Belgravia Capital SGIIC SA

Change of cycles

October 2018

This report has been elaborated by:

Table of contents

Change of cycles

European equities have been trending downwards for 18 years and it's not much consolation that Japanese have been for nearly 30

Chart 1 | Equity markets since 1990 (base 100)

Stoxx 600 (lhs) — Eurostoxx 50 (lhs) — Topix (lhs) — S&P 500 (rhs)
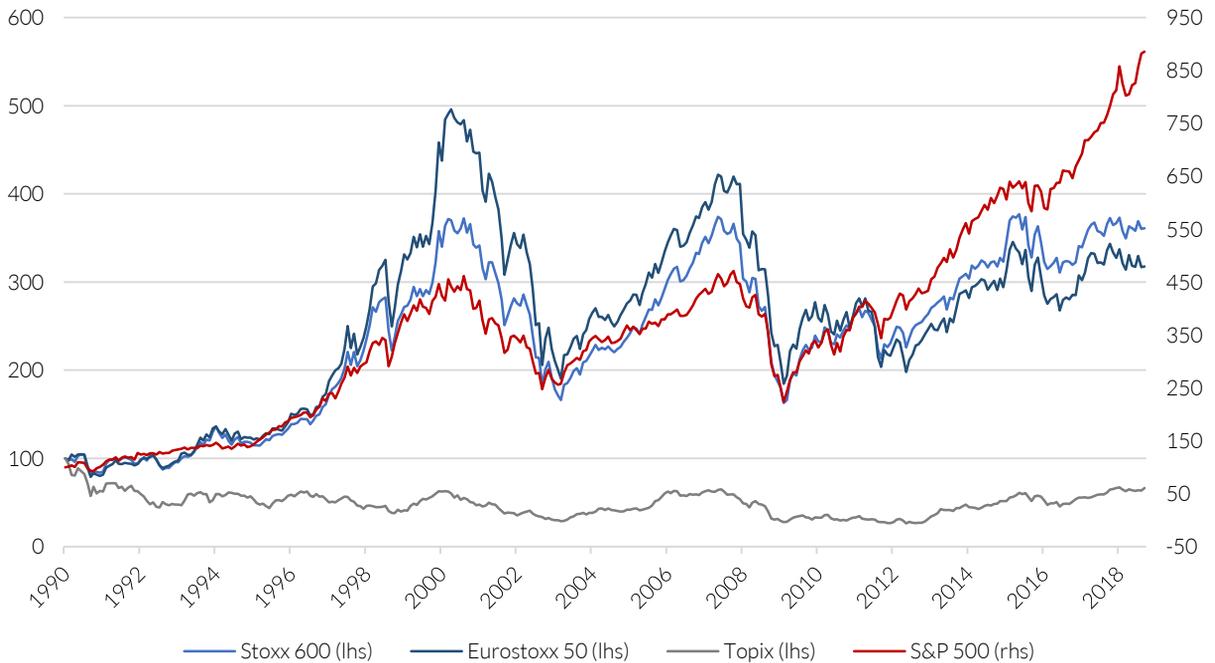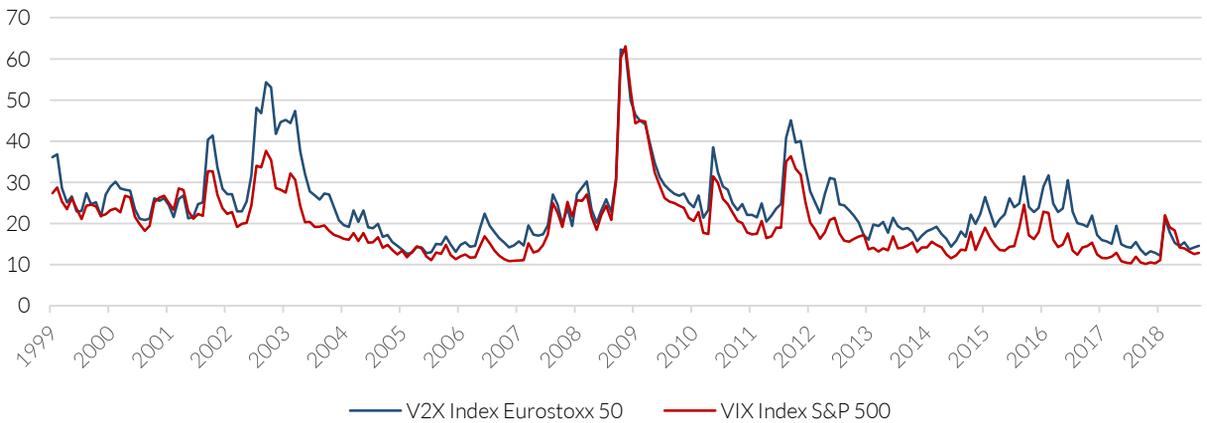
Source: Bloomberg

2018 marks the end of the bull market in European financial assets that began nine years ago and consolidated from July 2012 after Draghi's "whatever it takes" speech, although we would point out that the cycle high of last January was only so in terms of the risk premium for European credit and the V2X index of implied equity volatility. Lows in terms of bond yields (highs in price) were reached in September 2016 and equity prices hit highs in March 2015, without these having been exceeded since. In fact, European equity highs of 2000, on the peak of the dot-com bubble, haven't been exceeded either. European equities have been trending downwards for 18 years and it's not much consolation that Japanese have been for nearly 30.

