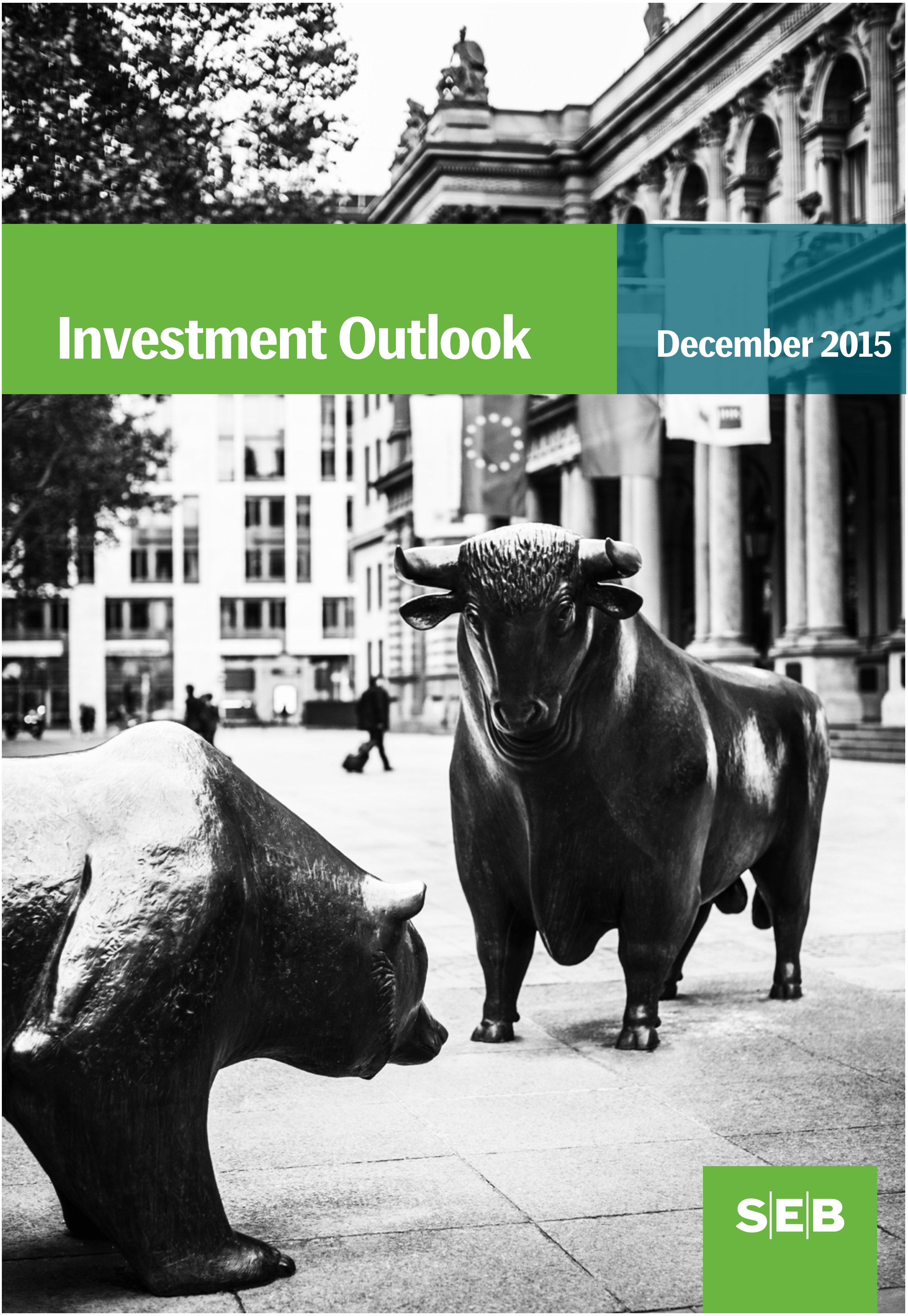
Investment Outlook

December 2015



SEB

In this issue:

This report was published on December 1, 2015. The contents of the report are based on information and analysis available before November 24, 2015.

Large differences and high volatility

CORPORATE REPORTS FOR THE THIRD QUARTER show very clearly that the global economy is continuing its dual-track growth. The consumer and service sectors are in fairly good shape. Low interest rates, low commodity prices and low inflation are leading to rising real wages and more room for consumption. This benefits service and consumer companies, which are continuing to deliver sales increases and rising profits. Structural forces such as a growing global middle class are also making a positive contribution.

Conditions are noticeably tougher for the manufacturing and commodity sectors, which are more dependent on capital spending and stimulative fiscal policies. In large parts of the world, policymakers' strategy has been to help sustain growth via active central banks rather than via government investment projects. Meanwhile China is shifting its economic model from a focus on capital spending to a more consumer- and service-oriented variant. Taken together, all these forces have created surplus capacity over a long period, combined with fairly weak demand. For companies operating in capital-intensive industries, the result has been poor volume demand and falling prices. This negative mechanism has been the most evident in commodity segments such as the oil industry. In our section on Nordic equities, we take an in-depth look at the consequences that follow from the above two-speed situation.

This issue of *Investment Outlook* also includes a theme article, which presents innovations that we believe will have a very large impact during the coming decade.

On a regional basis, too, the world is experiencing dual-track growth. In the United States, the Federal Reserve is expected to raise its key interest rate. Meanwhile in the euro zone, the European Central Bank is expected to expand its current economic stimulus measures. During the third quarter of 2015, there was mounting concern in financial markets about a new economic downturn. Are we headed towards a new slump, or has the time finally come for the non-consumer-driven portion of our economy to rebound? Such a development would lead to increased output and better growth. The Macro section in this issue explains how the overall picture is taking shape and presents our forecast of global and regional growth.

We also provide our views on future earnings, valuations and market conditions for various assets. For example, after several years of low returns, is it time to increase the portfolio weighting of cyclical assets? We present what we consider to be a suitable allocation of assets in a complex and ever more volatile environment.

Wishing you enjoyable reading,

FREDRIK ÖBERG
Chief Investment Officer, Private Banking

Market view

Summary

- Weak growth signals, but no clear deceleration.
- Higher volatility is here to stay.
- Normalised valuations and lower expected returns.
- Stimulative central bank environment even if US hikes key rate.
- 2016 may be the year that interest rates rise.

THE SIZEABLE STOCK MARKET DECLINE this past summer signalled widespread stress among investors and indicated clearly mounting worries about slowing economic growth and, further ahead, a possible recession. In reality, worries about a recession mainly concern the manufacturing sector, with a focus on investment goods and commodities. Consumer- and service-oriented companies are experiencing a rather favourable situation. The risk, of course, is that the weak part of the economy will slowly but surely pull down the strong part as well. This is not our main scenario, however. Instead we foresee more of what we have already seen: fairly weak growth signals, but no clear deceleration. Nor can we entirely rule out that pricing in the commodity segment may improve. We do not believe that the Chinese economy will suddenly come to a halt either.

Because of uncertainty and the leisurely rate of economic growth, however, volatility will continue. In terms of the ability of companies to generate earnings, this environment means that we are forecasting an earnings increase of around 5-7 per cent and a dividend yield of 2-3 per cent, but with expectations of large variations between regions and sectors. These should thus also be the potential returns that equities offer in a 12-month perspective, since the valuation component is neutral.

The fixed income market offers expected returns of between 0-6 per cent, with government bonds at the bottom and corporate credits at the top. This has been a disappointing year for returns on corporate credits, but on the other hand their pricing is now more attractive than before. Even though central banks around the world are still maintaining record-low key interest rates and pumping money into the system, 2016 may be a year when interest rates begin to normalise and climb. Such a trend may be triggered, for example, by the Federal Reserve's gradual key rate hikes combined with easing deflation pressure, since commodity prices should not fall as fast as before.

Alternative investments, led by hedge funds, have not delivered the returns we had expected either. Yet we see clearly that when shakiness increases, this part of the portfolio serves as a stabilising factor – in keeping with its purpose.

MAIN STRATEGIES IN OUR PORTFOLIO MANAGEMENT

THE CAPITAL MARKET AND THE WORLD ECONOMY are turbulent and choppy, but if we look at outcomes, stock market movements in 2015 reflect the ability of companies to generate earnings. Europe and Japan are outperforming the US, which in turn is outperforming the emerging market (EM) sphere. On a sector-by-sector basis, defensive sectors are being rewarded and cyclical ones are being punished, but the pattern also follows their delivery of earnings. Taking current valuations into account, equities remain our preferred asset type, followed by corporate credits.

In equities, we are overweighting Europe and Asia. We are underweighting the commodity segment and the US. In fixed income assets, we are overweighting corporate bonds and keeping down average maturity since we do not want to be exposed to possible upturns in yields. In our alternative investments, we are avoiding commodities and are holding rather low-risk hedge funds.

We thus recommend some continued overweighting towards risk, but during 2015 we have adjusted this risk downward, mainly via lower exposure to equities and corporate bonds.

At this writing, all assets have lower expected returns than before. Combined with higher volatility, this has persuaded us to lower total risk in our portfolios.

What may challenge the strategy we have chosen?
Risks connected to economic activity may have a large impact. They may be related to Chinese growth, further weaknesses in manufacturing, a clearly higher percentage of commodity companies going bankrupt or similar events.

Liquidity in the credit market has been problematic during 2015, adversely affecting returns. This may continue to create problems. In addition, rising interest rates combined with mediocre growth may lower risk appetite.

One upside surprise that might have an impact is if the long period of low activity in cyclical sectors comes to an end. Should this be the case, growth will accelerate and a positive volume and price trend for industrial goods and commodities will begin.

ASSET	WEIGHT	TACTICAL EXPECTATION (12-MONTH)		REASONING
		RETURN	RISK	
EQUITIES				
Global	1 2 3 4 **5** 6 7	7.5 %	10.1 %	At the current level of growth, the global corporate sector should be able to deliver 12-month earnings growth in the 5-7 per cent range and dividend yield of 2-3 per cent. The broad exposure of this asset type provides stability in an environment of rising volatility. The major differences between sectors will continue, though hardly remaining at their 2015 level.
Emerging markets (EM)	1 2 3 **4** 5 6 7	7.4 %	13.5 %	Weaker EM economic performance and sluggish international trade will have a negative impact, while valuations compared to the rest of the world are a plus. Heavy commodity dependence, the negative effects of a strong US dollar and rising US interest rates will be minuses. Commodity-exporting countries will be attractive only when we see pricing stabilisation.
Swedish	1 2 3 **4** 5 6 7	11.0 %	12.1 %	Due to a combination of well-run companies and a balanced allocation among cyclical, defensive and growth companies, at current valuations the Swedish stock market is attractive as long as economic growth remains solid. The weak krona has provided support but is a factor that may change in the near future. Further ahead, there are clear risks connected to the real estate market and higher future interest rates.
FIXED INCOME				
Government bonds	1 **2** 3 4 5 6 7	-1.6 %	4.9 %	Due to very low government bond yields, portions of the bond market are unattractive. A strengthening of economic conditions or a somewhat higher inflation rate may lead to gradually rising yields during the coming year, with a risk of negative returns.
Corporate bonds, investment grade (IG)	1 2 **3** 4 5 6 7	2.0 %	2.9 %	Low yields provide low potential, but this asset type may work well in a portfolio that includes other higher-risk assets.
Corporate bonds, high yield (HY)	1 2 3 **4** 5 6 7	4.9 %	3.6 %	Yields of 3-5 per cent stand out in the fixed income world, but as a consequence there is also clearly higher risk than with IG bonds, for example. High indebtedness and exposure to commodities are problems for this asset type, which is reflected in pricing.
Emerging market (EM) debt	1 2 **3** 4 5 6 7	6.9%	10.2 %	Yields of around 6 per cent are high, but risks have increased due to developments in emerging markets.
ALTERNATIVE INVESTMENTS				
Hedge funds	1 2 3 **4** 5 6 7	N/A	N/A	Lower volatility, combined with the opportunity to generate returns even from negative trends and in assets that do not have a strong correlation with equities and corporate credits, make this asset class attractive as a complement in a portfolio.
Commodities	1 2 **3** 4 5 6 7	N/A	N/A	Gradually lower demand from China and elsewhere, combined with rising production capacity, has led to sharply falling commodity prices. In a long-term perspective, this asset class is attractive if inflation rises along with commodity prices.
CURRENCIES				
Currency pairs	**Nov 17, 2015**	**Q4 2015**	**Q1 2016**	**COMMENTS**
EUR/USD	1.06	1.05	1.02	A coming Fed rate hike may weaken the dollar in the short term, but the ECB will probably offset a strong euro via expansionary monetary policies. We expect a somewhat stronger dollar during 2016.
EUR/SEK	9.30	9.20	8.85	Strong fundamentals will force the Riksbank to accept a stronger krona, and the ECB is working actively to counter an appreciation of the euro.
USD/SEK	8.73	8.76	8.68	Our assessment is that the krona will strengthen somewhat more than the USD.

