MIZUHO

One MIZUHO

Mizuho Economic Outlook & Analysis

Brexit and its impact on the global economy

August 31, 2016

Mizuho Research Institute

One MIZUHO
Building the future with you

One Think Tank

Overview

- In the referendum to decide whether the UK should leave or remain in the European Union (EU) on June 23, 2016, UK citizens chose to exit the EU (Brexit). There is no clear idea on the details and negotiation schedule with the EU, and the outlook remains uncertain.

- Uncertainty caused by Brexit is exerting downward pressures on the global economy. It seems inevitable that the UK economy will slow down, and Eurozone GDP will likely decline on the back of subdued investment. On the other hand, its impact on the US economy seems limited thus far with the US dollar fluctuating narrowly from the perspective of effective exchange rates.

- As for Japan, while the appreciation of the yen is expected to weaken firms' export activities, the overall impact may be mitigated by the government's economic stimulus package. Nonetheless, heightened uncertainty in the financial markets may restrain corporate capital investment.

Results of the referendum: “Remain 48% vs. Leave 52%”

- In the referendum held on June 23, UK citizens chose to exit the EU (Brexit).
  - Discontent over immigration issues and distrust in the EU bureaucracy mainly among the rural and suburban voters in England were contributing factors.
- After Prime Minister David Cameron stepped down, Theresa May, former home secretary, became prime minister.
  - As new prime minister, Theresa May has stated that “the UK will not submit the withdrawal notification to the EU to invoke Article 50 of the Treaty on European Union before the end of 2016,” and “in negotiations with the EU, priority will be given to securing access to the EU single market and restricting immigration.” These positions suggest the difficulty of the UK-EU negotiations going forward.

[Results of the UK referendum]

	< Remain >	< Leave >
England (excluding London)	11,003,477 44.6%	13,675,174 55.4%
London	2,263,519 59.9%	1,513,232 40.1%
Northern Ireland	440,707 55.8%	349,442 44.2%
Scotland	1,661,191 62.0%	1,018,322 38.0%
Wales	772,347 47.5%	854,572 52.5%
Total	16,141,241 48.1%	17,410,742 51.9%

Note: Figures in the upper row represent the number of votes obtained.
Figures in the lower row represent the ratio to total number of votes.
Source: Made by MHRI based on the UK Electoral Commission.

[Major policies of PM Theresa May]

There shall be no second referendum.
There shall be no general election until 2020. (Parliament shall not be dissolved for a general election.)
Article 50 shall not be invoked before the end of the year.
In negotiation with the EU, both British companies' access to the single market and immigration restrictions shall be priorities.
A new government department to conduct Britain's negotiation with the EU shall be established, and the position of senior Secretary of the State to lead the department shall be taken by a Member of Parliament who campaigned for the UK to leave the EU.
The target of a budget surplus by 2020 shall be cancelled.

Source: Made by MHRI based on *The Independent*.

Uncertainty regarding the negotiation process

- The timing to notify the EU of the UK's withdrawal and the negotiation process thereafter remain uncertain.
  - Concerning the withdrawal notification, while the EU has urged the UK to withdraw as soon as possible, the UK government is cautious on submitting the withdrawal notification within the current year.
  - The process after notification will vary depending on the negotiation period of withdrawing from the existing treaty and the signing of a new treaty, and whether or not an extension period will be permitted.

[Process after the UK's withdrawal notification]

Source: Made by MHRI based on the HM Treasury.

What will the UK seek in the new relationship with the EU?

- Canadian model or Norwegian model?
  - The Canadian model with its comprehensive economic and trade agreement concluded with the EU looks prominent, but adoption of the Norwegian model, which would see the UK participate in the EEA (European Economic Area) through the EFTA (European Free Trade Association), is also supported mainly by the Remain voters.
  - Nonetheless, it is highly likely that immigration restrictions and complete access to the single market will not be realized at the same time.

