# Political Foreign Exchange Risk of England

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## Abstract

As introducing the new concept of political exchange risk, which differs from classical exchange risks such as transaction risk, translation risk, and economic risk in international financial management textbooks, my previous study empirically tests the relationship between a change in government and foreign exchange rates of North-East Asian countries because these countries have been enjoying trade surplus. However, the implementation of "Abenomics" in Japan and "MBnomics" in Korea can rationally raise doubt that these countries' exchange rates could be increased because of these "-nomics".

Unlike these countries, England has not pursued any "-nomics." and totally free developed country.

Therefore, the present study empirically tests the relationship between a change in government, a change in government party, and foreign exchange rates of England using ANCOVA models. The analysis results indicate that a change in government and a change in government party, affect the foreign exchange rates of England and present additional meaningful evidence for the existence of a new concept of political exchange risk, regardless of the economic development stage, economic policy of the countries and regional location of country.

**Keywords:** Political exchange risk, Government change, Government party change,

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## 1. Introduction

My previous study introduces the new concept of political foreign exchange risk, which differs from classical foreign exchange risks such as transaction risk, translation risk, and economic risk in international financial management textbooks, as empirically testing the relationship between a change in government and foreign exchange rates of North-East Asian countries such as Japan, Korea, and Taiwan.

The empirical results of these basic studies show that a change in the Japanese, Korean, and Taiwan governments can affect foreign exchange rates, regardless of the size or level of development of the country, and successfully introduced the possibility of the existence of the new concept of political foreign exchange risk in this region.

However, North-East Asian countries in Eurasia, such as Taiwan, Korea, and Japan, have been enjoying trade surplus and their governments are suspected of managing foreign exchange rates for achieving such surplus. Still less, the implementation of "Abenomics" in Japan and "MBnomics" in Korea can rationally raise doubt that this region countries' foreign exchange rates could be increased because of these "-nomics," as stated by several articles.

Comparing to these North-East Asian countries, England has not pursued any "-nomics." and totally free open large developed European country.

Therefore, finding a relationship between a change in government and foreign exchange rates of the European country such as England(despite the lack of a specific "-nomics"), would show that a change in government could affect foreign exchange rates of free open large developed European country and can present meaningful evidence for the existence of the new concept of political foreign exchange risk, regardless of the economic development stage, economic size, and economic policy of the countries and regional location of country.

Therefore, the main purpose of this study is to empirically test whether government change influences foreign exchange rates of the European country such as England, to consequently more certainly show that the new concept of political foreign exchange risk exists in Eurasian countries, regardless of the economic development stage, economic size, and economic policy. The existence of a new type of foreign exchange risk in the Eurasian countries requires a new dimension of foreign exchange risk management strategy by international companies and businesses that undertake operate and invest in this region.

### 1.1 Background

In order to study the political factors affecting a change in foreign exchange rates of Eurasian countries, the first pilot study empirically tested the effect of a change in the Korean government on controlling other economic factors, such as inflation, interest, current account, capital account, and Yen-US Dollar exchange rate. The results show that a change in the Korean government can influence the Korean Won-US Dollar exchange rate. This empirical result presented the possibility that the political risk of a change in another Eurasian country's government could affect foreign exchange rates. The second political foreign exchange risk study on the Eurasian countries chose Japan for the empirical test, considering that Japan is a larger and more developed country when compared to Korea, among the Eurasian countries. This study shows that a change in the Japanese government can influence the Japanese Yen-US Dollar exchange rate. This relationship can present meaningful evidence that government change affects foreign exchange rates of Eurasian countries, regardless of whether the country is developed or developing.

However, there are suspicions on the Japanese government for managing its foreign exchange rates not only owing to the huge trade surplus, but also due to its economic policy of "Abenomics," which is similar to the Korean government's economic policy of "MBnomics."

Comparing Korea and Japan to Taiwan, there are suspicions on Taiwan as well for managing its foreign exchange rates owing to the huge trade surplus, though there does not exist any economic policy similar to the Japanese government's economic policy of "Abenomics" or the Korean government's economic policy of "MBnomics."

