Economics Bulletin

Volume 40, Issue 2

Effect of Economic and Monetary Policy Uncertainty on stock markets. Evidence on return, volatility and liquidity

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Abstract

This paper studies the effect of Economic Policy Uncertainty (EPU) and Monetary Policy Uncertainty (MPU) on the return, volatility and liquidity of the stock markets. Taking the S&P 500 and NASDAQ 100 as reference, it is demonstrated how these uncertainties influence the return and volatility and, to a lesser extent, the liquidity of these indexes. It has been found that EPU have a greater effect on return and volatility during periods of recession, having only an effect on liquidity during periods of expansion. In contrast, MPU influences return and volatility more during periods of expansion, and liquidity only during periods of recession. These findings demonstrate the existence of behavioural biases consistent with Behavioural Finance, as well as the importance of controlling uncertainty on the part of economic policy makers to avoid the damages that EPU and MPU can generate in the stock markets.

Citation: Jessica Paule-Vianez and Raúl Gómez-Martínez and Camilo Prado-Román, (2020) "Effect of Economic and Monetary Policy Uncertainty on stock markets. Evidence on return, volatility and liquidity", *Economics Bulletin*, Volume 40, Issue 2, pages 1261-1271
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Submitted: March 21, 2020. **Published:** May 09, 2020.

1. Introduction

Information uncertainty has shown to be behind several findings consistent with Behavioural Finance, but difficult to reconcile with traditional models of asset valuation (Jiang et al., 2005). Various authors have documented that uncertainty regarding social, political or economic conditions has a major influence on investor sentiment (Knight, 1921; Price & Tewksbury, 1997; Shiller, 2005).

Economic Policy Uncertainty (EPU) has been an issue that has aroused great interest in recent years, being understood as the uncertainty generated by economic policy makers on the actions they will carry out. Based on this, we assume that the lack of changes in existing economic policies, or even the speed of the agreed economic policy changes, can influence investors generating a feeling of insecurity about their possible effects on the economy.

Several studies show a link between the level of EPU and stock market return. Bernanke (1983) theorizes that high EPU gives companies a reason to delay their investment projects. Other studies such as Panousi and Papanikolaou (2012) and Pastor and Veronesi (2012) suggest that EPU can reduce the macroeconomic activity by increasing managerial risk aversion and the cost of capital (Adjei & Adjei, 2017). Thus, a higher transaction cost hinders the stock market activity and reduces its return. Sum (2012), Arouri and Roubaud (2016), Adjei and Adjei (2017), and Enamul Hoque et al. (2019), among others, show that EPU reduces the return of stock markets.

EPU, also, implies an increase in information asymmetry, causing in this way the volatility of the stock market to shoot up and increase the transaction cost due to an adverse selection problem (Akerlof, 1970). Pastor and Veronesi (2012), Sum and Fanta (2012), Baker et al. (2013), Liu and Zhang (2015), and Liu et al. (2017), among others, demonstrate how EPU increment the market volatility.

The fact that EPU increases the cost of capital causes investments to be more expensive (Bhagat et al., 2016), which will encourage operators to be reluctant to take positions in capital markets, and consequently, liquidity will be reduced in these markets (Datar et al., 1998). Debata and Mahakud (2018) find that EPU reduces the liquidity of the Indian stock market especially in times of financial crisis.

It is necessary to differentiate, within the economic policy, the actions taken by central banks and governments. Central banks are in charge of the monetary policy (interest rates, money supply, ...), while governments are in charge of the fiscal and regulatory policy (Adjei & Adjei, 2017), being the study of the uncertainty generated by both of importance. However, few studies have evaluated the impact of only Monetary Policy Uncertainty (MPU) on stock markets. Bernanke and Kuttner (2005) suggested that changes in monetary policy produce changes in private portfolios due to the “wealth effect”, and therefore, should be reflected in the stock markets.

The effect of EPU on the stock markets can be different depending on the economic cycle. In this line, several authors defend a greater influence of EPU during periods of recession than expansion (Pastor & Veronesi, 2012; Baker et al., 2013; Adjei & Adjei, 2017; Debata & Mahakud, 2018). Baker et al. (2013) determine that during periods of recession, there are more economic policy adjustments and investors respond more to these changes. It is assumed that during economic downturns, economic policy makers are under more pressure to stimulate the economy, and investors are more sensitive to their doubts, producing a negative effect on stock markets. (Adjei & Adjei, 2017).

