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# The Spillover Effect of Economic Policy Uncertainty:

# Evidence from Analyst Behaviors in Hong Kong\*

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# The Spillover Effect of Economic Policy Uncertainty:

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# Evidence from Analyst Behaviors in Hong Kong

#### Abstract

This paper examines the spillover effect of economic policy uncertainty on the financial market by comparing how local and external policy uncertainties affect the behaviors of analysts in an international financial center. Unlike findings in the United States and the United Kingdom, high local policy uncertainty does not significantly decrease analysts' earnings forecast accuracy or exacerbate forecast dispersion in Hong Kong. In contrast, high external policy uncertainty from Mainland China, the U.S., Europe, and across the globe significantly decrease analysts' forecast accuracy in Hong Kong, although these external policy uncertainties have also no significant effect on forecast dispersion. In addition, both local and external policy uncertainties have significant impact on analyst coverage and recommendations. These results provide strong evidence on the cross-country spillover effect of economic policy uncertainty on a developed and international financial market.

Keywords: Economic Policy Uncertainty; Spillover Effect; Analysts' Earnings Forecast Accuracy; Forecast Dispersion; Analyst Coverage; Recommendations

#### 1. Introduction

Political or policy uncertainty is a key channel through which various factors affect financial markets including asset pricing and corporate activities (e.g. Pastor and Veronesi, 2012, 2013; Brogaard and Detzel, 2015; Baker, Bloom, and Davis, 2016; Kelly, Pastor, and Veronesi, 2016; Brogaard, Dai, Ngo, and Zhang, 2020). Existing studies show that *local* political and policy uncertainty have significant impact on analyst behaviors, especially in the U.S. and U.K. (e.g., Baloria and Mamo, 2017; Chen et al., 2022; Chourou, Purda, and Saadi, 2021; Chen et al., 2022).

However, no study has explicitly compared how local and external policy uncertainty affect analyst behaviors. It is necessary to investigate the impact of *external* policy uncertainty on local analyst behaviors, helping us better understand the factors influencing analyst behaviors. With increasing globalization, economies have become dynamically interrelated around the world. Recent studies show that political and policy uncertainty in the U.S. would have significant impact on the financial markets in other countries. Brusa, Savor and Wilson (2020) and Brogaard et al. (2020) show that the monetary and political policy of the U.S. Federal Bank has a significant impact on global financial markets. Therefore, we expect that external policy uncertainty has a spillover effect on local analyst behaviors.

In this paper, we contribute to the literature by focusing on the spillover effect of economic policy uncertainty (EPU) on global financial markets via an important information intermediary (i.e., financial analysts). Specifically, we compare how local and external economic policy uncertainty affect the behaviors of analysts in an international financial center (i.e., Hong Kong). As information intermediaries, financial analysts play an important role in interpreting and transmitting valuable firm-level information on investment and financing decisions to external investors, thereby influencing the aggregate capital market.

Hong Kong (HK) is an ideal empirical setting because Hong Kong, as a developed international financial center, confronts economic policy uncertainty from different countries. Many firms listed in the Hong Kong exchange are headquartered elsewhere. These nonlocal public firms are expected to be affected by policy uncertainty in home countries. For example, many firms in Mainland China are listed on the Hong Kong exchange. Therefore, we expect that these Chinese public firms listed in the Hong Kong exchange would be affected by policy uncertainty in Mainland China. At the same time, policy uncertainty in HK should have

significant impact on analyst behaviors in HK. Therefore, Hong Kong is a natural setting in which we can identify the different impacts of local and global policy uncertainty.

We examine analysts' behavior from the aspects of earnings forecast accuracy, the forecast dispersion, analyst coverage, the number of upward stock recommendations, and the number of downward recommendations. We expect a negative relation between the forecast accuracy and the Hong Kong EPU because the forecasting environment is likely to be more challenging when EPU is high, and a negative relation between the forecast dispersion and the EPU because of analysts' herding behavior in times of more challenging tasks (e.g., Lin 2020). We also predict negative relations between analyst coverage and the EPU because analysts are unlikely to follow new firms when existing tasks become more challenging. Further, the numbers of upward and downward recommendation revisions are expected to be negatively related to the EPU because analysts are concerned over unforeseeable prospects.