Therefore, if an additional relationship is found between a government change and foreign exchange rates of the Eurasian countries, including England which has not the huge trade surplus and no "-nomics" economic policy, it would show that government change affects foreign exchange rates of the Eurasian countries such as England and can present meaningful evidence of the existence of the new concept of political foreign exchange risk, regardless of the economic development stage, size, or economic policy of the Eurasian countries. This result can be significant empirical evidence to generalize the existence of political risk in foreign exchange rates of the in this region.

If there exists a new type of political foreign exchange risk among the Eurasian countries, a new stage of foreign exchange risk management is also essential for international companies and individuals to deal with the new type of foreign risk while conducting business and investing in the Eurasian countries.

Finally, with these empirical evidences, we can expand our study to a similar relationship among other countries, such as the United States of America (the US), where "Reagonomics" exists, in order to confirm the new concept of political foreign exchange exposure which is different to the transaction foreign exchange exposure, translation foreign exchange exposure, and economic foreign exchange exposure mentioned in classical international finance books.

### 1.2 British Government change

After the British Pound began to float freely in the market in 1971 and the UK joined the European Exchange Rate Mechanism in 1990, there have been 6 prime minister from 1990: Margaret Thatcher, John Major, Tony Blair, Gordon Brown, David Cameron, Theresa May. Therefore, the impact of government change on the British Pound exchange rate can be analyzed after the UK joining the European Exchange Rate Mechanism of 1990.

**Table 1: British Government Change from March 1990 to February 2016**

| Government | From | To | Party |
|---|---|---|---|
| Margaret Thatcher | 4 May 1979 | 28 November 1990 | Conservative |
| John Major | 28 November 1990 | 2 May 1997 | Conservative |
| Tony Blair | 2 May 1997 | 27 June 2007 | Labour |
| Gordon Brown | 27 June 2007 | 11 May 2010 | Labour |
| David Cameron | 11 May 2010 | 13 July 2016 | Conservative |
| Theresa May | 13 July 2016 | Incumbent | Conservative |

Source: Prime Ministers of Britain//www.britannica.com//topic/list-of-prime-ministers-of-Great-Britain-and-the-United-Kingdom-1800350.../

## 2 . Research Hypothesis and Methodology

### 2.1 Research Hypothesis

The previous foreign exchange articles relating with our subject question can be summarized in the following hypothesis:

Hypothesis 1: British Government change influences the British Pound exchange rate-U.S.Dollar exchange rate.

The H1 hypothesis was tested by ANCOVA models and were expected to check whether the British Pound exchange rates respond due to each British government change.

### 2.2.2 Methodology

### 2.2.3 Data and Sample

For empirical test, monthly data in the Economic Statistics System of Bank of England are used from March 1990 to February 2016. For each variable, M1 statistics of England and the United States are used for monetary volume since monetary volume is largely related to monetary demand for transaction. The 3 month CP interests in England and the 3 month CD interests in the United States are taken for short-term interests, while the 10 year government interests in England are taken for the long-term interest rate. The index of export price/the index of import price are used for the terms of trade in England. The seasonable variables are adjusted by the seasonal adjustment variable.

## 3. ANCOVA Model

In order to test Hypothesis 1, the following ANCOVA model was used to test Hypothesis 1. One reason for using the ANCOVA model is that our analytical focus looks at whether or not the continuous data BPD( British Pound exchange rate-Dollar Exchange Rate), can differ according to the government variable of non-metric data of BGV(Dummy Variable for British government (Margaret Thatcher, John Major, Tony Blair, Gordon Brown, David Cameron, Theresa May). The other reason is that the continuous data PPP, CD, CR(Current Account), KA(Capital Account) and FP(Foreigners' Net Purchase in England and so on can be expected to strongly affect the dependent variable BPD(British Pound exchange rate) and used as the control variable for the analysis

ANCOVA formulas are as follows:

$BPD = b_0 + b_1(BGV) + \varepsilon$ ---------- (1)