The aim of this paper is to demonstrate the impact that both EPU and MPU have in US stock markets, specifically in the S&P 500 and NASDAQ 100. It is studied if there are differences in the behaviour of these markets by these uncertainties depending on the economic cycle, evaluating the impact of these variables on the return, volatility and liquidity of this markets. Therefore, in this paper, the results obtained by previous studies regarding EPU are contrasted, and a new line with is opened trying to empirically demonstrate the influence of MPU in the stock markets.

By applying regressions demonstrates how the uncertainty generated by both governments and central banks regarding fiscal, regulatory and monetary policies has a significant effect on stock markets, in terms of return, volatility and liquidity, finding differences depending on the economic cycle. This implies the need for economic policy makers to know and control these situations more in order to avoid their effects on these markets.

From here, the work is structured as follows:

Section 2 explain the data and variables used. Section 3 describes the methodology used and the hypothesis to be tested. Section 4 presents the results obtained. Finally, Section 5 shows the conclusions of the study.

2. Data and variables

The aim of this paper is to evaluate the influence of EPU and MPU on the return, volatility and liquidity of US stock markets. To carry out this analysis, S&P 500 and NASDAQ 100 were selected as representative market indices.

Thus, to achieve the proposed objectives, the sample used in the study covers from January 1990 to December 2014, with monthly data.

The most commonly used measure to study the effects of EPU have been the EPU indices of Baker et al. (2013). These indices are composed of measurement elements that capture three dimensions of EPU (Baker et al. 2013):

1. The number of provisions of the federal tax code that will expire in the coming years.
2. The frequency of references to EPU in 10 leading newspapers.
3. The level of disagreement between economic forecasters about future purchases by federal, state and local governments, and the CPI level.

Thus, the monthly indices “Baseline Overall Index” and “News Based Policy Uncertainty Index” developed by Baker et al. (2013) were used, and they are available on the Economic Policy Uncertainty platform (http://www.policyuncertainty.com/) (Figure 1).

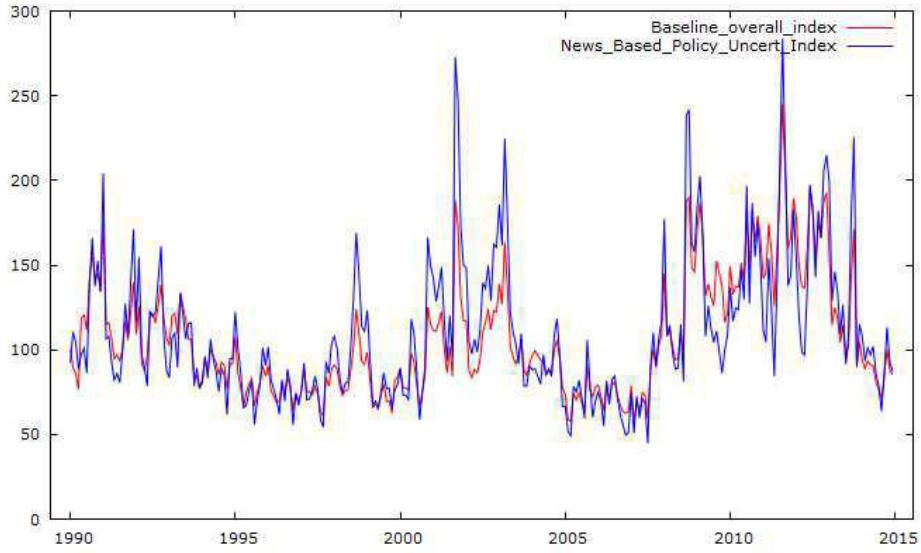

Figure 1: Economic Policy Uncertainty during the 1/1990-12/2014 period

From the point of view of the decisions taken by central banks, Husted et al. (2016) construct a measure of MPU following the news-based search approach of Baker et al. (2013).

Thus, to measure MPU, the monthly indices "MP Uncertainty Index: US Historical - 3 Word (Fed)" and "MP Uncertainty Index: US Historical - Proximity: 10 (Fed)" by Husted et al. (2016) were used, which we find in the Federal Reserve platform (https://www.federalreserve.gov/) (Figure 2).