[“Five options” of the UK’s new agreement with the EU]

		Free market access				Impact of EU laws	Contribution to EU budget	Participation in decision making
		Goods	Services		People			
				Financial service (note)				
1	EFTA (European Free Trade Association) + EEA (European Economic Area) (Norway option)	○	○	○	○	Yes	Yes	No
2	EFTA + Individual agreement with the EU (Switzerland option)	○	△ (Very limited)	×	○	Yes	Yes (Partial)	No
3	The Comprehensive Economic and Trade Agreement (CETA) (Canada option)	○	△ (Partial)	×	×	Partial	No	No
4	No economic agreement with the EU (WTO option)	×	×	×	×	Partial (export of goods to the EU)	No	No
5a	Current status of the UK (EU membership)	○	○	○	○	Yes	Yes	Yes
5b	What the UK will seek if leaving the EU	○	○	○	△ (Limited)	Partial	No	No

Note: Financial service in the above table means whether a financial institution can provide financial services directly without setting up a subsidiary within the EU region. Movement of people in 5b assumes limited acceptance based on a point system.

Source: Made by MHRI based on TheCityUK, *A Practitioner's Guide To Brexit*, Open Europe, *Trading Places: Is EU Membership Still the Best Option for UK Trade?* and the HM Government, *Alternatives to membership: Possible models for the United Kingdom outside the European Union*, among others.

Discussion points in the negotiation (1): Customs

- If conclusion of a new agreement with the EU is delayed, customs duties will be imposed on trade transactions with the EU (average EU tariff rate is about 5%). Zero tariff rates may not be accepted in the new agreement.

[Time period required to conclude an FTA]

Switzerland - China	4 years
EU - South Korea	4 years
EU - Mexico	4 years
US - Australia	3 years
EU - Canada	5 years (not yet enacted)
EU - Switzerland	10 years

Source: Made by MHRI based on the OECD.

[Tariff rate in the EU]

	Tariff rate		Share of duty-free items
	Average	Maximum	
Animal products	17.7	138.0	28.4
Dairy products	42.1	122.0	0.0
Fruit, vegetables, plants	10.9	182.0	19.6
Coffee, tea	6.1	22.0	27.1
Cereals & preparations	14.9	52.0	13.0
Oilseeds, fats & oils	6.8	176.0	48.1
Sugars and confectionery	25.2	81.0	11.8
Beverages & tobacco	20.7	166.0	19.2
Cotton	0.0	0.0	100.0
Other agricultural products	3.6	75.0	65.5
Fish & fish products	12.0	26.0	8.2
Minerals & metals	2.0	12.0	50.2
Petroleum	2.5	5.0	33.7
Chemicals	4.5	13.0	22.5
Wood, paper, etc.	0.9	10.0	81.1
Textiles	6.5	12.0	2.1
Clothing	11.4	12.0	0.3
Leather, footwear, etc.	4.1	17.0	26.3
Non-electrical machinery	1.9	10.0	21.3
Electrical machinery	2.8	14.0	20.8
Transport equipment	4.3	22.0	12.8
Other manufactures	2.6	14.0	20.9

Agricultural products average	12.2
Other products average	4.2
Overall average	5.3

Note: Most-favored-nation tariff rate.
Source: Made by MHRI based on the WTO.

MIZUHO

Discussion points in the negotiation (2): EU passport

- In the financial sector, attention should be paid to the impact on both financial services and infrastructure.
  - Britain losing its EU passport may trigger an exodus of financial institutions from Britain as well as a decline in number of financial institutions setting up office in the UK.
  - On the financial infrastructure front, the ability to maintain euro settlement operations is crucial.
  - The possibility that part of the settlement function will be transferred to the European continent due to Brexit cannot be overlooked.

[Outline of the EU passport system on financial services]

Single passport (single authorization) system
This system allows financial services operators legally established in one Member State to establish branches/provide services in other Member States without further authorization requirements.

Types of passport	Subject businesses	Subject services
Capital Requirements Directive (CRD) passport	Banking	**Deposit, loan,** lease, payment services, guarantee and electronic money, among others.
Markets in Financial Instruments Directive (MiFID) passport	Investment services	Accepting and executing orders on **financial products including securities, derivative and credit products**. Also includes portfolio management, investment advice, etc.

Source: Made by MHRI based on the EU and EBA.

