**The Economic Research Guardian – Vol. 11(2)2021**
**Semi-annual Online Journal, www.ecrg.ro**
**ISSN: 2247-8531, ISSN-L: 2247-8531**
**Econ Res Guard 11(2): 182-193**

# Nexus between Economic Stability and Political Stability in China and Japan

**Vedat Yorucu**
Department of Economics, Eastern Mediterranean University, Famagusta, Northern Cyprus, Mersin-10, Turkey
E-mail: vyorucu@hotmail.com

**Dervis Kirikkaleli**
Department of Banking and Finance, Faculty of Economic and Administrative Sciences, European University of Lefke, Lefke, Northern Cyprus, Mersin-10, Turkey
E-mail: dkirikkaleli@eul.edu.tr

## Abstract
*This research aims to investigate the causal relationship between economic stability and political stability for Japanese and Chinese markets. Based on the study's aims, time domain causality tests - Granger causality, Toda-Yamamoto causality, and nonlinear Diks-Panchenko causality - and a frequency domain causality test - spectral Breitung and Candelon causality - are employed. The outcomes of the time domain causality tests reveal that there is feedback causality between political stability and economic stability in both countries, indicating that political stability is an important predictor for economic stability in both countries and vice versa.*

**Keywords:** Political Stability, Economic Stability, Frequency Domain Causality, China, Japan

**JEL classification:** E02, C01, F50

Received: 25 Apr 2021; Received in revised form: 13 June 2021; Accepted: 14 June 2021

## 1. Introduction

The Asia-Pacific region has become the world's center of attention due to its dynamic economic growth over the last couple of decades. This rapid economic growth has triggered uncertainties and eventually a potential crisis in the region which has led to significant political unrest. As highlighted by Newby (2018), Sino-Japanese bilateral relations have caused some complex issues, which have been met with considerable domestic changes in their host nations. These changes had a relatively more dramatic impact on China compared to Japan. Considering the volume of growth in global terms of trade, level on investment and foreign aid, China has expanded its role in the region and has become the game changer in international trade. In terms of nominal GDP, China's and Japan's economies are the first and second-largest economies in Asia, respectively. As clearly seen in Figures 1-2, the overall economic risk level of China and Japan was very low between 1998 and 2018 while the performance of Japan's political stability was better relative to that of China.

Identifying the linkage between economic stability and political stability is a vital aim for governors, investors and also academics. However, to the best of our knowledge, there is no study of Japan and China in the literature that investigates the linkage using time and frequency domain causality approaches simultaneously. Therefore, the main innovation of this paper is to build models to fill this gap in by establishing time and frequency domain causality techniques to explore the possible causal relationship between economic stability and political stability variables. This study therefore attempts to answer the following questions: Is there any relationship between political stability and economic stability in China and Japan? If yes, what is the direction of this causality? The study will likely open up new debate in the literature and the findings have noteworthy implications for policy-makers in China and Japan.

It is clear that an unstable economic environment is often regarded as harmful to economic growth. Furthermore, such instability is also likely to be triggered by political issues (Telatar et al. 2010). It is expected that under the conditions of unexpected regime change and political turmoil, there could be less economic growth. To be able to achieve high economic prosperity, improvement in economic performance and the fostering of a nation's entrepreneurs is only possible if the country achieves political stability. Permanent and long term investment decisions are then based on predicting such political stability. If such political stability is not achieved, it is commonly accepted that such instability will harm economic growth negatively.

It is an actual fact that in short-run time series, a seasonal pattern is important and the frequency domain allows eliminating these variations. This research study has implemented econometric techniques to eliminate such seasonal variations to avoid biased results. Moreover, the frequency domain approach was applied in estimating interdependency between economic and political stability in China and Japan. It is advantageous because the frequency domain causality allows a better understanding of the nexus between economic and political stability, in high or low frequencies in Japan and China.

It is obvious that the implementation of non-linear frequency domain approach contributes to the current literature in several ways. Firstly, it is a pioneering effort to investigate the nature of the interdependency between political stability and economic stability. Secondly, Granger causality, TY causality, non-linear DP causality and Spectral BC causality approaches provided more robust results in empirical investigations and also detecting the superiority of each technique in the modern economic literature.

The rest of the paper is structured as follows: Section 2 provides an overview of the literature on the concept. The dataset and methods are described in Section 3. Empirical findings of this research are reported and explained in Section 4, while Section 5 provides the conclusion and policy implications.