Paradoxically, the S&P 500 has continued to record highs throughout 2018, without leading the ongoing change of cycle in the main global bourses despite US bonds also peaking in July 2016 in terms of minimum yields, with both risk-free rates and premiums rising since then.

Chart 2 | Implied volatility index Eurostoxx 50 & S&P 500

Legend: — V2X Index Eurostoxx 50 — VIX Index S&P 500

Source: Bloomberg

Chart 3 | Investment grade credit index Europe & US

Legend: — Itraxx IG (Europe) — CDX IG (US)

Source: Bloomberg

The change of cycle we refer to involves, on the one hand, a downturn in the 9 years old bull market in European equities, within the bear market super cycle which lasts for nearly twenty, and, on the other, the beginning of a bear market in the US, which could also be the start of a super cycle as was the case in Japan in 1990 and in Europe in 2000.

From an argumentative rather than a demonstrative point of view, we describe below the two main factors responsible for this change of cycle in the prices of financial assets: the monetary cycle and the economic cycle.

Monetary cycle

Prices depend on the amount of money

Chart 4 | Money supply eurozone (M3) & US (M2)

Source: Bloomberg

The quantitative theory of money originally proposed by Copernicus in 1526 and defined by the Salamanca School in 1556 (Martín de Azpilicueta Navarro), and widely developed and spread by British and US economists such as Fisher, Marshall, Friedman, etc. from the 20th century, is still valid: prices depend on the amount of money in circulation.

The main limitation when it comes to validating the quantitative theory of money lies in defining the data to be used; generally the level of transactions carried out in a period, for example, the annual GDP of a monetary area. Verification has focused on comparing growth in the money supply (M2 in the US, M3 in the Eurozone, M4 in the UK, etc.) with the nominal GDP deflator and, even more naively, with the CPI as the main component of prices of transactions in developed economies. As a result, the quantitative theory has often been dismissed because the money supply does not maintain a sufficiently stable relationship with the level of the nominal GDP deflator or of the CPI.

The problem is that the money in circulation is not used just to carry out the transactions typical of real economic activity. It is also used to buy and sell assets that are not included in the indicators widely used to measure prices such as the GDP deflator or the CPI,

or are not included properly. These are mainly capital assets, financial assets and money market assets that are not included in the measurement of the money supply (e.g. fixed term deposits), especially:

1. Property assets for commercial and industrial use, associated with the capital factor of production.

2. Property assets for residential use, which are really durable consumer goods and not capital goods, and so are associated with the labour factor.

3. Property assets for public use, associated with both the labour and the capital factors.

4. Companies, associated with the capital factor.

5. Financial assets associated with the above, such as public debt, corporate debt, commercial, industrial and residential mortgage debt, personal and consumer debt, private equity and stocks.

6. Money market assets not included in the measurement of the money supply.

7. Gold, other precious metals and other raw materials associated with the natural resources factor.

8. Art and collectibles.

Given the wide range of assets and the impossibility of measuring and weighting prices, little can be demonstrated with any accuracy, especially bearing in mind the global circulation of capital which would require the inclusion of the measurements of the main economies with different currencies.

But it can be argued that the prices of the goods and services, both included and not included in the GDP, depend on variations in the money supply. Therefore, we can state that the latter depend on the difference between growth in the money supply and the nominal GDP, in other words, the Marshallian K.

K=m-p-y, where m is the variation in the money supply, p is the variation in the prices of the goods and services included in the GDP or nominal GDP deflator, and y is real GDP growth.

Coincidentally or consequently, public debt prices, as measured by the five-year sovereign bond, positively correlate with the liquidity surplus, or Marshallian K. In other words, the higher the difference between growth in the money supply and the nominal GDP, the lower the yield (and so the higher the price) of public debt. Given the lack of data, sovereign debt is the best proxy to validate the theory, and especially five-year debt, as this is the typical average maturity of sovereign debt in developed economies. The public sector is a pool of private sector agents, be they companies, workers, consumers or investors, so the welfare, solvency and prospects of the public and private sectors are closely connected, although with timing differences within the cycle of the whole economy of a country or monetary area.

