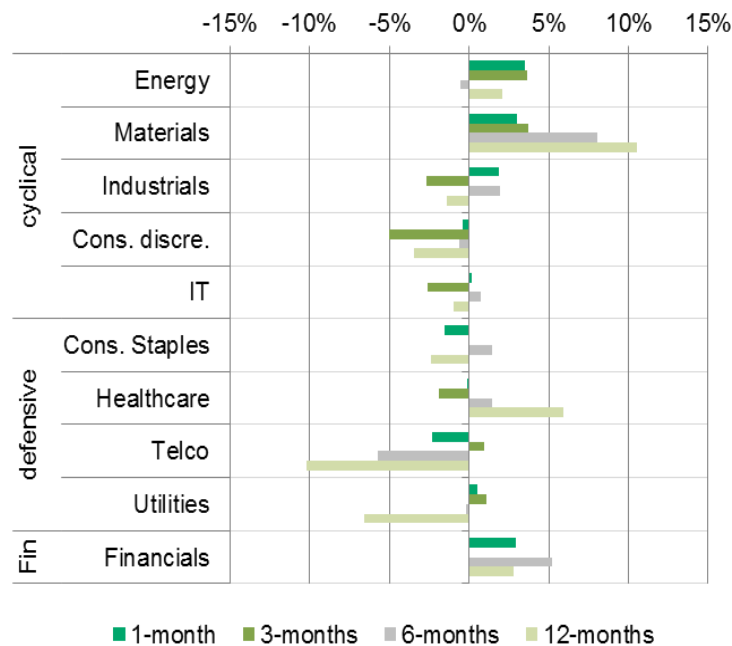
Figure 6 - Equity performance during oil shocks and protectionism routs



Source: Bloomberg, BNPP AM, as of March 2018

In terms of protectionist regime changes reversing liberal trade regimes we have few precedents upon which we can make direct observations, with the US imposition of tariffs in 1930 via the Smoot-Hawley Act being the most notable. Therefore, to obtain a wider analysis of the potential impact of trade wars on a range of assets, we have looked at the impact of oil shocks on asset prices too. The rationale for this analysis is that the imposition of tariff and quotas constitutes a supply shock which reduces global output and boosts price levels. Similarly, oil shocks also constitute supply shocks which hits global output while hiking the price level. The impact on asset classes of the various oil shocks, the Bush administration’s temporary imposition of tariffs and Trump’s election in 2016 are detailed in the data Appendix. However, what emerges from this analysis is the vulnerability of equities to such shocks over time (Figure 6), while the results for bonds are more ambiguous and depend on the reaction function of central banks. Indeed, defensive sectors such as telecommunications and utilities typically underperform during these shocks as markets expected the Federal Reserve to raise rates to contain inflation (Figure 7). The results for currencies are also dependent on the reaction functions of central banks. While the negative impact of such shocks varies over time from the Dow falling by 25% in the two weeks prior to the passing of the Smoot-Hawley Act and by a further 10% immediately after its passing, the MSCI US index also fell by 40% over the 12 months following the 1973 oil shock. The only exception to this result is the performance of equities following the 1979 oil shock, when they had already declined materially before the oil shock and performed marginally positively over the next 12 months.

Figure 7 – Defensive stocks did not necessarily offer protection as central banks typically raised rates - Equity moves by sector in supply shock episodes



Source: Bloomberg, BNPP AM, as of March 2018

Given our two scenarios for modelling the risk of an escalation of trade tension, what then are the likely consequences for asset prices? For our multi-lateral trade war scenario, we would expect broad equity indices to fall by around 15%-20%, with multinationals and technology companies hit the hardest. Initially, we would expect fixed-income markets to have a temporary bid from the flight to quality argument that would hold initially as market price in a risk-off world. Similarly, currencies such as the Japanese yen and Swiss franc would benefit from the initial shock, while EM currencies would depreciate. Once the initial shock has occurred, the response of fixed-income markets and currencies would depend on whether central banks accommodated the shock (which would prove inflationary) or offset the shock (which would prove disinflationary).

Crucial to the longer-term performance of equities under this scenario is the implicit view that the Trump administration is less prepared to undertake a global multi-lateral trade war for a protracted period than it would be to pursue a bi-lateral trade war with China where economic and national security issues become interwoven. Under the bi-lateral scenario, where US policy is focused on ensuring US strategic hegemony as well as improving trade opportunities with China, the risk is that the US is prepared to accept significantly higher costs and take a longer-term view to achieving its objective. Under such a scenario, we would expect global equity markets to fall by between 30%-50%, with equity indices dominated by technology, multinationals and commodity producers suffering disproportionately. Again, one would expect fixed income to catch a temporary bid until the reaction function of central banks is clarified in terms of accommodating or offsetting this shock. Similarly, the yen and Swiss franc would be initial beneficiaries from a risk-off move.