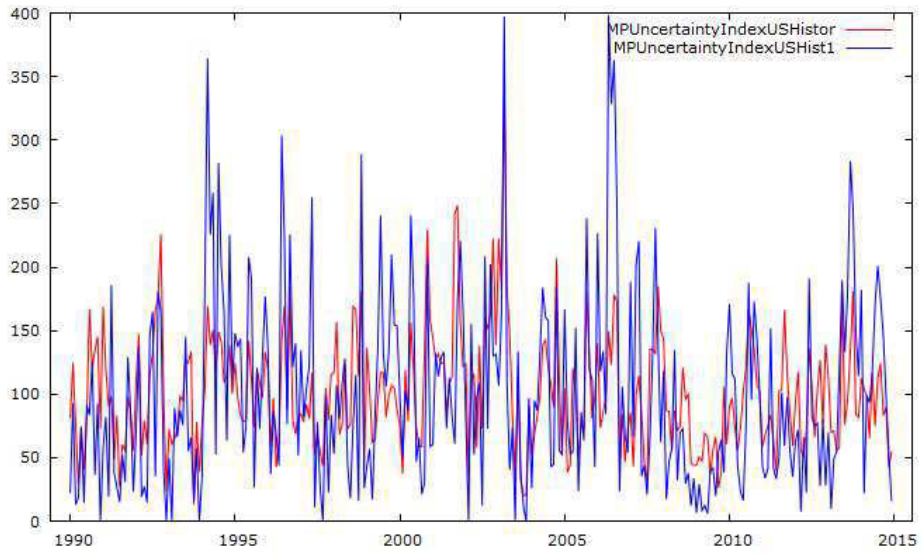

Figure 2: Monetary Policy Uncertainty during the 1/1990-12/2014 period

Following the proposed objectives, the data to obtain the variables referring to S&P 500 and NASDAQ 100 was extracted to Yahoo Finance (https://es.finance.yahoo.com/), extracting stock market prices and trading volume data to construct the measures of return, volatility and liquidity representative of the same.

Return was formed as the stock price rate of change at different times:

$$R_{it} = \frac{P_{it} - P_{i,t-1}}{P_{i,t-1}}, \quad t = 1, \ldots, T. \tag{1}$$

Where R_{it} represents the return of index i in month t, and P_{it} and $P_{i,t-1}$ represents the index points i in month t and t-1.

Volatility was formed following Chen and Zheng (2009), as the difference between the highest listing price reached in the period minus the lowest listing price obtained in that period divided by the average of both:

$$V_{it} = \frac{P_{it}^{H} - P_{it}^{L}}{(P_{it}^{H} + P_{it}^{L})/2}, \quad t = 1, \ldots, T. \tag{2}$$

Where V_{it} represents the volatility of index i in month t, P_{it}^{H} represents the maximum points obtained by index i in month t and P_{it}^{L} the minimum points obtained by index i in month t.

As a liquidity measure, the illiquidity measure proposed by Amihud (2002) was used, that measures the stock return response to the change in trading volume. Thus, we calculate illiquidity as the daily ratio of absolute stock return divided by the daily trading volume.

$$Il_{it} = \frac{1}{D_t} \sum_{d=1}^{D_t} \frac{|R_{idt}|}{VN_{idt}}, \quad t = 1, \ldots, T. \tag{3}$$

Where Il_{it} represents the illiquidity of index i in month t, D_t represents the trading days of month t, R_{idt} represents the return of index i on day d in month t, and VN_{idt} represents the trading volume of index i on day d in month t.

In addition, in this study, a distinction is made between recession and expansion periods, determining the resulting economic periods by following the National Bureau of Economic Research (http://www.nber.org/).

Thus, in Table 1, the descriptive statistics of the variables used in the study can be seen. It observes how there are significant differences both in EPU_1 ("Baseline Overall Index") as in EPU_2 ("News Based Policy Uncertainty Index") during periods of expansion and recession, having a higher mean during periods of recession than expansion, which is consistent with Baker et al. (2013), who show that there is more EPU in times of recession. However, by analysing the MPU indices, one finds how the index MPU_2 ("MP Uncertainty Index: US Historical - Proximity: 10 (Fed)") shows significant differences with respect to its mean between both periods, being in this case higher during expansion than recession periods. For the index MPU_1 ("MP Uncertainty Index: US Historical - 3 Word (Fed)"), no significant differences are found between the two periods.