We measure economic policy uncertainty with the EPU index developed by Baker et al. (2016). Interestingly, we find that HK EPU does not have significant impact on analysts' earnings forecast accuracy and dispersion. In contrast, external EPUs such as EPU in Mainland China, U.S., Europe, and across the globe have significant impact on analysts' forecast accuracy in HK, suggesting that external EPUs has stronger impact than local HK EPU on analysts' forecast accuracy in HK. In addition, unlike the findings in existing studies, neither local HK nor external EPU has significant impact on analyst forecast dispersion in HK, suggesting analysts in HK tend to keep pace with each other during high uncertainty periods.

Although local and external EPUs have different impact on earnings forecast accuracy, they have same impact on analyst coverage and recommendations. Analysts tend to decrease their firm coverage and are reluctant to change both upgrade and downgrade recommendations. Overall, these results suggest that analysts tend to be more conservative when confronting both local and external increasing policy uncertainty.

#### 2. Data and Methodology

## 2.1 Data and Sample

We obtain analyst data and firms' financial data from CSMAR. We start with public firms on the

Hong Kong exchange and keep the latest one-year-ahead individual analysts' earnings forecasts and stock recommendations. We then delete any observation with missing data on analyst behavior and control variables. The final sample covers the period from 2000 to 2018 and comprises with 1,700 firm-year observations.

Table 1 presents descriptive statistics for all variables. Panel A reports that the mean (median) analyst earnings forecasts accuracy is -0.034 (-0.017); the mean (median) dispersion of earnings forecasts is 0.00021 (0.0001); and the mean (median) log of analyst following for a firm in a certain year is 2.297 (2.485), equivalent to a mean (median) of 13 (11) analyst following a firm. The mean log of the number of analyst upward recommendation revisions is 0.127, equivalent to 0.494 upward recommendation revisions. The mean log of the number of analyst downward recommendation revisions is 0.121, equivalent to 0.745 downward recommendation revisions. The medians of the log of downward recommendation revisions as well as upward revisions are both 0.000, equivalent to 0 downward and upward recommendation revisions. In addition, the sample firms have a mean (median) ROA of 0.057 (0.044); a mean (median) leverage of 0.519 (0.527); and a mean (median) growth of 0.010 (0.001). The mean (median) log of market capitalization is 2.401 (2.404). The mean (median) of market volatility in Hong Kong is 0.012 (0.010).

An unreported Pearson correlation shows that the HK EPU is positively correlated with forecast accuracy, but negatively related with analyst coverage, recommendation upgrades, and recommendation downgrades. This suggests that local EPU complicates analysts' forecast tasks, and analysts are reluctant to follow new firms or make recommendation revisions. In addition, EPU in Mainland China, HK, Europe, U.S., and global EPU are positively related with each other.

# 2.2Methodology

To examine the relationship between analyst behavior and macro uncertainty, we use the following model:

Analyst Behavior<sub>i,t</sub> = 
$$\alpha EPU_{i,t} + \beta Controls_{i,t} + \mathcal{E}_{i,t}$$

where EPU is measured with the Hong Kong EPU index. This index is a weighted-average of

Baker et al. (2016) economic political uncertainty index in the most recent two months. Analyst performance is measured with earnings forecast accuracy, earnings forecast dispersion, analyst coverage, stock recommendation upgrades, and stock recommendation downgrades. Forecast accuracy (accuracy) is calculated as -1 times the absolute difference between the mean analyst earnings forecast per share over a year and firms' actual EPS scaled by the price per share. Forecast dispersion (dispersion) is the standard deviation of all individual analysts' earnings forecasts issued for a firm over a year. Analyst coverage (logfollow) is calculated as the natural logarithm of the summation of one and the number of analysts following a firm. Stock recommendation upgrades (lognumrecup) is the natural logarithm of the summation of one and the number of recommendations that have been revised upward, whereas recommendation downgrades (lognumrecdown) is the natural logarithm of the summation of one and the number of recommendations that have been revised downward.

