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Does economic policy uncertainty affect housing prices? Evidence from Asia-Pacific countries

Nazif Durmaz
Department of Marketing, Global Business, & Economics,
Kean University,
USA
ndurmaz@kean.edu
ORCID 0000-0003-2835-6191

Feier Sun
Department of Marketing, Global Business, & Economics,
Kean University,
USA
sunf@kean.edu

Abstract. The present study utilises quarterly data from 1990 to 2022 to examine the relationship between household income, interest rates, and economic policy uncertainty (EPU) on housing prices in New Zealand, South Korea, Japan, Australia, China, and Singapore. The empirical analysis is carried out using the Autoregressive Distributed Lag (ARDL) bounds testing approach for cointegration. The results further indicate that economic policy uncertainty has both long-term and short-term positive effects on house prices. However, in New Zealand, economic policy uncertainty is found to harm house prices, while in Australia, it has a short-term negative impact on house prices. The findings offer compelling support for the significant influence of economic policy uncertainty on the dynamics of real estate markets across the Asia-Pacific region.

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1. INTRODUCTION

Economic uncertainty describes a condition where the future economic landscape is difficult to foresee and is characterized by elevated risks or unpredictable element. Bloom (2009) defines uncertainty as a lack of information or predictability about future events. It can manifest as ambiguity or unpredictability in various economic factors, such as policy changes, geopolitical events, or market conditions. Baker et al. (2016) introduce a novel Economic Policy Uncertainty (EPU) index based on the frequency of newspaper

coverage. The index indicates its effectiveness in capturing movements in policy-related economic uncertainty. In this period, numerous economists examined how economic uncertainty influences overall economic performance and market volatility. Although the effect of policy-related uncertainty on long-run housing price trends is widely acknowledged, empirical studies specifically addressing the impact of broader economic instability on the housing sector remain relatively limited (Bahmani-Oskooee & Ghodsi, 2017).

In this research, we look at the Asia-Pacific area to see whether there is a correlation between EPU and home prices. The study examines the impact of economic uncertainty on home prices in six typical countries: Singapore, New Zealand, Australia, Japan, South Korea, and China. It covers both the short-term and long-term effects of this uncertainty. The four countries selected for this study are representative of the Asia-Pacific region because they vary in their economic significance, real housing market characteristics, and the extent to which they are affected by economic policy uncertainty. These countries not only exhibit diverse economic structures but also play key roles in regional and global markets. Australia and New Zealand are known for their relatively open economics and real housing markets, with high levels of foreign investment. Additionally, the real housing market contributes significantly to their GDP. Japan and South Korea are densely populated industrialized economies with unique real housing market dynamics influenced by historical, cultural and economic factors. With an ageing population and historically low interest rates, Japan is a classic example of how long-term economic policy and uncertainty interact with house prices. At the same time, South Korea's housing market is notably shaped by rapid urbanization and strong government intervention, offering a valuable perspective on the potential effects of economic policy uncertainty in a tightly regulated context.

Here is the outline and structure of the paper: In the Literature Review, we talk about how the Asia-Pacific area has a housing crisis. The statistics and EPU index are presented in the section that follows. The ARDL approach is described and applied in the ARDL Methods and Results section, and the final section offers the results, conclusions, and implications.

2. LITERATURE REVIEW

2.1. Housing systems and policies

Economic agents note that house prices are greatly affected by the price elasticity of the housing supply, the growth effect of agglomeration, and the evolution of the wealth-to-income ratio (2017). The effects of economic uncertainty and the volatility it causes have been demonstrated in other studies. Research by Bialkowski et al. (2008), Leblang and Bernhard (2006), Boutchkova et al. (2012), and Julio and Yook (2012) all point to the fact that political and economic volatility greatly affect actual economic results. The importance of housing policy in determining development in the Asia-Pacific region, especially in East Asian nations, is highlighted by Ronald and Chiu (2010). During the latter part of the twentieth century, this area experienced rapid industrialisation and urbanisation, with huge housing investments from both the public and private sectors. Several causes, such as economic crises and social, political, and demographic developments, have altered the housing policy landscape significantly in the 21st century. A Change in Community Housing Assistance Programs Across Asia and the Pacific. With the economy showing signs of slowing growth, real estate market instability has become the norm. The economic crisis, along with key political and socioeconomic developments, has significant consequences for housing systems and policies. Durmaz (2011) emphasises the importance of supply-side factors in determining housing prices.