[Arguments on the location of clearing institutions between the ECB and HM Treasury]

Eurosystem Oversight Policy Framework by the ECB (July 5, 2011)
The malfunctioning of clearing institutions, including clearing houses outside the Eurozone, could have an adverse impact on payment systems located in the Eurozone.
Infrastructures that settle euro-denominated transactions should be legally incorporated into the Eurozone with full managerial and operational control and responsibility.
Claim by the UK Government
The ECB's claim violates the basic principle of the EU single market that ensures the free movement of services and capital.
Judgment by the General Court of the European Union (March 4, 2015)
The General Court **annuls** ECB's Eurosystem Oversight Policy Framework requiring central counterparties to be located in the Eurozone.
The ECB lacks the necessary authority to regulate the activity of securities clearing systems as its regulatory powers are limited to payment systems alone by Article 127 of the Treaty on the Functioning of the European Union (the "FEU Treaty") (Basic Function of the ESCB).
There is also no explicit reference to the clearing of securities in **Article 22** of the ESCB/ECB Statute.
If the ECB reasons that authority is necessary for proper performance of the task, the ECB needs to revise Article 22 of the Statute based on Article 129 (3) of the FEU Treaty (Revision of the ECB Statute).
Article 129 (3) of the FEU Treaty
The ECB Statute Article 5 (1), (2), … Article 22 … may be modified based on the normal legislative process by **the European Parliament and European Council**.

Note: Translation by MHRI. Texts shown in **red** have been added by the author.
Source: Made by MHRI based on the European Court of Justice and EUR-Lex.

Europe awaits important elections in 2017—Risk of an “exit domino” if the EU fails to respond adequately

- Eurosceptic parties are expanding their presence in the EU countries, and attention must be paid to their impact on next year’s elections in major EU countries.
  - In particular, developments in Italy, Netherlands and France require attention.
  - Another focal point is whether the EU can ameliorate the discontent of citizens in each EU country through reform.

[Key political events in Europe]

		Political events	The monetary policy meeting
2016	August		BOE (3)
	September	Informal meeting of EU27 leaders (16)	BOE (15), ECB (8)
	October	UK Conservative Party convention (2 - 5)	ECB (20)
		Austria presidential election (reelection, 2 [scheduled])	
		EU summit (20 - 21)	
		Constitutional referendum in Italy (October – December)	
	November		BOE (3)
	December	EU summit (15 - 16)	BOE (15), ECB (8)
2017	March	Netherlands Lower House election (15)	
	April	France presidential election / first round (23)	
	May	Same as above / second round runoff (7)	
	Around September	Germany federal parliament election (August 27 - October 22)	
2018	May	Italy general election (until 23)	

Note: Figures in parenthesis show dates. The Austria presidential election is a forecast. The monetary policy meeting is entered only for 2016.
Source: Made by MHRI based on the European Council and various media coverage, among others.

[Major Eurosceptic parties]

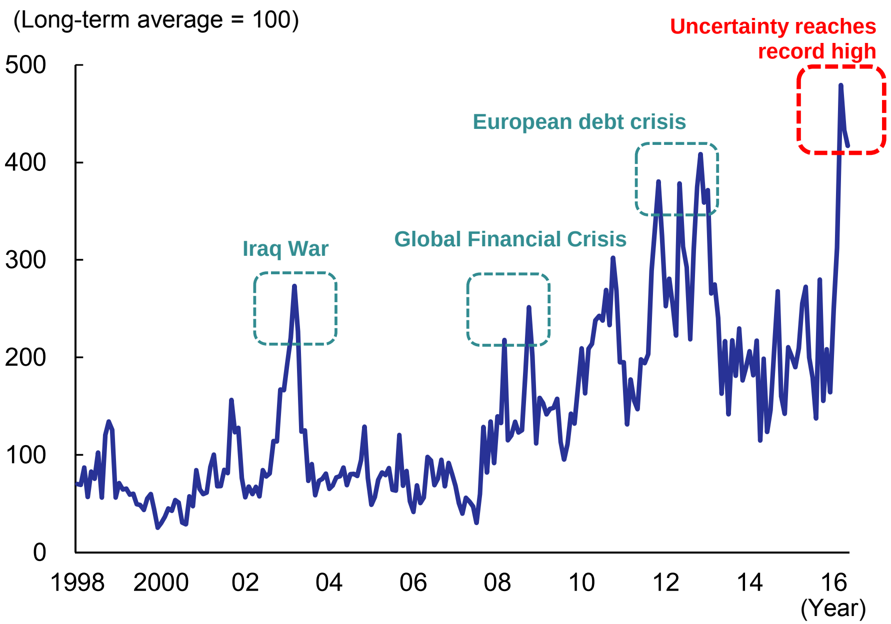
Country	Name of party
Germany	Alternative für Deutschland
France	Front National
Italy	Lega Nord
Italy	Five Star Movement
Holland	Partij voor de Vrijheid
Austria	Freiheitliche Partei Österreichs
Belgium	Vlaams Belang
Finland	Perussuomalaiset
Greece	Syriza
Greece	Golden Dawn
Norway	Framstegspartiet
Sweden	Sverigedemokraterna
Denmark	Dansk Folkeparti
Hungary	Jobbik
Poland	Prawo i Sprawiedliwość
UK	UKIP