We control for market volatility which influences analysts' behavior at the macro level to isolate the effects of EPU on analyst behavior. It is measured by the standard deviation of the returns generated with the Hong Kong Hang Seng index over the past twelve months. We also control firm-level characteristics, such as return on assets, leverage, growth, and firm age, because prior research documents a correlation between analyst behavior and these firm characteristics. In addition, we include industry-fixed effects in the regressions. Appendix 1 presents the variable descriptions in detail. All dependent variables and control variables are winsorized at 1% and 99% levels.

#### 3. Empirical Results and Discussions

#### 3.1 Local EPU and Analyst Behaviors

Table 2 reports the results of the relationships between HK EPU and analyst behaviors after controlling for other macro-level variables and firm-level variables. Column 1, which tabulates the results on analyst forecast accuracy, shows an insignificant coefficient of -0.001 on HK EPU, after controlling for other variables. This indicates no significant influence of local HK EPU over analyst earnings forecast accuracy, although the sign is expected. This differs from the finding of Chourou et al. (2021) that in U.S. that analyst forecasts are less accurate as U.S. EPU

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<sup>&</sup>lt;sup>1</sup> We derive similar results from using different estimates of the policy uncertainty index in the formation period.

increases, suggesting the uniqueness of HK market as the international finance center. This finding suggests that analysts in HK seem to devote more to forecasting when local policy uncertainty is high.

Column 2, which shows the results on analyst forecast dispersion, tabulates an insignificant coefficient of -0.001 on the HK EPU. This insignificant relation demonstrates no change in volatility of analysts' earnings forecasts during times of economic uncertainty. This differs again from Chourou et al. (2021)'s findings in U.S. that analyst forecast dispersion are significantly related to the U.S. EPU. This finding suggests that analysts in HK tend to keep pace with each other when local uncertainty is high.

Column 3 tabulates the results on analyst forecast following and shows a significant coefficient of -0.341 on HK EPU. This implies reduced supply of analyst coverage in times of greater uncertainty due to the more challenging forecasting tasks. Columns 4 and 5 report results on recommendation upgrades and downgrades. The coefficient on HK EPU for the number of upgrades is -0.062 whereas the coefficient on HK EPU for the number of downgrades is -0.087. This indicates that analysts are reluctant to revise recommendations during times of uncertainty due to concerns over unforeseeable firms' prospects. Overall, these results show that local EPU has no significant impact on analysts' forecast accuracy and dispersion in HK, but local EPU still has significant impact on analyst coverage and recommendations.

#### 3.2 External Policy Uncertainty and Analyst Behaviors

With increasing globalization, economies have become dynamically interrelated around the world. We explore whether globalization applies to economic policy uncertainty. That is, does economic policy uncertainty in some regions of the world influence other regions? Hong Kong provides a natural setting for this question because it confronts economic policy uncertainty from different countries as a developed international financial center. We investigate the impact of EPU in Mainland China, the U.S., and Europe, and Global EPU on Hong Kong analysts' behaviors.

Table 3 reports the results of EPU of Mainland China and analysts' behaviors in Hong Kong. Column 1 shows a statistically significant coefficient of -0.005 on the Mainland China's EPU. This suggests that economic policy uncertainty in Mainland China complicates the forecast

tasks and decreases analyst forecast accuracy in Hong Kong. Column 2 reports a negative but insignificant coefficient on Mainland China's EPU. This shows no relationship between Mainland China's EPU and Hong Kong analysts' forecast dispersion. Column 3 shows that the coefficient on analyst coverage is statistically significant of -0.245, indicating that the analyst following of firms in Hong Kong tend to decrease when Mainland China's EPU is high. Columns 4 and 5 show significant coefficients of -0.065 and -0.058 on Mainland China's EPU. This suggests that analysts in Hong Kong are reluctant to revise recommendations when Mainland China's EPU is high. While the results on analyst coverage and stock recommendations are similar to those in the main analysis in Table 2, the findings on analyst forecast accuracy are different when we examine the impact of the EPU of Mainland China and the impact of the local HK EPU. This difference demonstrates the spill-over effect of Mainland China's economic policy uncertainty over the HK financial market.