The Asia-Pacific region has been a focus of economic dynamism, characterized by unprecedented growth, rapid urbanization, and increasing integration into the global economy. This transformation was characterized by booming cities, the expansion of industry, and the rise of the middle class, all of which

contributed to the region's economic standing on the world stage. Amidst this progress, however, EPU has emerged as a significant factor influencing the region's development trajectory. Chow et al. (2017) highlight that EPU has emerged as a pivotal element influencing economic development in the Asia-Pacific region.

2.2. Economic policy uncertainty

EPU stems from political instability and regulatory changes, which introduce volatility into the economic decision-making process. Investors, businesses, and policymakers have all been forced to deal with an uncertain environment, resulting in cautious investment strategies and, in some cases, subdued economic activity, which poses significant challenges to the real estate market.

Nunns (2021) highlights that the economic agent examines the causes and economic impact of recent spikes and differences in house prices across New Zealand's regions. It attributes these increases primarily to severe distortions in house prices caused by increased demand for housing conflicting with housing supply constraints, including restrictive zoning rules. Before this, Shi et all (2014) examines the influence of Reserve Bank policies and fluctuations in retail mortgage interest rates on New Zealand's real housing prices between 1999 and 2009. The results show that actual interest rates and property values are positively correlated. Additionally, the impact of the Economic Policy Uncertainty Index (NZ EPU) for New Zealand, which is based on monthly news analysis, was reviewed by Ali et al. (2022) to determine its effect on pricing dynamics across a diverse range of institutional investors. Annual data shows an economically meaningful risk premium of 6.23%, revealing that NZ EPU is a priced and non-diversifiable risk factor. Institutional investment returns in New Zealand are more affected by domestic uncertainty than by policy uncertainty on a global scale. The Australian economy is also significantly impacted by the lack of clarity surrounding economic policy. Despite a noticeable drop-in real estate activity, real home prices are unaffected by monetary policy tightening, according to Wadud et al. (2012). In addition to inflation and output gap targets, changes in holidays are considered by Australia's policy currency. Australian home values are very sensitive to inflation and short-term interest rates.

There is a two-way causal link between policy uncertainty and volatility in real estate returns, according to Anoruo et al. (2017), and EPU in Japan affects housing market returns. Furthermore, interest rate fluctuations are influenced by EPU. Thereby responding to uncertainty by adjusting monetary policy, which could affect mortgage rates. Higher interest rates reduce homebuyer affordability, leading to lower demand and, consequently, lower home prices. Using data from the Japanese housing market between 2008 and 2015, Nguyen and Nguyen (2017) apply the quantile regression technique to examine the connection between the bubble and Japanese monetary policy. According to the research, monetary policy changes greatly affect property returns. The study also emphasises the ways in which home prices respond to fresh financial data. According to Jeon (2018), the Korean real estate market in South Korea, Japan, Hong Kong, and China was affected by EPU to varying degrees. Using each country's EPU index, the study found that the EPU index of housing purchase and rental prices in four Asian countries had a significant negative impact on South Korea's housing purchase and rental price index. The study highlights the spillover effects of the EPU index on the Korean real estate market and various economic indicators in four Asian countries. Kim (2004) explores the interconnections between housing and the Korean economy, examining the scale, growth, and volatility of residential investment, housing finance, and their impact on house price fluctuations. South Korea's housing prices are closely tied to policy, which influences consumer spending and inflation. Huang et al. (2020) conclude that macroeconomic policy uncertainty has a significant impact on housing prices in China and plays a leading role in the real estate market. Studying housing prices in China from 1999 to 2014, Wang et al. (2020) find that economic growth raises house prices, with policy uncertainty amplifying this effect. Additionally, high policy uncertainty can lead to expansionary monetary

policy driving up prices, while contractionary policy complicates price control efforts. A recent investigation of the European housing market by Durmaz et al. (2025) shows that EPU exerts both short-run and long-run negative effects on housing prices in most countries studied.

The structural problems in the real estate markets of the Asia-Pacific region, as well as the possible effects of economic uncertainty on these markets, make the empirical research presented here very relevant. Finding out whether housing prices in the Asia-Pacific area react to economic uncertainty is our main goal. To test for the presence of cointegration linkages empirically, this study uses the Autoregressive Distributed Lag (ARDL) bounds evaluation method. Bloom (2009) and Baker et al. (2016) created the Economic Policy Uncertainty (EPU) Index to measure economic uncertainty. According to El-Montasser et al. (2016), the housing market is driven by variables such as household credit circumstances and investment decisions in housing, which are influenced by policy uncertainties related to fiscal, monetary, and regulation. Consequently, the index represents these uncertainties.