## 2. Literature review

Since the global financial crisis in 1929, political and economic turbulence has received considerable attention by researchers and policy-makers, but in China and Japan, using time and frequency domain causalities to study the interlinkages between political and economic stability has not been explored in depth. This study fills the gap in the existing literature by examining the nexus between economic stability and political stability in the case of China and Japan. To the best of our knowledge, it seems that a research gap exists for the case of China and Japan.

In the political economic literature, the theoretical and empirical link between economic growth and political instability has been one of the most important topics. This nexus was initially investigated by Olson (1963) who underlined that while chronic political instability is harmful to the economic growth of a country, rapid economic growth has the potential to destabilize the political environment.

Barro (1991), Alesina and Perotti (1996), and Ades and Chua (1997) undertook important studies that proved negative correlations between political uncertainty and economic development. They implemented advanced empirical techniques to validate such an argument. Recently, a study by Julio and Yook (2012) revealed that political uncertainty is associated with less investment for a nation's economic development. Benhabib and Rustichini (1996), Devereux and Wen (1998) and Darby et al. (2004) also reported such a negative correlation in their research between political uncertainty and economic development. In addition, Barro (1991) and Knack and Keefer (1995) accentuated that economic growth is adversely affected by the possibility of revolutions, coups, and assassinations. In contrast, Londregan and Poole (1990) stated that the probability of a coup does not play an important role in the economic growth of an economy. More recent research focuses on institutional quality, for example Acemoglu et al. (2003) reported that reducing institutional quality and inefficient macroeconomic policies are the main causes of persistent macroeconomic instability.

Aisen and Veiga (2013) highlighted that economic instability is triggered by switching macroeconomic policies more frequently, which results in negative macroeconomic performance. They noted that the political conditions and stability also affect the level of economic growth and development in a nation. Meanwhile, Barro (2013) also argued that economic growth is related with persistent government policies and implementation of these policies. He claimed that, through launching such government policies, it is possible to improve the capabilities and skills of the masses, as well as attracting new technologies. Increasing domestic and foreign investment to a country is only possible if a nation develops more friendly government policies that favor the environment and foster economic growth. Jong-a-pin (2009) also stated that an adverse association has been observed between political volatility, economic performance, and growth.

Considering government crisis and regime changes, Campos and Nugent (2002), Pei and Adesnik (2010), Görmü and Kabaskal (2010) found significant effects on economic growth. They also reported that there is a negative relationship between economic growth and political instability. In contrast, Okafor (2017) recently implemented a GMM approach to show the positive effects of political instability on economic growth. To validate his arguments, he analyzed several factors such as good governance, social unrest, corruption, and political instability. Being a government associate or a ruler creates opportunities and challenges to change social and economic policies for the better of a nation. Every nation has a vision to increase the welfare of the society, yet sometimes the prosperities achieved follows some political and economic unrest, which causes political vulnerability. Recessions and low levels of economic growth eventually calls for rapid changes in the subsequent elections. As also supported by Campos and Nugent (2002), slow economic growth may cause changes in the power balance of the ruling parties and may lead to structural changes. Such forms of coalition governments may dissolve and political instabilities can be triggered. Telatar (2003) accentuated that, in democratic regimes, the possibility of an election recount depends on the economic performance of a nation. In contrast, low economic growth may result in political unrest, which dissatisfies a community and leads to a coup or revolution in an autocratic (authoritarian) regime. Miljkovic and Rimal (2008) also investigated the hypothesis that socio-economic factors can affect political instability. Furthermore, they

insisted that income growth rate and initial income level can affect political instability, which may result in poverty and income inequality in a nation.

The political and economic turbulences since the Great Depression period in 1929, have received considerable attention by many researchers and practitioners, as well as the policy makers in the world. Nonetheless, in China and Japan it seems that a research gap exists which offers us a new insight to explore in depth the relationship between the causality of economic and political stability, by individually implementing the Granger, non-linear DP, TY and Spectral BC causality techniques for Japan and China.