Chart 5 | US K (using M2) & Sovereign 5Y nominal yield

ρ = -0.70

5Y nominal yield (lhs) ——— K (rhs)
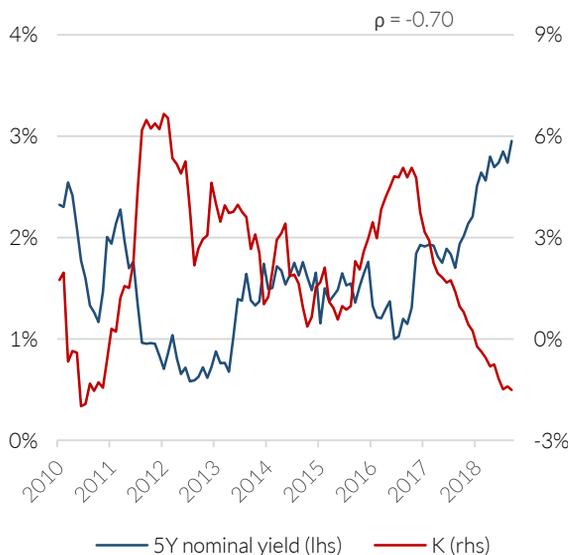
Source: Bloomberg, Belgravia Capital SGIIC

Chart 6 | Eurozone K (using M3) & French 5Y nominal yield

ρ = -0.76

5Y nominal yield (lhs) ——— K (rhs)

Source: Bloomberg, Belgravia Capital SGIIC

As the chart shows, US and Eurozone public debt yields fall or rise as the surplus liquidity increases or decreases. Logically, the weighted prices of all the assets excluded from the GDP deflator will also tend to rise or fall in line with variations in the size of the surplus liquidity, if we accept that public debt is a minimally valid proxy for the weighted prices of these assets. This relationship also holds good for corporate debt.

Chart 7 | US K (using M2) & IG 5Y nominal yield

ρ = -0.63

— US IG 5Y nominal yield (lhs)
— K (rhs)

Source: Bloomberg, Belgravia Capital SGIIC

Chart 8 | Eurozone K (using M3) & Eurozone IG 5Y nominal yield

ρ = -0.73

— Eurozone IG 5Y nominal yield (lhs)
— K (rhs)

Source: Bloomberg, Belgravia Capital SGIIC

Given the future monetary policies that have been announced for these economies, one would expect prices of public debt and of the overall assets aforementioned to perform negatively, as the surplus liquidity or Marshallian K continues to decrease.

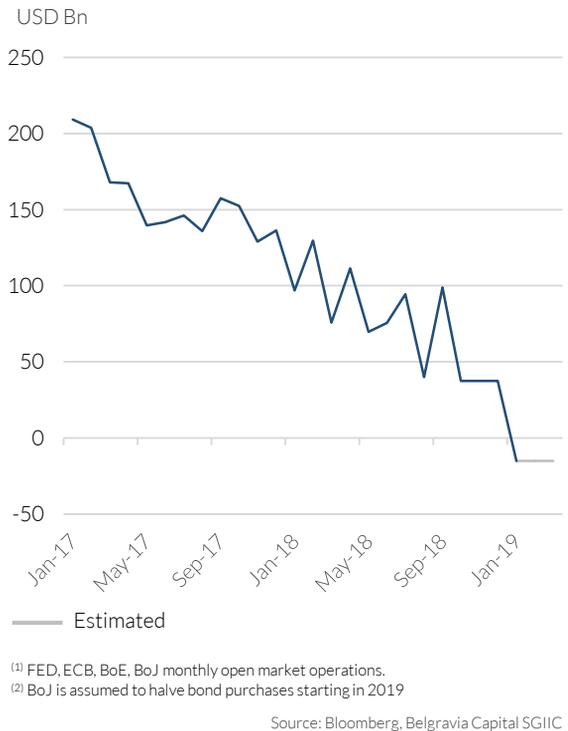## Chart 9 | Central Banks balance sheet evolution (FED, ECB, BoE, BoJ) [1][2]

USD Bn

— Estimated

[1] FED, ECB, BoE, BoJ monthly open market operations.
[2] BoJ is assumed to halve bond purchases starting in 2019