Table 4 presents the effect of the European EPU on analyst behaviors in Hong Kong. The results are similar to those in Table 3. Column 1 shows a significant coefficient of -0.006 on the European EPU for analyst forecast accuracy. Column 2 reports an insignificant coefficient of -0.001 on the European EPU for analyst forecast dispersion. Column 3 tabulates a significant coefficient of -0.559 on the European EPU for analyst coverage. Columns 4 and 5 show significant coefficients of -0.140 and -0.135 on the European EPU for upgrade and downgrade recommendation revisions. The result on analyst forecast accuracy is different from those presented in Table 2 which shows no influence from local HK EPU. This provides evidence of the spill-over effect of European economic policy uncertainty over Hong Kong's financial market.

Table 5 reports the results for the impact of U.S. EPU on Hong Kong analyst behaviors. The results are consistent with those in the previous analyses. Column 1 presents the results of the analyst forecast accuracy. The coefficient -0.016 on the U.S. EPU is significant. Column 2 tabulates that the effect of U.S. EPU on analyst earnings forecast dispersion in Hong Kong is insignificant. Column 3 shows a statistically significant coefficient of -0.398 on the global EPU for analyst coverage. Columns 4 and 5 which report regression results of recommendation upgrade and downgrade revisions show statistically significant coefficients of -0.107 and -0.051 on the U.S. EPU. These findings demonstrate that policy uncertainty in the U.S. impacts analyst behaviors in HK.

Table 6 reports the results for the impact of Global EPU on analyst behaviors in Hong Kong. Column 1 presents the results of the analyst forecast accuracy. The coefficient on the global EPU is -0.009 and is statistically significant. Column 2 tabulates that the effect of global EPU on analyst earnings forecast dispersion in Hong Kong is insignificant. Column 3 shows a significantly negative coefficient of -0.444 on the global EPU for analyst coverage. Columns 4 and 5 report significant coefficients of -0.116 and -0.100 on the global EPU for recommendation upgrade and downgrade revisions. The finding on analyst forecast accuracy again is different from that presented in Table 2. This demonstrates that policy uncertainty around the world has a significant impact on analyst behaviors in HK.

# 3.3 Potential Endogeneity Concern

To address potential endogeneity issue, we employ an instrument variable of partisan polarization that represents the level of political polarization in the US Congress. This variable has been used widely in the literature as an instrument for policy uncertainty (e.g. Gulen and Ion, 2016; Nguyen and Phan, 2017). This instrument variable carries a significant relationship with EPU in HK, but it is not apparently related to analysts in HK.

Following Gulen and Ion (2016), we use the first dimension of the DW-NOMINATE scores of McCarty, Poole, and Rosenthal (1997) to represent partisan polarization. We perform two-stage least square estimations with Polarization as the instrument variable. An unreported table shows that the coefficients on the predicted HK EPU are significantly related to analyst coverage and recommendation upgrade and downgrade, but are insignificantly related to forecast accuracy and dispersion. These results are consistent with our findings in the main analyses.

### 4. Conclusions

This paper documents that local policy uncertainty has no significant impact on analyst forecast accuracy and dispersion in HK. In contrast, external policy uncertainty from other main countries such as China and USA and global and Europe could significantly and negatively affect forecast accuracy in HK, although the external policy uncertainty still has no significant impact on forecast dispersion in HK. In addition, both local and external policy uncertainties have significant impacts on analyst coverage and recommendations in HK. These findings emphasize the spillover effect of economic policy uncertainty on global financial markets.

