

Macro-Strategy Key Issue

Brexit – Impact on the EU

Economics

Europe including UK

Two crucial questions to determine the impact of a potential Brexit on the EU

We argue that the economic impact of Brexit on the EU – rather than the UK – would depend crucially on how EU-UK negotiations evolve and how the EU itself develops after Brexit. The two key questions will be whether (a) the negotiations between the EU and the UK proceed in an amicable or in a confrontational way; and (b) whether, over the longer term, the EU moves towards closer integration or disintegration.

EU-UK negotiations and EU (dis)integration post-Brexit as "axes of uncertainty"

Defining these two questions as key "axes of uncertainty", we establish a four-quadrant scheme that renders various shades of relatively benign and challenging scenarios, which allow for a nuanced assessment of potential outcomes. In an upbeat scenario, amicable EU-UK negotiations are followed by further EU integration steps over time. Such an outcome would minimise short-term costs and maximise long-term benefits. By contrast, a confrontational exit followed by further disintegration of the EU would likely imply higher short-run costs and damage to long-run growth prospects. It could also lead to new concerns about the integrity of the monetary union.

Market reaction over the short and longer term

If the UK votes to leave the EU we would expect markets to react in two phases: In the *short term*, right after the referendum, we would expect markets to price in confrontational negotiations between the EU and the UK; sterling would be most vulnerable and peripheral spreads to Germany would widen, particularly in Ireland and Spain. Equity would likely see a risk-off trade with a move into quality and defensives. Over the *longer term*, the market reaction would depend more on signals as to whether the EU will move towards closer integration or disintegration. Closer EU integration would result in higher German yields and tighter peripheral spreads to Germany, and a closing of the US-Europe profit and valuation gap. In contrast, signs of EU disintegration would trigger sharply higher peripheral yields and more risk-off in Equity with relative out-performance of large cap stocks with international exposure.

Reinhard Cluse

Economist

reinhard.cluse@ubs.com

+44-20-7568 6722

Felix Huefner

Economist

felix.huefner@ubs.com

+49-69-1369 8280

Nishay Patel, CFA

Strategist

nishay.patel@ubs.com

+44-20-7568 8298

Jeff Greenberg

Strategist

jeff.greenberg@ubs.com

+1-203-719 1751

Karen Olney, CFA

Strategist

karen.olney@ubs.com

+44-20-7568 8944

David Tinsley

Economist

david.tinsley@ubs.com

+44-20-7567 4652

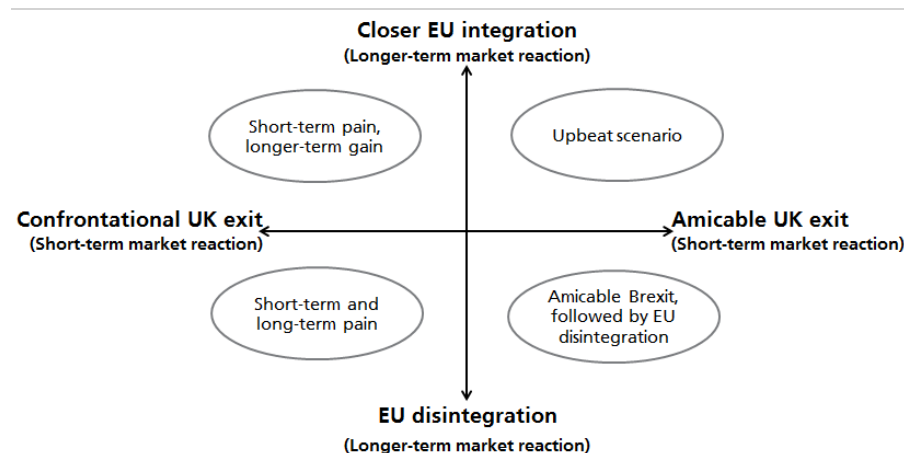
Jennifer Aslin

Associate Economist

jennifer.aslin@ubs.com

+44-20-7568 6585

Figure 1: Brexit impact on the EU: two "axes of uncertainty" and four scenarios



Source: UBS

The impact of Brexit on the EU

UBS has already published extensively on the UK's referendum on EU membership, and the impact a potential Brexit could have on the UK.¹ In contrast, this report focuses on the potential market and macroeconomic impact of Brexit on the EU. We argue that this cannot be determined in a simplistic fashion and hence that individual data-point forecasts – above all for GDP growth in the EU and individual member states – are of limited value. Instead, we see an extensive range of possible outcomes, which will depend crucially on how negotiations between the EU and the UK evolve, and how the EU itself develops after a Brexit decision.

In our view, the two key questions will be: *First*, will the negotiations between the EU and the UK proceed in an amicable or a confrontational way? We think the answer to this question might become clear relatively soon, perhaps within a few weeks or months. *Second*, will the rest of the EU move toward greater integration or disintegration over time? We think it will take much longer – perhaps years – to gain clarity about the answer to this question. Defining these two questions as key "axes of uncertainty", we establish a four-quadrant scheme that renders various shades of benign and challenging outcomes, allowing us to make a more nuanced assessment of potential outcomes over time.

But before we come to that, we first present a few basic insights and facts.

Some general considerations

The **legal basis** for the UK's exit from the EU would be **Article 50 of the EU Treaty**, which stipulates a 2-year period for negotiations, which can be extended if the European Council so decides. As no country has ever left the EU, there is no precedent for the procedure of secession.

Trade in goods and services is considered to be the key transmission mechanism of the economic impact of Brexit on the UK and the EU, although investment and financial sector linkages are important as well.

According to OECD data, the share of (direct *and* indirect) EU-ex-UK exports of goods and services to the UK (i.e. those that finally end up in the UK even if they pass through third countries) is around 12% of total EU-ex-UK exports (Figure 2). As a proportion of value added (a proxy for GDP), the share is 1.9% (Figure 3). However, these measures mask substantial country-specific differences between individual EU member states. As a share of value added, **Ireland, Malta, Cyprus, Luxemburg, Denmark, Belgium** and the **Netherlands** have the highest trade integration with the UK – arguably putting these countries most at risk of suffering negative growth effects following a Brexit. Amongst the larger European countries, Spain and Germany are most exposed.

Brexit impact on the EU: wide range of possible outcomes, depending on how EU-UK negotiations evolve and how the EU itself develops after Brexit

Will EU-UK negotiations be amicable or confrontational? Will the EU move towards greater integration or disintegration?

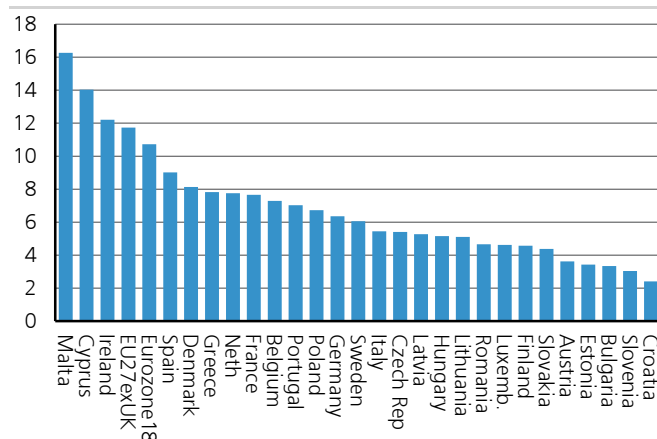
EU-UK exit negotiation likely to last 2 years

How will trade, investment and financial linkages be affected?

Ireland, Malta, Cyprus, Luxemburg, Denmark, Belgium, Netherlands have closest trade links with the UK

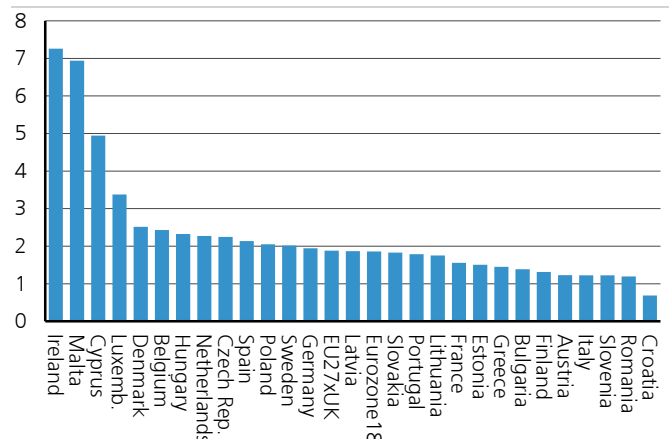
¹ [Brexit: EU can go your own way?](#), 22 September 2015; [Brexit Renegotiation, referenda and rate calls](#), 9 February 2016; [Brexit: An ever closer referendum](#), 21 February 2015; [A Brexit Map for Sterling](#), 28 February 2016; [The UK's twin deficits, the Budget and Brexit](#), 11 March 2016.

Figure 2: Final (i.e. direct and indirect) goods and services exports to the UK, % of total final exports, 2011



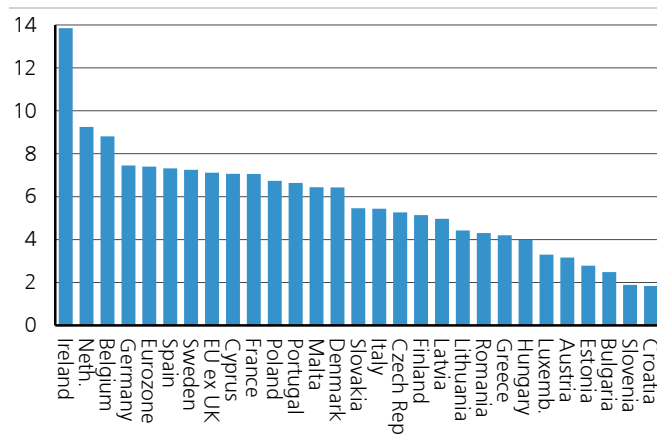
Source: OECD Trade in Value Added (TiVA) database, UBS.