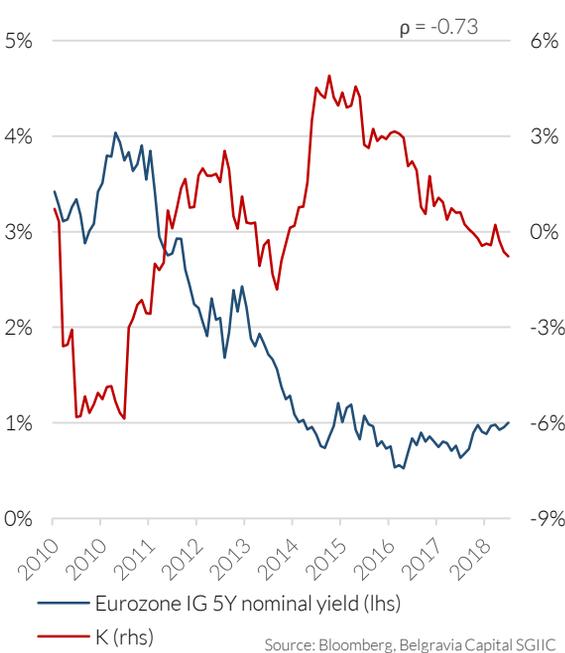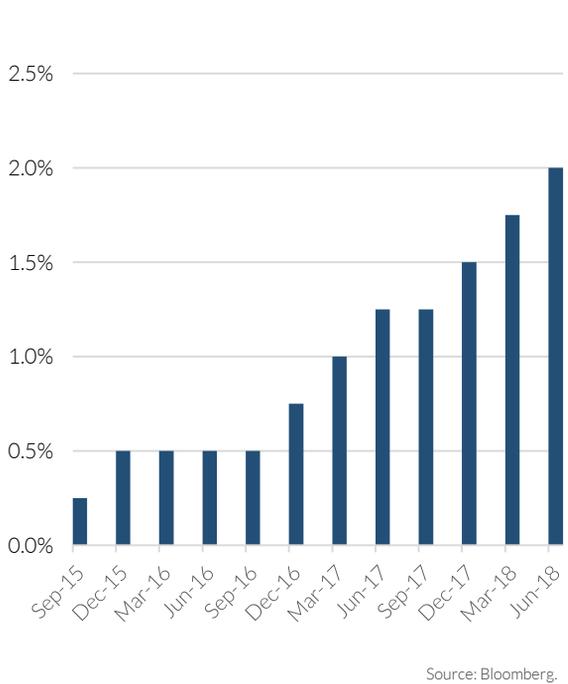Source: Bloomberg, Belgravia Capital SGIIC

Chart 10 | US Fed rates evolution

Source: Bloomberg.

This does not mean that each and every one of these assets has to perform negatively, as evidenced by the disparate performance of US bonds and equities in the first nine months of 2018. Just that the overall prices of these assets perform negatively with a negative K,

and that each of these taken individually performs better (either positively or negatively) the larger the surplus liquidity, and worse (either positively or negatively) the smaller the surplus liquidity.

Chart 11 | US K (using M2) & S&P 500

ρ = 0.93

S&P 500 (lhs) — K (rhs)

Source: Bloomberg, Belgravia Capital SGIIC

Chart 12 | Eurozone K (using M3) & Euroztoxx 50

ρ = 0.85

Eurostoxx 50 (lhs) — K (rhs)

Source: Bloomberg, Belgravia Capital SGIIC

Chart 13 | US K & Real Estate price index

ρ = 0.50

US Residential Real Estate price index (lhs) — K (rhs)

Source: Bloomberg, Belgravia Capital SGIIC

Economic cycle

Slowdown in economic growth and decline in capital income

Variations in the money supply in relation to the real GDP explain the absolute level of prices as a whole, including both those of the components of the GDP and those of assets acquired with money but excluded from the calculation, typically capital and financial assets. However, this does not account for the relative performance of prices, which depends on the economic cycle and the association of each asset with income from the factors of production: natural resources, labour and capital.

It is worth remembering here the main components of the aggregate demand of an economy:

$Y=C+I+(G-T)+(X-M)$, which we can link to the aggregate output associated with the income of the factors of production.

$Y=Il+Ik+Inr+Ip+Iniip$, which includes income from labour, capital, natural resources, the public sector, and from the net international investment position; with income from labour being associated mainly with consumer demand, income from capital and natural resources or raw materials with investment demand, public sector income with both consumer and investment demand, and income from the net international investment position with the external sector.

The relative performance and prices of the components of aggregate demand depend on the performance of relative income in the economic cycle as a consequence of the seniority of the factors of production in the collection of income, and on the relative elasticity of the factors of production to their income. In turn, the performance of relative income explains the relative prices of the associated capital assets.

The components of aggregate demand and income alternate in terms of importance according to the stage of the economic cycle:

1. Initially, the cycle is led by the external sector (X-M) during its recovery stage as exports increase and imports decrease as a result of enhanced competitiveness via deflation of the currency or internal deflation in the recession. Deflation improves the net international investment position (niip), the associated income (Iniip) and the external flow of goods and services, establishing the basis for the stabilisation and subsequent recovery of the currency.

2. The improvement in the external sector increases the use of internal capital and, in an environment of abundant labour, its income (Ik), increasing the value of capital assets to stimulate investment (I).

3. The increase in investment is followed by an improvement in employment and labour income (Il) which encourages consumption (C) and demand for housing, eventually causing inflation in labour income.

4. The cyclical recovery of public sector accounts or net rents (Ip) as a result of the simultaneous growth in capital and labour income, and the reduction in social benefits, leads to an increase in the value of public debt prior to an increase in public spending and/or reduction of taxes (G-T) marking the last stage of the expansionary cycle.