$BPD = b_0 + b_1(CR) + b_2(BGV) + \varepsilon$---------- (3)

$BPD = b_0 + b_1(CR) + b_2(KA) + b_3(BGV) + \varepsilon$---------- (4)

$BPD = b_0 + b_1(PPP) + b_2(BGV) + \varepsilon$---------- (6)

$BPD = b_0 + b_1(PG) + b_2(BGV) + \varepsilon$---------- (8)

$BPD = b_0 + b_1(PG) + b_2(CD) + b_3(BGV) + \varepsilon$---------- (9)

$BPD = b_0 + b_1(M1) + b_2(UM) + b_3(CD) + b_4(BGV) + \varepsilon$---------- (10)

$BPD = b_0 + b_1(M1) + b_2(UM) + b_3(CD) + b_4(LCD) + b_5(BGV) + \varepsilon$---------- (12)

$BPD = b_0 + b_1(M1) + b_2(UM) + b_3(CD) + b_4(LCD) + b_5(KA) + b_6(BGV) + \varepsilon$---------- (14)

$BPD = b_0 + b_1(M1) + b_2(UM) + b_3(CD) + b_4(LCD) + b_5(KA) + b_6(TOT) + b_7(BGV) + \varepsilon$(16)

$BPD = b_0 + b_1(M1_i) + b_2(UM) + b_3(CD) + b_4(LCD) + b_5(KA) + b_6(TOT) + b_7(FP) + b_8(YEN) + b_9(BGV) + \varepsilon$ ----------

-------(18)

BPD: British Pound exchange rate-Dollar Exchange Rate

BGV : Dummy Variable for each government; Margaret Thatcher:1, John Major:2, Tony Blair:3, Gordon Brown:4, David Cameron:5, Theresa May:6 in England

CR: Current Accounts in England

KA : Capital Accounts in England

PPP : Purchasing Power Parity in England =

Consumer Price Index in England/ Consumer Price Index in the United States

PG: Price Difference =

Consumer Price Index in England - Consumer Price Index in the United States

$M1_i$ : M1 statistics of England for monetary volume

$UM$ : M1 statistics of the United States for monetary

CD: Short-term Interests Difference between England and the United States=

the 3 month Interest rates of CP in England - the 3 month yield on CD in the United Sates,

LCD : Long-term Interests Difference between England =

the 10 year government interests in England - the 5 year Yield of U.S. Treasury Notes,

TOT : Net Barter terms of trade Index= the index of export price/the index of import price in England

FP: Foreigners' Net Purchase in England Equities(Trading Value)

$YEN$: Japanese Yen-Dollar Exchange Rate

## 4. Results and Conclusion

The findings are that "BGV" of the dummy variable for each government in England is significant at the 1% significance level in every regression and ANCOVA models in Table 3. These findings empirically support Hypothesis 1, which states that British Government change influences the British Pound exchange rate-U.S.Dollar exchange rate.

This means that when British government changes, the new government adopts its own economic policy and it results in different foreign exchange rate levels.

In other words, classical economic factors, such as inflation rate, interest rate, and other balance of payment factors significantly affect exchange rates. However, together with these economic factors, government change as a political factor can also significantly affect foreign exchange rates of countries in this region.

Controlling for largely significant CR, KA, PPP, PG, M1, UM, CD, LCD, and FP in most of the regression and ANCOVA models, the PGV variables are significant. This means that the British government change is important for England and the controlling variables, such as the PPP, price level differences, short-term and long-term interest differences, and monetary volume difference influence exchange rates in most of the academic models.