As for stock market data, only significant differences are observed in the volatility levels, both for S&P 500 ($V_{S\&P}$), and NASDAQ 100 (V_{NASDAQ}), being in both cases higher during periods of recession than expansion. In terms of return, significant differences in the return of S&P 500 ($R_{S\&P}$) can be accepted with a 10% significance, being the mean return higher during periods of expansion than recession. However, the different in the return of NASDAQ 100 (R_{NASDAQ}) cannot be accepted, even though there are signs of the same relationship. Regarding illiquidity, no significant differences can be accepted in S&P 500 ($IL_{S\&P}$), nor in NASDAQ 100 (IL_{NASDAQ}), despite the mean being slightly higher in both cases during periods of recession than periods of expansion. Finally, regarding the differences found between S&P 500 and NASDAQ 100, it is observed that in all periods NASDAQ 100 shows on mean, both a higher return and a higher volatility.

Table 1: Descriptive statistics of variables during the 1/1990-12/2014 period.

Variable	Full Sample N=300			Recession N=35			Expansion N=265			T-test Mean difference (p value)
	Mean	Median	STD	Mean	Median	STD	Mean	Median	STD	
EPU_1	106.35	95.456	34.45	133.87	131.86	31.888	102.71	92.321	33.159	5.247 (0.000)
EPU_2	109.55	98.879	41.614	145.92	134.06	50.099	104.75	94.763	37.942	4.687 (0.000)
MPU_1	100.72	96.898	45.224	105.71	95.981	51.306	100.06	96.912	44.425	0.694 (0.488)
MPU_2	99.141	81.998	75.195	66.034	58.099	51.922	103.51	85.984	76.761	-3.762 (0.000)
$R_{S\&P}$	0.68	1.11	4.22	-1.05	-0.60	6.37	0.91	1.21	3.81	-1.780 (0.083)
$V_{S\&P}$	6.82	5.70	4.16	11.13	8.60	6.89	6.25	5.47	3.26	4.134 (0.000)
$IL_{S\&P}$	1.05	0.70	1.19	1.55	0.58	2.17	0.99	0.75	0.98	1.521 (0.137)
R_{NASDAQ}	1.00	1.75	6.56	-0.23	1.42	9.21	1.17	1.78	6.13	-0.871 (0.389)
V_{NASDAQ}	9.37	7.55	5.81	14.35	13.65	7.63	8.72	7.11	5.203	4.241 (0.000)
IL_{NASDAQ}	1.39	1.08	1.12	1.82	1.12	1.79	1.33	1.07	0.99	1.554 (0.129)

Table 2 shows the bivariate correlations of the study variables. It is observed, as expected, that EPU indices (EPU_1 and EPU_2) are highly correlated positively with each other with a Pearson correlation coefficient of 0.903, and so are the MPU indices with a Pearson correlation coefficient of 0.618. In addition, an inverse relationship is found between EPU_1 and MPU_2 and a positive relationship between EPU_2 and MPU_1, the latter being stronger than the previous relationship.

Analysing the existing relationships between the financial variables, it is observed that between the returns of both indices there is a high positive correlation (0.834), as well as between volatility and illiquidity levels, with coefficients of 0.798 and 0.890, respectively. In turn, an inverse relationship is observed between return and volatility in both indices. However, with respect to illiquidity, only the illiquidity of the NASDAQ 100 is found correlates positively with the volatilities of both indices, although with little strength.

Finally, regarding the relationship between the uncertainty indices and the financial variables, it is observed how EPU correlates negatively with the return of S&P 500, validated by both indices (EPU_1 and EPU_2). However, only the EPU_2 index is correlated with the return of NASDAQ 100, in any case, the correlations between EPU and return of the indices are not very strong. Regarding volatility, it can be how EPU, supported by both indices, correlates positively with the volatilities of S&P 500 and NASDAQ 100. With respect to MPU, it only correlates positively with the volatilities of S&P 500 and NASDAQ 100 and with the illiquidity of NASDAQ 100.