Figure 3: Final (i.e. direct and indirect) goods and services exports to the UK, % of total value added, 2011



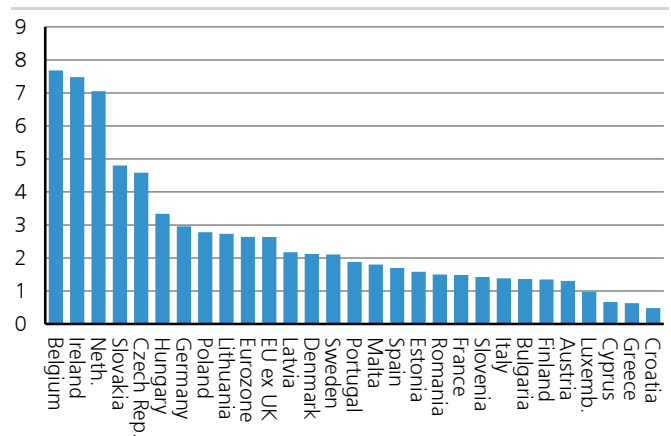
Source: OECD Trade in Value Added (TiVA) database, UBS.

Figure 4: Goods exports to the UK, % of total goods exports, 2015E



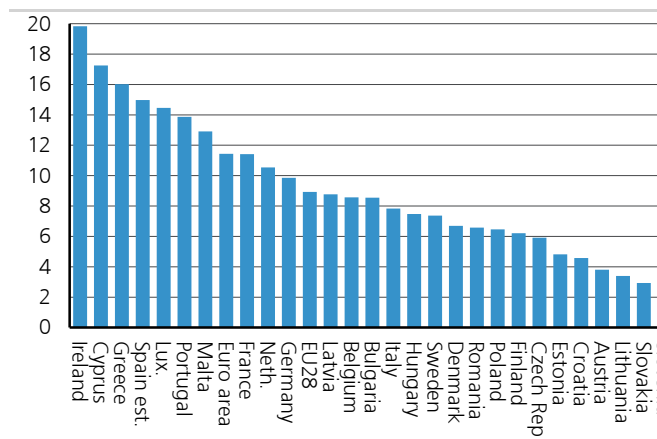
Source: IMF Direction of Trade Statistics, UBS

Figure 5: Goods exports to the UK, % of GDP, 2015E



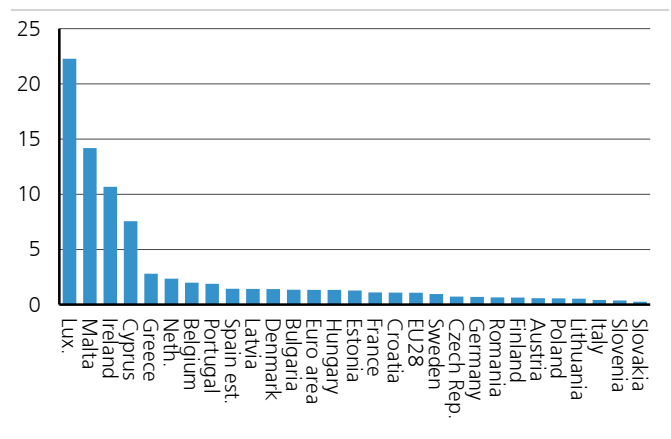
Source: IMF Direction of Trade Statistics, UBS

Figure 6: Services exports to the UK, % of total service exports, 2014



Source: Eurostat Balance of Payments Statistics, UBS.

Figure 7: Services exports to the UK, % of GDP, 2014



Source: Eurostat Balance of Payments Statistics, UBS.

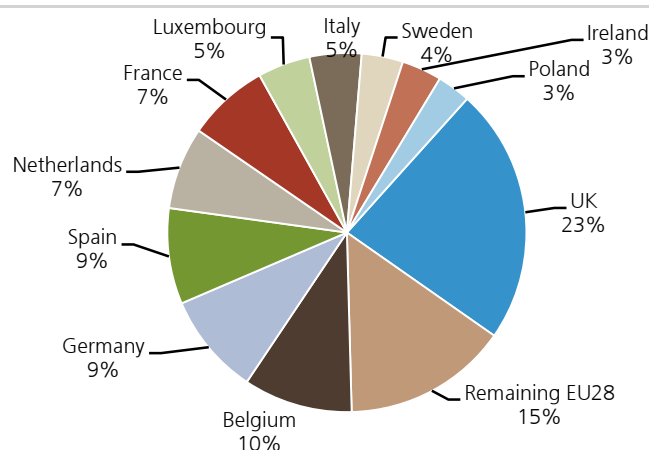
However, the way in which the **EU's trade relations with the UK** change after Brexit will hinge on the future integration model between the EU and the UK. Will the UK become a member of the European Economic Area (EEA), like Norway, Liechtenstein and Iceland, and thus continue to enjoy access to the EU's Single Market, with free movement of goods, services, capital and labour²? Or will the UK negotiate bilateral treaties with the EU as Switzerland has done? *In extremis*, and rather unlikely, the UK might have no preferential trade agreements with the EU, in which case bilateral trade relations would be governed by the basic rules of the World Trade Organisation (WTO).

What will be the future integration model between the UK and the EU?

This will also have an impact on **cross-border investment**. Over the last 10 years, the UK received almost a quarter of all FDI inflows into the EU (€978bn out of a total €4,242bn, Figure 8) and we believe Brexit would likely reduce this, in particular if the outcome of EU-UK negotiations is less favourable. Some of the FDI flows may be redirected towards the continent. There could even be some repatriation of existing FDI stock back to the EU.

Would the UK remain successful in attracting FDI?

Figure 8: Inward FDI, 2005-14, % of total EU inward FDI



Source: UNCTAD, UBS.

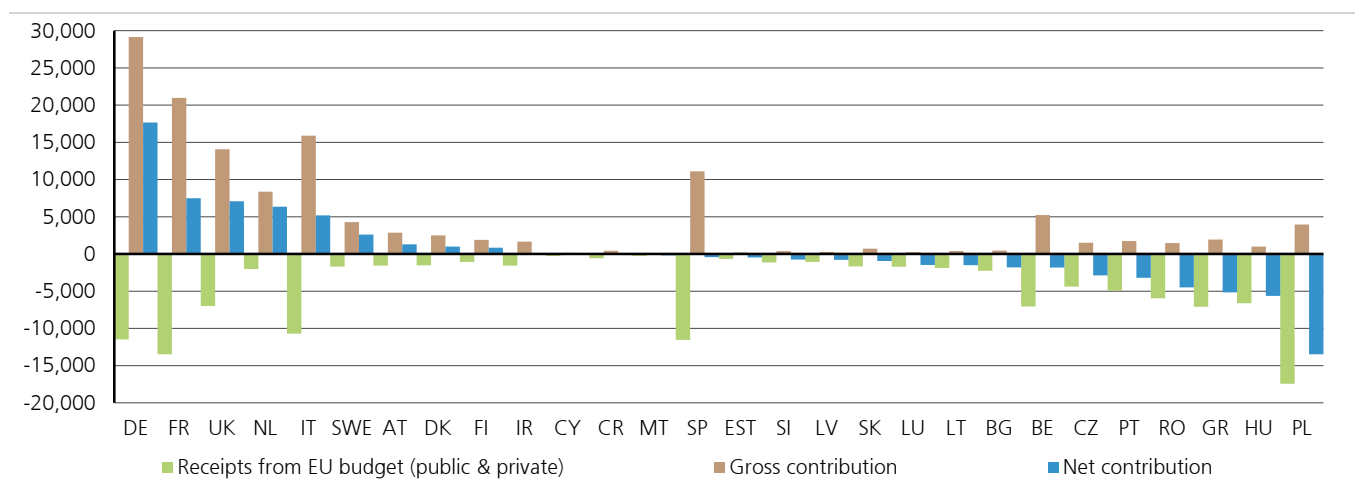
Most likely, the eventual integration model would also determine whether the UK continues to contribute to the **EU budget**. According to European Commission data, the UK's gross contribution to the EU budget (post rebate) was €14bn in 2014, roughly 10% of the EU's total budget. The UK's receipts from the EU budget (both to the private and the public sector) were €7bn, leaving a UK net contribution to the EU budget of €7bn, or £5.7bn (Figure 9). According to data published by the Office for Budget Responsibility (ONS), the UK net contribution to the EU budget in 2014 was £9.8bn, but this figure does not include funds that went directly from the EU budget to the UK private sector, e.g. research funding paid directly to UK universities³. If the UK stopped its contributions entirely, the remaining EU countries would have to make up the shortfall or reduce expenditure. However, should the UK maintain a high level of integration with the EU, it might have to continue to contribute to the EU budget. For example, Norway reportedly contributed €388 million to the EU's budget last year (based on a population of merely 5.1m and a GDP of €350bn, i.e. 8% and 13.6%, respectively, of the UK).

Will the UK still contribute to the EU budget after Brexit?

² Given the sensitivity of the migration issue it might arguably be unlikely that, post Brexit, the UK would grant the citizens of EU member states free movement of labour.