## 3. Data and methodology

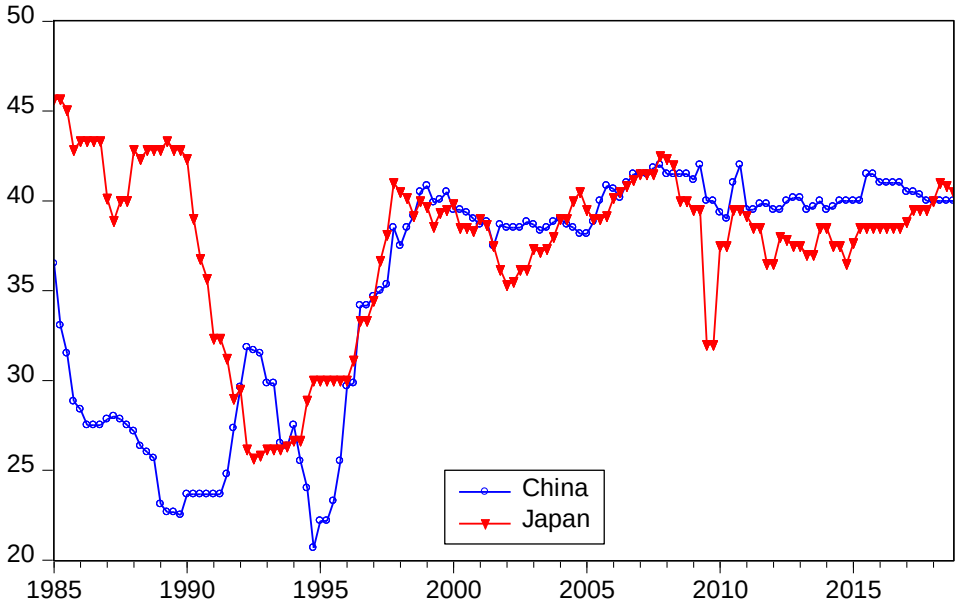
Throughout this study, the aim is to explore the causal linkage between economic stability and political stability in China and Japan using quarterly data sets from the Political Risk Services (PRS) Group, covering the period of 1985Q1 to 2018Q4. The Economic Risk Index and Political Risk Index variables are used as proxy for economic stability and political stability, respectively. According to the PRS Group, political risk indicates the weaknesses and vulnerability in political environment, while economic risk index reflects the economic weaknesses and strengths. The Economic Risk Index takes values between 0 and 50, with 0 corresponding to the highest economic risk and 50 to the lowest, whereas The Political Risk Index ranges from 0 (maximum risk) to 100 (minimum risk).The descriptive statistics of the variables that were used in the empirical models are reported in Table 1, as shown below

Table 1 - Descriptive Statistics

| | China | | Japan | |
|---|---|---|---|---|
| Code | ES | PS | ES | PS |
| Source | Political Risk Services | | Political Risk Services | |
| Mean | 34.650 | 64.934 | 37.349 | 82.730 |
| Median | 38.500 | 65.833 | 38.500 | 82.333 |
| Maximum | 42.000 | 76.000 | 45.674 | 91.000 |
| Minimum | 20.670 | 56.000 | 25.670 | 75.000 |
| Std. Dev. | 6.656 | 4.512 | 4.872 | 3.759 |
| Skewness | -0.654 | -0.211 | -0.895 | 0.343 |
| Kurtosis | 1.821 | 2.259 | 3.082 | 2.181 |
| Jarque-Bera | 15.770 | 5.698 | 16.346 | 5.799 |
| Probability | 0.000 | 0.557 | 0.000 | 0.055 |

Note: ES and PS denote economic stability and political stability, respectively.

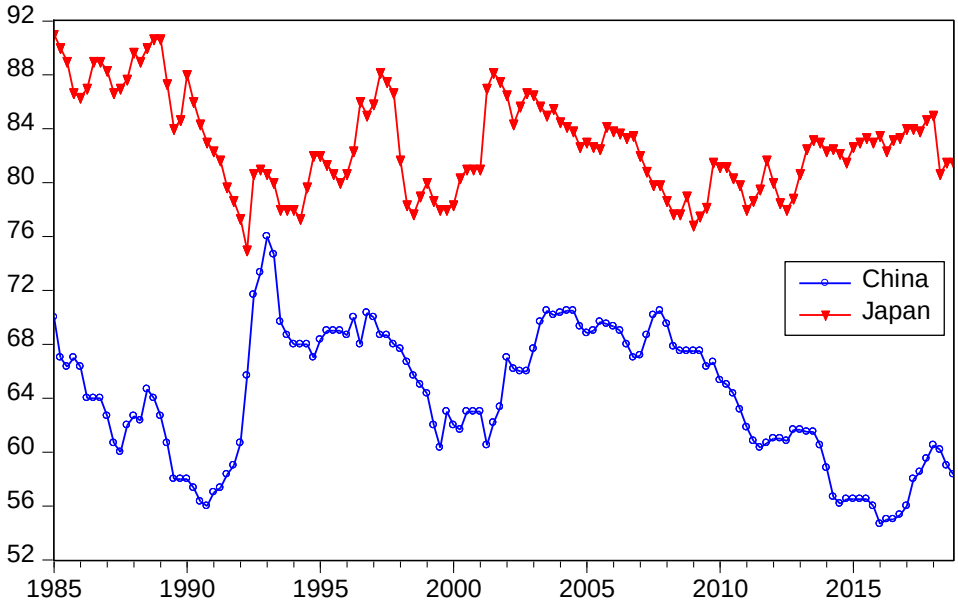
Figure 1 shows the economic risk in China and Japan over the period of 1985 and 2018. As clearly seen in Figure 1 between the late 1980s and the middle of 1990s, China found itself in a position of moderate to very high economic risk environment. Accelerating economic reforms and achieving substantial economic growth in the early 1990s minimized the economic risk in China. These factors led China during that decade to achieve one of the fastest growth rates of any country in the world, and since the end of the 1990s, China has mostly been able to a position itself in a very low economic risk environment in the world while Japan has also followed a similar pattern in terms of economic risk performance. However, over this period, the economic risk in Japan sharply increased as a result of two important factors: (i) the negative effect of economic stagnation period followed by sharp declining asset prices in Japan from 1991 to 1992; (ii) the 2007 global economic crisis.