However, such a shock is likely to trigger further pressures in the Eurodollar market which could seriously disrupt banking and financial flows, in turn leading to a significant appreciation in the US dollar (as per events in the latter stages of the financial crisis 2007-08). Given that China holds USD 1.2 trillion in US Treasuries, a key question in investors' minds is what China may do with its holding? If China sold off its US Treasuries, the short-term impact would be a rise in US yields (by how much would depend on whether or not the FOMC re-introduced quantitative easing) and which currencies will the authorities buy with the proceeds. If the Chinese authorities repatriate the funds this would be a one-off negative for the US dollar (more a protracted stock adjustment) and begs the question of whether China would diversify its reserves to other currencies or would it want to engineer any appreciation of its own currency in the face of a trade war. Additionally, the risk of China selling off its US Treasury holdings is potentially double-sided as Chinese banks have expanded their balance sheets aggressively, funded via US dollars in the Eurodollar market. A sharp rise in US rates if the FOMC does not implement QE in the face of China selling US Treasuries would blow out spreads in the interbank market, which could prove extremely detrimental to Chinese banks' offshore funding.

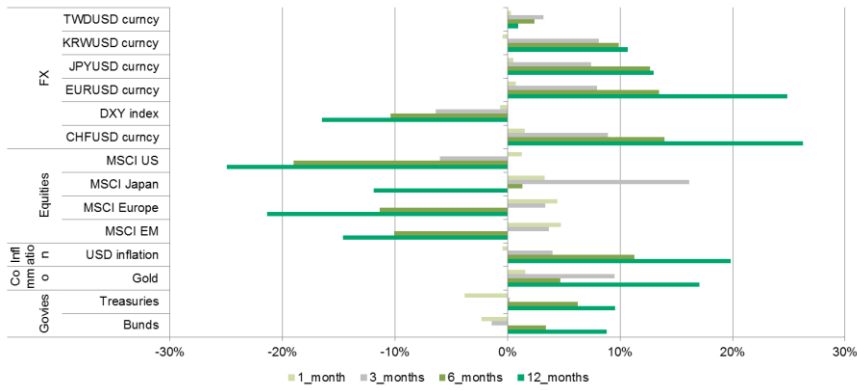
While these two scenarios are in our view still low risk at present, the prospect of increasing trade tensions as the political pendulum swings against greater trade liberalisation is likely to require higher risk premiums for a wide range of assets over time given the uncertainty associated with the direction of trade policymaking.

In terms of strategy, we are not altering our base case scenario of strong growth and contained inflation. But while we may believe that the probability of full-blown trade wars is still low we do expect further outbreaks of protectionist tension as the globalisation pendulum continues to oscillate back and forth, and that makes the trading environment riskier. With higher uncertainty or 'fatter tails', market volatility should move higher and risky asset prices lower. If the trade war scenarios remain low probability it makes sense to hedge portfolios against them with assets that do well in risk-off environments but that do not underperform if these risks fail to materialise.

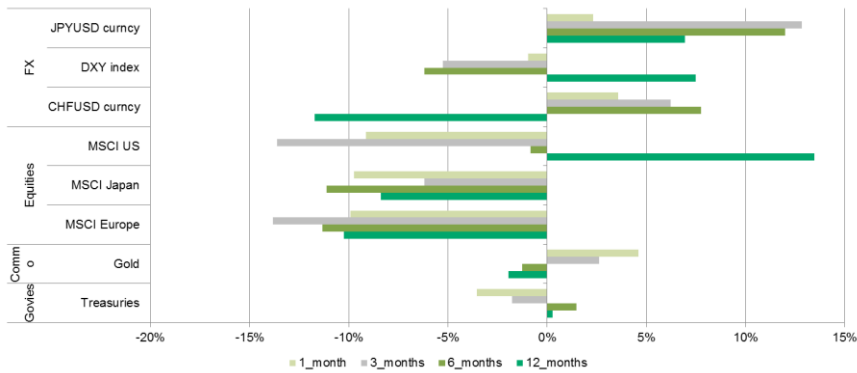
Identifying these assets is not straightforward. We focus our attention on the following criteria: expected market move given macro/market rationale, valuations, liquidity and positioning. Taking these factors into account, assets such as safe haven currencies stand out. For example, we see the Japanese yen as a beneficiary in a risk-off environment, it scans as cheap in real-effective terms, it is liquid and investors do not seem to have stretched long positions on it.