5. Finally, inflationary trends and inefficiencies accumulated during the expansionary stage lead to a loss of external competitiveness that pave the way for a new recessionary stage of the cycle led by the external sector via the deterioration of the current account balance (X-M).

| ASSET	INCOME	GDP	CYCLE	SEN.	TERM	ELAST.	VOL.
CURRENCY	lniip	X-M	1	1	Zero	High	Low
PUBLIC DEBT	ll, k, nr	G-T	3	2	Med.	Med.	Low/med.
MORTGAGE DEBT	ll	C	3	4	Med./long	Med.	Med./low
HOUSING	ll	C	3	5	Long	Med.	Med.
CORP. DEBT	li	I	2	6	Med.	Med.	Med.
CORP. EQUITY	li	I	2	7	Long	Med.	High
NAT. RESOURCES	lnr	Y	4	3	Long	Low	High

Source: Belgravia Capital SGIIC

Regarding income seniority, public income dominates private, and within this, labour income dominates capital income. In regard to the elasticity of supply of factors of production, labour is usually more elastic than capital, but not when the economy is close to full employment. The combination of seniority and elasticity together with the duration of the asset determines the level of volatility.

As also happens with the analysis of the monetary cycle, the globalisation of the economy makes it very difficult to clearly identify the stages of the economic cycle. However, there are a number of trends which point to the advanced state of the expansionary cycle of the global economy, prior to a new stage of growth below the long-run trend rate:

1. The slowdown in international trade which, as a percentage of global GDP, has fallen from a high of 61% in 2008 and 2011 to 56% in 2016, continuing to decline since then and with this trend set to continue as a result of current US trade policy.

2. The fall in the current account surplus of China, the world's largest exporter of goods, to levels close to zero at present.

3. The acceleration of growth in the US, the biggest consumer among the main economies, above its long-run trend rate of 2% due to public sector stimulus via the tax cuts made by the Trump administration.

Chart 14 | World trade as % of GDP
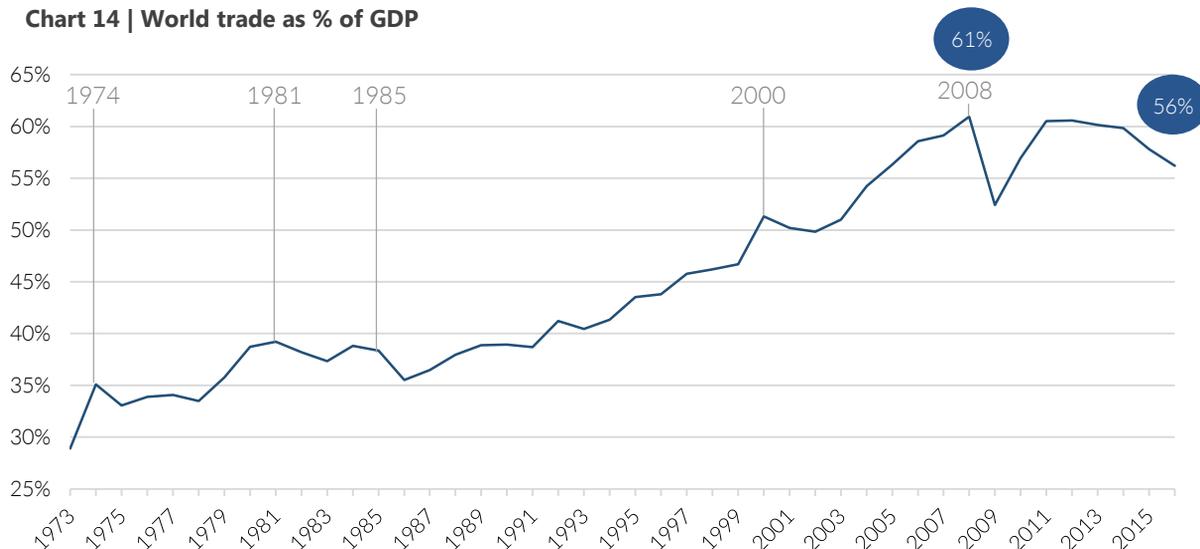
Source: World Bank

In terms of income, the elasticity of the supply of labour in the US continues to decline from dangerously low levels as a consequence of the low unemployment rate and immigration restrictions. The inflationary impact on wages and deflationary impact on capital income has barely been felt in 2018 due to the containment of unit labour costs associated with the increase in productivity caused by the fiscally stimulated economic acceleration. However, as early as 2019 the fiscal stimulus will decline significantly at the same time as the new trade tariffs hit costs and economic activity, as these represent a type of tax shared by the exporter and importer.