³ HM Treasury: European Union Finances 2015, December 2015, p 11-19

Figure 9: Annual net contributions to EU budget (EUR mn, 2014)

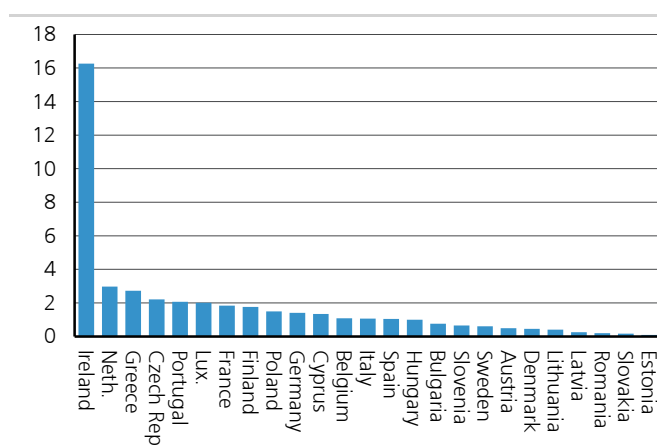


Source: European Commission, UBS

Another channel of spillovers could be **financial linkages**. Should UK banks restrict their activities in the EU, this could negatively affect credit conditions in the EU. This risk seems most relevant for **Ireland**, as claims by UK banks account for 16% of Ireland's total banking assets. For other countries, these linkages are much smaller, however (Figure 10).

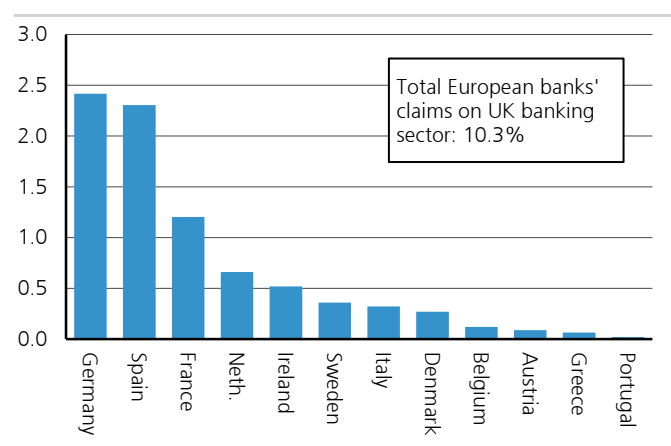
Will UK banks reduce their exposure to the EU?

Figure 10: UK banks' claims on EU's banking sectors, % of total banking sector assets, 2014



Source: BIS, Haver, UBS

Figure 11: EU banks' claims on UK's banking sector, % of total UK banking sector assets, 2014



Source: BIS, Haver, UBS.

Following a Brexit vote, **political uncertainty** might increase in the EU, potentially weighing on private sector confidence. We think this would be the case at least during the period of EU-UK negotiations, but could potentially be longer-lasting too, as businesses might worry about the future of EU integration. Scotland might hold a second independence referendum, potentially with implications for other regions in Europe. Also, Brexit would mark the first major step backwards after decades of increasing EU integration. All these concerns could weigh on investment plans.

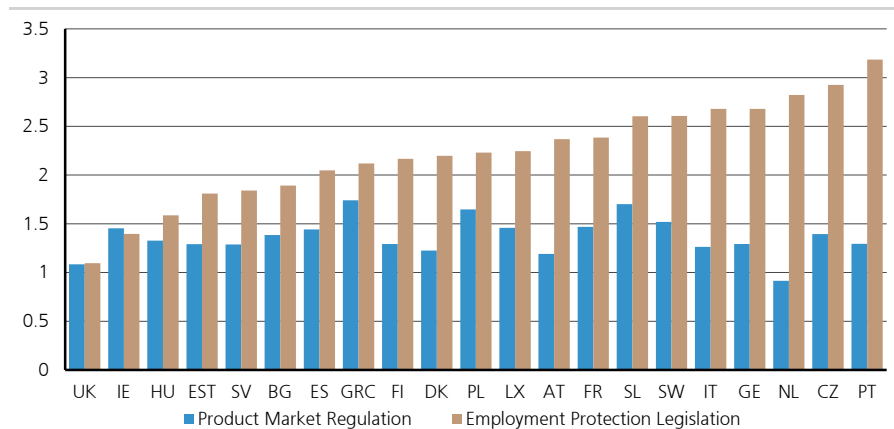
Brexit would likely raise political uncertainty in the EU

Closely related to this, question marks might also arise about the future direction of the EU's **economic policy**. Traditionally, the UK has argued for a more liberal policy approach. It has the lowest degree of product and labour market regulation in the EU, and concerns could increase that without the UK's free-market voice, EU

The UK's "free-market voice" might be missed in the EU

policy-making could become less liberal, which could weigh on business investment over time (Figure 12).

Figure 12: Levels of product market regulation and employment protection legislation across the EU, 2013



Source: OECD. Note: Higher value denotes stricter product market regulation and tighter employment protection legislation.

In the end, the economic impact on the EU will also depend on **financial market variables**. Whether the EUR appreciates against the GBP or depreciates against the USD, there would be implications for the Eurozone's export competitiveness and hence growth.⁴ Whether Eurozone bond yields rise or fall, there would be an impact on private sector financing costs. And if Eurozone equity markets fall, this might have an impact on private sector confidence. Yet, how financial market variables move after a potential Brexit decision would depend crucially on how markets see the UK and the EU evolving in the aftermath – hence an element of circular reference is involved.

Two key questions

In essence, the ways in which the EU and its member states are affected after a Brexit vote will likely depend on individual circumstances. In our view, the two most important questions will be:

- Firstly, whether the negotiations between the UK and the EU following a Brexit vote are **amicable** or **confrontational**. We think the answer to this question might become clear relatively soon, perhaps within a few weeks or months.
- Secondly, whether the EU moves towards **further integration** or **disintegration** after Brexit, over time. We think it will take much longer – perhaps years – to gain clarity about the answer to this question.

We define these two questions as the crucial "**axes of uncertainty**". Combining them in horizontal and vertical directions yields our **four quadrant scheme** below (Figure 13), which allows us to discuss the potential impact of Brexit on the EU in a differentiated fashion.

The most crucial questions for the period after Brexit:

- 1. Will EU-UK negotiations be amicable or confrontational?**
- 2. Will EU move towards greater integration or disintegration?**

⁴ Potential safe-haven flows into Switzerland could be one concern, which would exacerbate the problems for the SNB.

Life after Brexit – A scenario-based approach

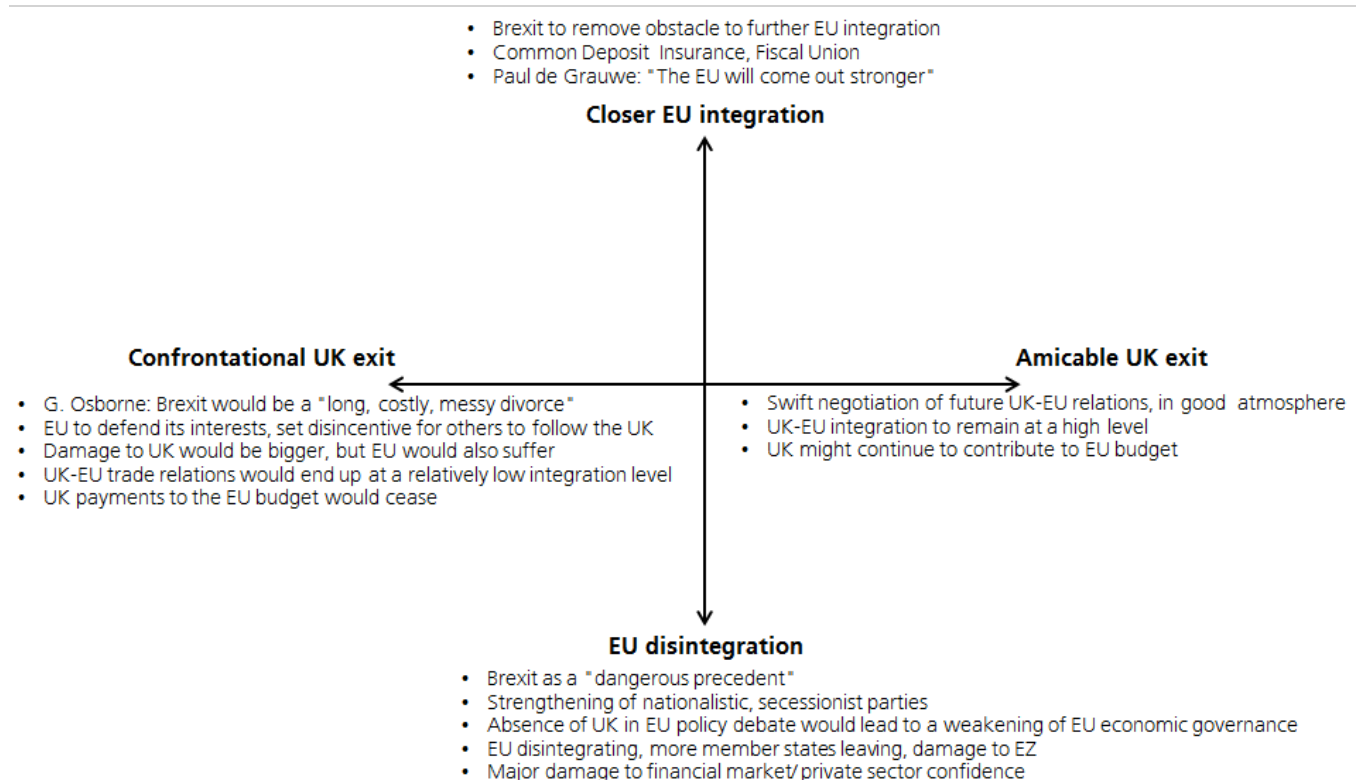
The **horizontal axis** displays the various potential outcomes of **EU-UK negotiations post-Brexit**. *The initial reaction of markets following a Brexit vote will likely move along this axis.*

Discussing post-Brexit scenarios in our 4-quadrant scheme

Movement towards the right denotes an amicable exit, wherein negotiations are cooperative and swift and a high level of integration is maintained, possibly with continued UK contributions to the EU budget.