Table 2: Matrix of correlations of the variables. 1/1990-12/2014 period

Variable	EPU_1	EPU_2	MPU_1	MPU_2	$R_{S\&P}$	$V_{S\&P}$	$IL_{S\&P}$	R_{NASDAQ}	V_{NASDAQ}	IL_{NASDAQ}
EPU_1	1.000									
EPU_2	0.903 (0.000)	1.000								
MPU_1	0.208 (0.000)	0.408 (0.000)	1.000							
MPU_2	-0.117 (0.042)	-0.015 (0.802)	0.618 (0.000)	1.000						
$R_{S\&P}$	-0.113 (0.050)	-0.163 (0.005)	-0.063 (0.276)	0.066 (0.256)	1.000					
$V_{S\&P}$	0.381 (0.000)	0.474 (0.000)	0.159 (0.006)	-0.093 (0.107)	-0.275 (0.000)	1.000				
$IL_{S\&P}$	-0.020 (0.726)	0.003 (0.965)	0.074 (0.203)	-0.089 (0.125)	-0.046 (0.427)	0.05 (0.264)	1.000			
R_{NASDAQ}	-0.076 (0.189)	-0.110 (0.056)	-0.080 (0.169)	0.047 (0.422)	0.834 (0.000)	-0.263 (0.000)	-0.054 (0.352)	1.000		
V_{NASDAQ}	0.205 (0.000)	0.354 (0.000)	0.259 (0.000)	0.002 (0.979)	-0.247 (0.000)	0.798 (0.000)	0.070 (0.224)	-0.245 (0.000)	1.000	
IL_{NASDAQ}	-0.091 (0.116)	-0.025 (0.667)	0.148 (0.010)	-0.006 (0.921)	-0.047 (0.419)	0.109 (0.059)	0.890 (0.000)	-0.082 (0.158)	0.177 (0.002)	1.000

3. Methodology and hypothesis

In order to study the impact of EPU and MPU on US stock markets, the application of different regression models was proposed, being the proposed hypothesis and the models to contrast them are the following:

H.1. An increase in EPU reduces US stock market return.

$$R_{it} = \alpha + \beta \Delta EPU_{jt} + \varepsilon_t \quad (4)$$

Where R_{it} represents the return of index i in period t, α the independent parameter, β the influence of the EPU index on the return of index i in period t, ΔEPU_{jt} the variation of EPU_j in period t, where j represents the corresponding EPU index, and ε_t the error term.

H.2. An increase in EPU increases US stock market volatility.

$$V_{it} = \alpha + \beta EPU_{jt} + \varepsilon_t \quad (5)$$

Where V_{it} represents the volatility of index i in period t, EPU_{jt} the value of EPU_j in period t.

H.3. An increase in EPU reduces US stock market liquidity.

$$Il_{it} = \alpha + \beta EPU_{jt} + \varepsilon_t \quad (6)$$

Where Il_{it} represents the illiquidity of index i in period t.

H.4. An increase in MPU reduces US stock market return.

$$R_{it} = \alpha + \beta \Delta MPU_{kt} + \varepsilon_{it} \quad (7)$$

Where ΔMPU_{kt} represents the variation of MPU_k in period t, where k represents the corresponding MPU index.

H.5. An increase MPU increases US stock market volatility.

$$V_{it} = \alpha + \beta MPU_{kt} + \varepsilon_t \quad (8)$$

Where MPU_{kt} represents the value of MPU_k in period t.

H.6. An increase MPU reduces US stock market liquidity.

$$Il_{it} = \alpha + \beta MPU_{kt} + \varepsilon_t \quad (9)$$

These models are tested in the entire sample period, as well as during recession and expansion periods, with the aim of detecting possible differences in the relationship between EPU and MPU regarding US stock markets in these contexts.

4. Results

In this section, hypotheses studying the effects of EPU and MPU on return, volatility and illiquidity are tested.

Based on the results obtained in Table 3, it is observed how EPU negatively influences the return obtained by both S&P 500 and NASDAQ 100, which demonstrates the fulfilment of H.1. However, it is clear how EPU shows a greater influence during periods of recession than expansion. It is shown as EPU has a negative effect on the returns of the period, a result consistent with the previous works in which EPU deters investment (Bernanke, 1983) and increases aversion to risk and the cost of capital (Panousi & Papanikolaou, 2012; Pastor & Veronesi, 2012). In addition, the greater impact during periods of recession corroborates the work of Pastor and Veronesi (2012) and Adjei and Adjei (2017).