There are some limitations due to the limited space. In particular, it is meaningful to explore in more detail why local and external economic policy uncertainties have significantly different impact on analysts' earnings forecast accuracy, which is one of the most variables in the literature on analysts. In addition, it is also interesting to explore why local and external policy uncertainties have different impact on different aspects of analysts' behaviors. These research questions are left for the future research.

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Table 1: Summary Statistics

This table reports the summary statistics of the main variables used in regression analyses, including the mean, deviation error (SD), 10th percentile (10%), 25th percentile (25%), median, 75th percentile (75%), and 90th percentile (90%) in the full sample. All variables are defined in Appendix 1.

| Variable                 | N     | Mean   | Std Dev | 10th Pctl | 25th Pctl | 50th Pctl | 75th Pctl | 90th Pctl |
|--------------------------|-------|--------|---------|-----------|-----------|-----------|-----------|-----------|
| Accuracy                 | 1,484 | -0.034 | 0.044   | -0.089    | -0.040    | -0.017    | -0.008    | -0.005    |
| Dispersion               | 1,533 | 0.000  | 0.000   | 0.000     | 0.000     | 0.000     | 0.000     | 0.001     |
| Logfollow                | 1,608 | 2.297  | 0.884   | 1.099     | 1.609     | 2.485     | 3.091     | 3.332     |
| Lognumrecup              | 1,687 | 0.127  | 0.283   | 0.000     | 0.000     | 0.000     | 0.000     | 0.693     |
| Lognumrecdown            | 1,687 | 0.121  | 0.282   | 0.000     | 0.000     | 0.000     | 0.000     | 0.693     |
| China Mainland EPU       | 1,700 | 5.294  | 0.753   | 4.329     | 4.629     | 5.205     | 5.586     | 6.549     |
| HK EPU                   | 1,700 | 5.162  | 0.518   | 4.455     | 4.792     | 5.124     | 5.655     | 5.788     |
| US EPU                   | 1,700 | 4.759  | 0.244   | 4.441     | 4.643     | 4.784     | 4.930     | 5.019     |
| European EPU             | 1,700 | 5.096  | 0.406   | 4.358     | 4.931     | 5.073     | 5.402     | 5.579     |
| Global EPU               | 1,700 | 4.898  | 0.428   | 4.278     | 4.676     | 4.863     | 5.068     | 5.513     |
| LogMarketCap             | 1,700 | 2.401  | 1.416   | 0.742     | 1.396     | 2.404     | 3.310     | 4.260     |
| ROA                      | 1,700 | 0.057  | 0.055   | 0.003     | 0.019     | 0.044     | 0.086     | 0.135     |
| Leverage                 | 1,700 | 0.519  | 0.228   | 0.205     | 0.340     | 0.527     | 0.699     | 0.808     |
| Growth                   | 1,700 | 0.010  | 0.019   | 0.000     | 0.000     | 0.001     | 0.012     | 0.029     |
| MKT Volatility-Hong Kong | 1,700 | 0.012  | 0.006   | 0.006     | 0.008     | 0.010     | 0.018     | 0.018     |

Table 2: Hong Kong Economic Policy Uncertainty and Analyst Behaviors

This table presents the average estimated coefficients from regressions of measures of analyst behaviors on economic policy uncertainty (EPU) index in Hong Kong. All variables are defined in Appendix 1. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels (two-tailed), respectively. T-statistics are in parentheses.