*Source: Political Risk Service Group.*

Figure 1 - Economic Risk Index for China and Japan

Figure 2 shows the political performance of China and Japan between 1985 and 2018. The political risk environment in China was relatively more vulnerable than that in Japan. Over the period of 1985 to 2018, Japan remained in a very low risk environment in terms of politics except for the economic stagnation period in 1991 and 1992, the Iranian War in 2001, and the 2007 Global Economic Crisis. However, the political environment of China was also domestically affected at the end of the 1990s by the Tiananmen Square movement.



*Source: Political Risk Service Group.*

Figure 2 - Political Risk Index for China and Japan

Before checking the causal linkage between political stability and economic stability in Japan and China, the order of integration of the time series variables were determined using ERS Point

Optimal and Dickey Fuller Generalized Least squares (DF-GLS) were employed (Elliot, Rothenberg, and Stock, 1996). Then, as a next step, Granger causality, TY causality and DK causality tests - the time domain causality tests - were applied. The traditional Granger causality test was developed by Granger (1969) to capture the short-term causal linkage among the time series variables. The idea is that $PS_t$ does Granger cause $PS_t$, if and only if the variable $ES_t$ can be explained better by using the past values of both $PS_t$ and $ES_t$, rather than just by using the historical values of $ES_t$. In essence, this test allows us to investigate whether the past values of $PS_t$ can improve the prediction of $ES_t$ or not. The equation of the Granger causality test for the variables of ES and $PS_t$ is shown below:

$$PS_t = \alpha_0 + \alpha_1 ES_{t-1} + \cdots + \alpha_z PS_{t-z} \quad (1)$$

$$ES_t = \beta_0 + \beta_1 PS_{t-1} + \cdots + \beta_z ES_{t-z} \quad (2)$$

where, $PS_t$ denotes political risk index and $ES_t$ denotes economic risk index, $\alpha'$s $\beta'$s are the parameters and both variables have a lag length of $z$ (historical values back to time $z$).

In this study, we also used the TY causality test which was developed by Toda and Yamamoto (1995). The TY test allows us to conduct vector autoregressive (VAR) estimations in levels, regardless of whether the series have the same order of integration (d) or not. Hence, there is no information loss due to differencing the data series and the procedure is more flexible considering arbitrary levels of integration. In addition, the TY casualty test has an advantage over the other traditional cointegration methodology, such as Granger (1982), due to the fact that in the TY procedure there is no need to test for cointegration. Hence, a likely pre-test bias was eliminated with the Toda-Yamamoto (TY) causality test (Toda and Yamamoto, 1995; Kirikkaleli, 2020; Kirikkaleli 2021). From the perspective of Time Domain Causality, the Non-Linear causality test of Dicks and Panchenko (DK) was employed to explore the causal linkage between economic stability and political stability in China and Japan. Diks and Panchenko (2006) developed the nonlinear causality test of Hiemstra and Jones (1994) by overcoming the possibility of spurious rejections of the null hypothesis (Kirikkaleli and Dogan, 2021).