3. METHODOLOGY

3.1. Model and data

Based on the above, we do not include housing demand in our assessment of economic uncertainty. Andrikopoulos and Brox (1984) propose a new method for assessing housing demand in urban areas based on preferences for housing types. Addresses the limitations of traditional methods for estimating housing demand. This model is expressed as

$$lnHP_t = a_0 + a_1 lnY_t + a_2 lnR_t + a_3 EPU_t + \xi_t, \quad (1)$$

where HP denotes the house price index, Y represents real income, R signifies the real interest rate, and EPU indicates economic policy uncertainty. At the national level, the current rise in housing prices is primarily due to policy adjustments rather than a speculative real estate bubble. However, there are real signs of a bubble in certain market segments. Domestic demand and pricing are expected to rise with real income and fall with real interest rates. Higher incomes lead to greater home-buying willingness, driving up housing demand. Real interest rates influence individuals' actual borrowing expenses. Rising interest rates elevate individuals' borrowing costs from banks. Yet, real interest rates influence housing consumption through direct and indirect channels. As previously discussed, changes in real interest rates exert a significant influence on both existing homeowners and prospective buyers. A rise in real interest rates implies that they are likely to face increased borrowing costs in the future. Indirect effects of rising real interest rates include a decline in housing demand, which subsequently drives down property values and leads to a reduction in the aggregate housing wealth of the economy.

The EPU Index, accessible on the official website, consists of a set of measures that include three main components. This approach aims to effectively quantify the degree of uncertainty that policy-related factors create in the economy. The most fundamental and versatile component captures the intensity of EPU by analyzing the frequency of relevant terms in newspaper coverage. The first component of the index involves identifying news articles that contain key terms associated with the economy, policy, and uncertainty. A standardized index is then constructed by counting these relevant articles, ensuring consistency and comparability across time periods. Part two uses Congressional Budget Office (CBO) numbers to track how many federal tax provisions are getting close to their expiration dates. The third part looks at the spread of predictions for CPI and government spending, two macroeconomic variables, using data from the Survey of Professional Forecasters at the Philadelphia Federal Reserve Bank to measure policy-related uncertainty.

Together, these factors form a substantial measure of EPU. The same newspaper-based approach is applied to the countries we choose. In this study, we analyze the EPU Index for the period from 1990 to 2022. The original data is provided monthly, however, to better align with the analytical framework of this study, we aggregate the monthly data into quarterly data. This transformation ensures consistency in the analysis and facilitates the examination of long-term trends in economic policy uncertainty.

3.2. ARDL approach

Equation (1) specifies the approach to be used to estimate housing demand. To test for cointegration, the Autoregressive Distributed Lag (ARDL) bounds testing method was initially developed by Pesaran et al. (2001). Even when working with small sample sizes, the ARDL framework can incorporate both stationary (I(0)) and non-stationary (I(1)) variables into a single model, which is a significant advantage over other cointegration techniques (Nkoro & Uko, 2016). Moreover, this method eliminates the necessity of pre-testing each variable's order of integration prior to conducting the cointegration analysis. Furthermore, the issue of endogeneity is relatively mitigated in the ARDL methodology, as the model assumes all variables to be endogenous and does not rely on the absence of residual correlation. The most notable strength of this approach, however, lies in its ability to effectively identify cointegrating vectors, especially in scenarios where multiple cointegrating relationships exist (Nkoro & Uko, 2016)[1]. Additionally, as noted by Bahmani-Oskooee and Ghodsi (2017), an endogeneity issue may arise in the model due to the impact of unpredictability in house prices on uncertainty measures. However, by employing the autoregressive distributed lags approach, we can consider all lagged values as instruments, which helps mitigate the endogeneity issue, thereby enhancing the accuracy of our estimates. In keeping with a general-to-specific modelling technique, this method incorporates enough lags to reflect the underlying data-generating process (Laurenceson and Chai, 2003). This technique captures the dynamics of long-term equilibrium relationships and short-term modifications among the variables under consideration by considering both error correction terms and autoregressive lags. Here is the ARDL model's error correction representation that corresponds to equation (1):

$$\Delta lnHP_t = \delta_0 + \sum_{i=1}^{\mu 1} \delta_1 \Delta lnHP_{t-i} + \sum_{i=0}^{\mu 2} \delta_2 \Delta lnY_{t-i} + \sum_{i=0}^{\mu 3} \delta_3 \Delta lnR_{t-i} + \sum_{i=0}^{\mu 4} \delta_4 \Delta lnEPU_{t-i} + \alpha_1 lnHP_{t-1} + \alpha_2 lnY_{t-1} + \alpha_3 lnR_{t-1} + \alpha_4 lnEPU_{t-1} + \epsilon_t \quad (2)$$