"Weight" shows how we currently view the asset type as part of a portfolio. These weights are changed continuously, based on our tactical market view, and may thus diverge from our long-term strategic view. Tactical expected return is based on the SEB House View as of November 11, 2015. Index/basis for calculation: Global equities – MSCI All Country World Index in local currencies. Emerging markets – MSCI EM TR in local currencies. Swedish equities – SIX Portfolio Return Index in SEK. Government bonds – OMRX T-bonds in SEK. Corporate bonds (IG and HY), IBOXX Investment Grade Index in USD and IBOXX High Yield Index in USD. EM debt – JP Morgan Emerging Markets Bond Index in local currencies. Hedge funds – HFRX Global Hedge Fund Index in USD.

Market view

Macro - delayed speed-up

The expected global economic speed-up continues to elude economists. China's deceleration and (partly because of it) weaker industrial activity are holding back both sentiment and growth. Yet households are benefiting from better labour markets, low inflation and rising asset prices – growth in the service sector remains strong. We thus still expect economic growth to take off during the next couple of years. The worries about a recession that were aired this autumn appear exaggerated. One reason is that the weak manufacturing sector accounts for a small portion of the total economy. Another is that we believe that the manufacturing slump is temporary in nature. We also expect the downturn in oil prices to ease and we believe that low interest rates will continue to stimulate consumption. Even though Chinese growth keeps decelerating, growth in the emerging market sphere is rising. A speed-up in India and a slowing decline in Russia and Brazil will provide greater stability. The impact of the refugee crisis on Europe is more political and humanitarian in nature; the economy will be only marginally affected.

US – Consumers, services drive GDP

The United States has a dual-track economy, and this trend is gaining strength. The gap between purchasing managers' indices in manufacturing and service sectors is the widest in more than 10 years, with services being higher. This sector's strength is mainly due to good household demand, a strong labour market, low interest rates, rising asset prices and lower petrol prices. A strong private sector combined with rapid formation of new households is making construction investments the single strongest growth component.

US industry remains in a slump. ISM's purchasing managers' index (PMI) for manufacturing is fluctuating around the neutral level, while a stronger dollar – combined with weaker demand from major EM economies like China and Brazil – is holding back exports. Meanwhile the oil price downturn is hurting the energy sector. But a PMI below the neutral 50 reading does not mean that the whole economy is in recession. Because of strong demand from households, the risk of recession is low. In our opinion, market worries are exaggerated – especially since we expect the industrial slump to be temporary.

Europe – Growth is increasing, structural problems are becoming clearer

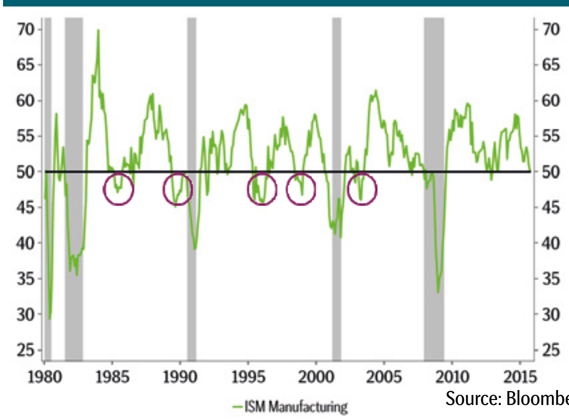
The refugee crisis and structural challenges in the wake of the debt crisis are putting pressure on European politicians and underscoring both cooperation problems and major long-term challenges, but in terms of economic activity the situation is moving in the right direction. The economy is being stimulated by lower energy prices and the expansionary policies of the European Central Bank. Growth will accelerate a bit further in the next couple of years, mainly driven by exports and private consumption. Yet structural problems are limiting potential growth, even though debts are not an acute problem due to low interest rates. The direct economic impact of the refugee crisis will probably be marginal. We expect both budget deficits and GDP to increase in the near term by a few tenths of a percentage point (somewhat more in Germany). Growth is relatively evenly divided between countries, with a stable situation in Germany, decent growth in France and Italy and healthy momentum in Spain.

The British economy is continuing its stable growth. Low inflation and pay increases will allow solid private consumption, while productivity increases will drive the corporate sector. Fiscal austerity will slow growth during the next couple of years, and so will currency appreciation.

Asia/China – Persistent growth

Asia will remain the world's fastest-growing region, but the picture is not uniform. Exports are being squeezed, especially for commodity exporters like Malaysia and Indonesia, while domestic demand is still good. The coming US Federal Reserve interest rate hikes are a source of concern, but we do not expect any major turbulence.

TEMPORARY MANUFACTURING SLUMP



Source: Bloomberg

US manufacturers are being squeezed by a stronger dollar, weak capital spending activity and falling oil prices that are hurting the energy sector. With the purchasing managers' index (PMI) close to a neutral 50, some are worried about a possible recession, but we regard this as exaggerated. Today manufacturing only accounts for 12 per cent of total US output. It is not unusual for ISM's manufacturing PMI to fall below the 50 mark without the rest of the economy doing the same. A level of 43 is viewed as critical.

This past summer's financial market turmoil was driven by increased uncertainty about China's economic growth. Concerns about possible continued deceleration have been accompanied by scepticism about official Chinese statistics. GDP growth is probably lower than the official figures and is likely to continue slowing, though to a lesser extent than before. In China, as well as globally, the service sector and private consumption are driving growth, while manufacturing is weaker. We also expect continued official stimulus measures that will help sustain growth.

In India, growth will accelerate somewhat less than we had forecast. This is mostly because reform efforts are proceeding more slowly than expected. Because of stronger industrial production, falling inflation and more stable government finances (which have made stimulus measures possible), India will still be a global growth winner in the next couple of years.

Japan – Continued headwinds

The Shinzo Abe government's efforts to stimulate Japanese growth are facing headwinds. Aside from major stimulus measures, policymakers have been hoping that a depreciation of the yen will stimulate the economy by boosting exports, resulting in surging profits and capital spending in the corporate world. But exports are hampered by lower demand from China, one of the main markets for Japanese exports. Although the level of corporate earnings has improved, domestic capital spending has not taken off either. Companies are investing to a greater extent abroad, thus failing to stimulate domestic demand and hampering future exports. Yet the economy is benefiting from good service sector momentum, and we expect new official stimulus measures. We are revising our already modest Japanese GDP forecasts by another few tenths to around 1 per cent in the next couple of years.

Latin America – Squeezed by commodity prices

Still-depressed commodity prices are squeezing Latin American economies. Meanwhile various countries are struggling with structural problems. The region's largest economy, Brazil, illustrates this well – growth has fallen since 2014 and is expected to continue doing so well into 2016. Falling commodity prices, combined with faltering domestic demand due to high inflation and rising unemployment, are squeezing growth. Brazil's cheaper currency is providing only partial relief by lifting industrial exports. Corruption problems and political tensions provide very little hope for improvement without external help. In Mexico, the region's second largest economy, growth is also being squeezed by lower commodity (read oil) prices, but large exports to the US are a positive factor that still enables the country to maintain decent growth.

Eastern Europe – Russian problems and Central European stability

Russia is still grappling with major problems including continued Western sanctions, low oil prices and the conflict with Ukraine, which we expect to be long-lasting. GDP will thus probably continue to fall next year, although the slide will be gentler thanks to easing of sanctions and some recovery in oil prices. The Ukrainian economy will also continue to shrink, but we expect some stabilisation via debt relief from the International Monetary Fund (IMF) and other lenders.

Elsewhere in Eastern and Central Europe, the picture is brighter. Growing domestic demand is the main growth engine, thanks to good household economic conditions. Exports are also gradually gaining strength, with higher German demand benefiting Central European countries while the Nordic region helps to sustain exports from the Baltic countries. Looking ahead, we foresee the best growth in Central Europe, especially in Poland and the Czech Republic, while the Baltic countries will be weighed down by Russia's problems.

GDP – YEAR-ON-YEAR PERCENTAGE CHANGE	2014	2015	2016	2017
United States	2.4	2.5	2.9	2.6
Japan	-0.1	0.6	1.1	0.8
Germany	1.6	1.5	2.1	2.1
China	7.3	6.9	6.5	63
United Kingdom	2.9	2.4	2.5	2.6
Euro zone	0.9	1.6	2.0	2.1
Nordic countries	1.6	1.9	2.2	2.3
Sweden	2.3	3.2	3.6	2.8
Baltic countries	2.8	2.0	2.7	3.3
OECD	1.9	2.1	2.4	2.4
Emerging markets	4.7	4.0	4.5	5.0
The world (PPP)*	3.4	3.1	3.6	4.0

Source: SEB Economic Research, analysis dated November 2015.

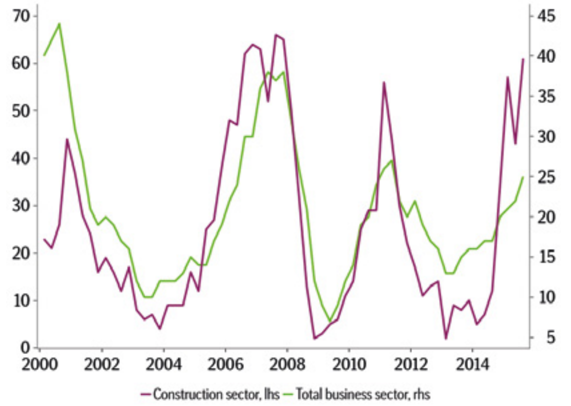
* PPP= Purchasing power parities: economies have been adjusted to account for price differences between them.

Nordic countries – Divergent growth picture with Sweden at the top

In the Nordic countries, the economic picture remains mixed. The situation in Finland is worrying, with fiscal austerity and falling Russian demand, but there are bright spots in the form of confidence indicators that have bottomed out and better export prospects. In contrast, the Danish economy is growing at a decent pace despite some recent disappointments. Signals of tighter fiscal policy and weaker capital spending than expected are offset by stable consumer confidence and better European demand. Norway is being squeezed by continued low oil prices, with growth close to zero in the third quarter.

In Sweden, the economy continues to strengthen. Better demand from other countries and increased immigration are driving forces, along with construction investments and continued good private consumption. The costs of refugee resettlement in Sweden will affect public finances, but will be funded partly by decreased international development assistance and eased by higher tax revenue as consumption rises. In the short term, we expect the stimulus effect on GDP to be around one percentage point. The long-term impact is more uncertain and will depend on how well the country's integration policies succeed.

LABOUR SHORTAGES EXPECTED



Source: National Institute of Economic Research

In Sweden there are growing labour shortages, measured as the percentage of companies which state they are having difficulty recruiting suitable employees. These shortages are generally a bit below earlier peaks, but some sectors such as construction are already experiencing problems. In the short term, this situation may worsen in the public sector due to the refugee crisis. In the long term, an increase in the labour force should benefit economic growth.

Conclusions from our macro analysis that we take into account in asset management

- Growth forecasts are being adjusted downward, but a speed-up remains likely.
- Continued robust growth in the service sector, driven by strong households.
- The slump in industrial activity is both structural and temporary in nature – but there is no recession in sight.
- Chinese growth will decelerate but there will be no hard landing, while the situation in other EM countries will stabilise.
- Continued weak commodity prices will squeeze producer countries.
- The US Federal Reserve's initial key interest rate hikes will create upward pressure on long-term yields and confirm the strength of the dollar.
- Increasing economic growth and still-low interest rates will provide continued support for risky asset classes.