Source: Made by MHRI based on various media coverage, among others.

The UK economy may slow down in coming years

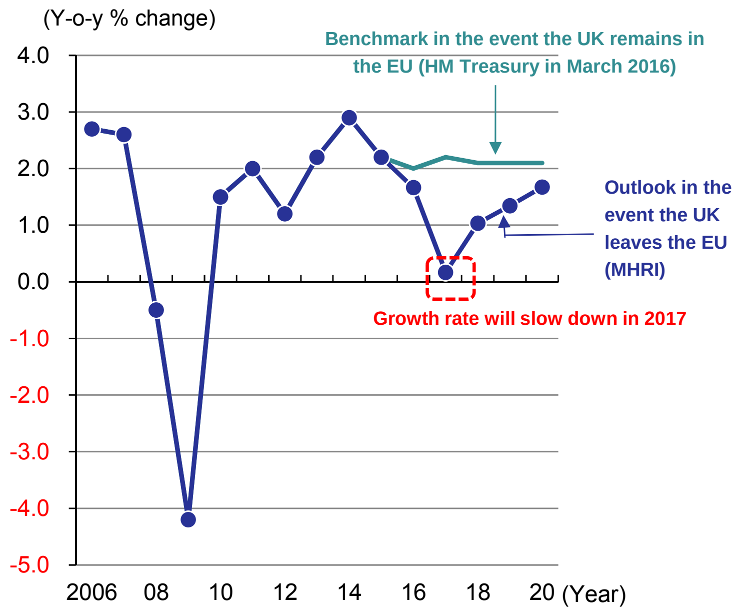
- UK economic growth rate is forecast to fall substantially below initial projections made before the referendum.
  - Amid rising uncertainty over the UK's relationship with the EU, companies are expected to reconsider their investment plans.
  - According to a survey of companies after the referendum, Brexit will exert a negative impact on business activities (64% of respondent companies), and as a result, firms are expected to reduce investment (36%) and restrain hiring activities (31%) (based on the survey conducted by the Institute of Directors from June 24 to 26).
  - Delay in the timing of the withdrawal notification to the EU and difficult withdrawal negotiations with the EU will heighten uncertainty and serve as downside risks upon the UK economy.

[Uncertainty index on UK economic policy]



Note: The above index reflects scaled monthly counts of uncertainty-related words in major newspapers in the UK.
Source: Made by MHRI based on Scott, R. B., Bloom, N., and Davis, B. J. (2015), *Measuring Economic Policy Uncertainty*, NBER Working Paper, 21633.

[Outlook on the UK GDP growth rate]



Note: Data after 2016 are forecast.
Source: Made by MHRI based on the Office for National Statistics and HM Treasury.

Mid- to long-term UK economic outlook is also negative

- Estimates by the Organisation for Economic Co-operation and Development (OECD) and HM Treasury show a decline in level of UK GDP as a result of Britain’s exit from the EU, due largely to the reduction in trade with and direct investment from the EU compared with remaining in the European Union.
  - Brexit supporters claim that successful negotiations with other countries and regions after leaving the EU will have a positive impact on the UK economy. But the complexity of trade negotiations is expected to make talks difficult and time consuming, and only after a lengthy period of time can Brexit be expected to generate a positive economic impact.