Appendix - Asset performance during supply shocks (Source: Bloomberg, BNPP AM, as of March 2018)

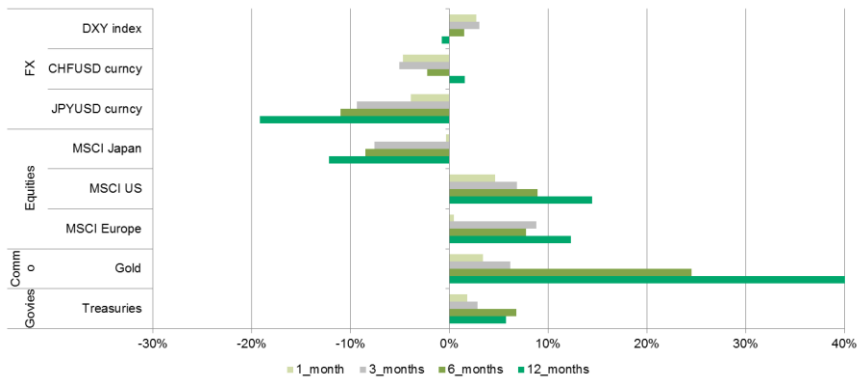
2002 - Bush's steel tariffs



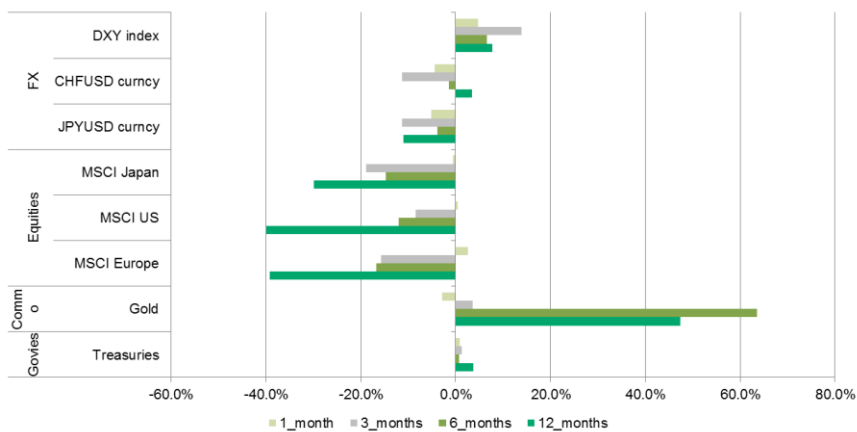
1990 oil shock



1979 oil shock



1973 oil shock



DISCLAIMER

BNP Paribas Asset Management France, "the investment management company," is a simplified joint stock company with its registered office at 1 boulevard Haussmann 75009 Paris, France, RCS Paris 319 378 832, registered with the "Autorité des marchés financiers" under number GP 96002.

This material is issued and has been prepared by the investment management company.

This material is produced for information purposes only and does not constitute:

1. an offer to buy nor a solicitation to sell, nor shall it form the basis of or be relied upon in connection with any contract or commitment whatsoever or
2. investment advice.

This material makes reference to certain financial instruments authorised and regulated in their jurisdiction(s) of incorporation.

No action has been taken which would permit the public offering of the financial instrument(s) in any other jurisdiction, except as indicated in the most recent prospectus and the Key Investor Information Document (KIID) of the relevant financial instrument(s) where such action would be required, in particular, in the United States, to US persons (as such term is defined in Regulation S of the United States Securities Act of 1933). Prior to any subscription in a country in which such financial instrument(s) is/are registered, investors should verify any legal constraints or restrictions there may be in connection with the subscription, purchase, possession or sale of the financial instrument(s).

Investors considering subscribing to the financial instrument(s) should read carefully the most recent prospectus and Key Investor Information Document (KIID) and consult the financial instrument(s)' most recent financial reports. These documents are available on the website.

Opinions included in this material constitute the judgement of the investment management company at the time specified and may be subject to change without notice. The investment management company is not obliged to update or alter the information or opinions contained within this material. Investors should consult their own legal and tax advisors in respect of legal, accounting, domicile and tax advice prior to investing in the financial instrument(s) in order to make an independent determination of the suitability and consequences of an investment therein, if permitted. Please note that different types of investments, if contained within this material, involve varying degrees of risk and there can be no assurance that any specific investment may either be suitable, appropriate or profitable for an investor's investment portfolio.

Given the economic and market risks, there can be no assurance that the financial instrument(s) will achieve its/their investment objectives. Returns may be affected by, amongst other things, investment strategies or objectives of the financial instrument(s) and material market and economic conditions, including interest rates, market terms and general market conditions. The different strategies applied to financial instruments may have a significant effect on the results presented in this material. Past performance is not a guide to future performance and the value of the investments in financial instrument(s) may go down as well as up. Investors may not get back the amount they originally invested.

The performance data, as applicable, reflected in this material, do not take into account the commissions, costs incurred on the issue and redemption and taxes.

All information referred to in the present document is available on www.bnpparibas-am.com