Global equities

Wide swings in world stock markets

After share prices declined in early autumn, we saw a revival of risk appetite and a strong stock market rebound in October and November. US equities led the way, although measured from the start of the year, European and Japanese shares have been the best performers. Global equity valuations are attractive, especially emerging market (EM) shares. On the other hand, expectations of company earnings have been adjusted downward following mediocre quarterly reports. We forecast earnings growth next year of around 8 per cent, which still indicates decent returns. In our portfolios, we have chosen European over US equities, with a slight overweight for Japan and other selected Asian countries.

- This year has been dominated by large swings. After the stock market slump in early autumn, risk appetite returned in October, with share prices rising sharply as a result.
- Big gains for growth companies over a long period combined with high valuations make value shares more attractive.
- Global equities have become cheaper and are trading at a P/E ratio of 15 (12 months forward) compared to an expected P/E ratio of around 17 last spring.
- Total corporate earnings have been revised downward after mediocre quarterly reports and are expected to grow about 8 per cent in 2016.
- Good potential in Asia, led by China, as its economy shifts from investor-led to consumer- and service-led growth.
- We are overweighting equities in our portfolios but are a little cautious in the short term. Better earnings and a more positive tone from companies are needed to raise our risk.

THE WORLD'S STOCK MARKETS HAVE EXPERIENCED WIDE SWINGS this year. We initially saw share prices rise substantially, but the summer was shaky, with steep share price declines. Risk appetite returned in October, as the global equity index – led by US and Japanese equities – climbed sharply. This autumn, the US has been the top performer, whereas things have not gone as well for Europe and Japan. The global index has lost 1 per cent in local currencies (+12 per cent in SEK) since the start of the year. However, there is a significant difference between developed market (DM) and EM shares, with the latter losing almost 10 per cent.

Time for value shares?

Equities with high historical and forecast earnings growth are generally categorised as growth shares. This type of company usually has good profit margins and a high return on equity and is found in rapidly expanding sectors such as IT and biotechnology. Since the financial crisis, the strategy of investing in growth shares has been far more successful than investing in value shares. Value shares are defined as equities with a low valuation and high dividend yield. Banks, other financial companies and commodity companies belong to this category. A typical investor in value shares tries to find companies that are undervalued at the moment, whereas an investor in growth shares looks for companies that are growing faster than market forecasts.

When there is uncertainty about the general economic trend, market participants tend to look to growth shares, which have a greater chance of good earnings growth. As a result, growth company valuations have become high from a historical perspective. We may now be facing a shift, with value shares instead leading the market forward. During periods when the US Federal Reserve raises its benchmark interest rate (which it is probably on the verge of doing), value shares have performed better than growth shares.

Earnings have been adjusted downward

During 2015, global equities have become cheaper and are trading at a price/earnings ratio of 15 (12 months forward) compared to an expected P/E ratio of around 17 last spring. The US market is trading at higher multiples than the global index, while Europe is in line with the average. Japanese companies are attractively valued from a historical perspective and show good earnings growth. Total corporate earnings in the world have been revised downward on several occasions following mediocre quarterly reports and are now expected to

RECOVERY POTENTIAL FOR VALUE SHARES

The chart shows the return on value shares divided by the return on growth shares, with value shares outperforming growth shares between 2000 and 2006. Since the 2008 financial crisis, value shares have not fared as well. With the rise in share prices, growth company valuations have become high from a historical perspective.

grow by around 8 per cent in 2016. Emerging markets in Asia are attractive from a valuation perspective, with companies in India, the Philippines and South Korea looking like they can generate higher earnings both this year and next.

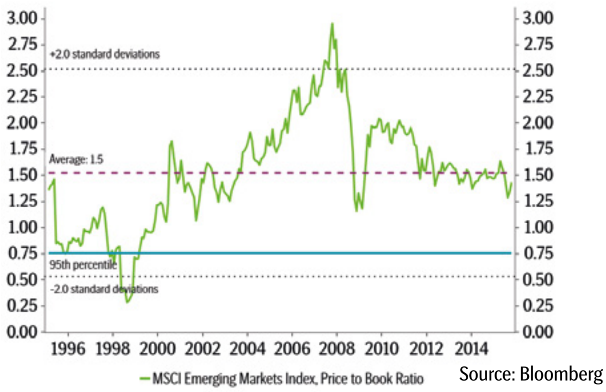
We wrote in the last issue of *Investment Outlook* (published in September 2015) that Asian company valuations had reached historically low levels following the stock market slump. Investors were frightened by stagnant corporate earnings growth, a strengthening US dollar, falling commodity prices and uncertainty about China's economic growth. However, in our view, the region will stabilise with help from China, which continues to grow at a decent pace, and global growth will help stabilise commodity prices.

EM – at the bottom of the cycle

Emerging market economies are generally cyclical. Their growth follows the ups and downs of the general economic trend but with higher underlying growth than in the more developed countries in the West. Now that EM countries are at the bottom of their cycle, investors are worried that their weakness is more structural and persistent. However, earnings growth will once again accelerate and margins will improve once the economic trend and commodity prices rebound. There is still good potential for long-term growth. Wages, consumption and demand for various types of services are all on the rise while an expansion in infrastructure is still under way. Some 85 per cent of the world's population lives in the EM countries, where a rising share of GDP growth takes place. Nonetheless, EM market capitalisation accounts for only 12 per cent of the world index.

It is important to emphasise that there are different economic driving forces and major disparities between countries. India, China and Turkey are net importers of commodities and thus benefit from low commodity prices. They are also far ahead on the curve in terms of their transition to consumer-driven cyclical growth. India is also benefiting from political reforms and a more balanced economy. Due to the continued need for large investments in infrastructure and a growing middle class, there is great potential in many areas of India.

HISTORICALLY LOW VALUATIONS FOR ASIAN COMPANIES



Source: Bloomberg

Asian company valuations have reached historically low levels since the decline in share prices. Only the region's deep financial crisis in the 1990s brought lower multiples. For sustained share price increases, we need to see more stable currencies and commodity prices. Brighter economic prospects and signs of higher corporate earnings are also desirable. The odds of an improvement are now high.

The situation in China may deteriorate in the short term, but political leaders will do their best to counter this situation through continued monetary stimulus measures. In a longer perspective, there are very good chances of finding attractive investments in China as this gigantic economy gradually shifts from investment-led to consumer- and service-led growth. Statistics indicate that the "old China" (electricity, cargo operations etc.) is growing marginally whereas "new" sectors such as the Internet including Alibaba (China's counterpart to Google) and health care are seeing growth of more than 20 per cent.

The countries of South America continue to face headwinds. As a commodity exporter, Brazil has been hit hard by falling prices. The absence of political reforms has also handicapped the country, and now that growth is slowing it needs to deal with inflation and economic imbalances in order to regain investor trust.

Earnings growth indicates decent returns

Last summer the consensus view was that we would see the US Federal Reserve's first interest rate hike for a decade in September, which did not happen. It remains to be seen whether it will happen this quarter or early next year, but the fact is that a rate hike indicates there is strength in the economy and thus provides a favourable environment for equities. Historically, this asset class has performed well when the US Federal Reserve starts to raise rates. Our main scenario is reasonable global economic growth and higher corporate earnings, which will provide scope for higher share prices. We are therefore overweighting equities in our portfolios. So far, corporate earnings have not lived up to expectations, and we need to see better earnings and a more positive tone from companies to increase our risk. Earnings growth for 2015 will be marginal, with returns on global equities generally following the earnings trend. In our view, this environment – with its wide stock market swings – may continue next year. Earnings growth for 2016 will be around 8 per cent, which indicates a decent return. SEB's portfolios are overweighted in Europe, where conditions are gradually improving and valuations are attractive compared to US equities. We also have a slight overweighting in Japan along with selected markets in Asia.

COUNTRY/ REGION	P/E RATIO, 2016 (F)	EARNINGS GROWTH, 2016 (F)
Globally	15.5	8.3
India	16.4	18.7
Japan	14.4	19.0
South Korea	10.2	10.4
China	9.2	8.0
Philippines	17.7	12.4

Source: JPMorgan /IBES

Sources in the text: JPMorgan, Barclays, Bloomberg

Nordic equities

Happy consumers, depressed manufacturers

Another strong stock market year is coming to a close. The VINX Nordic index indicates a total return of about 16 per cent (in SEK), and central banks have again played a vital role in this performance. The lack of return-generating alternatives has been the stock market's trump card for a long time and will also be an important source of support during 2016. The trend of corporate earnings is positive, yet clearly disappointing. There are, however, major differences between countries, sectors and companies. One consistent theme is that in many cases, companies whose end-customer exposure consists of consumers are performing relatively well, while companies dependent on commodities/energy – or sub-contractors of commodity producers and commodity-exporting economies – are consistently plagued by falling demand. This trend was accentuated during the third quarter of 2015, and we see no signs of any immediate turnaround. On the contrary, time lags in the economy – combined with the prevailing labour market situation in the Western world and current mineral prices – suggest that this dual-track demand situation will persist.

- Listed companies face a dual-track market.
- Consumers are sitting pretty, while oil and mining are sliding rapidly into black holes.
- The earnings trend is disappointing, and forecasts are being adjusted downward.
- Low return requirements will provide support.
- A lack of support from the economic cycle will lead to recurring market turmoil.

IN 2015 THE AGGREGATE EARNINGS of Nordic listed companies are expected to grow by nearly 9 per cent. This is less than half of what we estimated at the beginning of the year. In 2016 we expect an earnings level of below 7 per cent. This means that our 2016 forecast has been adjusted downward by a full 14 per cent this year. These downward adjustments are broad and affect all the Nordic countries and essentially all sectors; only the health care sector has seen upward adjustments in forecasts. Norway's downward adjustments are by far the largest (more than 30 per cent). This is largely explained by the oil and gas industry, where a downward adjustment of more than 50 per cent gives it last place among the 10 sectors into which we divide the market.

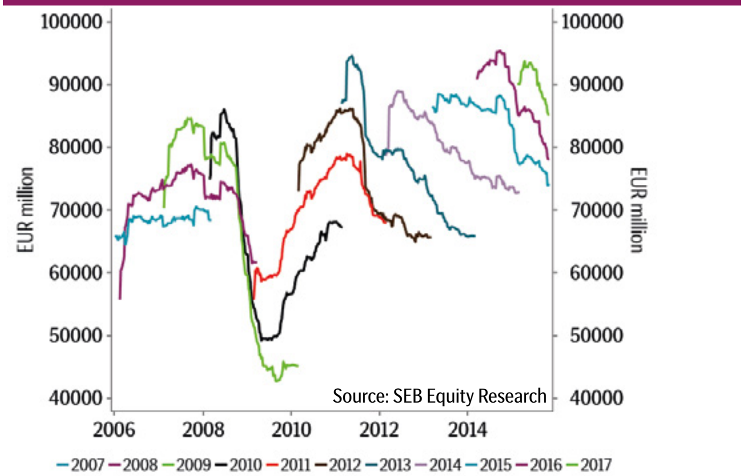
Modest growth in Sweden, despite weak krona

This year we have seen the second-largest downward revisions in Sweden. Here too, an important explanation is commodities and oil as well as industrial companies exposed to these sectors, but the telecom sector and banking have also recently been disappointing. Earnings growth is expected to be somewhat better in Sweden than in the other Nordic countries. In krona terms, we foresee aggregate earnings growth of 11 per cent in 2015 and 9 per cent in 2016, but given the powerful tailwind that Swedish companies have enjoyed because of the weak krona, this is not especially impressive. Besides, Sweden is better than "other Nordic countries" in 2015 mainly because this comparative group includes Norway. Both Finnish and Danish listed companies are expected to show better earnings growth this year than Swedish ones, even though these companies have not benefited in the same way from currency exchange rates.