By contrast, movement to the left denotes confrontational negotiations about the UK's exit and the future UK-EU integration model. This could lead, in the words of UK Chancellor George Osborne, to a "long, costly, messy divorce" which would result in limited integration between the EU and the UK.

Figure 13: The EU after Brexit – two axes of uncertainty



Source: UBS

The **vertical axis** displays a continuum of outcomes of **future EU (dis)integration**. *This axis will likely determine the movement of markets over the medium and longer-term.*

Movement north along this vertical axis denotes that Brexit would be followed by increased EU integration over time, such as a common deposit insurance scheme or moves towards a Fiscal Union – two of the key projects that were highlighted in last year's ["Five Presidents' Report"](#). As a result, monetary union would become more stable over time, with positive implications for growth. (However, progress towards Fiscal Union would require significant concessions, above all from Germany – which seems questionable in the current political context.) Professor

Paul de Grauwe⁵ of the London School of Economics has argued that such integration steps would be more likely if the UK were to exit the EU, concluding, pointedly, that "the EU will come out stronger" from a Brexit.

Movements south along the axis denote the opposite development: Brexit would lead to a strengthening of nationalist, secessionist parties, and the absence of the UK's "free-market voice" would weaken EU governance and policies, making membership less attractive. The European spirit would wane over time.

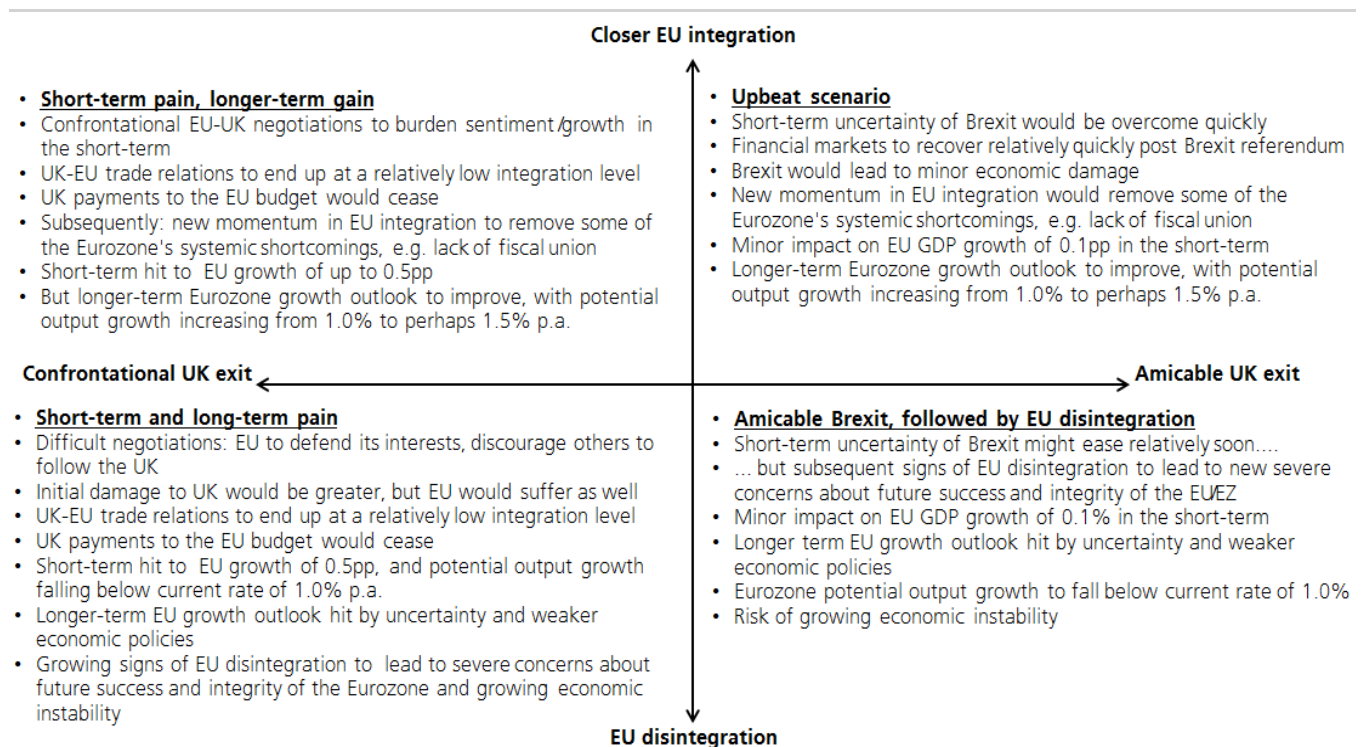
Four scenarios, from relatively benign to challenging

Combining different outcomes along these axes renders four possible scenarios:

Four scenarios for the time after Brexit

1. **Upbeat scenario** (upper right quadrant): This combines an amicable UK exit with a longer-term move to a more closely integrated EU;
2. **Short-term pain, longer-term gain** (upper left quadrant): EU strategy of hard negotiations leads to a confrontational exit of the UK, but is followed by deeper EU integration over time;
3. **Amicable Brexit, followed by EU disintegration** (lower right quadrant): Amicable negotiations lead to a benign UK exit, but are followed by EU disintegration over time;
4. **Short-term and long-term pain** (lower left quadrant): confrontational EU-UK negotiations, followed by EU disintegration over time.

Figure 14: The EU after Brexit – four key scenarios



Source: UBS

⁵ Paul De Grauwe, 22 Feb 2016: <https://www.socialeurope.eu/2016/02/why-the-european-union-will-benefit-from-brexit/>

What are the costs associated with each outcome?

In our view, the question about the **type of Brexit** (horizontal axis – amicable vs. confrontational) will influence the **short- and medium-term** costs that the EU faces: a period of uncertainty, perhaps lasting 1-2 years, will be followed by a period of adaptation to the "new normal". In contrast, the question regarding the **degree of EU (dis)integration** (vertical axis) is more about **long-term** costs or benefits for the EU (because more/less integration has effects on, for example, competition and hence productivity growth, as well as on private sector sentiment and, ultimately, macroeconomic stability).

The upbeat outcome (upper right quadrant) would combine minimised short-term costs with long-term benefits. We estimate that the short-term loss in GDP for the EU-ex-UK would be just 0.1pp, while the medium-term trend growth rate (potential output growth) could well rise substantially above the current rate of 1.0% p.a., to perhaps 1.5% p.a.

By contrast, the scenario of a confrontational exit and EU disintegration (lower left quadrant) would combine setbacks in EU-UK economic relations and potentially much more severe economic and political challenges for the EU over the longer term. We estimate that the short-term loss in Eurozone GDP as a result of a Brexit shock and difficult negotiations could be up to 0.5pp. However, the long-term damage caused by EU disintegration could be much more severe, as the potential output growth rate would likely fall further, and the Eurozone might sooner or later suffer another 2012-like confidence crisis, with strongly negative GDP shocks.

While the EU and the Eurozone are two different institutional arrangements, the linkages between the two are such that major disintegration forces affecting the EU would inevitably spill over into the monetary union as well, in our view.

We would therefore stress that the question of EU integration/disintegration is ultimately much more important than whether the UK's exit from the EU is amicable or confrontational. In the wider scheme of things, the two lower quadrants are therefore the more negative outcomes. If the EU moves towards disintegration, the question of whether Brexit negotiations have been amicable or confrontational will, in the aftermath, have largely faded into insignificance.

However, to repeat, the markets would likely get clarity about the type of Brexit (amicable/confrontational) much faster than about the future state of the EU (integration/disintegration).

Type of UK exit (amicable/confrontational) affects the short-term costs; the question of EU (dis)integration is more relevant for the longer term

Market reactions in the aftermath of 23 June

The degree to which financial markets price Brexit risk prior to the referendum on 23 June is likely to be governed by how UK opinion polls trend in the lead-up to the vote.

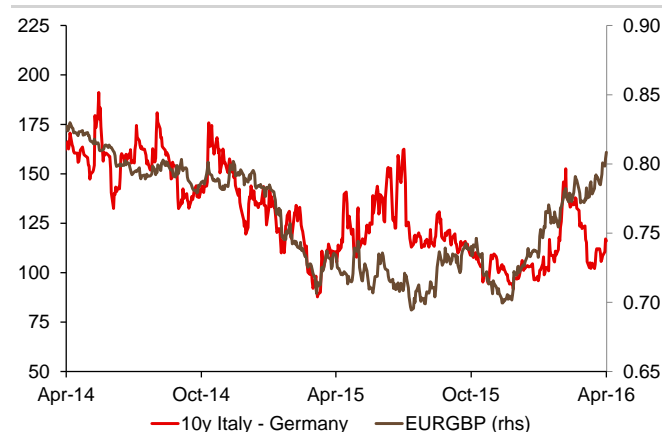
Polls continue to show that the outcome of the referendum is likely to be close. The response in currency markets since Q4-15 has been for a weaker sterling⁶, in line with our expectations⁷. However, other assets such as peripheral Eurozone

⁶ [Global Macro Strategy: The pounding of the pound](#), 21 January 2016

⁷ [Global Macro Strategy: A "Brexit" Map for Sterling](#), 28 February 2016

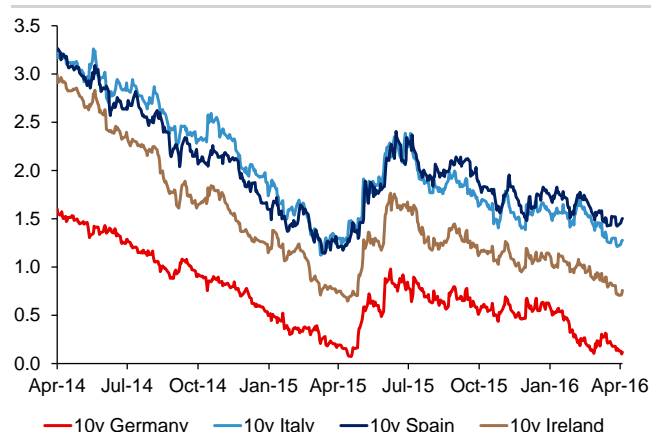
bond markets have not displayed any meaningful concerns so far, perhaps as a result of accommodative ECB policy rather than Brexit being seen by market participants as having a negligible impact on the periphery (Figure 15 and 16). Should a vote for Brexit come unexpected, we would anticipate a broadening of the pressure on markets.