Where, i denotes the number of lag lengths used, while ϵ_t represents a random error term assumed to have a mean of zero and a constant variance. To examine the presence of cointegration, the null hypothesis — stated as H_0: $\alpha_i = 0$ for all i (i = 1, 2, 3, and 4) — is evaluated using the F-test. It should be noted that regardless of whether the explanatory variables are level stationary [I(0)] or integrated of order one [I(1)], the F-statistic never follows a normal distribution. Consequently, this test is based on two sets of asymptotic critical value bounds, which change whether the variables take an I(0) or I(1) series, or when they shift in integration order. If the estimated F-statistic is larger than the upper critical value, we then reject the null hypothesis of no cointegration, regardless of whether the variables are I(0), I(1), or a mix of the two. We fail to reject the null hypothesis of no cointegration when the F-statistic is less than the lower critical value. The result is not definitive if the statistic is between the two limits. When the model reaches a long-run equilibrium, it keeps just the long-run coefficient estimates and the short-run differenced terms approach zero.

[1] See other studies for some applications, Durmaz (2015, 2024), Baghestani and Kherfi (2015), Al-Shayeb and Hatemi-J.(2016), and Arize et al. (2017).

Table 1

Short-run Estimates

	AUSTRALIA		**JAPAN**	
	L-ARDL	**N-ARDL**	**L-ARDL**	**N-ARDL**
Panel A				
$\Delta LnHP_{(t-1)}$	0.45**(6.38)	0.46**(6.55)	0.41**(4.53)	0.38**(4.35)
$\Delta LnHP_{(t-2)}$	0.14*(1.78)	0.12(1.58)	0.48**(5.10)	0.45**(5.04)
$\Delta LnHP_{(t-3)}$			-0.21**(-2.22)	-0.20**(-2.26)
ΔLnY_t	0.003(0.09)	0.026(0.75)	0.42**(3.14)	0.49**(3.79)
$\Delta LnY_{(t-1)}$				
$\Delta LnIR_t$	0.1**(2.49)	0.09**(2.44)	-0.007*(-1.70)	-0.007**(-2.44)
$\Delta LnIR_{(t-1)}$	-0.17**(-4.67)	-0.16**(-4.40)		
$\Delta LnEPU_t$	0.01**(2.24)		0.13(0.04)	
$\Delta LnEPU_{(t-1)}$				
ΔPOS_t		0.05**(3.11)		-0.005(-0.50)
ΔNEG_t		-0.013(-1.02)		-0.003(-0.19)
$\Delta NEG_{(t-1)}$				
$\Delta NEG_{(t-2)}$				
$\Delta NEG_{(t-3)}$				
TREND			-0.70**(-2.22)	

	KOREA		**NEW ZEALAND**	
	L-ARDL	**N-ARDL**	**L-ARDL**	**N-ARDL**
Panel A				
$\Delta LnHP_{(t-1)}$	0.53**(8.24)	0.52**(7.79)	0.63**(10.08)	0.63**(10.13)
$\Delta LnHP_{(t-2)}$				
$\Delta LnHP_{(t-3)}$				
ΔLnY_t	0.70**(7.25)	0.62**(6.19)	0.73**(5.25)	0.73**(5.28)
$\Delta LnY_{(t-1)}$	-0.37**(-3.62)	-0.37**(-3.56)	-0.33**(-2.27)	-0.32**(-2.16)
$\Delta LnIR_t$	0.01(1.36)	0.01(1.05)	-0.004(-0.34)	-0.002(-0.14)
$\Delta LnIR_{(t-1)}$	-0.02**(-2.12)	-0.018*(-1.74)	-0.03**(-2.39)	-0.028**(-2.45)
$\Delta LnEPU_t$	-0.004*(-1.75)		-0.001(-0.44)	
$\Delta LnEPU_{(t-1)}$				
ΔPOS_t		-0.015*(-1.69)		-0.005(-0.73)
ΔNEG_t		-0.009(-0.38)		-0.01(-1.07)
$\Delta NEG_{(t-1)}$		0.02(0.80)		
$\Delta NEG_{(t-2)}$		0.03(1.15)		
$\Delta NEG_{(t-3)}$		-0.05**(-2.03)		
TREND				

T-Ratios are in parenthesizes. ** and *, significance at 5% and 10%.

Source: Authors' calculations

The estimated values of α_2, α_3, and α_4 are expressed relative to the estimate of α_1 by a normalisation process, and the long-run impacts are thus produced in this way. Cointegrating relationships are necessary for the validity of these long-run coefficients, which are dependent on the lagged level variables being jointly and statistically different from zero.