In Europe, the Eurozone unemployment rate, in general, does not present inflationary dangers, although its composition does:

1. Countries showing the healthiest financial position and whose economies have performed best since the last crisis have low levels of unemployment. This is the case of Germany and the Netherlands where wage inflation could be boosted by greater restrictions on immigration.

2. The main peripheral economies of southern Europe, Italy and Spain, where unemployment remains high, are changing their economic policies in favour of labour and of public spending, in detriment to capital income.

Populism is shaping politics in favour of labour income and in detriment to capital income via political, social and immigration policies. The common denominator of all populisms is the cause they find in the increase in inequality in developed economies as a result of globalisation; be it greater inequality among yuppies and blue collars and red necks in the US, between London and the rest of the country in the UK, between Germans and Greeks or between the middle/upper and lower/middle classes in Sweden, France, Austria and other European countries. The result is a populism aimed at fighting inequality, be it via import tariffs in the US, Brexit in the UK, opposition to immigration in Bavaria, Austria, the Netherlands, Sweden, etc., or more social public budgets in Italy and Spain; all pointing towards an increase in the share of labour income in the GDP in detriment to that of capital income.

Finally, income from natural resources, or weighted prices of raw materials, are also trending upwards boosted by oil, which makes it difficult to sustain capital income in the face of wage increases in developed economies. The elasticity of energy demand is low, and with the market's main marginal producer (US shale oil) operating at full capacity, the elasticity of supply is once again discretionary to say the least, in other words, in the hands of OPEC and Russia. A scenario that is favourable for the continuation of the increase in oil prices.

Valuation

The stock market is more expensive than it looks

Although of little use for ascertaining changes of cycle, we are required to approach the value/valuation factor not to contribute to the popularity and populism this enjoys, but because it is useful for estimating the size and duration of the potential trend.

Analysing European equities, the 2019e P/E of the Stoxx 600 is 12.6x, in line with the historical average since 2007, and 3% below the average since 1985.
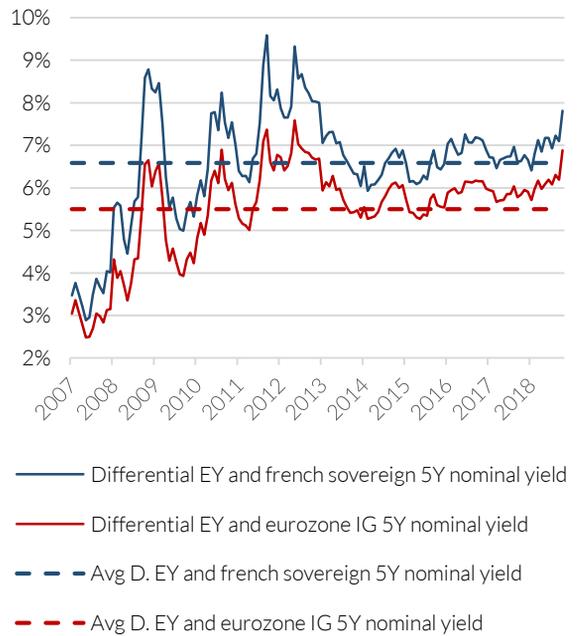
Chart 16 | Differential Stoxx 600 EY & 5Y sovereign vs IG nominal yield

— Differential EY and french sovereign 5Y nominal yield

— Differential EY and eurozone IG 5Y nominal yield

- - - Avg D. EY and french sovereign 5Y nominal yield

- - - Avg D. EY and eurozone IG 5Y nominal yield

Source: Bloomberg, Belgravia Capital SGIIC

Chart 15 | P/E Stoxx 600

Source: Bloomberg

As regards US equity, the 2019e P/E is 15.2x, 4% above its average since 2007, although this falls to 2% with the average since 1985.

European stocks are attractively valued in relation to bonds, with the earnings yield gap (the inverse of the P/E or EY) relative to the French nominal bond at 7.8% and at 6.9% relative to IG corporate debt. The reason for this is the high price of bonds, both government and corporate, due to the expansive monetary cycle previously mentioned. As monetary policies normalise, we expect a rebound in bond yields which will normalise the gap with equities.
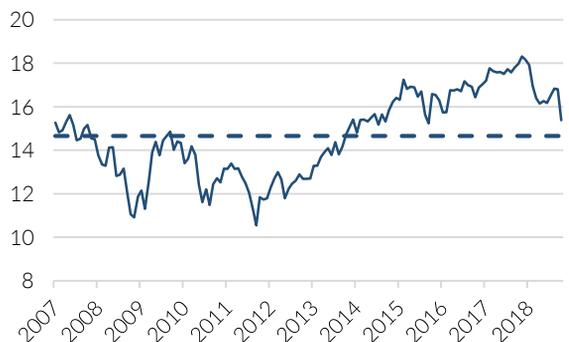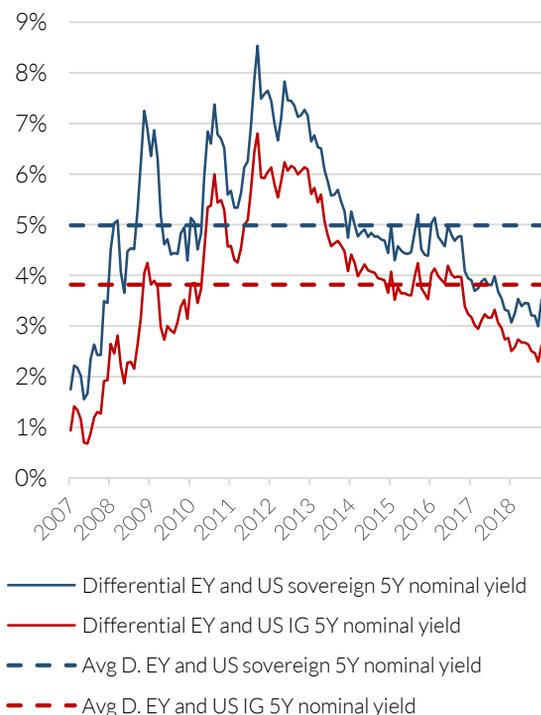
Chart 17 | P/E S&P 500