Apart from time domain causality tests, we also employed the frequency domain causality test of Breitung and Candelon (2006). The main difference between these two methods is: the "time-domain" approach, which shows us when a certain variation happens within a times series, and the "frequency-domain" approach which measures the degree of a certain variation in the time series. Geweke (1982) proposed a causality test at a particular frequency by using the Wald test to decompose the spectral density. The early work of Geweke (1982) is developed by Breitung and Candelon (2006) which considers the short- and long-term predictability at some pre-specified frequency. One of the main advantages of the spectral Breitung and Candelon (BC) causality test over the traditional causality test is that in short series studies, a seasonal pattern may be important and the frequency domain allows for eliminating these variations. Moreover, the frequency-domain approach allows us to observe non-linearities and causality cycles, that is, the causality in high or low frequencies. In order to test for the causal nexus between political stability and economic stability in China and Japan based on the frequency domain causality approach, we applied the test procedure of Breitung and Candelon (2006).

## 4. Empirical findings

Throughout this study, time series unit root tests were conducted to investigate the stationarity problem. ERS Point Optimal and Dickey Fuller Generalized Least squares (DF-GLS) (Elliot, Rothenberg, and Stock, 1996) techniques were implemented for unit root procedure before preceding causality tests. The results of such unit root tests are reported in Table 2. They clearly reveal that both ES and PS variables for China and Japan are found to be non-stationary at their levels but at first differences they seems stationary, meaning that the order of integration for the ES and PS variables for both countries are one, I(1).

Table 2 - Unit Root Tests

| | ERS Point Optimal [a] | | DF-GLS [b] | |
|---|---|---|---|---|
| | C | C & T | C | C & T |
| | | China | | |
| ES | 5.683 | 15.781 | -1.581 | -1.869 |
| ΔES | 0.908** | 3.090** | -3.223** | -3.901** |
| PS | 43.981 | 34.075 | -0.010 | -1.232 |
| ΔPS | 0.551** | 1.646** | -8.146** | -9.192** |
| | | Japan | | |
| ES | 16.409 | 31.254 | -0.956 | -1.628 |
| ΔES | 0.431** | 1.563** | -9.351** | -9.399** |
| PS | 5.530 | 17.075 | -1.406 | -1.432 |
| ΔPS | 0402** | 0.990** | -7.744** | -8.484** |

Note: Letter *C* stands for constant, and letters *C* and *T* denote constant and trend included together for stationarity check. Δ symbol refers the first difference of time series variable.
** and * denote statistically significant at 0.01 and 0.05 levels, respectively.

As a next step, we performed time domain causality tests, namely Granger causality, TY causality, and nonlinear DK causality tests to obtain information about the causal relationship between economic stability and political stability in China and Japan. The results from such tests are presented in Table 3. The estimated results reveal that vulnerability in political stability in Japan significantly leads to vulnerability in economic stability at 5% (in the TY causality test) and at 10% significance level (in the Granger causality and non-linear DP causality tests). The results in Table 3 also report that a change in economic stability in Japan significantly leads to a change in political stability at 5% level in all time domain causality estimations. Another significant result obtained from the time domain causality tests highlights that a change in political stability in China significantly leads to a change in economic stability at 5% (in the Granger causality and TY causality tests) and at 10% level (in the non-linear DP causality test). The causality test results also indicate that a change in economic stability in China significantly leads to a change in political stability at 5% (in the Granger causality and non-linear DP causality tests) and at 10% significance level (in the TY causality test).

Table 3 - Time Domain Causality Tests

| | Japan | | | | | |
|---|---|---|---|---|---|---|
| | Granger Causality | | TY Causality | | Non-linear DP Causality | |
| | F-statistic | P-value | M-walt | P-value | T-statistic | P-value |
| PS => ES | 3.403 | 0.056[a] | 7.156 | 0.0279* | 1.480 | 0.069[a] |
| ES => PS | 3.508 | 0.049* | 6.412 | 0.0405* | 2.609 | 0.004** |
| | China | | | | | |
| | Granger Causality | | TY Causality | | Non-linear DG Causality | |
| | F-statistic | P-value | M-walt | P-value | T-statistic | P-value |
| PS => ES | 3.601 | 0.031* | 12.946 | 0.005** | 1.458 | 0.072[a] |
| ES => PS | 3.604 | 0.030* | 7.585 | 0.055[a] | 1.737 | 0.041* |

Note: **,*, and [a] denote statistically significant at 0.01, 0.05, and 0.10 levels, respectively. => denotes the direction of causality.