Worse than expected, better than feared

Third quarter company reports were somewhat disappointing, compared to analysts' expectations. This applies to earnings, but even more to the order bookings of large industrial companies. In spite of this, share prices have reacted

HOPES OF A CYCLICALLY DRIVEN PROFIT SURGE ARE DASHED ONCE AGAIN



The chart shows SEB's forecast of aggregate earnings in millions of euros for Nordic listed companies during the financial years 2007-2017 as well as revisions of these over time. The earnings trend has been the object of steadily recurring disappointments since 2011. But this is primarily due to a lack of earnings growth and to hopes that improved economic conditions during the next year and the next six months will then raise earnings, which have repeatedly proved to be wrong. There have been periodic signs of stabilisation, most recently during the spring of 2015, followed by a new wave of downward revisions such as this autumn.

positively on average once the reports have been published. We interpret this as meaning that in spite of everything, companies have performed less negatively than many investors had feared late this past summer. Above all, the widely expected collapse in Chinese demand conspicuously failed to occur.

Consumer companies in a better trend
One clear pattern during the report period, which is not new but which was further accentuated during the third quarter of 2015, is the dual-track world that companies are encountering in terms of demand. Companies that sell to consumers – or that are sub-contractors to sectors driven by private consumption – are generally reporting a substantially better trend of demand than average. They have also provided upside surprises to a significantly greater extent than other companies. This applies to the consumer sector as such, but even in the manufacturing sector we can see that companies that sell, for example, to the passenger car industry or to white goods producers have performed substantially better than other manufacturers. Hardly surprisingly, on the weak side we find oil, energy and commodity companies, as well as their sub-contractors. We can also see “rings on the water” effects in other closely related sectors.

This pattern is not uniquely Nordic. On the contrary, it is even clearer if we look at the reports from the 500 largest American listed companies (S&P 500) for the third quarter of 2015. Classifying them into ten different sectors, consumer durables top the list with 16 per cent earnings growth compared to a year earlier, followed by health care and telecoms with 15 per cent earnings growth. Overall earnings are growing in seven out of 10 sectors, but because of the dramatic decline in the energy sector the total earnings of all companies are down by nearly 2 per cent – even though total earnings in the other nine sectors increased by 7 per cent.

China explains this dual-track growth
One important reason behind the trend we are seeing in corporate reports can be found in China. Economic growth in China is slowing down. It is not collapsing, but the deceleration in the growth rate – which has been under way since the first quarter of 2010 – is continuing. In addition, the structure of the Chinese economy and the composition of its growth are changing dramatically. The consequences of these changes are probably at least as important to Nordic listed companies as the lower overall economic growth rate.

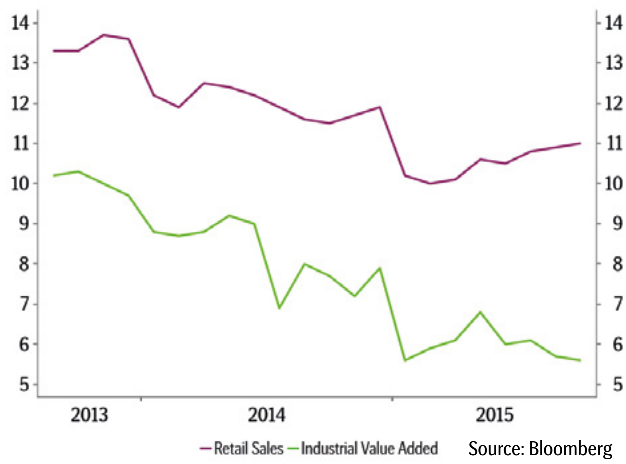
Growth composition more important than speed
After decades of growth primarily driven by manufacturing, exports and large infrastructure investments, for a long time the Chinese economy has had a lopsided and ultimately unsustainable structure – with an excessive environmental impact and extremely uneven allocation among both individuals and regions. Under the current Communist Party chairman and president, Xi Jinping, these problems along with the battle against corruption have been assigned a distinctly higher priority. The composition of growth appears to have become more important than its speed. China is now actively trying to achieve a better balance, with more private consumption-driven growth and a lower share of capital spending in the economy. The effect of this shift has now become clear, both in the official statistics and in SEB’s own research.

SEB’s latest China Financial Index, a twice-yearly survey among top managers at Nordic and German subsidiaries in China, confirms that growth is generally slowing but remains positive, and there are major differences between sectors. The golden years appear to be over for heavy industry, infrastructure and machinery sector sub-contractors, and in many cases demand is shrinking in these fields. However, business remains brisk in health care, consumer goods and professional services.

THE GOLDEN AGE OF COMMODITIES SEEMS TO BE OVER

The chart shows the price of oil (Brent crude, USD/barrel, right-hand scale) and copper (USD/tonne, left-hand scale) since 2004. China’s appetite for commodities and energy has decisively influenced prices, and the ongoing structural transition in the Chinese economy is having a big adverse impact on all the companies and countries that benefited from this appetite earlier in the current decade.

RETAIL SALES OUTCLASS MANUFACTURING IN CHINA



The chart shows year-on-year percentage growth in China’s retail sales and industrial value added during the past two years. Growth is slowing in both industry and retailing, but growth is substantially higher in retailing and the difference has increased noticeably in the past year. (Note: Data for January and February have been omitted due to recurrent major disruptions in data for these months because of the Chinese New Year, which varies between different dates in the Gregorian calendar.)

Chinese official statistics also indicate that growth is generally slowing and that this is especially accentuated in industrial production, where there has been a clear falling trend for several years. Retail sales growth has also lost momentum in recent years, but after reaching a low point last spring there has now been a six-month period of accelerated retail sales growth, parallel with continued deceleration in industrial production. The gap between the growth rates in these two sectors is now the widest for at least three years – clear confirmation that the structure of China's economy is changing and becoming more consumer-driven.

The rebalancing of China's economy has a far-reaching impact on other countries and is not limited to the Chinese-based subsidiaries of multinational companies. The country's hunger for energy and commodities to sustain its industrialisation and urbanisation played a decisive role in the commodities boom that the world experienced between 2004 and 2013 (with a brief, abrupt interruption in 2008-2009). High prices for both energy and metals led to gigantic investments in new production capacity all over the world, and especially in a large number of mineral-rich emerging market countries such as Russia and Brazil. Now that growth in demand from China has slowed sharply, the effect on the market is dramatic. Such effects are now spreading further to all global manufacturing via the commodity and energy sectors plus sub-contractors and sub-sub-contractors, as well as via numerous countries whose economic backbone consists of mineral exports.

Consumers are sitting pretty

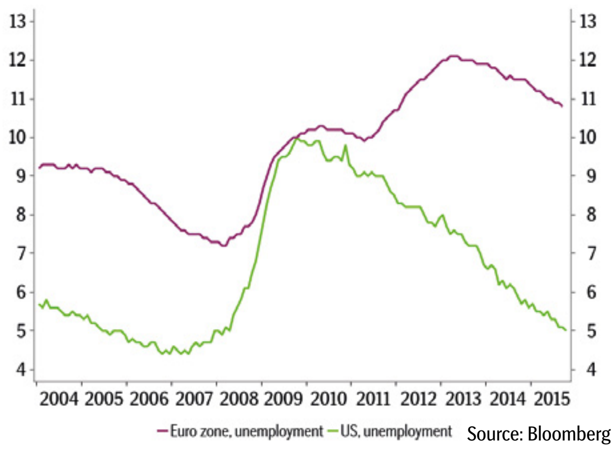
Although today it is easy to fall into the trap of believing the opposite, the decline in prices of oil and other commodities is not negative but positive for the world economy, at least in a somewhat longer perspective. For households, lower energy costs result in sometimes significant increases in the disposable income that is available for other consumption. Economists often say that an oil price decline is like a tax cut. But even if cheaper energy is pleasant and positive for households, in most cases it is far from being decisive to their sentiment and willingness to consume. What is most critical is the labour market. Fortunately the labour market is relatively strong today in important economies such as the United States, Germany and the United Kingdom. In the US we are also seeing that more labour-intensive parts of the business sector – the service sector and small businesses – plan to continue recruiting new employees at a rapid pace. In the euro zone as a whole, unemployment remains high but the labour market has been improving for the past 2½ years.

Other factors of great importance to household finances and willingness to consume are asset prices (especially homes and financial securities), access to credit and interest expenses. In several of the most important Western economies, these factors are at or near their most favourable levels on record. Overall, this is also reflected in high consumer confidence in several important markets, with consumers opening their wallets more frequently.

Widening gaps visible around the world

One area where the joy of consumption is obvious is new passenger cars. In Sweden, car registrations are expected to set a new record in 2015 for the first time in 27 years. In Europe's most important automotive markets – Germany, the UK, France, Italy and Spain – car sales are also growing substantially this year. The hard-pressed markets of southern Europe are showing the strongest recovery. In Spain, percentage growth is in double digits. In the US, car sales are growing at the fastest annual rate in 10 years; in recent months they have been about 10 per cent higher than a year earlier. In China and India, too, car sales grew by double digits in per cent during October.

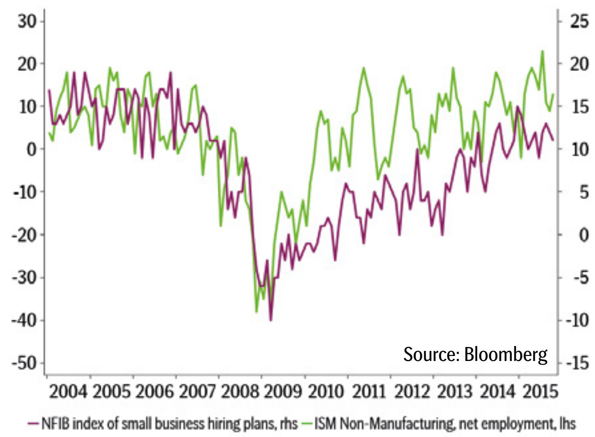
UNEMPLOYMENT IS FALLING IN EUROPE AND LOW IN THE US



Source: Bloomberg

The chart shows official unemployment in the US and the euro zone as a percentage of the labour force. The US labour market is relatively strong. In Europe, unemployment remains high but the trend has been in the right direction for the past 2½ years. In countries like Germany and the United Kingdom, the labour market is strong.

A POSITIVE SPIRAL IN THE US LABOUR MARKET?



The chart shows an index of hiring plans at small businesses (NFIB) and a purchasing managers' index for the service sector (ISM Non-Manufacturing) in the United States. An overwhelming share of job growth occurs in small businesses and in the service sector, so it is quite encouraging that these two parts of the business sector continue to have high ambitions on the recruitment front.

If we look more closely at the US, we can see that robust demand is not limited to cars; for example, sales of new homes and white goods are also growing strongly. The contrast between these cyclical, consumer-oriented sectors and the commodity sector is extreme. In one of the charts below, we use the number of active drilling rigs for oil and gas production and exploration in the US to illustrate energy sector investments, which have recently more than halved. Meanwhile car sales are about to break records. During the initial economic recovery after the 2008 Lehman Brothers crash these two indicators moved in the same direction, but recently an ever-wider gap can be seen opening between them.

Meanwhile we can see how consumer confidence in Germany, just like car sales in the US, has shown a relatively steady upward trend since 2009. Initially we could see a parallel but even more powerful upturn in optimism about the country's manufacturing sector (just like for drilling rigs in the US). But the latter upturn peaked as early as 2010, and in recent years a clear gap has emerged between more optimistic consumers and more worried manufacturers.

We believe that the same "gap" between heavy industry, on the one hand, and relatively fortunate consumers, on the other hand – illustrated by the above examples from the US and Germany respectively – is also visible in Chinese industrial value added and retail sales as illustrated on page 12.

Unshared joy is twice the joy

For manufacturers and retailers of consumer goods, however, the willingness of households to consume is not the only thing that is especially favourable right now. When it comes to cost trends, the commodity crash is also a supportive factor. In 2007 many consumer-oriented companies were suffering, not so much from poorer demand as from expensive commodities and an inability to pass on higher costs to consumers. While industrial customers often have a good understanding of the need to adjust prices of material-intensive products to compensate for higher input costs – sometimes even automatically by means of pricing indexing – households often have little understanding of or interest in such factors. In many cases, they are probably completely ignorant of recent price trends for the commodities that go into their products.