Source: Bloomberg

The EY gap of the S&P 500 is 3.5% vs the Treasury bond and 2.6% vs IG corporate debt, below its historical averages since 2007 of 5.1% and 4% respectively, which does not favour US equities.

Chart 18 | Differential EY S&P 500 & 5Y sovereign vs IG nominal yield

Differential EY and US sovereign 5Y nominal yield

Differential EY and US IG 5Y nominal yield

Avg D. EY and US sovereign 5Y nominal yield

Avg D. EY and US IG 5Y nominal yield

Source: Bloomberg, Belgravia Capital SGIIC

However, the valuation by P/E is somewhat misleading as currently company earnings are inflated by the low level of interest rates, especially in the S&P 500, where debt is high.

We consider the EV/EBIT operating ratios to be more reliable for an historical analysis as these reflect the valuation of the business instead of just equity that could be distorted by historical divergences in debt levels and the yield curve.

Chart 19 | Europe/US EV/Ebit

EV/Ebit US

Average EV/Ebit US

EV/Ebit Europe

Average EV/Ebit Europe
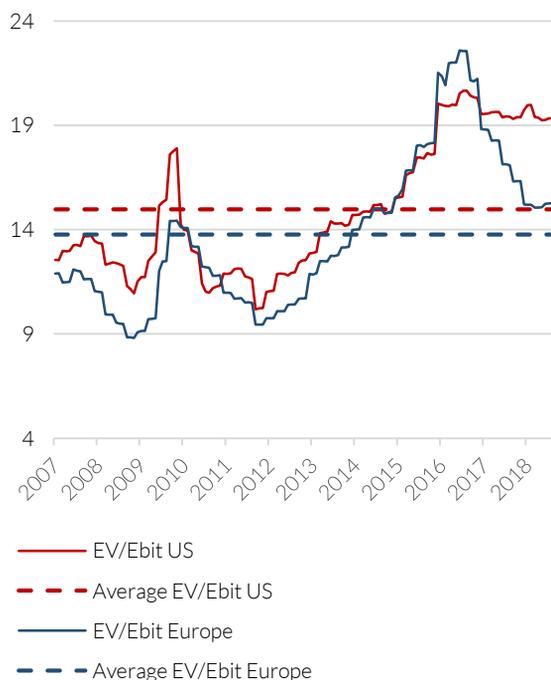
Source: Datastream, Belgravia Capital SGIIC

Based on EV/EBIT operating ratios, the US market is 24% above its historical average while European equities are trading at a 9% premium to their historical average since 2007. Contrary to P/E ratios, the premiums increase if they are calculated on averages since 1985.

Conclusion

The bear market continues

The monetary analysis shows an ongoing reduction in the liquidity surplus which will have a negative impact on capital asset prices. Moreover, the analysis of the economic cycle reveals an upcoming deceleration of growth and an increase in the share of labour income in detriment to capital income, which will accentuate the negative impact on capital asset prices.

In this context, it is likely that the equities correction will continue as both company earnings and multiples decline. After a period of gradually increasing risk-free rates since the middle of 2016, 2018 is characterised by an increase in risk premiums for both debt and equity.

The upturn in risk premiums is typical of the end of the expansionary cycle, heralding the arrival of a new cycle of economic growth below the long-run trend rate. In this third phase there is a narrowing of corporate margins together with a deceleration or decline in sales, strengthening the negative impact on corporate earnings and share prices.

In financial terms, if $P=D/(r+p-g)$, where P is stock prices, D dividends on earnings, r the risk-free rate, p the risk premium and g earnings growth.

We are at the stage where r has been rising for over two years, p has been rising for nine months, and D and g have yet to begin to fall.