To get information about the causal relationship among the variables in China and Japan within the framework of frequency domain causality, a spectral BC causality test was applied as suggested by Breitung and Candelon (2006). Figure 3 demonstrates the spectral BC causality test results for China within the framework of frequency domain causality. The results reveal that in China there is causality detected running from political stability toward economic stability at medium and high frequency levels at 5% significance level. Regarding China, in correspondence with the findings of Barro (1991), Knach and Keefer (1995) and Acemoglu (2003), they all highlighted that political stability induces economic development and prosperity. Our results also support their findings.

In addition, the economic stability also causes political stability at 10% significance level only at low frequency level in China. Our findings support the results of Campos and Nugent (2002) as they stated that recession in the economy may cause imbalance in the future of ruling parties and may lead to a structural change in the nation's politics. Our results for China are in line with Campos and Nagent (2002). The frequency domain causal relationship between economic stability and political stability for Japan is presented in Figure 4. The frequency domain causal findings for Japan reveal that at 10% significance interval, there is a causality running from political stability toward economic stability at a low frequency level only. However, the results indicate that there is a causal relationship running from economic stability toward political stability in Japan at 10% significance interval at a high frequency level only. In the case of Japan, we found out that politics leads economics in the long-run. However, economics leads politics only in the short-run. This is unique for the case of Japan which can be used as an example for future studies. Japanese electors are affected more in the short-run from economic success rather than political development. Although in the long-run, political changes tend to have a stronger impact on the Japanese economy.

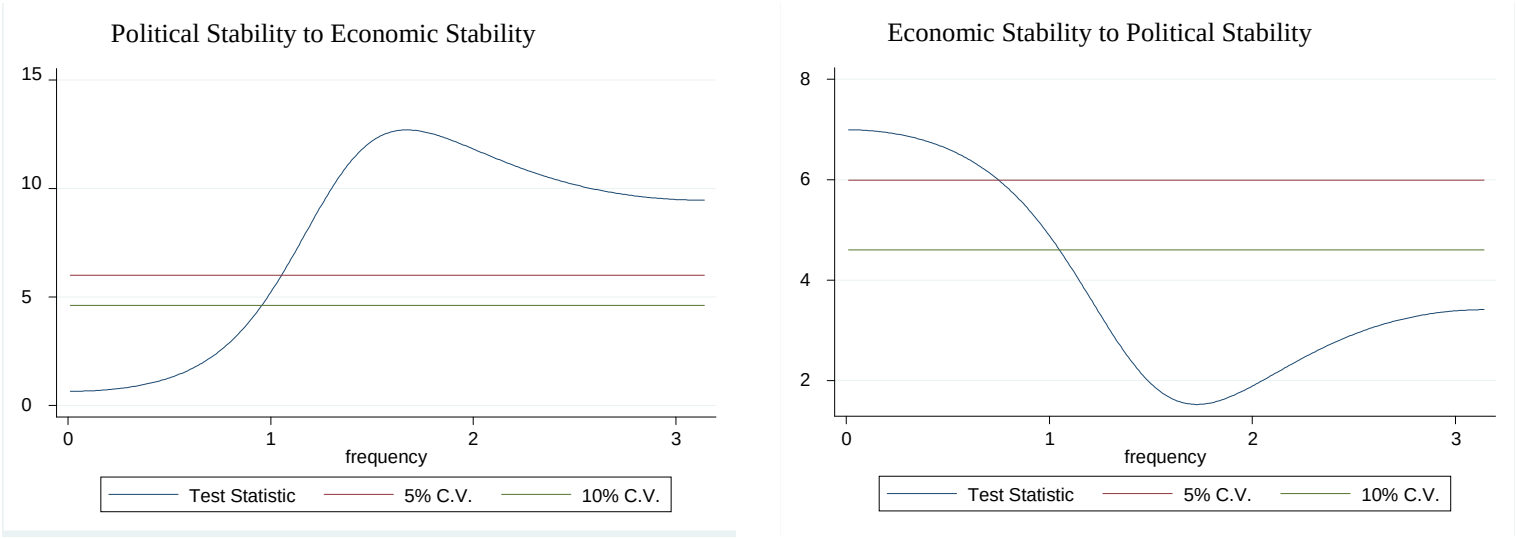
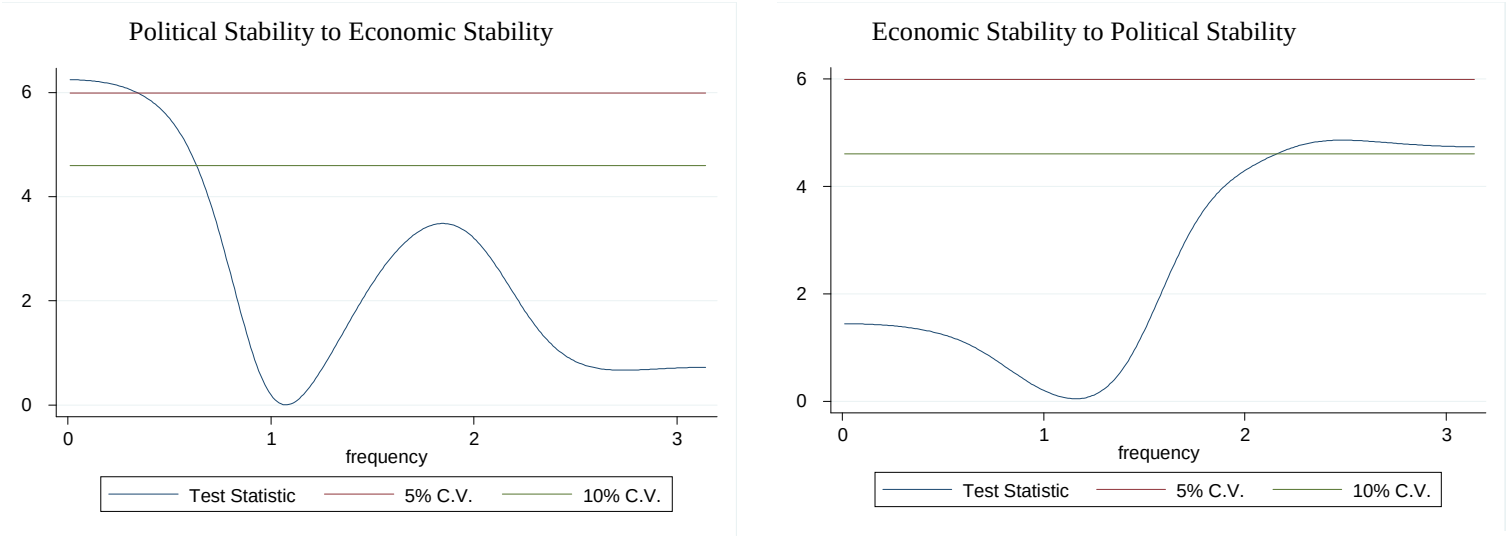