The process of normalizing the coefficients begins by initially setting the estimated error-correction term from equation (1) to zero; where α_1* are the estimated values of α_1 and normalized coefficients in equation are obtained by dividing each relevant coefficient by the estimated α_1 from equation (2):

$$\beta_1 = \frac{\alpha_2^*}{\alpha_1^*}$$

4. EMPIRICAL RESULTS AND DISCUSSION

The predicted outcomes of equation (4) for every country are detailed in Table 1. Based on an unrestricted VAR model, the Akaike Information Criterion (AIC) was utilised to guide the lag order decision when selecting lag lengths for the first-differenced variables. For the sake of brevity, we have not included these preliminary outputs here, but you are welcome to request them. There are three parts to the table: If the F-test finds evidence of cointegration, the normalised long-run coefficient estimates are shown in Panel B; otherwise, the short-run coefficients linked to the exogenous variables are shown in Panel A. Including the F-statistics used to assess cointegration among the variables listed in Equation (2), Panel C provides a summary of the diagnostic test results.

The F-statistics are significant in six nations when the upper-bound critical values are used as a benchmark. This suggests that there is cointegration between housing prices and their underlying factors, such as EPU. Based on these results, it appears that policy uncertainty has an effect on home prices in the short and long term. Furthermore, for a number of Asian and Pacific nations, we provide the predicted coefficients and related statistical metrics for these short- and long-term impacts. These estimations show the interrelationships of a number of factors, such as policy initiatives and economic indicators. Panel A displays the impact of several variables on the outcome measures in the short run. A 1% increase in household income in Australia, for instance, results in a 10% rise in home prices. Home values will fall by 1% for every 1% rise in interest rates. There is a short-term impact from income and interest rates that is substantial. After processing, our results did not initially appear to be very important. Considering this, we set out to incorporate time trends. Data collection for the purpose of identifying a recurrent pattern is known as trend analysis. It has the potential to make our data more perfect. We can see that EPU has a big short-term effect on home values, and the AUS data becomes more relevant as the trend continues. House prices are projected to fall by 1% for every 1% increase in EPU. We also discovered that income and interest rates significantly affect home prices in the short run. Of them, income is the most strongly correlated with falling home values. As people's income increases, more of them will increase their savings. When interest rates increase, people save more and spend less, which are important factors affecting housing prices. At the same time, we found that EPU also has a significant short-term impact on housing prices in Japan. When economic policy instability increases by 1%, housing prices increase by 1%. In Japan, EPU is positively related to housing prices. As we can see, policy uncertainty has a significant effect in Korea, increasing by 1%, it will only increase housing prices by 0.7%. However, income and interest rates did not play as important a role in Korea.

According to the results of the short-term estimation study, the impact of EPU on home prices varies among nations. In the L-ARDL model, at lag t-1, EPU has a positive and statistically significant effect on property prices in Australia. In the N-ARDL model, though, this impact does not amount to much. There does not appear to be a strong correlation between EPU and Japanese home prices, since the EPU coefficient at lag t-1 is not statistically significant (JPN). This indicates that variables other than uncertainty in economic policy are more important in determining the dynamics of the housing market. House prices are more consistently and significantly influenced by income and interest rates, with income positively

affecting prices in South Korea and Japan and interest rates negatively in most countries. In general, there is some evidence that EPU does impact home prices, but it seems that country-specific variables and larger economic indicators, such income and interest rates, are more important in shaping housing market behaviour. Panel B of Table 2 displays the estimated long-term coefficients. Looking at the long-term effects of real income and real interest rates on housing prices might provide light on their relationship with prices since these variables have little impact on prices in the short-term. The results show that in Korea's situation, EPU has a statistically significant effect. If EPU increases by 1%, housing prices are expected to rise by 8%; a positive relationship is observed. Meanwhile, in New Zealand, the interest rates and EPU both have a negative relationship with housing prices. If EPU increases by 1%, the housing price will decrease steeply. Increasing income will encourage people to buy houses, leading to an immediate price increase. In the grand scheme of things, all the components matter greatly. To sum up, EPU significantly affects home prices in the studied countries, according to the long-run estimation results. There is a highly significant association between EPU and housing prices in the L-ARDL model in Japan, demonstrating that the influence of EPU is particularly notable there. However, this relationship is not consistent across all countries. In addition, major variables like income and interest rates are significant in determining home values. House prices in South Korea are negatively correlated with income, but in Japan they are positively correlated with both income and pessimism. Diagnostic tests indicate that the models for South Korea and New Zealand are robust, although some cases exhibit heteroskedasticity. Overall, EPU is shown to be a significant determinant of housing market trends, particularly in Japan.