|                        | (1)       | (2)        | (3)       | (4)       | (5)       |
|------------------------|-----------|------------|-----------|-----------|-----------|
|                        | Accuracy  | Dispersion | Coverage  | Upgrade   | Downgrade |
| Intercept              | -0.048*** | -0.001     | 2.977***  | 0.337***  | 0.521***  |
| •                      | (-4.29)   | (-0.29)    | (15.9)    | (4.54)    | (6.95)    |
| Hong Kong EPU          | -0.001    | -0.001     | -0.341*** | -0.062*** | -0.087*** |
|                        | (-0.47)   | (-0.58)    | (-9.62)   | (-4.37)   | (-6.06)   |
| LogMarketCap           | 0.008***  | 0.001***   | 0.428***  | 0.054***  | 0.036***  |
|                        | (10.3)    | (5.91)     | (32.6)    | (10.5)    | (6.94)    |
| ROA                    | 0.260***  | -0.001     | -1.137*** | -0.124    | 0.186     |
|                        | (12.2)    | (-1.33)    | (-3.20)   | (-0.89)   | (1.33)    |
| Leverage               | -0.010*   | 0.001***   | 0.103***  | -0.041    | -0.003    |
|                        | (-1.95)   | (5.03)     | (1.24)    | (-1.25)   | (-0.09)   |
| Growth                 | -0.072    | 0.002***   | -3.516*** | -1.345*** | -1.205*** |
|                        | (-1.29)   | (4.46)     | (-3.80)   | (-3.63)   | (-3.22)   |
| MKT Volatility         | -0.725**  | 0.006***   | -0.645    | 0.816     | -3.130*** |
| •                      | (-4.44)   | (5.63)     | (-0.24)   | (0.76)    | (-2.89)   |
| Firm age               | -0.001    | 0.001**    | 0.008**   | 0.001     | 0.001     |
| Ç                      | (-0.77)   | (2.13)     | (2.07)    | (0.76)    | (0.15)    |
| Industry Fixed Effects | Yes       | Yes        | Yes       | Yes       | Yes       |
| N                      | 1484      | 1533       | 1608      | 1687      | 1687      |
| $R^2$                  | 0.2289    | 0.0870     | 0.4451    | 0.0827    | 0.0584    |

Table 3: Mainland China Economic Policy Uncertainty and Analyst Behaviors in Hong Kong

This table presents the average estimated coefficients from regressions of measures of analyst behaviors on the China mainland's economic policy uncertainty (EPU) index in Hong Kong. All variables are defined in Appendix 1. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels (two-tailed), respectively. T-statistics are in parentheses.

|                        | Accuracy  | Dispersion | Coverage  | Upgrade   | Downgrade |
|------------------------|-----------|------------|-----------|-----------|-----------|
| Intercept              | -0.027*** | 0.001      | 2.502***  | 0.348***  | 0.379***  |
|                        | (-3.23)   | (0.45)     | (18.3)    | (6.42)    | (6.87)    |
| China Mainland EPU     | -0.005*** | -0.001     | -0.245*** | -0.065*** | -0.058*** |
|                        | (-3.73)   | (-0.41)    | (-10.2)   | (-6.73)   | (-5.90)   |
| LogMarketCap           | 0.008***  | 0.001***   | 0.420***  | 0.054***  | 0.034***  |
|                        | (10.6)    | (5.89)     | (32.3)    | (10.5)    | (6.61)    |
| ROA                    | 0.264***  | -0.001     | -1.049*** | -0.099    | 0.194     |
|                        | (12.5)    | (-1.33)    | (-2.96)   | (-0.72)   | (1.38)    |
| Leverage               | -0.009*   | 0.001***   | 0.075     | -0.042    | -0.011    |
|                        | (-1.79)   | (5.01)     | (0.91)    | (-1.30)   | (-0.33)   |
| Growth                 | -0.025    | 0.002***   | -2.740*** | -1.015*** | -1.047*** |
|                        | (-0.45)   | (4.39)     | (-2.93)   | (-2.72)   | (-2.76)   |
| MKT Volatility         | -0.810*** | 0.006***   | 0.956     | 0.710     | -2.707**  |
|                        | (-5.05)   | (5.77)     | (0.36)    | (0.67)    | (-2.52)   |
| Firm age               | 0.001     | 0.001**    | 0.009**   | 0.002     | 0.001     |
|                        | (0.16)    | (2.08)     | (2.44)    | (1.56)    | (0.29)    |
| Industry Fixed Effects | Yes       | Yes        | Yes       | Yes       | Yes       |
| N                      | 1484      | 1533       | 1608      | 1687      | 1687      |
| $R^2$                  | 0.2361    | 0.0869     | 0.4488    | 0.0966    | 0.0573    |

