Malcolm Barr (44-20) 7134-8326 malcolm.barr@jpmorgan.com Allan Monks (44-20) 7134-8309 allan.j.monks@jpmorgan.com Greg Fuzesi (44-20) 7134-8310 greg.x.fuzesi@jpmorgan.com David Mackie (44-20) 7134-8325 david.mackie@jpmorgan.com Economic Research Global Data Watch June 17, 2016 J.P.Morgan

Economic Research Note

The implications of Brexit

- Polls make the referendum result too close to call
- Brexit would see a big shift in UK politics and BoE rate cuts before exit negotiations begin
- Euro area growth likely to be hit by less than half a point—we do not anticipate referenda elsewhere
- Denmark, Sweden, and Switzerland will respond to unwanted FX strength

Opinion polls ahead of next week's referendum have made a powerful move toward Brexit (Figure 1). Our attempt to clean up the polls for methodological issues suggests a lead for leave in the 3%-5%-pt range at the time of writing. Prior referenda suggest that a swing toward the status quo is often seen, both in polling over the final two weeks of the campaign and in comparing the result with final projections from the polls. In the Scottish independence referendum, for example, polls made a small move back toward remain ahead of the vote, and the eventual 10%-pt win for remain compared to an average projection of a 5%-pt win from the eve-of-vote polls. This time around, however, the swing toward leave appears to have accelerated as we moved into the period when we would expect status quo bias to show. Moreover the dispersion in polling results and controversy over methods suggests the margin of error around any estimate derived from the polls is high. In our view, it is now unlikely that the polls will offer clear guidance on the outturn of the referendum before the vote takes place. Hence here we update and summarize views on the economic, political, and policy implications of Brexit for both the UK and the rest of Europe, should it occur.

Figure 1: Weekly lead of remain over leave %-pts, dots represent weekly averages of "cleaned up" lead



UK: Prepare for a bumpy ride

Process and politics: The referendum is consultative and does not legally compel politicians to take any particular course of action. The day after a leave vote, the UK's legal relationship with the EU would remain largely unchanged. But the political environment would change enormously. Our best guess is that David Cameron would resign as rime minister within hours of the result being known. While he might attempt to remain in office until the Conservative party conference in October, his authority during this period will have been eroded. Boris Johnson is likely to take over as PM subject to the vagaries of the Conservative leadership election process (see below). A snap general election is possible, but in our view, unlikely.

Under Conservative party rules for election of the party leader, MPs reduce the field of candidates to two through successive rounds of voting, with the candidate with least votes eliminated in each round. The election between the last two candidates is via a postal ballot of Conservative party members. If only one candidate stands unopposed, that candidate becomes PM. If Boris Johnson is the only MP to stand, the process could be completed within a matter of days. If other individuals choose to stand, however, the process will be more drawn out (in 2005, for example, it took two months).

Vote Leave has argued that a formal "article 50" request to leave the EU should not be made in the immediate aftermath of the vote, and informal negotiations about how the process will evolve should take place first. The organization has also argued that the UK will not accept free movement of labor as part of the subsequent arrangements and should exit the single market. This position may not bind a future UK prime minister. But it suggests that the UK will take an assertive stance in negotiations toward an exit at the early stage. Although new negotiations on terms of EU membership and a further referendum are possible, we see them as very unlikely.

Growth: Uncertainty around the UK's future trading regime is likely to depress firms' employment and investment decisions, and to limit household spending. Although sterling is likely to fall in value, recent experience has not shown UK corporates to be well positioned to take advantage of currency weakness by increasing their investment and building market share. In the meantime, import price increases would likely be passed through to households, compressing real income growth. It is tough to calibrate the net impact on growth, and some portion of those effects may already have been at play in the data. Our base case is that GDP growth would slow by close to 1% in sequential terms, pushing it below 1% in the near term. We would expect some of that effect on the growth rate to dissipate as it becomes clear that the terms of EU exit will take a period of years to negotiate (Table 1).

Malcolm Barr (44-20) 7134-8326 malcolm.barr@jpmorgan.com Allan Monks (44-20) 7134-8309 allan.j.monks@jpmorgan.com Greg Fuzesi (44-20) 7134-8310 greg.x.fuzesi@jpmorgan.com David Mackie (44-20) 7134-8325 david.mackie@jpmorgan.com

Economic Research

The implications of Brexit June 17, 2016

J.P.Morgan

Table 1: GDP forecasts and UK referendum outturns

%ch over prior period, annualized

	UK		Euro area	
	Remain	Leave	Remain	Leave
1Q16	1.6	1.6	2.2	2.2
2Q16	1.0	1.0	1.5	1.5
3Q16	2.5	0.5	2.0	1.6
4Q16	2.5	0.5	2.0	1.6
2016	1.9	1.5	1.8	1.7
1Q17	2.0	1.0	1.8	1.6
2Q17	2.0	1.5	1.8	1.6
2017	2.1	1.1	1.8	1.6