Belgravia's views and strategy

Chart 20 | Total return

* Since July 1999 to August 2004 performance belongs to Belgravia Beta SICAV, vehicle with the same investment policy, that was merged with Belgravia Epsilon FI Unit Trust in April 2017.
** Stoxx 600 series includes net dividends from the begining.

Source: Bloomberg

In January, all the short positions that had been held in Eurostoxx50 futures since April 2017 were bought back due to: i) the improved outlook for European equities in the first part of 2018, and ii) the undervaluation of the European equities market compared with debt according to Belgravia Capital's internal quantitative model (14% undervaluation - levels not seen since 2011).

In June and July, we reduced the portfolio's market risk to 27% of the NAV (61% long - 34% short positions in Eurostoxx50 futures) due to the scant upside as a result of the increase in debt risk premiums which reduced the level of undervaluation of equities vs debt to just 6%. In addition, the outlook for equities for the second half of the year was worse given the schedule for central bank bond purchases and the likely increase in political risk.

After October's correction and according to Belgravia's internal model, at present equities are undervalued by 10% with respect to debt. However, using the average for the iTraxx investment grade index since 2007 of 94bp instead of the current value, European equities are 5% overvalued. Taking into account what we have said previously about the monetary and economic cycles and the still high level of global debt, it is likely that debt risk premiums will continue to increase, approaching historical average levels. Considering the above, Belgravia's portfolios maintain an investment level of only 40%, with half the associated market risk hedged by short positions in Eurostoxx50 futures.

As regards stock picking, we began 2018 with high exposure to small and mid cap companies, as a result of the strategy adopted in 2017, which bore fruit at the end of the year.

However, during the first few months of 2018 we began to see signs of cycle fatigue with erratic behaviour by the companies in our portfolio, often independently of their business performance. In turn, our portfolio was highly uncorrelated to the market, which restricted the efficiency of the Eurostoxx50 futures hedge. Accordingly, at the end of the first quarter, we decided to reduce our exposure to small and mid cap companies. At present, our cash equities portfolio exposure is 2/3 large caps and 1/3 small and mid caps with an individual weighting of less than 1% of the NAV for the small and mid caps. The current net exposure of Belgravia Epsilon is 20% of NAV (40% cash equities and 20% short positions in Eurostoxx 50 futures) and 16% adjusted by their beta against the Stoxx 600.

Given the current stage of the monetary and economic cycles, the bear market is likely to continue in coming months, so we think our current portfolio allocation is adequate; although the proportion between large and small/mid caps will probably continue to evolve in favour of large caps until the end of the year.

However, we are optimistic as it is more than likely that the European equities correction will end in 2019 based on the behaviour of bear markets seen since the beginning of the European bear super cycle in 2000:

1. The last bear market, from July 2007 to March 2009, only lasted for twenty months as the initial excesses lay in the property rather than the stock market.

2. The previous bear market, from March 2000 to March 2003, lasted for three years as then it was equities that were overvalued due to the dot-com bubble.

3. In the current cycle, it is bonds not equities that are overvalued, so we think the European stock market correction will be relatively short-lived; it has already lasted for nine months since January 2018 or three and a half years if we go back to the highs of March 2015.

Finally, we would underline that Belgravia's achieving alpha or extra returns through stock picking also has its cycles, with bad years like the current one usually occurring in years of a change of cycle, followed by a period of several years of positive alpha and returns.

On the whole, taking into account the stock market cycle we envisage and Belgravia's current positioning towards it, we think 2019 will mark a change to a new positive cycle for the European stock market and for the generation of positive returns by Belgravia through stock picking. The high liquidity of Belgravia's portfolios will allow us to take advantage of this situation appropriately.

Legal disclaimer

This document is for informational purposes only and does not constitute, is not part of and should not be considered as an offer to sell or subscribe shares of the collective investment institutions managed by Belgravia Capital S.G.I.I.C, S.A. Opinions or statements made in this document express our opinion at the time of its preparation and may change without prior notice; neither is it intended or guaranteed, implicitly or explicitly, that such opinions or statements are accurate or complete. Belgravia Capital S.G.I.I.C., S.A. does not accept any responsibility for losses caused, directly or indirectly, by the use of such opinions or statements.

The value of the shares of the collective investment institutions managed by Belgravia Capital S.G.I.I.C., S.A. can both go up and down, and it is possible that the investor does not recover all the capital invested. All the estimates of profitability and indications of results obtained in the past by the collective investment institutions managed by Belgravia Capital S.G.I.I.C, S.A. that are found in this document have an exclusively informative purpose and cannot be interpreted in any way as a guarantee of future returns.

This report has been elaborated by:

Belgravia Capital SGIIC SA
Núñez de Balboa, 120. 4ºDcha.
28006 Madrid, Spain.
Phone: 00 (+34) 91 515 8590
info@belgraviacapital.es