**Table 2: British Pound exchange rate -U.S. Dollar Exchange Rate Basic Statistics of Each Government from March 1990 to March 2017**

| Government | From | To | Number | Mean | Standard Deviation |
|---|---|---|---|---|---|
| Margaret Thatcher | March 1990 | November 1990 | 9 | 1.80043333 | 0.12529288 |
| John Major | November 1990 | May 1997 | 77 | 1.62198961 | 0.13254629 |
| Tony Blair | May 1997 | June 2007 | 122 | 1.66948443 | 0.16155675 |
| Gordon Brown | June 2007 | May 2010 | 36 | 1.72903611 | 0.23001518 |
| David Cameron | May 2010 | July 2016 | 73 | 1.56869589 | 0.07580788 |
| Theresa May | July 2016 | March 2017 | 11 | 1.26804545 | 0.03122462 |

Source: Prime Ministers of Britain//www.britannica.com//topic/list-of-prime-ministers-of-Great-Britain-and-the-United-Kingdom-1800350.../

**Table 3: ANCOVA Results**

**Number of observation from March 1990 to February 2016. (N=328)**

| Independent Variable | Dependent Variable | |
|---|---|---|
| | (1) | (3) |
| Coefficient Variable | 8.962791 | 8.999833 |
| CR | | 0.31342007(14.46)*** |
| BGV | 2.52296696(23.57)*** | 1.86681110(17.23)*** |
| R2 | 0.267911 | 0.240339 |
| F-Value | 23.57*** | 16.77*** |

| Independent Variable | Dependent Variable | |
|---|---|---|
| | (4) | (6) |
| Coefficient Variable | 8.986707 | 7.997981 |
| CR | 0.31342007(14.51)*** | |
| KA | 0.06401542(2.96) | |
| PPP | | 1.07834614(63.25)*** |
| BGV | 1.84448975(17.07)*** | 2.86605682(33.62)*** |
| R2 | 0.244936 | 0.418851 |
| F-Value | 14.69*** | 38.56*** |

| Independent Variable | Dependent Variable | |
|---|---|---|
| | (8) | (9) |
| Coefficient Variable | 8.458065 | 7.431480 |
| PG | 0.07737555(4.06) | 0.07737555(5.26)* |
| CD | | 1.77793510(120.79)*** |
| BGV | 3.21927248(33.77)*** | 2.85163704(38.75)*** |
| R2 | 0.350067 | 0.499825 |
| F-Value | 28.82*** | 45.68*** |

| Independent Variable | Dependent Variable | |
|---|---|---|
| | (10) | (12) |

| Coefficient Variable | 6.276389 | 6.032451 |
|---|---|---|
| M1 | 1.88382084(169.58)*** | 3.15121041(309.67)*** |
| UM | 1.44453014(130.03)*** | 0.18977171(18.65)*** |
| CD | 0.52068442(46.87)*** | 0.00471799(0.46) |
| LCD | | 0.04862587(4.78 )* |
| BGV | 0.21577336(6.47)*** | 0.09706409 (4.77)*** |
| R2 | 0.628803 | 0.667380 |
| F-Value | 60.98*** | 57.18*** |

| Independent Variable | Dependent Variable | | |
|---|---|---|---|
| | (14) | (16) | (18) |
| Coefficient Variable | 6.019592 | 5.943533 | 5.770789 |
| KA | 0.00327447(0.32) | 0.00327447 (0.33) | 0.00327447(0.35) |
| M1 | 3.15121041(310.99)*** | 3.15121041 (319.01)*** | 3.15121041(338.39)*** |
| UM | 0.18977171(18.73)*** | 0.18977171(19.21)*** | 0.18977171(20.38)*** |
| CD | 0.00471799(0.47) | 0.00471799(0.48) | 0.00471799(0.51) |
| LCD | 0.04862587(4.80)* | 0.04862587(4.92)* | 0.04862587(5.22)* |
| TOT | | 0.00854709(0.87) | 0.00854709(0.92) |
| FP | | | 0.00628711(0.68) |
| YEN | | | 0.08876526(9.53)* |
| BGV | 0.11133292(5.49)** | 0.15591919(7.89)*** | 0.17512208(9.40)*** |
| R2 | 0.670733 | 0.680890 | 0.702729 |
| F-Value | 49.47*** | 45.07*** | 39.48*** |

*** at 0.001 significant level

** at 0.01 significant level

* at 0.03 significant level

**References**

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