[Estimates on the economic effect of Brexit by major institutions]

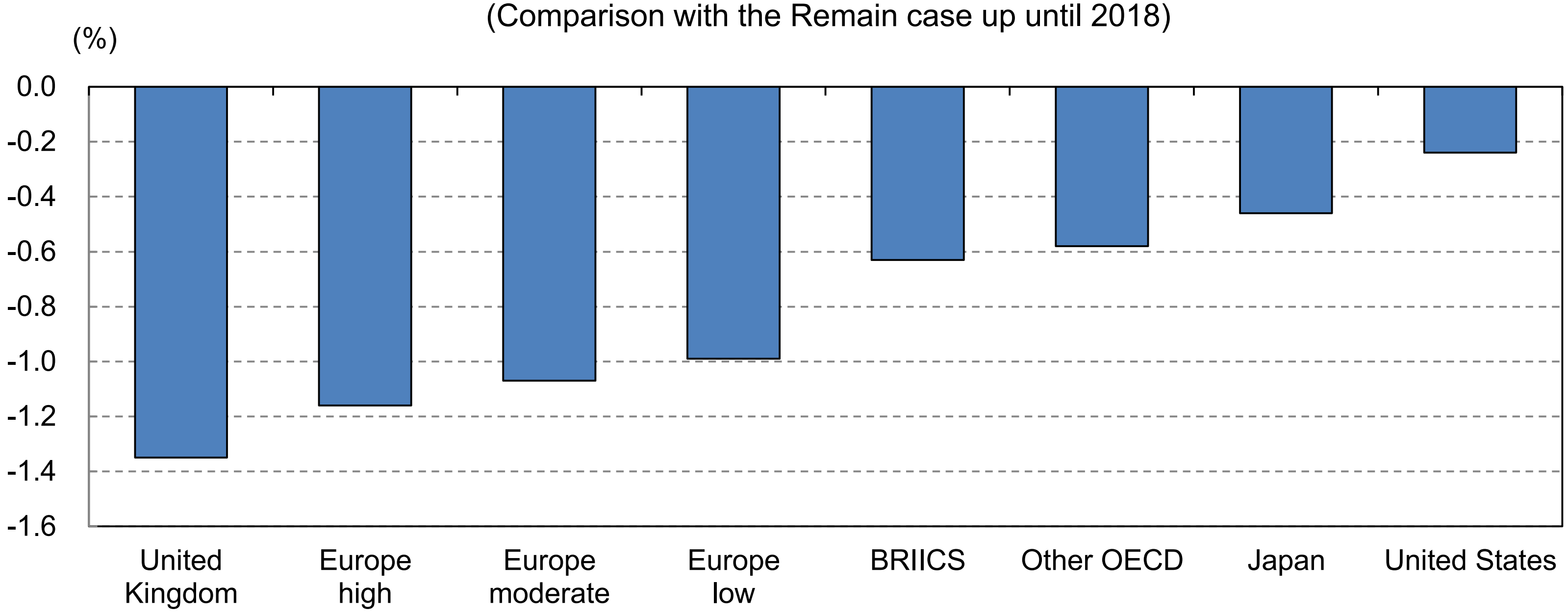
	EEA (European Economic Area) membership (Norway option)	FTA (Bilateral agreement) (Switzerland / Canada option)	WTO (No trade agreement with the EU)
Organisation for Economic Co-operation and Development (OECD) * Deviation from baseline as of 2030	–	-5.1 -2.7 to -7.7	
HM Treasury * Deviation from baseline as of 15 years after leaving the EU	-3.8 -3.4 to -4.3	-6.2 -4.6 to -7.8	-7.5 -5.4 to -9.5
National Institute of Economic and Social Research (NIESR) * Deviation from baseline as of 2030	-1.8 -1.5 to -2.1	-2.1 -1.9 to -2.3	-3.2 -2.7 to -3.7

Note: Figures in the table represent gaps from the UK baseline GDP. The baseline represents the case where the UK remains in the EU. The upper figures represent central estimates and lower figures are ranges. The unit is %.
Source: Made by MHRI based on the OECD, HM Treasury and NIESR.