Table 4: European Economic Policy Uncertainty and Analyst Behaviors in Hong Kong

This table presents the average estimated coefficients from regressions of measures of analyst behaviors on the European economic policy uncertainty (EPU) index in Hong Kong. All variables are defined in Appendix 1. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels (two-tailed), respectively. T-statistics are in parentheses.

|                        | Accuracy  | Dispersion | Coverage  | Upgrade   | Downgrade |
|------------------------|-----------|------------|-----------|-----------|-----------|
| Intercept              | -0.022*   | 0.001      | 3.993***  | 0.708***  | 0.746***  |
|                        | (-1.65)   | (0.72)     | (17.8)    | (7.85)    | (8.14)    |
| European EPU           | -0.006**  | -0.001     | -0.559*** | -0.140*** | -0.135*** |
|                        | (-2.36)   | (-1.47)    | (-12.6)   | (-7.82)   | (-7.40)   |
| LogMarketCap           | 0.008***  | 0.001***   | 0.428***  | 0.056***  | 0.036***  |
|                        | (10.5)    | (6.00)     | (33.3)    | (10.9)    | (6.97)    |
| ROA                    | 0.259***  | -0.001     | -1.308*** | -0.169    | 0.131     |
|                        | (12.2)    | (-1.39)    | (-3.75)   | (-1.23)   | (0.93)    |
| Leverage               | -0.009*   | 0.001***   | 0.084     | -0.042    | -0.010    |
|                        | (-1.88)   | (5.07)     | (1.04)    | (-1.30)   | (-0.30)   |
| Growth                 | -0.046    | 0.002***   | -2.403*** | -0.966*** | -0.959**  |
|                        | (-0.82)   | (4.64)     | (-2.62)   | (-2.61)   | (-2.55)   |
| MKT Volatility         | -0.753*** | 0.006***   | 1.429     | 0.867     | -2.634**  |
|                        | (-4.72)   | (5.71)     | (0.54)    | (0.83)    | (-2.48)   |
| Firm age               | 0.001     | 0.001**    | 0.013***  | 0.003*    | 0.001     |
|                        | (-0.14)   | (2.41)     | (3.51)    | (1.96)    | (0.80)    |
| Industry Fixed Effects | Yes       | Yes        | Yes       | Yes       | Yes       |
| N                      | 1484      | 1533       | 1668      | 1687      | 1687      |
| $R^2$                  | 0.2317    | 0.0881     | 0.4660    | 0.1049    | 0.0682    |

Table 5: U.S. Economic Policy Uncertainty and Analyst Behaviors in Hong Kong

This table presents the average estimated coefficients from regressions of measures of analyst behaviors on economic policy uncertainty (EPU) index in the US in the Hong Kong sample. All variables are defined in Appendix 1. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels (two-tailed), respectively. T-statistics are in parentheses.