Figure 15: Peripheral spreads have remained historically tight despite Brexit concerns being priced into FX market



Source: UBS Research, Bloomberg.

Figure 16: Peripheral yields have trended lower in the past 12 months



Source: UBS Research, Bloomberg.

Implications of Brexit on FX and rates markets

If the UK votes to leave the EU, we would split the likely subsequent moves into two distinct phases:

- **Phase 1:** A near-term market impact where investors become concerned about the economic implications for remaining EU members. In this stage, the market reaction might depend crucially on whether the Brexit negotiations are expected to proceed in an amicable or in a confrontational fashion and whether the UK is expected to maintain a high degree of integration with the EU or not (i.e. movements along the horizontal axis of our 4-quadrant scheme).
- **Phase 2:** A longer-term market reaction based on expectations as to whether Brexit is followed by closer EU integration or EU disintegration over time (i.e. movements along the vertical axis of our 4-quadrant scheme).

Phase 1: Near-term market impact (horizontal axis)

The sterling exchange rate has been the main source of vulnerability in anticipation of the referendum vote, and we would expect it to remain a central part of the Brexit adjustment. We forecast EUR/GBP rising to 0.84 by 23 June – with a 'Leave' vote potentially pushing the cross towards parity. The UK economy appears to be significantly imbalanced, reflected most clearly in its current account deficits, and Brexit would likely force a rapid adjustment⁸. Brexit might also trigger a kneejerk drop in EUR/USD, but we would not expect material euro weakness. Episodes of rising Eurozone political risks have continually failed to weaken the EUR. Similarly, risk-aversion might put pressure on the CHF, but we would expect the SNB to move against currency strength.

⁸ Please see [Could Brexit be a catalyst for GBP to par the EUR?](#), Themis Fiotakis, 13 April 2016, for more details.

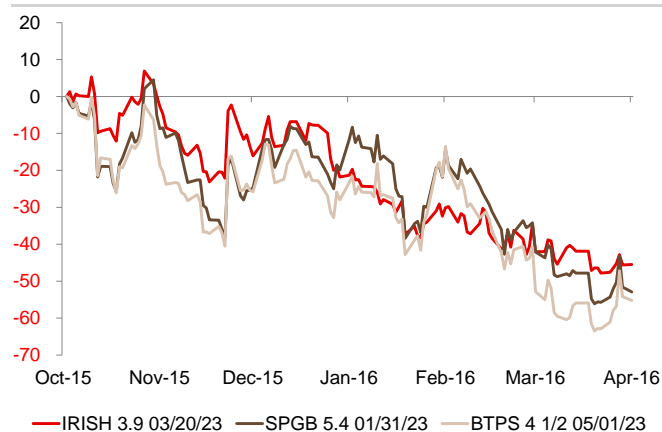
If the UK votes to leave the EU, heightened risk-aversion is likely to result in wider peripheral spreads to Germany (from current levels). The largest impact within Eurozone bond markets is likely to be on member states that have the largest fundamental exposure to the UK, such as Ireland and Spain. Within core markets, the Netherlands is the most exposed.

If Brexit occurs, we anticipate the 10-year Italy-Germany yield spread to initially widen above 175bp, Spain to underperform Italy, 10-year Ireland-Germany spreads to widen above 90bp, and Netherlands to underperform Germany.

The impact on 10-year German yields is likely to be asymmetric. On the one hand, a rise in peripheral yields is likely to put downward pressure on 10-year German yields due to safe-haven flows. However, 10-year German yields are already low (0.15%) and valuations are too pessimistic given fundamentals, in our view⁹.

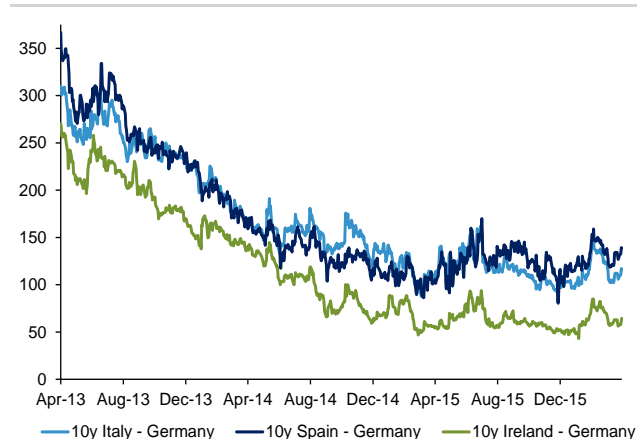
Overall, we believe the market would expect difficult negotiations between the UK and the EU in the event of a 'Leave' vote, although it might not have a strong view, at that juncture, about the future integration or disintegration of the EU. In terms of the spirit in which Brexit negotiations might be conducted, public remarks by senior EU politicians in the aftermath of 23 June will likely be important. For example, should the European Council indicate a strong sense of goodwill and determination to finish negotiations quickly and in a cooperative fashion, and with the aim of maintaining a high degree of integration with the UK, market concerns might dissipate relatively quickly – although this would have to be confirmed once negotiations actually get underway.

Figure 17: Normalised yield changes: Ireland has underperformed Spain & Italy



Source: UBS Research, Bloomberg.

Figure 18: 10-year yields spreads to Germany (bp)



Source: UBS Research, Bloomberg.

Phase 2: Longer-term impact (vertical axis)

Following the initial move described in "Phase 1", the longer-term impact on FX and rates markets is difficult to assess, as it is likely to play out over a longer period. It would take significant evidence to show that disintegration would materialise before peripheral spreads are deemed to widen well above the levels that we anticipate in the immediate aftermath of a UK vote to leave the EU. Indeed, initial risk-aversion and market moves may overshoot and reverse.

⁹ [Global Rates Strategy: Euro Area – Bund blues](#), 24 March 2016

While clarity about the future degree of EU (dis)integration would likely emerge only slowly, expectations about the EU's longer-term path could stabilise more quickly if the European Commission or the European Council were to present a comprehensive "Plan B" and outline its plans for future integration.

- **Integration:** This would be supportive for higher German yields and tighter peripheral spreads to Germany.
- **Disintegration:** This scenario would have the biggest risk for peripheral Eurozone markets, as the probability of a Eurozone break-up might arguably rise, triggering a substantial rise in peripheral yields.

A vote to remain in the EU

The pound has weakened significantly since Q4 15 (Figure 15), and we would expect a 'Remain' vote to reverse the recent course of EUR/GBP and push it towards 0.73. Greater clarity about the outlook for the EU should also result in tighter 10-year Italy-Germany spreads, which we expect to narrow to 90bp by end-2016, from currently 117bp. However, when considering current valuations in 10-year Italian government bonds, the risk-reward on taking new (long) positions versus Germany seems unattractive to us.

Equity market reactions

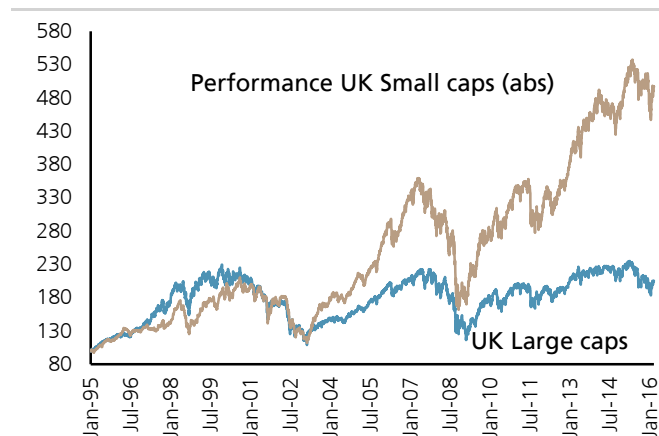
Phase 1: After Brexit vote (horizontal axis)

The immediate reaction might be to sell the UK, especially for foreign investors who will likely take a further currency hit from their UK-denominated assets. That doesn't seem to be priced in: FTSE 100 implied equity volatility is lower than it was in February and much lower than at prior EU crisis points. Within the UK, stock-pickers will likely favour UK large caps given 75% of UK large caps sell internationally so a weaker pound should boost earnings. Large caps are lagging in performance and are cheaper on valuation (Figure 19 and 20). However, the large cap UK stocks that will not be immune will be the domestic UK banks.