Source: J.P. Morgan

Policy: If the result is a vote to leave we would anticipate a 25bp cut in the Bank rate at the July meeting, followed by a further 25bp move alongside the August inflation report. The speed and magnitude of the response will be sensitive to moves in financial markets; the MPC likely would interpret a weaker currency as reflecting weaker growth expectations provided it is accompanied by weakness in other UK asset markets. The Bank of England has already planned emergency liquidity auctions and will stand ready to provide more if needed.

Euro area: A meaningful but manageable shock

Growth: The impact on growth would come from the direct spillovers from the uncertainty effect in the UK, a hit to Euro area confidence and financial markets, and currency appreciation. In our view, Euro area growth would be around 0.4%-pt lower than it otherwise would have been over the coming year, which would put average GDP gains at around 1.5% ar compared to the current 1.9% projection based on the assumption that the UK remains in the EU. Unemployment would still likely decline, although at a much reduced pace. Inflation would likely be slightly lower, perhaps by around 0.1%-pt.

Policy: The ECB's response to this shock would depend on the extent of the impact on growth and inflation, and on the extent to which financial market stress looked likely to weigh further on spending and increase sovereign and bank funding costs. We expect the ECB would quickly express its commitment to ensure price stability in the region, which would necessitate a commitment to the integrity of the region.

In the first instance, we would expect more easing on rates and the balance sheet. Our forecast already anticipates further easing in September, in the form of an extension of the current asset purchase program through end-2017 (an increase in asset purchases worth €720bn). If UK left the EU, we would expect additional easing involving a 10bp cut in the deposit rate (to -50bp) and a further extension of asset purchases into

2018. We would not expect these additional moves to come quickly, unless financial markets put the central bank under a lot of pressure. If peripheral financial market pressure were intense enough to threaten the integrity of the region, the ECB could introduce a new instrument to limit contagion. This could involve country-specific bond market intervention (like the OMT) but without conditionality. In our view, the ECB would rather introduce a new instrument to limit peripheral stress than divert purchases from the existing asset purchase program. Regarding potential bank funding pressure, banks already have access to unlimited liquidity in the weekly and three-monthly operations. If needed, the ECB could adjust the timing of these operations.

Politics: The rest of the EU is torn between fear and fantasy: Fear that a UK exit will lead the region to unravel, and a fantasy that without the UK the Euro area can take a leap forward in terms of integration. Neither of these extremes seems very likely. Non-mainstream political parties that are hostile to the EU would be energized by a UK vote to leave, but no other country in the EU looks likely to call a referendum on membership. And, in our view, it is not the UK that has held back the Euro area from further integration: it is domestic politics in the member states. In the event, we would expect EU politicians to express strong commitments to the integrity of the EU, but we would not expect any concrete action to integrate further. Such steps likely would need to wait at least until after the German and French elections next year.

In terms of the negotiations around UK exit, the rest of the EU is unlikely to agree to a significantly preferential trading arrangement. Given the reluctance of the UK Leave camp to provide contributions to the EU budget or to accept free movement of labor, the UK's new trade relationship with the EU would likely be more restrictive than Norway's or Switzerland's. If the UK were to take unilateral action that was perceived as unfriendly, negotiations could get very difficult, and in the extreme the UK could end up trading with the EU under WTO rules.

Spillovers elsewhere

A UK decision to exit the EU would also be a meaningful shock to the rest of Western Europe—Sweden, Switzerland, and Denmark. These countries are very sensitive to upward pressure on their currencies, and they would respond either to sustain the current peg in Denmark or to limit appreciation in Sweden and Switzerland. Depending on the extent of the pressure, these countries would likely see some combination of rate cuts, asset purchases, and FX intervention. Limits on rate cuts or asset purchases due to concern about pressure on bank profitability or market liquidity are not as relevant as elsewhere.