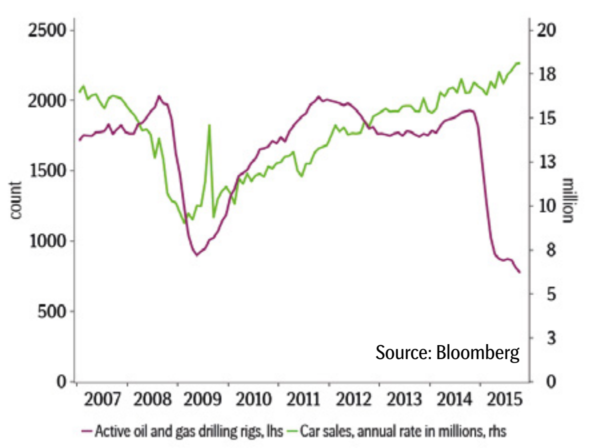
Today, helped by the same consumer ignorance and lack of interest as above, the companies that suffered eight years ago from the difficulty of passing on higher commodity prices can probably also keep part of the savings resulting from cheaper commodities – at least during a transitional period. Nowadays the best-positioned consumer goods companies are seeing better demand and a simultaneous improvement in their underlying operating margins.

Looking ahead, what will happen to the growth gap?

No tree grows to the sky. The last time we saw such an extremely dual-tracked market situation for listed companies – a mirror image of today's situation in 2007-2008 – it came to a sudden scary end when the crash came in the autumn of 2008. But we believe that the catalysts and market dynamic at that time were completely different from those of today, so it is probably not worth trying to draw any conclusions based on that period.

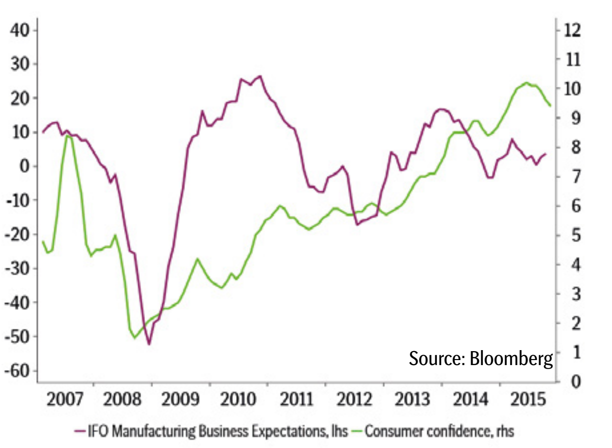
We believe that the favourable trend for consumer-oriented companies – especially compared to companies exposed to heavy industry, energy and commodities – will continue for a while. Current prices will not stimulate new investments in oil, mines or steelworks; on the contrary, there is an obvious risk of, and a need for, capacity cutbacks in all these areas. It will also probably be necessary to have a lengthy period of higher prices before capital spending will take off again. One explicit ambition by Saudi Arabia – not cutting back oil production in order to prop up prices – is to raise the risk level of investments

THE CAR INDUSTRY IS HEADING TOWARDS RECORD SALES, WHILE OIL AND GAS DRILLING COLLAPSES



The chart shows the annual rate of US car sales in millions of vehicles (seasonally adjusted) on the right-hand scale and the number of active US drilling rigs for oil and gas production or prospecting on the left. US car sales are heading towards a record year in 2015, while oil sector investments are collapsing and the number of active rigs has more than halved in one year. The same pattern recurs in closely related sectors. There is also a clear impact on sub-contractors at more than one level.

GERMAN CONSUMERS ARE MORE OPTIMISTIC THAN MANUFACTURERS



The chart shows the GfK Consumer Climate Indicator for Germany and the Ifo index of manufacturers' business expectations. Although a slight reversal can be noted in recent months, consumer confidence has shown a strongly positive trend since the summer of 2008. The manufacturing sector, however, showed a significantly faster recovery until the autumn of 2010 but since then it has had a gloomier outlook; during the past two years, optimism among manufacturers has deteriorated while consumer confidence has continued to strengthen.

in expensive oil wells, such as American shale oil and Brazilian offshore fields, in order to scare investors away from such spending. Meanwhile there is potential for the labour market and consumers in parts of the Western world, especially the US, to enter a positive spiral in which growing consumption will lift the service sector, which in turn will strengthen the labour market and thereby boost consumer confidence further.

Summary and strategy

The stock market's main trump card is –and will remain – investors' low return requirements, which will persist during the foreseeable future regardless of whether the Federal Reserve hikes its key interest rate in December or not. Looking ahead, low interest rates and good liquidity will continue to sustain share prices. As in recent years, however, there is an obvious risk that from time to time, investors will experience major market instability due to the weak earnings growth of listed companies.

One recurring question in the stock market is why the economy is not showing greater strength despite years of massive monetary policy stimulus. We fear that this theme may continue to generate volatility in 2016. We continue to prefer consumer-oriented companies and are avoiding those with exposure to commodities, energy and emerging economies that are highly dependent on commodities and energy.

Overall, we expect continued cautiously positive – but occasionally volatile – stock market performance during the coming year. In order to adopt a more positive attitude, we would like to see stabilised earnings forecasts and faster earnings growth. Potential threats to our cautiously positive basic view include the risk that the problems of the energy and commodity sectors and EM countries will escalate via the financial sector and thus also begin to harm healthier portions of the world economy.

% Fixed income

Active central banks with different aims

The next few quarters will very likely be characterised by a continued high level of activity on the part of the world's central banks. In our view, the US Federal Reserve (Fed) will increase its key interest rate gradually, with an initial hike on December 17 – almost exactly seven years after launching its low interest rate policy. The European Central Bank (ECB) has clearly indicated that there will be further monetary stimulus, possibly as early as December. Sweden's Riksbank decided to extend and expand its government bond purchasing programme in direct response to the ECB's dovish statements. Central banks in Japan, India, China and Norway are also providing stimulus. Given their aim to create potential for stronger economic growth via low interest rates and quantitative easing, in this scenario there is a risk to the fixed income market that inflation will accelerate unexpectedly.

- Sweden's Riksbank will continue its quest to achieve a 2 per cent inflation target.
- The energy sector will be an uncertainty factor in the corporate bond market.
- A two-speed situation in emerging markets.

Riksbank forced to continue stimulus measures

The Riksbank's response to ECB signals of continued stimulus was not long in coming. The Swedish central bank extended and expanded its current government bond purchase programme to a total of 200 billion Swedish kronor, with a new end date of June 2016. Its benchmark interest rate may also be adjusted downward, but only marginally from today's level of -0.35 per cent. The reason for the Riksbank's moves is of course to spur Swedish inflation and achieve its 2 per cent inflation target.

The inflation target as such has been called into question recently. How is inflation in Sweden actually measured today? In Sweden, inflation has long been measured as lasting changes in the consumer price index (CPI). One problem with this method is that it includes households' mortgage interest. Over the past 20 years, this component has trended downward, in turn driving the CPI to lower levels. The Riksbank therefore implemented a modified method, the consumer price index with a fixed interest rate (CPIF). The CPIF is more compatible with statistics published in other countries, which makes comparisons between countries easier. Several years ago the Riksbank decided to focus on the CPIF in its monetary policy, while sticking to the CPI as its official measure of inflation. As a result, the effect of declining mortgage loan costs does not influence the monetary policy pursued by the Riksbank.

Fed to initiate a normalisation of monetary policy

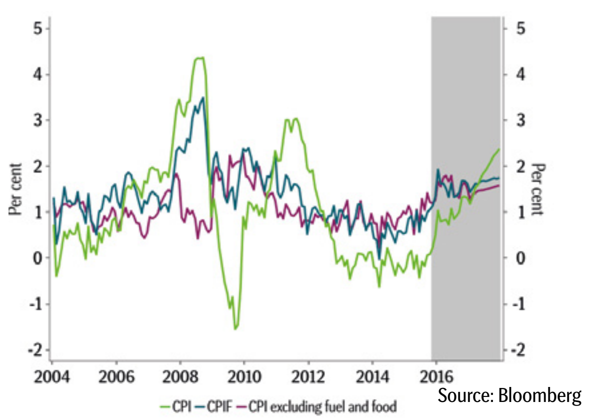
The US economy continues to show strength, and there are signs that this positive trend will continue. That will allow the Fed to start bringing its key interest rate back to a more normal level. We believe that it will increase this rate to 0.25-0.50 percentage points at its next meeting in December. This should be the start of a series of rate hikes, although at a slow and measured pace, given that Fed Chair Janet Yellen has noted on numerous occasions the international importance that monetary tightening may have. SEB predicts that the year-end federal funds rate will be 1.00 per cent in 2016 and 2.00 per cent in 2017.

Government bonds (ex emerging markets)

During the autumn, government bond yields in most countries have remained in a rather narrow, stable range, except in the US, where yields have climbed significantly, buoyed by improved economic data. That is because investors have already begun to price in the Fed's coming rate hike. The ECB, on the other hand, has signalled that further stimulus measures are on the way in early December, and we believe it has three alternative paths ahead:

1. Increase its monthly government bond purchases to between 70 and 80 billion euros.
2. Extend its asset purchase programme beyond the current end date of September 2016.
3. Further lower its key interest rate.

RISING SWEDISH INFLATION DESPITE LOWER OIL PRICES



Source: Bloomberg

The weaker krona, base effects (the price decline compared to one year earlier) due to lower energy prices and an increase in indirect taxes will create upward pressure on inflation.

The aim of the stimulative monetary policy being pursued by the ECB has been to boost the economic recovery in Europe in general and southern Europe in particular. A weakening of the euro against other currencies, which would indirectly help spur European inflation, is also in the cards. All in all, this means that bond investors will be forced to look further out on the risk and yield curve if they want to maintain previous return levels.

Corporate bonds – Investment grade and high yield

There are both positive and negative indicators in the US corporate bond market. The number of bankruptcies is on the rise, though from historically low levels and mostly in the oil and gas sectors, as a result of depressed energy prices. Reduced bank lending has also led to a bigger supply of corporate bonds, which – all else being equal – is driving yields higher. On the other hand, US corporate bonds are generating higher returns than their European counterparts due to the higher credit risk from the energy sector (a far smaller sector in the European corporate bond market). In Europe, the market is more stable because of this low exposure to the energy sector.

The ECB's continued stimulus measures have an indirectly positive influence on European corporate bonds, since the search for returns is shifting investor demand from government to corporate bonds. The situation in the Nordic market, where there is greater emphasis on high yield bonds in the energy sector, remains stretched. Bonds with a 3.5 per cent coupon can today yield between 15 and 20 per cent. Naturally, the most important underlying factor is low oil prices, which in turn increase the credit risk and reduce demand for these bonds. An upturn in oil prices and stabilisation at higher levels would be a positive signal. However, at present the oil price trend is uncertain (read more in *Alternative investments*).

The Swedish bond market has been dominated by a large supply of bonds from real estate companies during the autumn, a supply that has almost completely vanished in recent weeks. There will probably be a number of new issuers in the market before the end of the year, which should expand the supply again. Because of deteriorating liquidity, investors increasingly see their purchase as something to hold until maturity. Another pattern is that investors are buying bonds with floating rates as an alternative to fixed rate bonds, in order to eliminate interest rate risk.

Emerging markets – Continued uncertainty about growth (EM debt)

The presumed hike in the US key interest rate, with a stronger dollar as a result, will probably have a negative effect on government and corporate bonds in emerging markets. The problem arises when revenue in a local currency is to be converted into a more expensive US dollar to cover USD-denominated liabilities. One country that could fare badly is Turkey, since companies and the government have large loans in USD.

The reverse is true for countries in Central Europe, which are largely dependent on the economic trend in Germany and thus benefit from the ECB's stimulus measures.

The situation in South America, led by Brazil, remains uncertain since many countries are affected by declining oil prices as well as political instability. In Asia, the economic trend in China is the most important factor, and there is currently some uncertainty about what that country's new five-year plan will mean to future growth. However, the impact of Japanese stimulus measures should spread through the region and provide positive support. Nor is Asia unaffected by commodity price movements. India is a major oil importer that benefits from the current price trend, whereas Indonesia is being squeezed by lower prices.