Foreigners might sell the UK

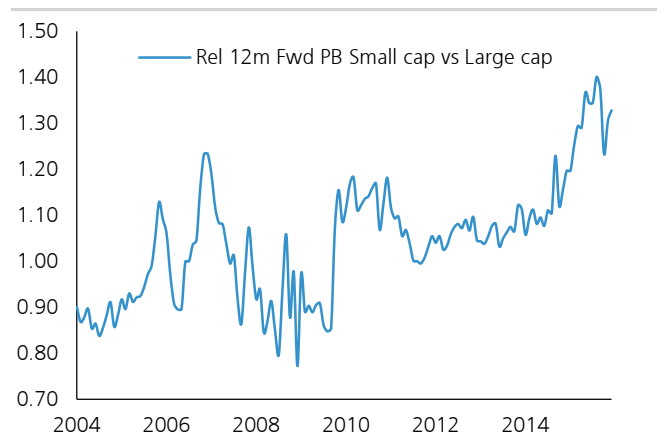
Large cap stocks with international exposure should be less at risk

Figure 19: Brexit favours large caps: they lagged as small domestics proved a haven from global troubles



Source: Bloomberg, UBS European Equity Strategy

Figure 20: Small caps are more expensive too – so will suffer more in the event of turmoil at home

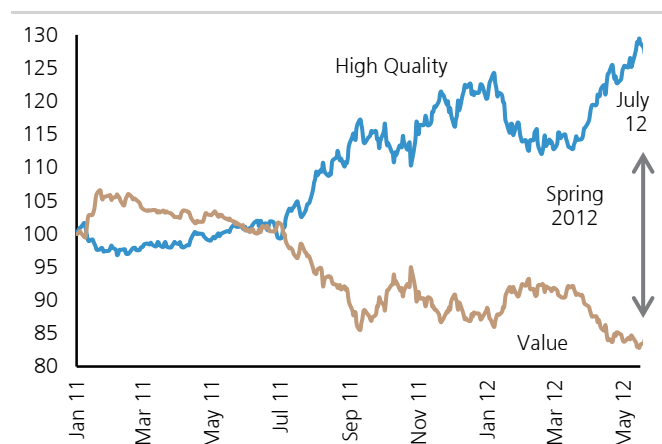


Source: Thomson Datastream, UBS European Equity Strategy

If concern were to shift to the EU, a wider risk-off trade would be triggered. Pre-OMT, between March and July 2012, we saw investors racing into Quality (lower-volatility stocks and sectors or countries with higher ROCE) (Figure 21). Switzerland was the only country not to be upset when investors started to worry seriously about the integrity of the Eurozone in the spring of 2012. Switzerland is 50% defensive and defensives were in favour during this risk-off period (Figure 22).

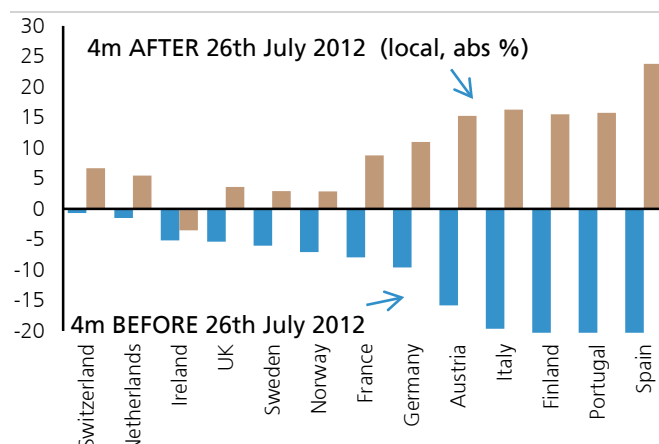
Go for Quality – like Switzerland

Figure 21: Quality beat Value by c30% in March-July 2012



Source: UBS Quant and European Equity strategy

Figure 22: Country performance. Switzerland is a quality safe haven: 50% of market is Pharma & food producers



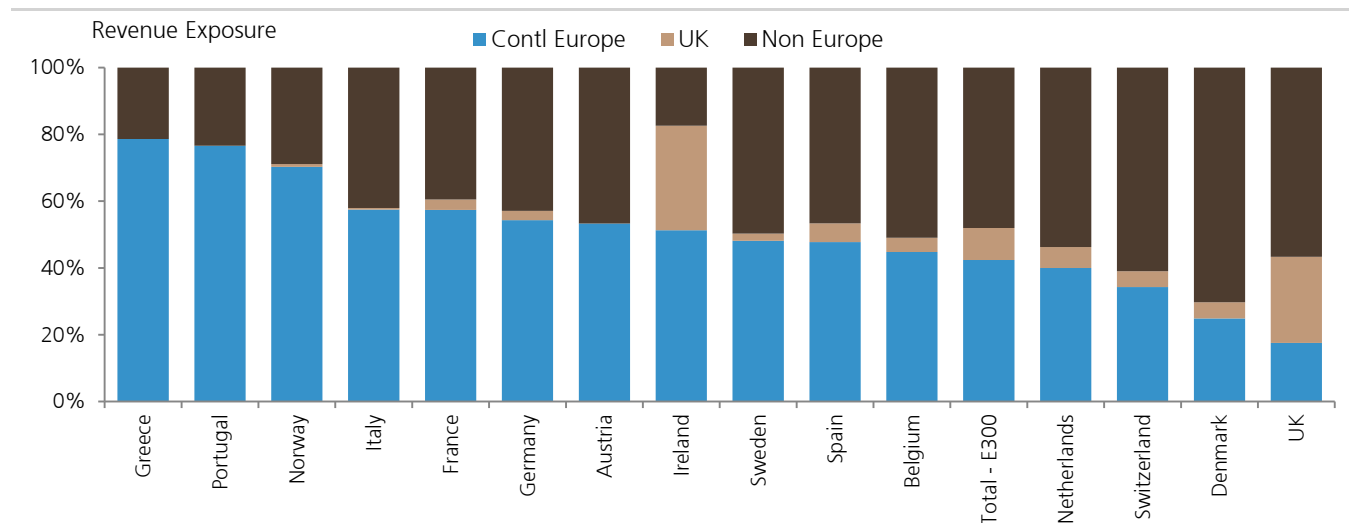
Source: Thomson Datastream, UBS European Equity Strategy

Phase 2: Scenario of EU disintegration (vertical axis, lower part)

If the focus were to move to disintegration, investors would likely start to focus on fundamental exposures. In this case Switzerland and the UK look all right because their fortunes are more linked to the rest of the world (see Figure 23 below). Investors would likely favour large cap international stocks that are less exposed to Europe, but countries and sectors too. The chart below shows that of the major countries, Switzerland has the highest 'Non Europe' exposure and the lowest exposure to continental European (next to UK).

Who is most/least exposed to Europe?

Figure 23: Sales exposure by region – dark brown represents non-Europe exposure of European large caps

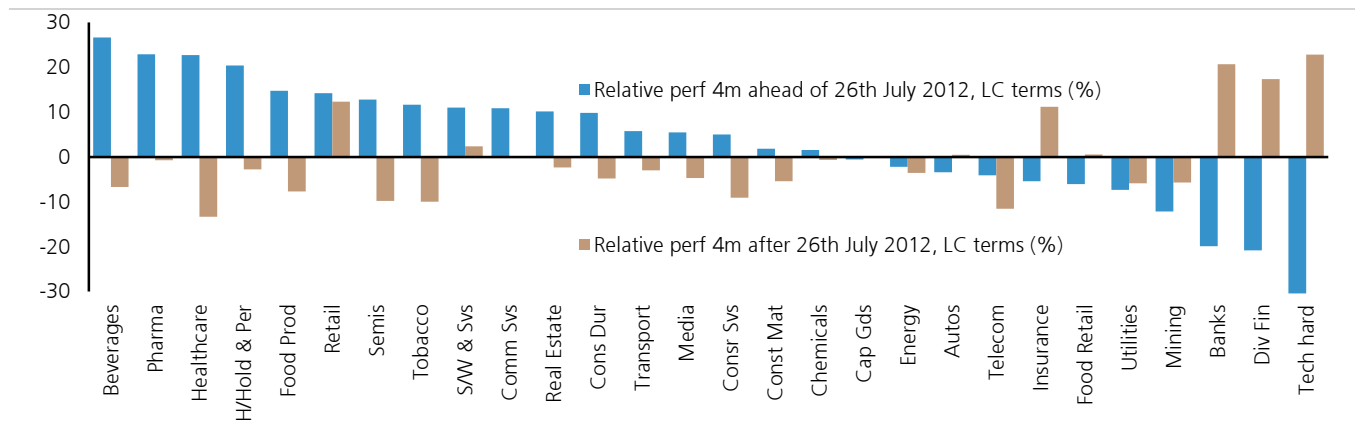


Source: UBS European Equity Strategy

Investors tend to crowd around Defensives in a risk-off trade. Beverages and Pharma were popular (Figure 24) and make up close to 50% of Switzerland's market cap. Much of the performance reversed after comfort was provided by ECB President Draghi in his 'we will do what it takes' speech on 26 July 2012.

Protection: Defensives (Beverages & Pharma)

Figure 24: Defensives (to the left) offered protection ahead of the "Draghi moment" on 26 July 2012



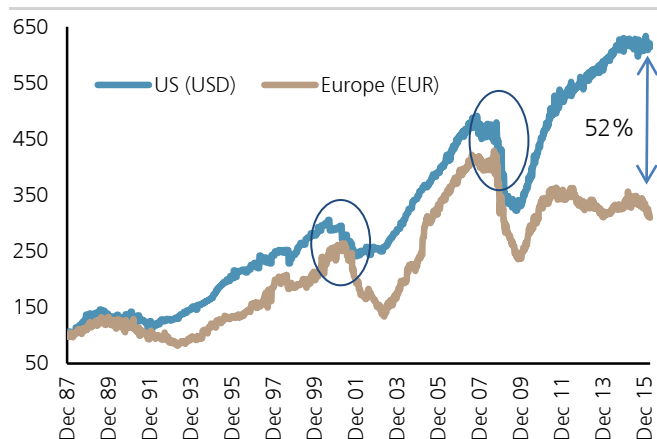
Source: Thomson Datastream, UBS European Equity Strategy

Scenario of closer EU integration (vertical axis, upper part)

If instead we end up with a more closely integrated EU with more structural and institutional reform this would be a positive. It may act to finally close the profit and valuation gap that emerged in 2011 between Europe and the US as the sovereign debt crisis took hold (Figure 25). Profits of US companies are up 25% since the last cycle peak while profits in Europe are still 27% below. This is why, even on a sector-adjusted price-to-book, Europe trades in recessionary territory relative to the US, because it cannot generate the same return on capital (Figure 26). Many international investors we meet would like to invest more in Europe, but they need to see more integration/reform first.