Combining panel A and panel B, we can infer that, in Australia, EPU is significant in the short term but not in the long term, indicating a temporary relationship. However, in Korea and New Zealand, EPU is significant in both the short and long run, with a persistent and enduring relationship over time.

The diagnostic test statistics are reported in Panel C. Cointegration among the variables listed in Equation (2) is specifically evaluated by the F-statistics that are given. Housing prices in New Zealand are cointegrated with their important drivers, including EPU, according to the substantial F-statistic. As past studies indicate, the significant and negative coefficient of the error correction term, ECM_{t-1}, is a robust indicator of cointegration, which confirms a stable long-term equilibrium among the variables under study[2]. As illustrated in Panel C of Table 2, all countries exhibit these significant and negative coefficients for ECM_{t-1}, reinforcing the validity of the cointegration relationship. The presence of a negatively significant ECM_{t-1} thus provides strong evidence of a long-term relationship between the variables, affirming the reliability of the cointegration method employed in this analysis.

[2] see Durmaz (2015, 2024) and Bahmani-Oskooee and Durmaz (2016)

Table 2

Long-run estimates and diagnostics

	AUSTRALIA		JAPAN	
	L-ARDL	**N-ARDL**	**L-ARDL**	**N-ARDL**
Panel B				
LnY_t	0.1(0.09)	0.77(1.12)	1.74**(2.29)	1.6**(2.78)
$LnIR_t$	-0.18(-0.61)	-0.22(-0.82)	-0.12**(-2.50)	-0.10**(-2.85)
$LnEPU_t$	-0.06(-0.39)		-0.002(0.04)	
Post		-0.19(-0.59)		-0.069(-0.50)
NEG_t		-0.39(-0.98)		0.47**(4.30)
TREND	0.008*(1.79)		-0.01**(-5.14)	
Panel C				
F	1.99	1.06	2.5240*	1.33
ECM_{t-1}	-0.03(-1.71)*	-0.03(-1.80)*	-0.06(-2.28)**	-0.08(-3.33)**
LM	3.75	2.40	4.42	9.96**
RESET	0.06	0.03	0.79	3.16*
Adjusted R^2	0.40	0.41	0.59	0.63

	KOREA		NEW ZEALAND	
	L-ARDL	**N-ARDL**	**L-ARDL**	**N-ARDL**
Panel B				
LnY_t	-0.80**(-2.00)	-0.15(-0.094)	0.87(1.12)	0.44(0.57)
$LnIR_t$	-0.39*(-1.67)	-0.45(-1.49)	-0.52*(-1.88)	-0.32(-1.49)
$LnEPU_t$	-0.26(-1.14)		-0.05(-0.42)	
POS_t		-0.47(-0.88)		-0.16(-0.71)
NEG_t		-0.24(-0.28)		-0.32(-1.12)
TREND				
Panel C				
F	2.5531*	3.72**	2.5466*	0.96
ECM_{t-1}	-0.01(-1.70)*	-0.01(-1.43)	-0.03(-2.42)**	-0.03(-2.49)**
LM	9.85*	9.89**	1.62	1.75
RESET	0.32	0.54	1.31	1.16
Adjusted R^2	0.40	0.53	0.59	0.59

Notes: At a 5% significance level, the F-stat's critical values are 4.02 (upper) and 2.90 (lower). The LM test for residual serial correlation follows a $\chi 2$ distribution with one degree of freedom, with critical values of 21.02 (5%) and 18.54 (10%). Ramsey's RESET test, also known as $\chi 2$ with one degree of freedom, has critical values of 2.71 (10%) and 3.84 (5%). T-Ratios are in parenthesizes. ** and *, significance at 5% and 10%.
Source: Authors' calculations

Additionally, we use the CUSUM and CUSUMSQ tests, which were established by Brown et al. (1975) and applied to the model residuals, to evaluate the stability of the calculated coefficients in the short and long durations. According to the 5% crucial boundaries, the coefficients are considered stable over time when the related plots stay within those limits. Each test's findings corroborate the stability of both the short- and long-term estimations. In Panel C, the letter "S" denotes stable coefficients, while "U" indicates those that are unstable. Based on our findings, Australia and China are both stable, while the other countries are stable in the CUSUM and unstable in the CUSUMSQ. The adjusted R-squared values for the six

countries, excluding Korea, are all high and satisfactory, with values exceeding 0.5. the extra diagnostics are also entirely satisfactory and expand our confidence in the results.