ASSET TYPE	WEIGHT	TACTICAL EXPECTED YEARLY RETURN			RISK		
		SEK	EUR	USD	SEK	EUR	USD
Cash	**1** 2 3 4 5 6 7	-0.5 %	-0.2 %	0.2 %	0.2 %	0.2 %	0.7 %
Government bonds	1 **2** 3 4 5 6 7	-1.6 %	-1.1 %	0.2 %	4.9 %	3.8 %	3.9 %
Investment grade corporate bonds	1 **2** 3 4 5 6 7	2.0 %	1.5 %	0.7 %	2.9 %	2.4 %	2.4 %
High yield corporate bonds	1 2 3 **4** 5 6 7	4.9 %	3.8 %	4.3 %	3.6 %	3.6 %	3.6 %
Emerging market debt	1 2 **3** 4 5 6 7	6.9 %	7.1 %	6.5 %	10.2 %	9.5 %	9.8 %

"Weight" indicates how we currently view each asset type as part of a portfolio. Level 4 is a neutral stance. These weights change continuously depending on our tactical market outlook and may therefore differ from our long-term strategic outlook for the asset type.

Source: SEB

Alternative investments

Waiting for lower volatility

After a volatile summer, when navigating the market was especially difficult for hedge funds in general, there were hopes that conditions would improve during the autumn. However, with the third quarter behind us, it is clear that this was not the case. Sharp movements in the world's stock markets, historically low yields on government securities and the continued unpredictability of monetary stimulus measures, combined with mixed macroeconomic signals on global growth, are factors that have created a cocktail that is anything but appealing to hedge fund managers.

Downward adjustments in global GDP growth, mostly due to weaker growth in a number of emerging markets, indicate relatively negative prospects for the commodities market.

- The difficult market for hedge funds last summer continued during the autumn.
- Despite this year's difficulties, new capital continues to flow into hedge funds.
- Demand from China is driving commodity prices.

Hedge funds – Waiting for lower volatility

August turned out to be the most difficult month in years for hedge funds, and essentially every strategy posted negative returns during the period. In September there was some rebound, which accelerated in October. Regardless of the strategy or asset class, hedge fund managers are looking for some form of predictability in the direction of the underlying markets. The difficulties over the past six months, and the potential going forward, are thus associated more with predictability and the stability of trends rather than their direction.

Equity long/short

Due to the strength of recent world stock market movements, there has been some de-coupling between share prices and company fundamentals. Overreactions to both upswings and downswings like those we have seen for individual companies should provide this strategy with the potential to identify mispricing and find investment opportunities. However, this assumes a stabilisation in the underlying stock market and a shift in the focus of share pricing from market factors to company fundamentals. Among managers who normally have some net exposure to equities, we prefer those who can quickly adjust their net exposure.

Credit long/short

Managers of this strategy have had to navigate difficult terrain during the summer and autumn. General volatility has also had a negative effect on credit markets. There was some rebound in October, but the strength of that rebound was not on a par with that of equities during the same period. Sustained strength for this strategy requires clear macroeconomic signals that global growth is on the right path, which among other things would imply support for emerging markets and commodities.

Event-driven

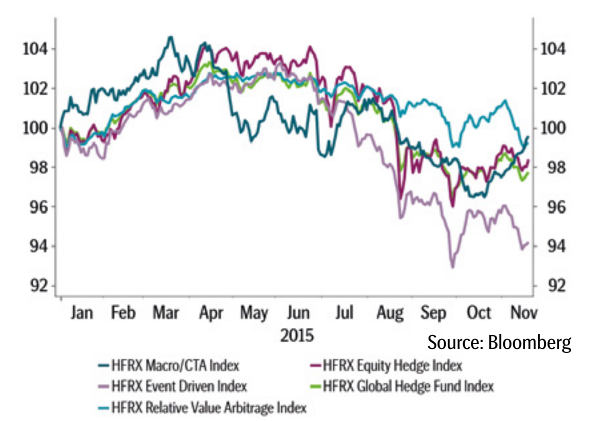
The underlying market for corporate events continues to grow. At the end of the third quarter, the global volume of corporate mergers and acquisitions was 30 per cent higher than on the same date last year. However, the underlying stock market trend and more stringent regulations have been counteracting forces that have kept down returns.

The underlying market has potential to remain strong in terms of corporate activity, and combined with fairly stable prospects for the stock market this strategy should be able to recover some of its declines from the summer and autumn.

Macro/CTA

By focusing on interest rates, yields and currencies, SEB's macro hedge funds managed to avoid the most negative effects of the commodity and share price decline in September. Trend-following strategies (CTA) did not do as well, since rapid reversals in short-term trends regardless of the asset class are difficult to handle with this strategy. After a period of uncertainty about the direction of the market, economic data in the coming period should indicate a clearer direction. This should benefit talented macro and

ABRUPT CHANGES IN A VOLATILE AUTUMN MARKET



This autumn's volatile markets have created challenging conditions for hedge fund managers, with abrupt changes in the yield curve as a result.

CTA managers. Meanwhile we are getting ever closer to the US Federal Reserve's first key interest rate hike and to a lower correlation between asset classes.

Commodities: Excess supply bolsters expectations of continued low oil prices

Small downward adjustments in global GDP growth, driven by weaker growth in a number of emerging markets, indicate relatively negative prospects for the commodities market. The pattern of growth and demand, especially from China, signals a rebalancing in demand from investment-driven commodities such as iron ore, steel and cement to more consumer-driven commodities such as energy and aluminium.

The steep decline in (Brent) oil prices has caused demand for oil to rise, but we believe the effects of this will be temporary given that the mainly affluent OECD countries appear to be heading back towards a trend of gradually falling oil consumption. Poor prospects for coal and gas prices over the next five years, all else being equal, are also negative for oil prices.

The Organisation of the Petroleum Exporting Countries (OPEC) does not seem to be planning for any production cut, but instead looks set to increase output. Supply will also be affected by Iran, which will probably increase its production in 2016 once sanctions against the country are lifted. This year world oil production has generated a surplus, resulting in growing oil stockpiles.

Going forward, the key factors will be how quickly US crude oil production can be cut and how today's lower capital spending will affect production later on. US shale oil is more adaptable, and higher volumes can quickly start being delivered if oil prices go up. Any changes in OPEC's strategy will also be crucial to the price trend. The uncertain growth prospects for many emerging markets are another factor that could contribute to continued price volatility.

The production surplus and increase in oil stockpiles are expected to continue into next year, and these enormous stockpiles can start to shrink only when there is a shortfall in oil production. We expect the oil market to achieve balance during the second half of 2016, and we predict that oil prices will gradually head towards USD 60 per barrel in 2017.

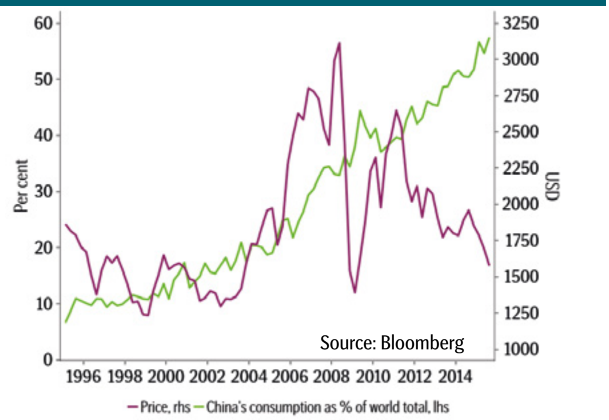
Who will take over after China?

Although growth prospects for China have deteriorated, a growing demand can still be seen for consumption-driven commodities such as energy and aluminium while the demand for investment-driven commodities such as iron ore, steel and cement has fallen. This reinforces the view that China is shifting from an economy driven by capital spending to one with more consumption-driven growth. The shift was expected and corresponds to an economic stage where there is a growing middle class and a population that demands commodities such as wheat to a lesser extent while demanding meat, energy and more durable goods such as cars to a greater extent. A study conducted by Goldman Sachs ("What China's rebalancing means for commodities", October 12, 2015) shows a strong correlation between growth in investment-driven economies and demand for commodities such as iron ore, steel, zinc and aviation fuel, whereas growth in consumption-driven economies could largely explain demand for commodities such as aluminium and meat. The question is what country or countries will drive up demand for investment-driven commodities after China.

Gold prices linked to interest rate hike expectations

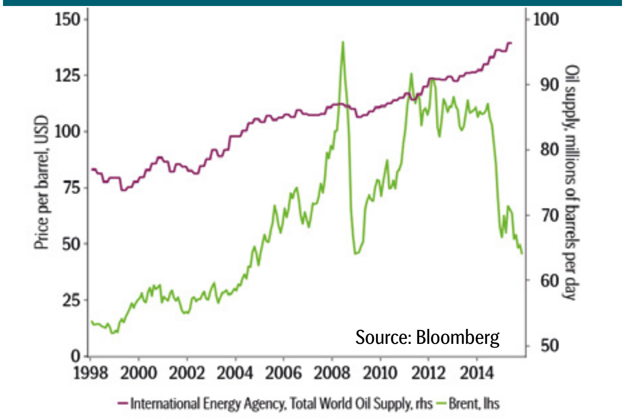
Gold prices have long been directly related to expectations about when the US Federal Reserve will increase its key interest rate. Earlier in the year, gold prices benefited from increased volatility in financial markets following the developments in Greece. Unlike most other commodities, which were adversely affected by slumping Chinese demand, gold has avoided sharp price declines since 2011. If the expected US interest rate hike is delayed, gold prices could rise somewhat in the short term.

CHINA'S ALUMINIUM CONSUMPTION CONTINUES TO GROW



China's share of total aluminium consumption continues to grow, but today's low price is not necessarily positive since China also accounts for a large percentage of production.

PRODUCTION SURPLUS IS KEEPING DOWN OIL PRICES



A continued large production surplus is helping keep (Brent) oil prices at around USD 45 per barrel at this writing. We expect the oil market to achieve balance as production in the OECD countries, but not in OPEC, declines next year. Our forecast is that oil will head towards USD 60 per barrel in 2017.

Currencies

Central banks still driving exchange rates

Central bank monetary policies continue to dominate foreign exchange (FX) market trends. So far, interest rates have been less important, with changes in monetary policy the most dominant factor for exchange rates. Expectations that the Federal Reserve (Fed) and the Bank of England (BoE) will soon start hiking their key interest rates have taken the USD and GBP to multi-year highs, even before the two central banks have begun tightening. Meanwhile having a weak currency has become more popular among central banks in order to "create" inflation. As a result, a clear dependence has developed between the outlook for monetary policy and exchange rates. Prospects of tighter monetary policy are rewarded with a stronger exchange rate, and at the same time they moderate the need to tighten policy.

- USD – Will remain strong, with a balanced risk picture.
- EUR – Undervalued, but due to low inflation a weak euro is still needed.
- JPY – Attractively valued, but will weaken because of need for stimulus measures.
- GBP – "Brexit" risk may have negative effect on "Europe's dollar".
- CHF – Overvalued against the Swedish krona.
- SEK – Sweden's Riksbank will be forced to accept a stronger krona.
- NOK – Risk of weak economic growth and a continued weak krone.

The US Federal Reserve announced in September that its first interest rate hike would not occur at that time. This diminished the appetite for the US dollar while benefiting commodity-linked currencies, emerging market (EM) currencies and the euro. However, a stronger euro was not a desired trend for the European Central Bank (ECB), which indicated quite clearly through verbal interventions that the top end of the EUR/USD range was around 1.15. Since then, the Fed has signalled that its first hike will come before the end of the year, while signals from the ECB instead point to additional quantitative easing as part of its already expansionary monetary policy. This once again reversed the trends in the FX market, with a stronger dollar, weaker commodity currencies and a weaker euro. Developments this autumn show quite clearly how central bank actions affect FX market trends. December will be extremely interesting, since all the major central banks including those in Scandinavia will make new interest rate announcements which will probably affect the trend. Historically, the dollar has weakened once the first increase in a new rate hike cycle has become a reality. However, the question is whether this historical correlation is relevant in the current environment. We expect the dollar to remain strong over the next year as the divergences between major central banks continue to widen. In such an environment, the squeeze on commodity-linked currencies normally persists, and even if the Swedish krona appreciates, this movement will probably be limited.