Figure 3 - Spectral BC Causality Result for China




Note: Breitung and Candelon (2006) suggests a 5% level of significance which is statistically accepted to make interpretations of frequency causality results. Additionally, a 10% level of significance also provides us 90% confidence interval to reveal the estimated elasticity coefficients in absence of significant results at 5% level. Frequency between 0 and 1 stands for long-term, frequency between 1 and 2 for medium-term and frequency between 2 and 3 for short-term time-horizons.

Figure 4 - Spectral BC Causality Result for Japan

## 4. Conclusion

This research used two separate causality approaches – time domain causality and frequency domain causality – to explore the direction of causalities between economic stability and political stability for two Asian economies, namely China and Japan. In this study, Granger causality, TY

causality, nonlinear DP causality and spectral BC causality tests were employed to investigate the direction of causalities among the time series variables over the period of 1985 and 2018.

The results from the spectral BC causality tests reveal that (i) in China there is a causality detected running from political stability toward economic stability at medium and high frequency levels; (ii) the economic stability also causes political stability at a low frequency level only in China; (iii) when the results for Japan are considered, the empirical results also reveal that there is causality running from political stability toward economic stability at a low frequency level only; (iv) there is also economic stability toward political stability in Japan at a high frequency level only. It should be noted that in this study, the findings of time domain causality tests are consistent with that of the frequency domain causality test, but at different significant levels. These results provide some policy advice to the governments in China and Japan. Therefore, to minimize vulnerability in the political environment in both countries, vulnerability in economic risk should be minimized while the government should control the political vulnerability to achieve economic stability. One of the reasons of a large-scale recession in the Japanese economy was due to "The Triple Disaster" in Fukushima which happened in 2011. Restructuring the Japanese economic growth, inevitably caused both economic and political losses nationwide. During this restructuring, the Japanese economy lost competitiveness in electronic exports against their biggest rival, China, because in the same period the Chinese economy underwent rapid growth. Despite these results providing strong empirical evidence, further research should be performed in different countries of the world to establish if similar conclusions can be reached there.