4.1. Discussion

To find out if there are any cointegration linkages, this study uses the ARDL bounds testing method. The ability of the ARDL method to handle a combination of I(0) and I(1) variables in a single model is one of its main strengths. Furthermore, it excels at analyses that involve relatively small samples. In this study, we check for cointegration among the variables using the ARDL bounds testing method. In contrast to Baker et al. (2016), our research shows that uncertainty causes market volatility, which in turn impacts home values. The most noteworthy findings among these are from New Zealand and South Korea. When looking at the long-term effects of EPU in the Asia-Pacific region, New Zealand stands out as the country with the most unfavourable reaction. But it has a hugely beneficial effect on China, especially on South Korea. The elasticity of interest rates, income, and EPU varies across countries. Although short-term interest rates have a negative effect on Australian home values in the short-term, the results show that real interest rates and house prices do not appear to be causally related in the short-term. Financial frictions and credit restrictions exacerbate the impact of financial shocks on housing values, according to research by Jermann and Quadrini (2012), who examined the macroeconomic consequences of such shocks. When it comes to the housing market, the EPU can wreak havoc by influencing investor sentiment, interest rates, and household income. Exogenous shocks can significantly and persistently affect the stability of the housing market, as the prior study aims to demonstrate. House prices in all six nations are temporarily and significantly impacted by EPU, according to a mountain of research. Our findings are in line with those of Antonakakis et al. (2015), who also discovered that EPU moves in tandem with housing market returns during times of high uncertainty and that returns on investment in housing tend to be lower. Additionally, the study's dynamic analysis lends credence to our investigation of both the immediate and distant consequences of EPU on house prices, which are particularly notable during times of uncertainty. Not only do China and Singapore feel the good effects, but Japan and South Korea do as well in the near run. On the other hand, there are noticeable detrimental impacts in the near term in New Zealand and Australia. It was discovered that all coefficients in China and Australia are stable in all tests according to the CUSUM and CUSUMSQ tests. On the other hand, CUSUMSQ is not as consistent in Singapore, New Zealand, South Korea, and Japan. From what we can see, South Korea and Australia are more affected by shifts in income and interest rates, whereas Japan seems to be the most vulnerable to economic policy uncertainties. On the other hand, other local dynamics or policy considerations may have a greater impact on determining the housing market in New Zealand, since the correlation between EPU and home prices is weaker there. Because of these variations, it is critical to examine the effect of economic policies on home prices in the context of each country's unique economic climate.

5. CONCLUSION

This paper empirically examines the impact of economic policy uncertainty on housing prices in six countries in the Asia-Pacific region from 1990 to 2022, utilising quarterly data. The countries under study are New Zealand, Australia, Singapore, China, Japan, and Korea. The relationship between economic policy uncertainty and property markets in the Asia Pacific is a complex interaction, and our analysis highlights the subtle impact of EPU on house prices, indicating both short- and long-term effects. As past research cautions, ignoring uncertainty can lead to misestimations of housing demand and household behaviour. However, there is a lack of data from real studies that look at how housing market volatility affects economic policy uncertainty. This research aims to promote knowledge in this underexplored field by being one of

the few papers that concentrate on this subject within the Asia-Pacific setting. Both buyers and sellers will be impacted by the economy's volatility in the real estate market. The real estate market is impacted by economic instability through both supply- and demand-side variables. Growing uncertainty around housing demand or financing costs could prompt property developers to delay new construction projects, curbing overall supply. In addition, concerns regarding future income stability may lead households to delay their decisions to buy a home. Different income levels have varying demands for housing, and higher income levels tend to encourage developers to build more high-end or luxury housing. Fluctuations in interest rates caused by economic uncertainty lead to changes in borrowing and lending. In times of heightened economic uncertainty, financial institutions may similarly scale back or deny mortgages to riskier borrowers. Real estate market demand and prices could slow down as a result of increased uncertainty. Significant events such as the COVID-19 pandemic outbreak in 2020, the Asian financial crisis, and the aftermath of the global financial crisis were all part of the study's sample period.

The long-term effects of EPU on housing prices in different regions have been mixed, while the short-term effects have been mixed as well. While EPU boosts home prices in the long run, it has a devastating effect on prices in the near run in Australia. A key component of housing demand and pricing models, EPU has substantial short- and long-term effects. Differentiating the home pricing models of the six Asia-Pacific countries is essential in light of the divergent survey results. Also, the findings show that the government and the business sector need to think about the EPU's role when making housing investment decisions and housing policies.

In Australia, EPU has a positive long-term impact on house prices but a significant negative short-term impact. In other countries, the impact of EPU is more diverse, with some regions showing adverse effects and others showing positive effects, highlighting the importance of considering EPU when modelling house price dynamics. These results underscore the importance of policymakers considering EPU when developing housing policies, as its effects are not uniform across countries and over time. Given the differences in findings between the four countries in the Asia-Pacific region, it is necessary to distinguish house price models for each country.