USD – Still strong, with balanced risks

With the Fed having decided earlier this autumn to leave its key interest rate unchanged, we expect the first rate hike to come at its December meeting. At the same time, we believe the Fed will proceed very cautiously with further hikes over the next couple of years. Previously, the dollar tended to weaken once the Fed started to raise its rate. This is a risk early next year. The USD is starting to become strong at current levels. Absent the support of any rate hike surprises, we find it difficult to see any potential upside from current levels. Meanwhile the dollar's performance will also depend on measures taken by other central banks (the ECB and Bank of Japan). Our main scenario for the next six months is still that the USD will continue to appreciate somewhat further but that there are short-term risks based on its historical behaviour following an initial rate hike.

EUR – Undervalued, but due to low inflation a weak euro is still needed

The euro zone economy continues to recover, and our long-term growth forecast is positive. The euro is getting some support from a current account surplus. ECB President Mario Draghi has again indicated that there

RIKSBANK WILL PROBABLY HAVE TO ACCEPT A STRONG KRONA

Source: Bloomberg

The Riksbank is continuing its efforts to coax inflation up to 2 per cent by weakening the krona. The Fed's rate hike may provide support, while ECB stimulus measures may create challenges.

may be further monetary easing to stimulate demand and bolster rising inflation. Until now, he has always surprised investors with more far-reaching measures after similar pledges. This may occur as early as December and should help further weaken the euro. In trade-weighted terms, the euro is undervalued, but as long as there are downside risks to inflation, the ECB will keep an eye on the euro and push back against appreciation. Meanwhile there are signs that the euro is becoming increasingly popular as a currency for financial transactions (as is the yen) due to low interest rates and prospects of remaining low for a long time. Normally this helps weaken a currency. We expect this to counter any euro appreciation, although the currency is undervalued in the long term.

JPY – Attractively valued, but will weaken due to need for stimulus

The Japanese yen has fallen more than 30 per cent in trade-weighted terms since its 2012 peak. According to our valuation models, it is undervalued. Meanwhile expectations are low that Prime Minister Shinzo Abe's three-prong economic programme will meet its targets – especially sustained inflation of 2 per cent. After the third quarter, Japan is again in recession (two quarters of negative growth). With inflation well below target and negative growth, we expect further expansionary measures from the Bank of Japan. This will probably further weaken the yen going forward.

GBP – "Brexit" risk may negatively affect "Europe's dollar"

After the US Federal Reserve, the Bank of England (BoE) will probably be the next central bank to raise its key rate. Inflation is still low and may not approach the BoE's target until 2017. The need to tighten monetary policy will thus probably be put off until the second half of 2016. Then the key rate will be hiked at a slow pace. Starting at historically low levels, the pound is now already overvalued against currencies such as the Swedish krona. There is very limited scope for further appreciation. Meanwhile the pound has largely tracked the USD over the past year, which is still an upside risk if the dollar appreciates further. On the other hand, a UK referendum on EU membership and the risk of "Brexit" (Britain leaving the European Union) could pull down the pound. But it is still uncertain whether the referendum will take place in 2016 or be put off until 2017.

CHF – Overvalued against the krona

After the Swiss central bank abandoned its cap on the franc (CHF) against the euro last spring and the CHF appreciated sharply, the country is headed for a lengthy period of deflation. During Q3, inflation was -1.4 per cent. Despite the strong currency, economic growth remains positive and the country can clearly handle the higher FX rate reasonably well. Given the euro zone political situation, new capital inflows to Switzerland cannot be ruled out. This would mean a stronger CHF than fundamental valuation models indicate.

SEK – Riksbank will be forced to accept a stronger krona

Strong fundamentals and an attractive valuation are the main reasons why we expect the Swedish krona to strengthen from current levels in the long term. Growth looks set to reach well over 3 per cent in the next couple of years as consumption and construction grow rapidly. Meanwhile the savings ratio is still high, contributing to a large current account surplus. Market positioning also suggests flows that will push up the krona. Because of underlying appreciation pressure, the Riksbank has been forced to lower its key interest rate below zero and expand quantitative easing through government bond purchases. In the first phase, it announced monthly purchases of SEK 10 billion, but in October it extended these until summer 2016, when its bond holdings are expected to total SEK 200 billion. Inflation will rise relatively quickly in the coming months and could approach an annualised rate of 2.0 per cent (Q1 2016). With little chance of countering appreciation going forward, we believe the Riksbank can/must accept a stronger krona in 2016.

NOK – Risk of weak growth and continued weak currency

Not surprisingly, Norway's economic situation has deteriorated, since oil prices have more than halved since summer 2014. It remains unclear how great the repercussions of a weaker oil sector will be. So far, Norges Bank has tried to counter the negative growth trend by cutting interest rates. Its key rate is now 0.75 per cent. Further cuts cannot be ruled out if growth remains weak, which will probably continue to have a negative effect on the krone. Meanwhile Norway's huge Government Pension Fund has great potential to spur the economy with expansionary fiscal policy, so a recession can be ruled out. Inflation is close to the central bank target and the currency is at a record low, which could be one reason for Norges Bank to wait and see about further rate cuts.

CURRENCY PAIR	FX RATE				CHANGE, %	
	Now*	Q4 2015	Q1 2016	Q2 2016	Q4 2015	Q1 2016
EUR/USD	1.06	1.05	1.02	1.00	*-1.5*	*-4.4*
EUR/SEK	9.30	9.20	8.85	8.80	*-1.3*	*-5.1*
EUR/NOK	9.29	9.50	9.40	9.25	*2.8*	*1.7*
USD/SEK	8.73	8.76	8.68	8.80	*0.2*	*-0.8*
USD/NOK	8.72	9.05	9.22	9.25	*4.4*	*6.3*
EUR/CHF	1.08	1.10	1.11	1.12	*1.8*	*2.7*
CHF/SEK	8.63	8.36	7.97	7.86	*-3.1*	*-7.6*
EUR/JPY	131	127	125	127	*-3.3*	*-4.6*
GBP/USD	1.52	1.52	1.46	1.41	*0.1*	*-4.2*
GBP/SEK	13.26	13.33	12.64	12.39	*0.3*	*-4.9*

** The FX forecasts were made by SEB Trading Strategy as of November 17, 2015. Please ask for a copy of our current forecast.*

Theme – Innovation

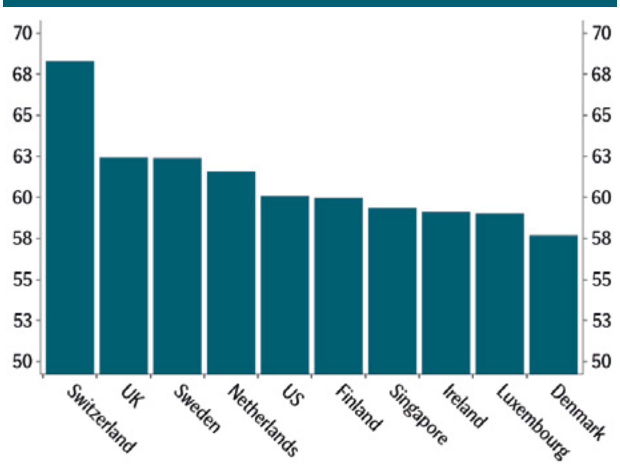
Innovative ability an important element of investment decisions

Economies and companies with good innovative ability grow faster than those that do not invest sufficiently in new products and services. There are many examples of technology shifts that are beneficial to those that promote new technology and detrimental to those that fail to think along new lines. Technological advances are continuously being made, and over the next ten years we will see further pioneering innovations, just as we have over the past decade. Having a continuously updated grasp of technology can be highly instrumental in generating good returns over time.

- Innovation is always an investment opportunity, in many ways.
- The most successful companies and economies in the world are always looking for new investment opportunities.
- Sweden is a pioneer measured by most innovation metrics, both in the public and business sectors.
- Since the year 2000, technological advances have been astounding, and we expect this trend to continue.
- Electrically powered and smart cars, additive manufacturing, digitisation and robot automation are all technological advances that will affect both businesses and consumers.

The stock market generates an annual return of about 7-8 per cent over time, and innovation is a very important component of this. There are thousands of examples of significant technological changes which are beneficial to companies or countries that promote new technology but detrimental to those that do not think along new lines.

SWEDEN RANKS HIGH ON INNOVATION INDEX



The chart shows the Global Innovation Index created by Cornell University, INSEAD France and the World Intellectual Property Organisation. Sweden ranks a strong global third in the 2015 index.

One example is Nokia, which was by far the world's largest mobile phone manufacturer in 2007 and made the choice not to invest in new smart phones. Just eight years later, mobile phones are no longer produced by the company. Industrial robots have changed how people make cars and mobile phones, while digitisation has revolutionised the exchange of information, creating many of what are now the world's largest companies. It has long been considered too difficult to develop electric cars that can meet performance and sustainability standards, but the industry is rapidly gaining ground and we expect the number of electric cars on the roads of the most developed countries to increase substantially within the next ten years.

Most sectors change a little each year, so we consider a continuously updated grasp of new technology to certainly be something that can be highly instrumental in generating good returns over time. Sometimes the intended potential of a given technology is not realised, but sometimes the technology actually transforms an entire industry.

One of the five components that make up productivity is innovation. In this theme article, we highlight both historical and current examples of why it is important to take innovation into consideration from an investment perspective. Productivity is an important metric of a country's prosperity, via how much is produced per working hour – and is thus a metric of competitiveness.

Swedish wages and salaries are high relative to the average levels in both developed and developing economies, but productivity is also at correspondingly high levels. Sweden is immensely productive per working hour. Swedish businesses invest the most of all European countries (along with Finland) relative to the value of the country's economy (GDP). Sweden ranks second in Europe (after Denmark) when it comes to investing in high-quality education. So it is not surprising that Sweden ranks highest in the number of multinational companies per capita, nor is it surprising that Sweden is among the highest ranking countries in the world based on a number of different innovation metrics. Sweden can take pride in everything from the Celsius thermometer, dynamite, the universal public pension system, the pacemaker, the adjustable spanner and the car seat belt to affordable fashion, affordable furniture, network equipment, digital music, digital telecommunications, radiosurgery to treat cancer, the ball bearing, compressors, industrial robots and not least an abundance of ultra-innovative new companies in the information technology (IT) sector. After Silicon Valley, Stockholm is the world's most prominent IT region per capita, with a full 18 per cent of all jobs in the city in the IT sector. Sweden is very much world-class in terms of innovation, and its big, successful manufacturing companies have always worked hard to find new ways each year to improve technology and products.

Electric cars

Technological change is sometimes strange. Advances often occur much faster than most people predicted, whereas in other cases it takes a decade to gain ground and convince businesses or consumers. In some cases, technological advances have been followed by reversals. Between 1830 and 1890, an electric motor was developed by both European and US researchers. Europe was at the forefront of development, and large-scale production enabled electric cars to take to the roads of countries such as Britain, France and Germany in the 1880s. Around 1890, Americans invested heavily in electric cars and made a handsome profit.

At the turn of the century, the electric car was a predominant means of road travel, but cheaper petrol combined with the improved performance of cars powered by fossil fuels led to a dramatic decline in electric car sales. There have been great advances in electric cars since then, but the fuel efficiency per litre and improved performance of fossil fuel-powered vehicles have significantly hampered the development of electric cars.

More than 130 years after fully functional electric cars first hit the world's streets, carmakers are now beginning to devote a significant portion of their research and development investment to electric-powered cars. One successful example is the US company Tesla, which makes high performance electric cars. Its prices are high but, as sales volume rise and competition intensifies, prices should fall. Most of the major carmakers are involved in electric car development, and prototypes are coming thick and fast. For manufacturers that take this trend seriously, electric cars are a great opportunity, but for those that ignore the trend and are unprepared when an electric car in the lower price segments offers competitive performance, their operations will probably be on the defensive for a while.

Electric car sales have risen sharply over the past five years. Although they only accounted for 0.5 per cent of global car sales in 2014, the total number of electric cars grew by more than 40 per cent. Norway is the largest market for electric cars in Europe, and sales there doubled last year; recently, electric cars have accounted for more than 10 per cent of total car sales. Chinese electric car sales grew almost 200 per cent last year, and in the US electric car sales are accelerating sharply (see chart).