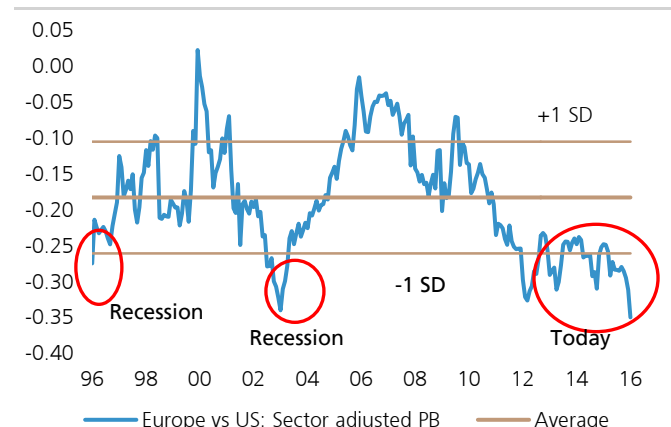
More EU integration could trigger a closing in the profit and valuation gap between the US and Europe

Figure 25: US vs Europe profit gap opened up post Sovereign debt crisis. US up 25% - Europe down 27%



Source: Thomson Datastream, UBS European Equity Strategy

Figure 26: US vs Europe: Sector adjusted Price to Book (using global weights), Europe is extremely cheap today



Source: Thomson Datastream, UBS European Equity Strategy

For more detail, see also [Full Brexit: Stocks, EU risk and Swiss protection](#), 13 April 2016.

Valuation Method and Risk Statement

Risks include macroeconomic variables (such as GDP growth rates and inflation), economic slowdown, a weakening currency, global economic events, and government policy changes.

UBS Global Research is produced independently. All views expressed herein are the views of the named analysts and were prepared in an independent manner including with respect to UBS. The views expressed by the analyst do not necessarily represent the views of UBS as an institution. Neither the analysts nor UBS is promoting or campaigning for any particular outcome in the Referendum to be held in the United Kingdom on 23 June 2016.

Required Disclosures

This report has been prepared by UBS Limited, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

For information on the ways in which UBS manages conflicts and maintains independence of its research product; historical performance information; and certain additional disclosures concerning UBS research recommendations, please visit www.ubs.com/disclosures. The figures contained in performance charts refer to the past; past performance is not a reliable indicator of future results. Additional information will be made available upon request. UBS Securities Co. Limited is licensed to conduct securities investment consultancy businesses by the China Securities Regulatory Commission. UBS acts or may act as principal in the debt securities (or in related derivatives) that may be the subject of this report.

Analyst Certification: Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner, including with respect to UBS, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

Company Disclosures

Issuer Name

Bulgaria⁷
Croatia
Cyprus (Republic of)
Czech Republic
Estonia
Federal Republic of Germany
French Republic^{1, 5, 7}
Greece⁷
Hungary
Kingdom of Belgium^{7, 16}
Kingdom of Denmark⁷
Kingdom of Sweden⁷
Kingdom of the Netherlands
Latvia
Lithuania
Poland⁷
Portuguese Republic⁷
Republic of Austria^{7, 16}
Republic of Finland
Romania⁷
Slovak Republic
Slovenia
Spain^{4, 7}
United Kingdom of Great Britain^{2, 4, 7, 16, 22}

1. UBS Limited is acting as manager/co-manager, underwriter, placement or sales agent in regard to an offering of securities of this company/entity or one of its affiliates.
2. UBS AG, its affiliates or subsidiaries has acted as manager/co-manager in the underwriting or placement of securities of this company/entity or one of its affiliates within the past 12 months.

4. Within the past 12 months, UBS AG, its affiliates or subsidiaries has received compensation for investment banking services from this company/entity or one of its affiliates.
5. UBS AG, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from this company/entity within the next three months.
7. Within the past 12 months, UBS Securities LLC and/or its affiliates have received compensation for products and services other than investment banking services from this company/entity.
16. UBS Limited has entered into an arrangement to act as a liquidity provider and/or market maker in the financial instruments of this company.
22. UBS AG, its affiliates or subsidiaries held other significant financial interests in this company/entity as of last month's end (or the prior month's end if this report is dated less than 10 working days after the most recent month's end).

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report. For a complete set of disclosure statements associated with the companies discussed in this report, including information on valuation and risk, please contact UBS Securities LLC, 1285 Avenue of Americas, New York, NY 10019, USA, Attention: Investment Research.

Global Disclaimer

This document has been prepared by UBS Limited, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

Global Research is provided to our clients through UBS Neo, the UBS Client Portal and UBS.com (each a "System"). It may also be made available through third party vendors and distributed by UBS and/or third parties via e-mail or alternative electronic means. The level and types of services provided by Global Research to a client may vary depending upon various factors such as a client's individual preferences as to the frequency and manner of receiving communications, a client's risk profile and investment focus and perspective (e.g. market wide, sector specific, long-term, short-term, etc.), the size and scope of the overall client relationship with UBS and legal and regulatory constraints.

When you receive Global Research through a System, your access and/or use of such Global Research is subject to this Global Research Disclaimer and to the terms of use governing the applicable System.

When you receive Global Research via a third party vendor, e-mail or other electronic means, your use shall be subject to this Global Research Disclaimer and to UBS's Terms of Use/Disclaimer (<http://www.ubs.com/global/en/legalinfo2/disclaimer.html>). By accessing and/or using Global Research in this manner, you are indicating that you have read and agree to be bound by our Terms of Use/Disclaimer. In addition, you consent to UBS processing your personal data and using cookies in accordance with our Privacy Statement (<http://www.ubs.com/global/en/legalinfo2/privacy.html>) and cookie notice (<http://www.ubs.com/global/en/homepage/cookies/cookie-management.html>).

If you receive Global Research, whether through a System or by any other means, you agree that you shall not copy, revise, amend, create a derivative work, transfer to any third party, or in any way commercially exploit any UBS research provided via Global Research or otherwise, and that you shall not extract data from any research or estimates provided to you via Global Research or otherwise, without the prior written consent of UBS.

For access to all available Global Research on UBS Neo and the Client Portal, please contact your UBS sales representative.

This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject UBS to any registration or licensing requirement within such jurisdiction. It is published solely for information purposes; it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy. No representation or warranty, either expressed or implied, is provided in relation to the accuracy, completeness or reliability of the information contained in this document ('the Information'), except with respect to Information concerning UBS. The Information is not intended to be a complete statement or summary of the securities, markets or developments referred to in the document. UBS does not undertake to update or keep current the Information. Any opinions expressed in this document may change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS. Any statements contained in this report attributed to a third party represent UBS's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party.

Nothing in this document constitutes a representation that any investment strategy or recommendation is suitable or appropriate to an investor's individual circumstances or otherwise constitutes a personal recommendation. Investments involve risks, and investors should exercise prudence and their own judgement in making their investment decisions. The financial instruments described in the document may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures are not suitable for all investors, and trading in these instruments is considered risky. Mortgage and asset-backed securities may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates or other market conditions. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument referred to in the document. For investment advice, trade execution or other enquiries, clients should contact their local sales representative.

The value of any investment or income may go down as well as up, and investors may not get back the full (or any) amount invested. Past performance is not necessarily a guide to future performance. Neither UBS nor any of its directors, employees or agents accepts any liability for any loss (including investment loss) or damage arising out of the use of all or any of the Information.

Any prices stated in this document are for information purposes only and do not represent valuations for individual securities or other financial instruments. There is no representation that any transaction can or could have been effected at those prices, and any prices do not necessarily reflect UBS's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by UBS or any other source may yield substantially different results.

This document and the Information are produced by UBS as part of its research function and are provided to you solely for general background information. UBS has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. In no circumstances may this document or any of the Information be used for any of the following purposes:

- (i) valuation or accounting purposes;
- (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or
- (iii) to measure the performance of any financial instrument.

By receiving this document and the Information you will be deemed to represent and warrant to UBS that you will not use this document or any of the Information for any of the above purposes or otherwise rely upon this document or any of the Information.

Research will initiate, update and cease coverage solely at the discretion of UBS Investment Bank Research Management. The analysis contained in this document is based on numerous assumptions. Different assumptions could result in materially different results. The analyst(s) responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting market information. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS into other areas, units, groups or affiliates of UBS. The compensation of the analyst who prepared this document is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues; however, compensation may relate to the revenues of UBS Investment Bank as a whole, of which investment banking, sales and trading are a part.

For financial instruments admitted to trading on an EU regulated market: UBS AG, its affiliates or subsidiaries (excluding UBS Securities LLC) acts as a market maker or liquidity provider (in accordance with the interpretation of these terms in the UK) in the financial instruments of the issuer save that where the activity of liquidity provider is carried out in accordance with the definition given to it by the laws and regulations of any other EU jurisdictions, such information is separately disclosed in this document. For financial instruments admitted to trading on a non-EU regulated market: UBS may act as a market maker save that where this activity is carried out in the US in accordance with the definition given to it by the relevant laws and regulations, such activity will be specifically disclosed in this document. UBS may have issued a warrant the value of which is based on one or more of the financial instruments referred to in the document. UBS and its affiliates and employees may have long or short positions, trade as principal and buy and sell in instruments or derivatives identified herein; such transactions or positions may be inconsistent with the opinions expressed in this document.