Focusing on MPU, it is observed how the index MPU_1 negatively affects the return of S&P 500 and NASDAQ 100 in the general context and during periods of expansion, such influence not being significant in times of recession. Based on these results, H.4. is partially accepted.

Table 3: Impact of Economic Policy Uncertainty and Monetary Policy Uncertainty on US stock market return

Variables	Full Sample		Recession		Expansion	
	β (p value)	R^2_{adj}	β (p value)	R^2_{adj}	β (p value)	R^2_{adj}
NASDAQ 100						
ΔEPU_{1t}	-0.080*** (0.000)	5.028	−0.131*** (0.004)	19.672	−0.052** (0.024)	1.547
ΔEPU_{2t}	-0.049*** (0.000)	5.193	−0.074*** (0.007)	17.924	−0.034** (0.015)	1.841
ΔMPU_{1t}	-0.023*** (0.003)	2.517	−0.043 (0.226)	1.520	−0.021*** (0.007)	2.416
ΔMPU_{2t}	2.96e-04 (0.946)	-0.334	0.055* (0.062)	7.454	−2.14e-03 (0.606)	-0.278
S&P 500						
ΔEPU_{1t}	-0.048*** (0.000)	4.255	−0.086*** (0.000)	17.255	−0.026* (0.069)	0.874
ΔEPU_{2t}	-0.029*** (0.000)	4.256	−0.047** (0,013)	14.647	−0.018** (0,045)	1.139
ΔMPU_{1t}	−0.012** (0.016)	1.606	−0,023 (0.355)	-0.351	−0.011** (0.018)	1.744
ΔMPU_{2t}	1.55e-03 (0.580)	-0.232	0,028 (0.176)	2.621	3,365e-04 (0.896)	-0.374

Note: *** Indicate significance at the 1% level, ** indicate significance at the 5% level, and * indicate significance at the 10%.

Table 4 show, in general terms, how EPU influences on the volatility of S&P 500 and NASDAQ 100, being this impact positive, this proves H.2. At the same time, it is observed that the influence is greater during periods of recession than expansion, reaching over 40% of explanatory capacity in the context of recession. These results are in line with the hypothesis that EPU increases information asymmetry, causing an increase in volatility (Pastor & Veronesi, 2012; Sum & Fanta, 2012; Baker et al., 2013; Liu & Zhang, 2015; Liu et al., 2017).

Regarding the influence of MPU, it can be seen that for the volatility of S&P 500 and NASDAQ 100, only the MPU_1 index has a significant impact in the general context and during periods of expansion. Therefore, H.5. is partially accepted.

Table 4: Impact of Economic Policy Uncertainty and Monetary Policy Uncertainty on US stock market volatility

Variables	Full Sample		Recession		Expansion	
	β (p value)	R^2_{adj}	β (p value)	R^2_{adj}	β (p value)	R^2_{adj}
NASDAQ 100						
ΔEPU_{1t}	0.035*** (0.000)	3.869	0.133*** (0.000)	29.009	7.66e-03 (0.429)	-0.141
ΔEPU_{2t}	0.001*** (0.000)	12.273	0.102*** (0.000)	42.735	0.026*** (0.002)	3.181
ΔMPU_{1t}	0.033*** (0.000)	6.407	0.0380 (0.138)	3.698	0.031*** (0.000)	6.516
ΔMPU_{2t}	1.18e-04 (0.979)	-0.335	0.013 (0.627)	-2.285	3.59e-03 (0.391)	-0.099
S&P 500						
ΔEPU_{1t}	0.046*** (0.000)	14.214	0.141*** (0.000)	40.536	0.023*** (0.000)	5.201
ΔEPU_{2t}	0.001*** (0.000)	22.164	0.086*** (0.000)	37.014	0.029*** (0.000)	10.885
ΔMPU_{1t}	0.015*** (0.006)	2.191	−8.91e-03 (0.705)	-2.577	0.017*** (0.000)	5.001
ΔMPU_{2t}	−5.15e-03 (0.107)	0.537	−0.031 (0.176)	2.625	−1.292e-04 (0.961)	-0.379

Note: *** Indicate significance at the 1% level, ** indicate significance at the 5% level, and * indicate significance at the 10%.