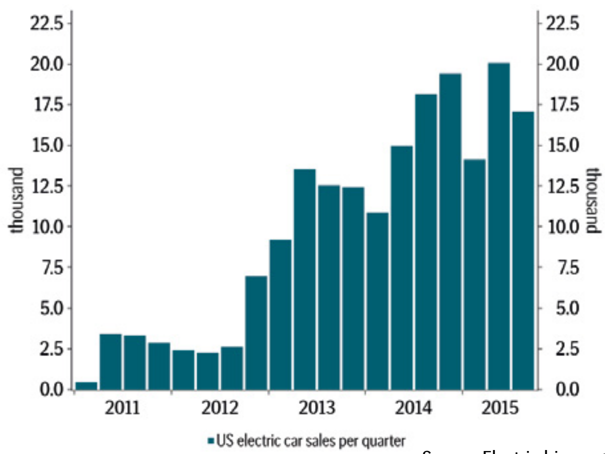
This vigorous growth is explained by a number of factors. The performance of these cars has improved considerably, with top speeds of around 250 km/h (using the characteristics of the latest Tesla model as an example), a range of about 500 kilometres, room for seven passengers, acceleration from 0 to 100 km/h in three seconds and finally a significantly lower environmental impact. Another important factor is that government subsidies are speeding up the pace of technological advances; a third factor is the improvement in battery capacity. Charging an electric car using any outlet is already a reality, and ultra-fast charging stations in parking facilities, at malls and petrol stations will be a reality in the future. Driving from Gothenburg to Stockholm, electric cars can cut the cost of energy by more than 70 per cent in good conditions (an estimate based on driving a Tesla). Changing the oil, replacing parts and carrying out some types of vehicle inspection can be eliminated, which are pluses for electric cars compared to fossil-fuel cars.

In a country such as India, the potential for electric cars is more problematic, since most electricity production is coal-based. Based on reports that we have studied, a modern electric car is cheaper to operate and produces about 25 per cent lower carbon emissions despite the use of coal, since its energy efficiency per kilometre is better than for a petrol-fuelled car. Some countries have very favourable conditions (for instance, Norway provides large government subsidies), while others have years of work ahead before electric cars can really catch on. We expect that development costs for electric car manufacturers – which account for the biggest proportion of the sales price – could be spread over more cars and thus lower the price to consumers.

Smart cars

Another development in the auto industry concerns how smart a car is today compared to just ten years ago. A smart car helps people maintain a safe distance on the motorway, indicates whether an object is too close to the car and can assist in braking. It shows when something in

ACCELERATING ELECTRIC CAR SALES IN THE US



Source: Electricdrive.org

The chart shows the trend for US electric car sales, which is clearly positive since electric cars were launched in earnest in the US. These statistics are for fully electric cars (not hybrid cars).

the car's inner workings needs to be checked, it can park itself to some extent and, of course, it connects the family to the Internet. In our view, the smartness of cars is a very attractive investment opportunity in the long term.

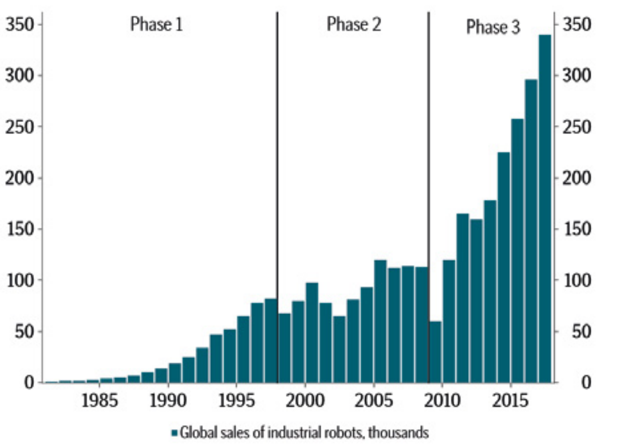
If a motorist can drive up to the car park entrance, punch in how long the car needs to be there and prepay before walking to work – with the car then piloting itself to an available space – that by itself would be a time-saver for everyone involved. There are many unanswered questions about self-driving cars, such as what their infrastructure should look like and who should pay the costs of an accident. These are difficult matters for carmakers to deal with, although the technology is largely available. We will probably have to wait 15 years before drivers can totally sit back and relax once the address has been keyed into their sat-nav (GPS) device, but having a car that drives itself in many situations can probably be a reality in just a few years.

In Sweden such measures as mandatory seat belts, mandatory daytime running lamps, general speed limits and lower alcohol limits were introduced long ago. Other countries have not come as far. In Thailand, 400 people may die over the New Year holiday, compared to 275 Swedish traffic fatalities during all of 2014. The hope is that innovations and other advances will reduce road traffic deaths.

Digitisation

Digitisation is a broad concept – what does it actually mean? Our interpretation is that processes that were once manual are handled to an ever growing extent by computers. That in turn changes human behaviour and creates opportunities for renewal in a number of industries, but for many it also constitutes a risk of becoming obsolete. If we look back at the changes we have seen in the financial sector over the past ten years, it is clear that the wave of digitisation has made payments and securities trading, for example, dramatically more efficient. Tasks once performed by humans are now done by algorithms to the benefit of customers, who get faster and more cost-effective service.

EXPONENTIAL GROWTH IN INDUSTRIAL ROBOT SALES



Source: International Federation of Robotics and statista.com

The chart shows the three different phases in global sales of industrial robots, from their launch in the early 1980s to the most recent forecast year, 2017.

There have been enormous technological advances in consumer electronics, such as mobile phones. In 15 years, the mobile phone has been transformed from an audio device into one with unlimited applications. Computer use is expected to continue its explosive growth going forward as well.

Telecom-related companies have invested heavily in this trend for a number of years and view the increase in applications very positively. This trend has benefited some consumer product companies in durable goods and services, while others have lost ground. The demand for paper falls each year, whereas the trend towards gathering information digitally continues to strengthen. Phone books are an obsolete product that became redundant due to the growth of search companies such as Google. Older game companies (such as Nintendo and Sega) face a highly uncertain future whereas mobile game developers (such as King, Net Entertainment etc.) are increasingly gaining consumer acceptance. Flat-screen TVs took over the market in dramatic fashion, both CDs and DVDs have been replaced by Spotify and Viaplay/Netflix, and the world's largest company in terms of market capitalisation, Apple, has taken consumers by storm.

Two quite interesting and related developments in 2012 were that Facebook acquired Instagram and its digital photo library, while the venerable Kodak went bankrupt – disruptive innovation is a brutal fact.

Smart homes featuring a comprehensive system that can be controlled by mobile device or a centralised screen will be introduced; marketing budgets will continue to focus increasingly on the digital forum; TV channels will definitely still exist but must focus on what is crucial – because consumers themselves choose what they watch to a greater extent. Groceries are sold mostly in shops today, but digitisation allows more efficient distribution systems and more efficient transport of groceries to each home. There are numerous areas where digitisation will have an impact; we have chosen to mention only a few.

Automation

Industrial robots and automation go hand in hand. There has been striking growth in robots over the past five years (see chart), and the pace of growth is expected to accelerate in the next few years. For 40 years, Sweden has had ABB as a reliable provider of both jobs and innovations. The development of industrial robots can be categorised into three phases (see chart).

The first phase, from 1980 to the late 1990s, was dominated by continuous improvements in performance, leading the vehicle industry to adopt a very high degree of automation; in the late 1990s a clear majority of all robots were found in the vehicle industry.

In the second phase, which lasted until the 2008 financial crisis, the vehicle industry reached maturity; there was such a high level of automation that growth in auto production drove robot use, while robots took on more areas of responsibility.

The current era of robots (phase 3) entails a tremendous expansion of applications, as more sectors decide that the capacity, intelligence and speed of robots is suitable for use. Examples of such sectors are consumer electronics, general manufacturing, rubber and plastics manufacturing, food processing and pharmaceuticals.

Two months ago, the International Federation of Robotics updated its forecast for robotic growth over the next couple of years. It now predicts annual growth of 15 per cent, up from last year's forecast of 12.5 per cent and far higher than the earlier forecast of 5 per cent. This high growth is attributed in part to good growth in most sectors in North America and Europe, but also in China, which is driving growth to large extent. With wage inflation there expected to be 10-15 per cent annually over the next 15 years, robots are now a full-fledged alternative for replacing standardised work and thus improving productivity. Robot sales were up almost 60 per cent last year, making China the brightest star in the robot firmament. The prosperity of Chinese consumers is growing significantly, and as a result of this trend, the demand for consumer products is sharply on the rise. Robots will be needed. Robots that work alongside humans are starting to become a reality in a number of industries, and the intelligence of robots is increasing with each passing year – the intention being to relieve humans of standardised manufacture.

Automation nowadays is not just robots or machines as such; it is also equipment that can help people do a faster and better job. For instance, helping nurses to process new patients faster would greatly ease today's onerous work load at hospitals. Tools that facilitate information retrieval, and potentially some medical tests, would mean that staff could spend more time helping patients with serious injuries.

Ultra high-speed trains are not usually considered to be automated vehicles, but if people can travel more quickly and easily than today, that can produce efficiency gains, which is the principle behind automation. Because of automation in a number of industries, employees are not needed for standardised processes to the same extent, but the demand for employees with good customer skills, innovativeness or programming abilities has instead increased sharply.

Additive manufacturing and 3D printing
New technologies that so far have revolutionised prototype development in many sectors are additive manufacturing and 3D printing. Additive manufacturing is a layer-on-layer process involving metals that are melted and then moulded into an extremely complex structure, which is created using advanced computer programmes. 3D printing usually involves plastic/rubber/polymer-based objects produced by material injected via a nozzle to make complex objects on a micro-millimetre scale using computer-calculated measurements which have applications in essentially every industry. The prototype phase in manufacturing has been shortened significantly (about 6-24 months depending on the product type), with the result being significant efficiency improvements in companies' development and design phases.
For a number of years, Swedish industrial companies have invested in additive manufacturing systems to speed up development time from idea to launch; this advance has been, to say the least, a success. The next major development in additive manufacturing is to incorporate the technology in large-scale production.

Manufacturing components in a single process, with almost zero material waste (waste can constitute up to 90 per cent of the material in traditional manufacturing processes) and with unlimited opportunities to customise components, implants and finished products, is something that most research departments both dream about and plan for. However, progress is not achieved overnight; such advances take time. But being able to manufacture a component for an aircraft engine with half the weight of its predecessor or produce a titanium implant that is customised for the patient is something that is slowly starting to become a reality.

It is very likely that many 3D printing shops will open in cities over the next ten years in order to help consumers, for example, produce custom-made jewellery or partly design their own shoes.

How should investors pay heed to innovation?
Companies with an ability to continually challenge themselves by spending significant amounts on investment are very attractive. When these kinds of companies have talented leaders, this generates great potential for them to beat their competitors. For companies in vulnerable sectors that have experienced a clear decline in demand but have only defended themselves by cutting costs, a sharp rise in their share price is a rare occurrence.

A lot will happen in the coming years. New innovations will definitely make today's conventional technologies obsolete. Investors should dare to think along new lines, dare to ask questions – dare to explore new investment ideas along with new technologies and products.

Contributors to this issue of *Investment Outlook*

Fredrik Öberg
Chief Investment Officer
fredrik.oberg@seb.se

Stefan Lukacs
Economist
stefan.lukacs@seb.se

Esbjörn Lundevall
Equity Strategist
esbjorn.lundevall@seb.se

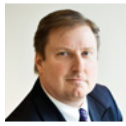
Reine Kase
Portfolio Manager
reine.kase@sebgroup.lu

Helene Cronqvist
Equity Strategist
helene.cronqvist@seb.se

Kai Svensson
Portfolio Manager
kai.svensson@seb.se

Carl-Filip Strömbäck
Economist
carl-filip.stromback@seb.se

Johan Hagbarth
Economist
johan.hagbarth@seb.se



Lars Granqvist
Economist
lars.granqvist@seb.se

Henrik Larsson
Economist
henrik.y.larsson@seb.se

Cecilia Kohonen
Investment Communication Manager
cecilia.kohonen@seb.se

Magnus Sabel
Portfolio Manager
magnus.sabel@seb.se

Pernilla Busch
Investment Communication Manager
pernilla.busch@seb.se

Christopher Lyrhem
Equity Strategist
christopher.lyrhem@seb.se