JPMorgan Chase Bank N.A, London Branch

Malcolm Barr (44-20) 7134-8326 malcolm.barr@jpmorgan.com Allan Monks (44-20) 7134-8309 allan.j.monks@jpmorgan.com Greg Fuzesi (44-20) 7134-8310 greg.x.fuzesi@jpmorgan.com David Mackie (44-20) 7134-8325 david.mackie@jpmorgan.com Economic Research Global Data Watch June 17, 2016 J.P.Morgan

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues. Principal Trading: JPMorgan and/or its affiliates normally make a market and trade as principal in fixed income securities discussed in this report. Legal Entities: J.P. Morgan is the global brand name for J.P. Morgan Securities LLC (JPMS) and its non-US affiliates worldwide. J.P. Morgan Cazenove is a brand name for equity research produced by J.P. Morgan Securities plc; J.P. Morgan Equities South Africa Proprietary Limited; JPMorgan Chase Bank, N.A., Dubai Branch; and J.P. Morgan Bank International LLC. J.P.Morgan Securities Inc. is a member of NYSE and SIPC. JPMorgan Chase Bank, N.A. is a member of FDIC. U.K.: JPMorgan Chase N.A., London Branch, is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and to limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from J.P. Morgan on request. J.P. Morgan Securities plc (JPMS plc) is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. J.P. Morgan Equities South Africa Proprietary Limited is a member of the Johannesburg Securities Exchange and is regulated by the Financial Services Board. J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority. JPMorgan Chase Bank, N.A., Singapore branch and J.P. Morgan Securities Singapore Private Limited are regulated by the Monetary Authority of Singapore. JPMorgan Securities Japan Co., Ltd. and JPMorgan Chase Bank, N.A., Tokyo Branch are regulated by the Financial Services Agency in Japan. J.P. Morgan Australia Limited (JPMAL) (ABN 52 002 888 011/AFS Licence No: 238188) is regulated by ASIC and J.P. Morgan Securities Australia Limited (JPMSAL) (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by ASIC and is a Market, Clearing and Settlement Participant of ASX Limited and CHI-X. J.P.Morgan Saudi Arabia Ltd. is authorized by the Capital Market Authority of the Kingdom of Saudi Arabia (CMA), licence number 35-07079. General: Information has been obtained from sources believed to be reliable but JPMorgan does not warrant its completeness or accuracy except with respect to disclosures relative to JPMS and/or its affiliates and the analyst's involvement with the issuer. Opinions and estimates constitute our judgment at the date of this material and are subject to change without notice. Past performance is not indicative of future results. The investments and strategies discussed may not be suitable for all investors; if you have any doubts you should consult your investment advisor. The investments discussed may fluctuate in price or value. Changes in rates of exchange may have an adverse effect on the value of investments. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. JPMorgan and/or its affiliates and employees may act as placement agent, advisor or lender with respect to securities or issuers referenced in this report. Clients should contact analysts at and execute transactions through a JPMorgan entity in their home jurisdiction unless governing law permits otherwise. This report should not be distributed to others or replicated in any form without prior consent of JPMorgan. U.K. and European Economic Area (EEA): Investment research issued by JPMS plc has been prepared in accordance with JPMS plc's Policies for Managing Conflicts of Interest in Connection with Investment Research. This report has been issued by JPMS plc has been prepared in accordance with JPMS plc's Policies for Managing Conflicts of Interest in Connection with Investment Research. This report has been issued by JPMS plc has been prepared in accordance with JPMS plc's Policies for Managing Conflicts of Interest in Connection with Investment Research. This report has been issued by JPMS plc has been prepared in accordance with JPMS plc's Policies for Managing Conflicts of Interest in Connection with Investment Research. This report has been issued by JPMS plc has been prepared in accordance with JPMS plc's Policies for Managing Conflicts of Interest in Connection with Investment Research. This report has been issued by JPMS plc has been issued by JPMS plc has been prepared in accordance with JPMS plc's Policies for Managing Conflicts of Interest in Connection with Investment Research. This report has been issued by JPMS plc h these persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. Japan: There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, JPMorgan Securities Japan Co., Ltd., will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between JPMorgan Securities Japan Co., Ltd., and the customer in advance. Financial Instruments Firms: JPMorgan Securities Japan Co., Ltd., Kanto Local Finance Bureau (kinsho) No. 82 Participating Association / Japan Securities Dealers Association, The Financial Futures Association of Japan, Type II Financial Instruments Firms Association and Japan Investment Advisers Association. Australia: This material is issued and distributed by JPMSAL in Australia to "wholesale clients" only. This material does not take into account the specific investment objectives, financial situation or particular needs of the recipient. The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMSAL. For the purposes of this paragraph the term "wholesale client" has the meaning given in section 761G of the Corporations Act 2001. New Zealand. This material is issued and distributed by JPMSAL in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. JPMSAL does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL. Canada: The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertigation. tisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities must be conducted through a dealer registered in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offense. Korea: This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Limited, Seoul branch. Brazil: Ombudsman J.P. Morgan: 0800-7700847 / ouvidoria.jp.morgan@jpmorgan.com. Revised April 09, 2016. Copyright 2016 JPMorgan Chase Co. All rights reserved. Additional information available upon request.