Table 5 show how in general terms, EPU influences only in liquidity during periods of expansion, which is why H.3. is partially accepted. The relationship found between EPU and illiquidity has been inverse, so during periods of expansion, an increase in EPU reduces illiquidity (increases liquidity). This result is postulated against that obtained by Debata and Mahakud (2018), who conclude that in times of crisis, EPU is positively related to stock market liquidity. However, their study is carried out in an emerging market such as India, which may behave differently from developed markets.

On the other hand, the results partly validate H.6. by showing that MPU influences on the illiquidity of S&P 500 and NASDAQ 100 in times of recession, being its explanatory capacity higher than that of the EPU impact. In this case, the relationship found is positive, resulting an increase in MPU in an increase in illiquidity in times of recession.

Table 5: Impact of Economic Policy Uncertainty and Monetary Policy Uncertainty on US stock market illiquidity

Variables	Full Sample		Recession		Expansion	
	β (p value)	R^2_{adj}	β (p value)	R^2_{adj}	β (p value)	R^2_{adj}
NASDAQ 100						
ΔEPU_{1t}	−2.96e-03 (0.116)	0.494	0.012 (0.224)	1.557	−6.62e-03 *** (0.003)	4.559
ΔEPU_{2t}	−6.713e-04 (0.667)	-0.273	3.637e-03 (0.562)	-1.967	−3.34e-03** (0.037)	1.264
ΔMPU_{1t}	3.66e-03** (0.010)	1.856	0.012** (0.038)	9.719	2.02e-03 (0.141)	0.447
ΔMPU_{2t}	−8.59e-05 (0.921)	-0.332	2.04e-03 (0.736)	-2.671	1.44e-04 (0.856)	-0.368
S&P 500						
ΔEPU_{1t}	−7.00e-04 (0.726)	-0.294	0.012 (0.329)	-0.057	−4.11e-03** (0.023)	1.571
ΔEPU_{2t}	7.26e-05 (0.965)	-0.335	2.07e-03 (0.785)	-2.795	−2.26e-03 (0.154)	0.392
ΔMPU_{1t}	1.94e-03 (0.203)	0.209	0.015** (0.040)	9.546	−4.57e-04 (0.737)	-0.337
ΔMPU_{2t}	−1.41e-03 (0.125)	0.457	2.86e-03 (0.697)	-2.550	−1.27e-03 (0.104)	0.624

Note: *** Indicate significance at the 1% level, ** indicate significance at the 5% level, and * indicate significance at the 10%.

5. Conclusions

In this paper it demonstrates how EPU and MPU influences on stock markets in US. EPU has a greater impact, demonstrating how, in general, the uncertainty generated regarding the actions carried out by governments, in terms of fiscal and regulatory policy have a greater impact on stock markets than that generated by the actions of central banks with respect to monetary policy.

By studying the effect of these measures on return and volatility, it has been found how both EPU and MPU have a negative influence on return and positive on volatility, with a greater impact on volatility. However, EPU has a greater impact in these measures during periods of recession, while MPU has a greater impact during periods of expansion.

Regarding liquidity, EPU only influences the liquidity level of S&P 500 and NASDAQ 100 during periods of expansion. It's found that EPU increases liquidity during periods of expansion. Contrary, MPU negatively influences US stock market liquidity only during periods of recession, its impact being higher of this measure than that of EPU.

This research confirms the behaviour found in the return and volatility of the stock markets in developed countries regarding EPU and detected an important gap in the literature regarding the effect of these uncertainties on liquidity. In turn, this paper opens a new line of investigation of the effect that MPU has on these markets, finding that unlike with EPU, a greater impact during periods of expansion.

Finally, it should be noted that our findings demonstrate the existence of behavioural biases in line with Behavioural Finance. This contribution is relevant for maintaining the stability of these markets, by demonstrating the power that regulators and legislators, as well as the speculations of the media have on them. Thus, it would be important for economic policymakers to understand the mechanisms for transmitting their decisions, and therefore, act accordingly to avoid the damages that they might cause.

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