United Kingdom and the rest of Europe: Except as otherwise specified herein, this material is distributed by UBS Limited to persons who are eligible counterparties or professional clients. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. **France:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities France S.A. UBS Securities France S.A. is regulated by the ACPR (Autorité de Contrôle Prudentiel et de Résolution) and the Autorité des Marchés Financiers (AMF). Where an analyst of UBS Securities France S.A. has contributed to this document, the document is also deemed to have been prepared by UBS Securities France S.A. **Germany:** Prepared by UBS Limited and distributed by UBS Limited and UBS Deutschland AG. UBS Deutschland AG is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). **Spain:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities España SV, SA. UBS Securities España SV, SA is regulated by the Comisión Nacional del Mercado de Valores (CNMV). **Turkey:** Distributed by UBS Limited. No information in this document is provided for the purpose of offering, marketing and sale by any means of any capital market instruments and services in the Republic of Turkey. Therefore, this document may not be considered as an offer made or to be made to residents of the Republic of Turkey. UBS AG is not licensed by the Turkish Capital Market Board under the provisions of the Capital Market Law (Law No. 6362). Accordingly, neither this document nor any other offering material related to the instruments/services may be utilized in connection with providing any capital market services to persons within the Republic of Turkey without the prior approval of the Capital Market Board. However, according to article 15 (d) (ii) of the Decree No. 32, there is no restriction on the purchase or sale of the securities abroad by residents of the Republic of Turkey. **Poland:** Distributed by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce regulated by the Polish Financial Supervision Authority. Where an analyst of UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce has contributed to this

document, the document is also deemed to have been prepared by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce. **Russia:** Prepared and distributed by UBS Bank (OOO). **Switzerland:** Distributed by UBS AG to persons who are institutional investors only. UBS AG is regulated by the Swiss Financial Market Supervisory Authority (FINMA). **Italy:** Prepared by UBS Limited and distributed by UBS Limited and UBS Italia Sim S.p.A. UBS Italia Sim S.p.A. is regulated by the Bank of Italy and by the Commissione Nazionale per le Società e la Borsa (CONSOB). Where an analyst of UBS Italia Sim S.p.A. has contributed to this document, the document is also deemed to have been prepared by UBS Italia Sim S.p.A. **South Africa:** Distributed by UBS South Africa (Pty) Limited (Registration No. 1995/011140/07), an authorised user of the JSE and an authorised Financial Services Provider (FSP 7328). **Israel:** This material is distributed by UBS Limited. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. UBS Securities Israel Ltd is a licensed Investment Marketer that is supervised by the Israel Securities Authority (ISA). UBS Limited and its affiliates incorporated outside Israel are not licensed under the Israeli Advisory Law. UBS Limited is not covered by insurance as required from a licensee under the Israeli Advisory Law. UBS may engage among others in issuance of Financial Assets or in distribution of Financial Assets of other issuers for fees or other benefits. UBS Limited and its affiliates may prefer various Financial Assets to which they have or may have Affiliation (as such term is defined under the Israeli Advisory Law). Nothing in this Material should be considered as investment advice under the Israeli Advisory Law. This Material is being issued only to and/or is directed only at persons who are Eligible Clients within the meaning of the Israeli Advisory Law, and this material must not be relied on or acted upon by any other persons. **Saudi Arabia:** This document has been issued by UBS AG (and/or any of its subsidiaries, branches or affiliates), a public company limited by shares, incorporated in Switzerland with its registered offices at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH-8001 Zurich. This publication has been approved by UBS Saudi Arabia (a subsidiary of UBS AG), a Saudi closed joint stock company incorporated in the Kingdom of Saudi Arabia under commercial register number 1010257812 having its registered office at Tatweer Towers, P.O. Box 75724, Riyadh 11588, Kingdom of Saudi Arabia. UBS Saudi Arabia is authorized and regulated by the Capital Market Authority to conduct securities business under license number 08113-37. **Dubai:** The information distributed by UBS AG Dubai Branch is intended for Professional Clients only and is not for further distribution within the United Arab Emirates. **United States:** Distributed to US persons by either UBS Securities LLC or by UBS Financial Services Inc., subsidiaries of UBS AG; or by a group, subsidiary or affiliate of UBS AG that is not registered as a US broker-dealer (a 'non-US affiliate') to major US institutional investors only. UBS Securities LLC or UBS Financial Services Inc. accepts responsibility for the content of a document prepared by another non-US affiliate when distributed to US persons by UBS Securities LLC or UBS Financial Services Inc. All transactions by a US person in the securities mentioned in this document must be effected through UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate. UBS Securities LLC is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule"), and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule. **Canada:** Distributed by UBS Securities Canada Inc., a registered investment dealer in Canada and a Member-Canadian Investor Protection Fund, or by another affiliate of UBS AG that is registered to conduct business in Canada or is otherwise exempt from registration. **Brazil:** Except as otherwise specified herein, this material is prepared by UBS Brasil CCTVM S.A. to persons who are eligible investors residing in Brazil, which are considered to be: (i) financial institutions, (ii) insurance firms and investment capital companies, (iii) supplementary pension entities, (iv) entities that hold financial investments higher than R\$300,000.00 and that confirm the status of qualified investors in written, (v) investment funds, (vi) securities portfolio managers and securities consultants duly authorized by Comissão de Valores Mobiliários (CVM), regarding their own investments, and (vii) social security systems created by the Federal Government, States, and Municipalities. **Hong Kong:** Distributed by UBS Securities Asia Limited and/or UBS AG, Hong Kong Branch. **Singapore:** Distributed by UBS Securities Pte. Ltd. [MCI (P) 018/09/2015 and Co. Reg. No.: 198500648C] or UBS AG, Singapore Branch. Please contact UBS Securities Pte. Ltd., an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110); or UBS AG, Singapore Branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or document. The recipients of this document represent and warrant that they are accredited and institutional investors as defined in the Securities and Futures Act (Cap. 289). **Japan:** Distributed by UBS Securities Japan Co., Ltd. to professional investors (except as otherwise permitted). Where this document has been prepared by UBS Securities Japan Co., Ltd., UBS Securities Japan Co., Ltd. is the author, publisher and distributor of the document. Distributed by UBS AG, Tokyo Branch to Professional Investors (except as otherwise permitted) in relation to foreign exchange and other banking businesses when relevant. **Australia:** Clients of UBS AG: Distributed by UBS AG (Holder of Australian Financial Services License No. 231087). Clients of UBS Securities Australia Ltd: Distributed by UBS Securities Australia Ltd (Holder of Australian Financial Services License No. 231098). Clients of UBS Wealth Management Australia Ltd: Distributed by UBS Wealth Management Australia Ltd (Holder of Australian Financial Services License No. 231127). This Document contains general information and/or general advice only and does not constitute personal financial product advice. As such, the Information in this document has been prepared without taking into account any investor's objectives, financial situation or needs, and investors should, before acting on the Information, consider the appropriateness of the Information, having regard to their objectives, financial situation and needs. If the Information contained in this document relates to the acquisition, or potential acquisition of a particular financial product by a 'Retail' client as defined by section 761G of the Corporations Act 2001 where a Product Disclosure Statement would be required, the retail client should obtain and consider the Product Disclosure Statement relating to the product before making any decision about whether to acquire the product. The UBS Securities Australia Limited Financial Services Guide is available at: www.ubs.com/ecs-research-fsg. **New Zealand:** Distributed by UBS New Zealand Ltd. The information and recommendations in this publication are provided for general information purposes only. To the extent that any such information or recommendations constitute financial advice, they do not take into account any person's particular financial situation or goals. We recommend that recipients seek advice specific to their circumstances from their financial advisor. **Korea:** Distributed in Korea by UBS Securities Pte. Ltd., Seoul Branch. This document may have been edited or contributed to from time to time by affiliates of UBS Securities Pte. Ltd., Seoul Branch. **Malaysia:** This material is authorized to be distributed in Malaysia by UBS Securities Malaysia Sdn. Bhd (Capital Markets Services License No.: CMSL/A0063/2007). This material is intended for professional/institutional clients only and not for distribution to any retail clients. **India:** Prepared by UBS Securities India Private Ltd. (Corporate Identity Number U67120MH1996PTC097299) 2/F, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000. It provides brokerage services bearing SEBI Registration Numbers: NSE (Capital Market Segment): INB230951431, NSE (F&O Segment) INF230951431, NSE (Currency Derivatives Segment) INE230951431, BSE (Capital Market Segment) INB010951437; merchant banking services bearing SEBI Registration Number: INM000010809 and Research Analyst services bearing SEBI Registration Number: INH000001204. UBS AG, its affiliates or subsidiaries may have debt holdings or positions in the subject Indian company/companies. Within the past 12 months, UBS AG, its affiliates or subsidiaries may have received compensation for non-investment banking securities-related services and/or non-securities services from the subject Indian company/companies. The subject company/companies may have been a client/clients of UBS AG, its affiliates or subsidiaries during the 12 months preceding the date of distribution of the research report with respect to investment banking and/or non-investment banking securities-related services and/or non-securities services. With regard to information on associates, please refer to the Annual Report at: http://www.ubs.com/global/en/about_ubs/investor_relations/annualreporting.html

The disclosures contained in research documents produced by UBS Limited shall be governed by and construed in accordance with English law.

UBS specifically prohibits the redistribution of this document in whole or in part without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect. Images may depict objects or elements that are protected by third party copyright, trademarks and other intellectual property rights. © UBS 2016. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