|                        | Accuracy  | Dispersion | Coverage  | Upgrade   | Downgrade |
|------------------------|-----------|------------|-----------|-----------|-----------|
| Intercept              | 0.022     | -0.001**   | 3.131***  | 0.526***  | 0.335**   |
|                        | (1.12)    | (-2.00)    | (9.50)    | (4.02)    | (2.51)    |
| U.S. EPU               | -0.016*** | 0.001      | -0.398*** | -0.107*** | -0.051*   |
|                        | (-3.93)   | (1.57)     | (-5.63)   | (-3.82)   | (-1.78)   |
| LogMarketCap           | 0.008***  | 0.001***   | 0.415***  | 0.053***  | 0.033***  |
|                        | (10.5)    | (5.80)     | (31.3)    | (10.2)    | (6.28)    |
| ROA                    | 0.260***  | -0.001     | -1.220*** | -0.157    | 0.145     |
|                        | (12.3)    | (-1.32)    | (-3.37)   | (-1.13)   | (1.03)    |
| Leverage               | -0.009*   | 0.001***   | 0.054     | -0.049    | -0.019    |
|                        | (-1.79)   | (4.91)     | (0.64)    | (-1.50)   | (-0.58)   |
| Growth                 | -0.057    | 0.002***   | -4.571*** | -1.497*** | -1.525*** |
|                        | (-1.04)   | (4.27)     | (-4.90)   | (-4.08)   | (-4.08)   |
| MKT Volatility         | -0.620*** | 0.006***   | 7.678***  | 2.379**   | -1.444    |
|                        | (-3.89)   | (5.66)     | (2.81)    | (2.25)    | (-1.34)   |
| Firm age               | -0.001    | 0.001*     | 0.003     | 0.001     | -0.002    |
|                        | (-0.20)   | (1.73)     | (0.66)    | (0.30)    | (-1.10)   |
| Industry Fixed Effects | Yes       | Yes        | Yes       | Yes       | Yes       |
| N                      | 1484      | 1533       | 1608      | 1687      | 1687      |
| $R^2$                  | 0.2368    | 0.0883     | 0.4244    | 0.0802    | 0.0396    |

Table 6: Global Economic Policy Uncertainty and Analyst Behaviors in Hong Kong

This table presents the average estimated coefficients from regressions of measures of analyst behaviors on the global economic policy uncertainty (EPU) index. All variables are defined in Appendix 1. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels (two-tailed), respectively. T-statistics are in parentheses.

|                        | Accuracy  | Dispersion | Coverage  | Upgrade   | Downgrade |
|------------------------|-----------|------------|-----------|-----------|-----------|
| Intercept              | -0.010    | -0.001     | 3.363***  | 0.572***  | 0.560***  |
| -                      | (-0.83)   | (-0.06)    | (16.3)    | (6.93)    | (6.65)    |
| Global EPU             | -0.009*** | -0.001     | -0.444*** | -0.116*** | -0.100*** |
|                        | (-3.65)   | (-0.72)    | (-10.6)   | (-6.89)   | (-5.79)   |
| LogMarketCap           | 0.008***  | 0.001***   | 0.421***  | 0.054***  | 0.035***  |
|                        | (10.6)    | (5.92)     | (32.4)    | (10.5)    | (6.61)    |
| ROA                    | 0.262***  | -0.001     | -1.177*** | -0.135    | 0.161     |
|                        | (12.3)    | (-1.35)    | (-3.33)   | (-0.98)   | (1.15)    |
| Leverage               | -0.009*   | 0.001***   | 0.075     | -0.044    | -0.013    |
|                        | (-1.81)   | (5.03)     | (0.91)    | (-1.35)   | (-0.38)   |
| Growth                 | -0.028    | 0.002***   | -2.714*** | -1.021*** | -1.073*** |
|                        | (-0.49)   | (4.47)     | (-2.91)   | (-2.74)   | (-2.83)   |
| MKT Volatility         | -0.783*** | 0.006***   | 1.927     | 0.963     | -2.450**  |
|                        | (-4.91)   | (5.79)     | (0.72)    | (0.92)    | (-2.30)   |
| Firm Age               | 0.001     | 0.001**    | 0.010***  | 0.002     | 0.001     |
|                        | (0.17)    | (2.17)     | (2.65)    | (1.61)    | (0.27)    |
| Industry Fixed Effects | Yes       | Yes        | Yes       | Yes       | Yes       |
| N                      | 1484      | 1533       | 1608      | 1687      | 1687      |
| $R^2$                  | 0.2357    | 0.0871     | 0.4513    | 0.0978    | 0.0567    |