Brexit will serve as downward pressures on the global economy

- According to the global economic model by the OECD, Brexit will exert a negative impact not only on the UK and Europe (the source of the issue), but also on emerging economies as well as Japan's economy.

[Impact of Brexit on the global economy]
(Comparison with the Remain case up until 2018)



Note: The above chart shows the impact of Brexit on each country's real GDP through widening of the corporate bond spread and an increase in the long-term government bond yield.
Europe high includes Ireland, Netherlands, Norway and Switzerland. Europe moderate includes Germany, France, Spain, and others. Europe low includes Italy, countries in Central and Eastern Europe, and others.

Source: Made by MHRI based on *OECD Economic Outlook*, Volume 2016 Issue 1.

Brexit carries the risk of triggering a further economic downturn

- Downside risks upon the global economy are increasing, given numerous uncertainties such as the timing of the UK's withdrawal notification to the EU and the negotiation process thereafter.

[Main economic scenarios and risk factors of respective countries]

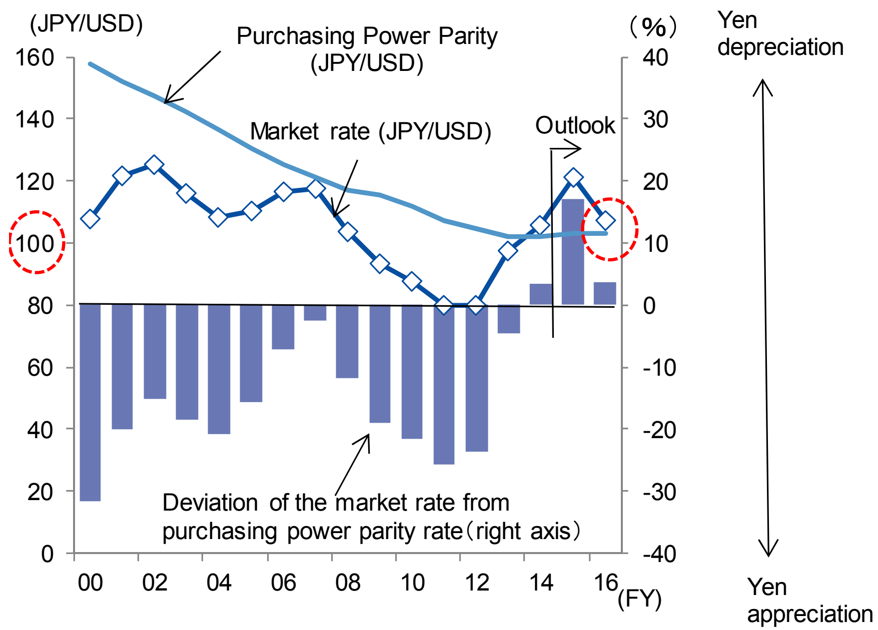
Country / region	Main scenario	Risk factors	Bias
UK	The economy will slow down mainly in the field of domestic demand due to the uncertainty on its new relationship with the EU. The GDP growth rate is expected to be negative from the end of 2016 toward the beginning of 2017.	・Delay in the withdrawal notification to the EU and difficulties in withdrawal negotiations with the EU. ・Sharp drop in real estate prices.	↓
Eurozone	Investment will be restrained due to heightened uncertainty on its new relationship with the UK, and the economy is expected to slow down from the second half of 2016 toward the beginning of 2017.	・Increase in political risk driven by a rising anti-EU movement. ・Heightened uncertainty over stability of the financial system on the back of the weak financial sector in countries like Italy, which suffers from a bad debt problem.	↓
Japan	Although the yen appreciation and stock market fall will serve as a drag upon the GDP growth rate, an economic slowdown should be averted due to measures such as the economic stimulus package.	・Possibility of an economic downturn if the yen appreciation and stock market fall continue driven by risk-off. ・Further pursuit of negative interest rates is a double-edged sword.	↓
US	The impact of Brexit through trade will be limited, based on the premise that there is no further market destabilization.	・Appreciation of the US dollar driven by risk-off. ・Increase in the risk of a cyclic economic slowdown in the US.	↓
Emerging countries	The impact of Brexit through trading will be limited, based on the premise that there is no further market destabilization.	・Sudden drop in the value of emerging countries' currencies driven by risk-off. ・Worsening of emerging countries' debt problems, mainly in China, due to external shocks.	↓

Note: Bias refers to the possibility of revising the forecast. If the arrow is pointing upward, the forecast may be subject to an upward revision; if pointing downward it may face a downward revision. Thickness of the lines indicates the strength of the bias.
Source: Made by MHRI.