## References


Ades A, Chua H B (1997). Thy neighbor's curse: regional instability and economic growth. *Journal of Economic Growth*. 2(3): 279-304.

Aisen A, Veiga F J (2013). How does political instability affect economic growth? *European Journal of Political Economy*. 29: 151-167.

Alesina A, Perotti R (1996). Income distribution, political instability and investment. *European Economic Review*. 40(6): 1203-1228.

Barro R J (1991). Economic growth in a cross section of countries. *The quarterly journal of economics*. 106(2): 407-443.

Barro R J (2013). Inflation and economic growth, annals of economics and finance. *Society for AEF*. 14(1): 121-144.

Benhabib J, Rustichini A (1996). Social conflict and growth. *Journal of economic growth*. 1(1): 125-142.

Breitung J, Candelon B (2006). Testing for short-and long-run causality: A frequency-domain approach. *Journal of econometrics*. 132(2): 363-378.

Campos N F, Nugent J B (2002). Who is afraid of political instability? *Journal of Development Economics*. 67(1): 157-172.

Darby J, Li C W, Muscatelli VA (2004). Political uncertainty, public expenditure and growth. *European Journal of Political Economy*. 20(1): 153-179.

Devereux M B, Wen J F (1998). Political instability, capital taxation, and growth. *European Economic Review*. *42*(9): 1635-1651.

Diks C, Panchenko V (2006). A new statistic and practical guidelines for nonparametric Granger causality testing. *Journal of Economic Dynamics and Control*. 30(9-10): 1647-1669.

Elliot B E, Rothenberg T J, Stock J H (1996). Efficient tests of the unit root hypothesis. *Econometrica*. 64(8): 13-36.

Geweke J (1982). Measurement of linear dependence and feedback between multiple time series. *Journal of the American statistical association*. 77(378): 304-313.

Görmüş Ş, Kabasakal A (2010). Are Economic Crises and Government Changes Related? A Descriptive Statistic Analysis. *International Journal of Human and Social Sciences*. *5*: 13.

Granger C W (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica: journal of the Econometric Society*, 424-438.

Granger C W (1982). Generating mechanisms, models, and causality. *Advances in econometrics*, 237-253.

Hiemstra C, Jones J D (1994). Testing for linear and nonlinear Granger causality in the stock price-volume relation. *The Journal of Finance*. 49(5): 1639-1664.

Jong-A-Pin R (2009). On the measurement of political instability and its impact on economic growth. *European Journal of Political Economy*. 25(1): 15-29.

Julio B, Yook Y (2012). Political uncertainty and corporate investment cycles. *The Journal of Finance*. 67(1): 45-83.

Kirikkaleli D (2020). New insights into an old issue: exploring the nexus between economic growth and CO2 emissions in China. *Environmental Science and Pollution Research*. 27(32): 40777-40786.

Kirikkaleli D (2021). Analyses of wavelet coherence: financial risk and economic risk in China. *Journal of Financial Economic Policy*. https://doi.org/10.1108/JFEP-08-2019-0174

Kirikkaleli D, Doğan N (2021). Energy consumption and refugee migration in Turkey. *Utilities Policy*. *68*: 101144.

Londregan J B, Poole K T (1990). Poverty, the coup trap, and the seizure of executive power. *World Politics: A Quarterly Journal of International Relations*. 151-183.

Miljkovic D, Rimal A (2008). The impact of socio-economic factors on political instability: A cross-country analysis. *The Journal of Socio-Economics*. 37(6): 2454-2463.

Newby L. (2018). *Sino-Japanese relations: China's perspective* (Vol. 3). Routledge.

Okafor G (2017). The impact of political instability on the economic growth of ECOWAS member countries. *Defence and Peace Economics*. 28(2): 208-229.

Pei M, Adesnik A D (2000). Why recessions don't start revolutions. *Foreign Policy*. 138-151. https://doi.org/10.1177/0002764214534666

Telatar E, Telatar F, Cavusoglu T, Tosun U (2010). Political instability, political freedom and inflation. *Applied Economics*. *42*(30): 3839-3847.

Telatar F (2003). Türkiye"de Enflasyon, Enflasyon Belirsizliği Ve Siyasi Belirsizlik Arasındaki Nedensellik İlişkileri. *İktisat İşletme ve Finans*. 18(203): 42-51.

Toda H Y, Yamamoto T (1995). Statistical inference in vector autoregressions with possibly integrated processes. *Journal of econometrics*. 66(1-2): 225-250.