The Japanese yen rising above 100 may invite a repeat of industrial hollowing out

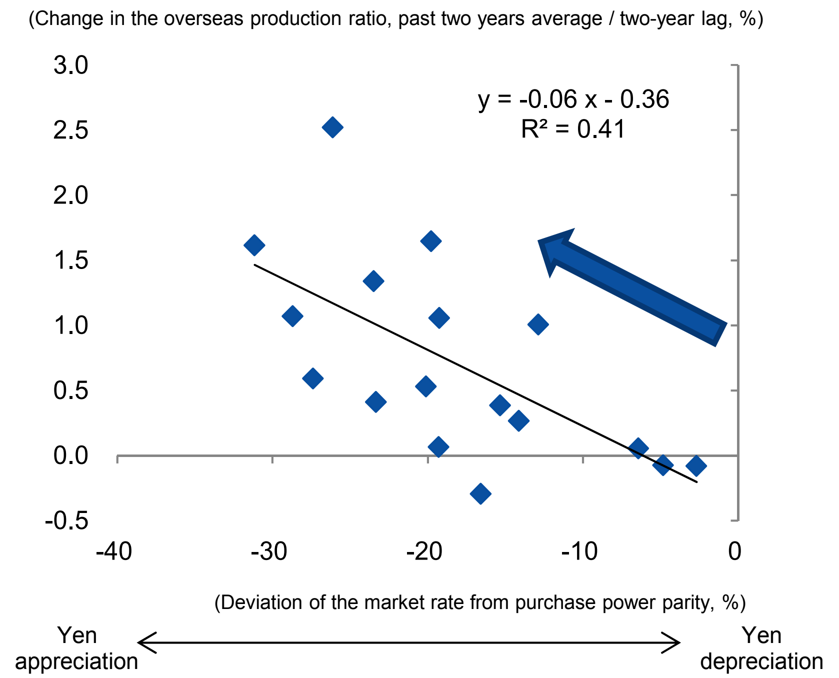
- If the yen continues to appreciate over 100 JPY/US dollar, the problem of Japan's industrial hollowing out may return.
  - While the current equilibrium foreign exchange rate varies depending on the survey, most agree that it should be around the mid-100 JPY/USD. The yen market rate in FY2014 and FY2015 was lower than the equilibrium rate, but the rate is expected to turn higher in FY2016.
  - The higher the market rate relative to the equilibrium rate, the more active overseas production activities become. Should the foreign exchange rate of 80–90 JPY/USD become fixed, overseas production may clearly accelerate with about a two-year time lag.

[Yen and US dollar market rate and purchasing power parity]



Note: Purchasing power parity is an estimate by the OECD (calendar year value). The market rate in FY2016 is a tentative forecast as of August 16. We assumed that purchasing power parity in FY2016 will remain flat from FY2015.
Source: Made by MHRI based on the OECD, among others.

[Relationship between the foreign exchange rate and overseas production ratio]

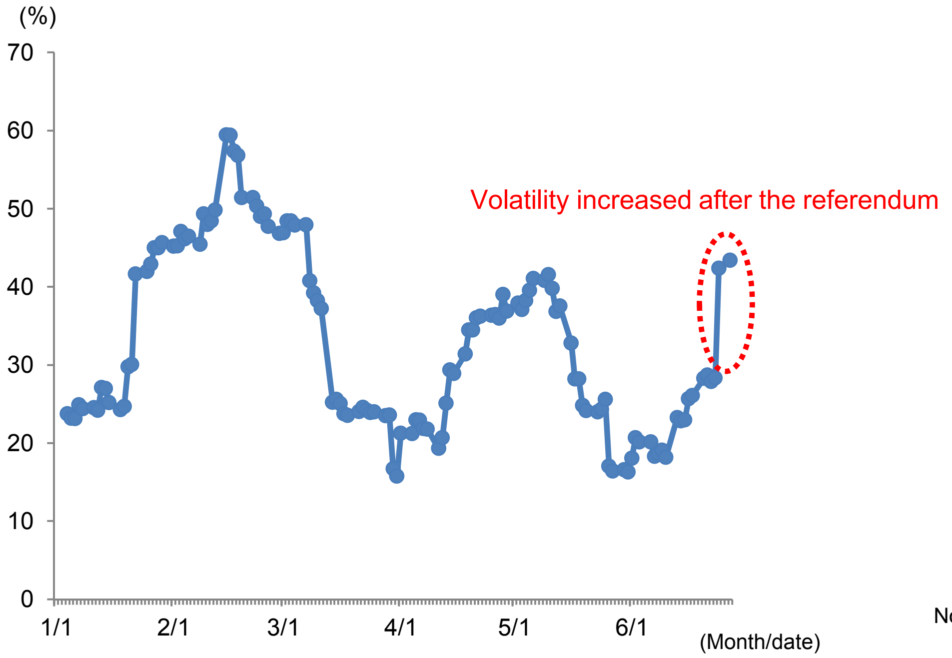


Note: Values from FY1997 to FY2015. Changes in the overseas production ratio are the past two years' average of changes from the previous year with a two-year time lag.
Source: Made by MHRI based on the Cabinet Office, *Annual Survey of Corporate Behavior* and the OECD, among others.

Rising uncertainty in the financial markets may reduce corporate Japan's capital investment by 1%

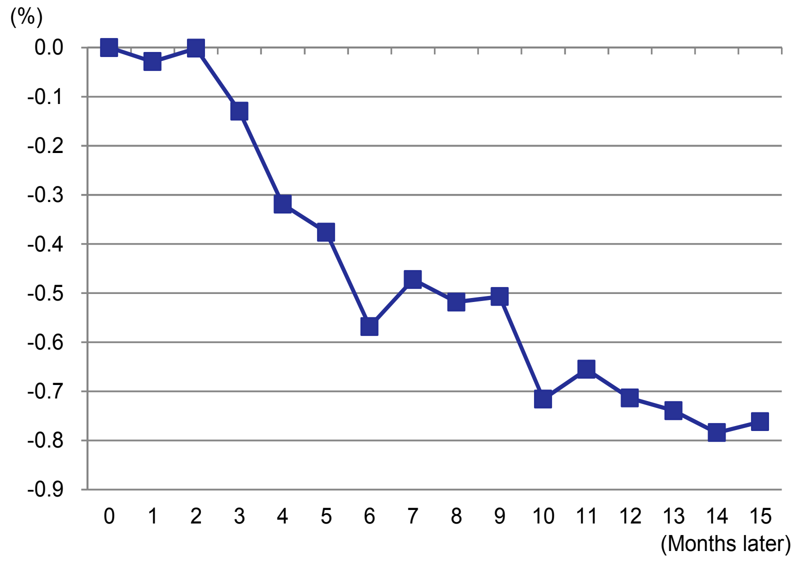
- Due to rising uncertainty in the financial markets after the UK referendum, capital investment in Japan may decline about 1%.
  - Historical volatility (past 20 days) of the Nikkei Average rose sharply after the referendum in the UK. After estimating its impact on capital investment, we concluded that the level of capital investment will decline 0.7% to 0.8% after one year.

[Historical volatility of the Nikkei Average in 2016]



Note: Stock price volatility in the past 20 days has been annualized.
Source: Made by MHRI based on Nikkei NEEDs.

[Impact (cumulative) on capital investment due to heightened uncertainty in the financial markets]



Notes: 1. We estimated the impact on capital investment due to the rise in monthly volatility based on stock volatility from June 1 to 23 (historical volatility in the past 20 days) and the jump in volatility after June 24 (volatility after June 28 is assumed to remain flat from June 27).
2. Refer to Yusuke Ichikawa, *Increase in uncertainty and its impact on the economy*, (September 11, 2015) (in Japanese only), for details.

Source: Made by MHRI based on the Ministry of Economy, Trade and Industry and Nikkei NEEDs, among others.