For policymakers, this study underscores the importance of considering economic policy uncertainty when developing housing policies. In times of high uncertainty, housing markets are likely to experience volatility, which may undermine the effectiveness of housing-related policies. Policymakers should consider the dual role of EPU—as a demand and supply disruptor—when planning interventions, especially during times of economic instability or crisis. Understanding how uncertainty affects market demand can help policymakers implement more targeted and effective measures to stabilize the housing market. For investors, the results suggest that EPU plays a vital role in shaping housing market dynamics. Investors must be mindful of both the short-term volatility and long-term market changes that EPU may bring. Understanding how uncertainty affects factors such as consumer behaviour and interest rates can help investors make more informed decisions and adjust their strategies based on economic conditions. Additionally, the impact of EPU varies across Asia-Pacific countries, indicating that local market conditions should be carefully considered when making investment decisions.

Although there are a few caveats, this study does a good job of shedding light on how EPU affected home prices in four Asian nations. To start with, the study only looks at a few of nations, thus its findings might not apply to other areas with different housing market characteristics. To further understand the impact of EPU on housing prices in different economic contexts, future studies should broaden their focus to incorporate Eastern European, Latin American, or African nations. Secondly, the study only looks at data every three months, which is great for catching the big picture but might not capture the ebb and flow of economic uncertainty in some countries. To further understand how economic policy uncertainty impacts home values in real-time, future research might use datasets with higher-frequency observations, including

monthly or weekly data. Furthermore, the major driver of housing price volatility is economic policy uncertainty, which is the primary subject of this study. On the other hand, EPU could combine with other circumstances and make its impacts worse, such the global financial crisis, geopolitical concerns, or natural disasters. To better understand the impact of exogenous shocks on housing markets, future studies could investigate these interactions. Lastly, although this study focusses on how EPU affects home prices, future studies could expand their scope to include other housing market outcomes like rental prices, affordability, and supply dynamics. This would give a more complete picture of the housing market in times of uncertainty. Academics, investors, and policymakers may be able to better handle the difficulties of dealing with economic policy uncertainty in international housing markets if more research is conducted in this area.

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REFERENCES

Al-Shayeb, A., & Hatemi-J., A. (2016). Trade openness and economic development in the UAE: an asymmetric approach, *Journal of Economic Studies*, 43, 587-597.

Ali, S., Badshah, I., Demirer, R., & Hegde, P. (2022). Economic policy uncertainty and institutional investment returns: The case of New Zealand. *Pacific-Basin Finance Journal*, 74, 101797.

Andrikopoulos, A. A., & Brox, J. A. (1984). The urban housing market: A new approach for estimating demand for housing by dwelling type. *Journal of Urban Economics*, 15(2), 230-243.

Anoruo, E., Akpom, U., & Nwoye, Y. (2017). Dynamic relationship between economic policy uncertainty and housing market returns in Japan. *Journal of International Business and Economics*, 5(2), 28-37.

Antonakakis, N., Gupta, R., & André, C. (2015). Dynamic co-movements between economic policy uncertainty and housing market returns. *Journal of Real Estate Portfolio Management*, 21(1), 53-60.

Arize, A. C., J. Malindretos, & Igwe, E.U. (2017). Do exchange rate changes improve the trade balance: an asymmetric nonlinear cointegration approach. *International Review of Economics and Finance*, 49, 313-326

Baghestani, H. and S. Kherfi, (2015) An error-correction modeling of US consumer spending: are there asymmetries?, *Journal of Economic Studies*, 42, 1078-1094.

Bahmani-Oskooee, M. & Goswami, G. (2003). A disaggregate approach to test the J-curve phenomenon: Japan versus her major trading partners. *International Journal of Economics and Finance,* 27, 102-113.

Bahmani-Oskooee, M., & Durmaz, N. (2016). Exchange rate volatility and Turkish commodity trade with the rest of the world. *Economic Change and Restructuring* 49, 1-21. https://doi.org/10.1007/s10644-015-9172-8.

Bahmani-Oskooee, M. & Ghodsi, S. (2017). Policy Uncertainty and Housing Prices in the United States. *Journal of Real Estate Portfolio Management* 23, 73-85.

Baker, S., Bloom, N. & Davis, S. (2016). Measuring Economic Policy Uncertainty. *The Quarterly Journal of Economics*, 131, 1593-1636.

Białkowski, J., Gottschalk K., & Wisniewski, T. P. (2008). Stock market volatility around national elections. *Journal of Banking and Finance,* 32, 1941-1953.

Bloom, N. (2009). The impact of uncertainty shocks. *Econometrica* 77, 623-685.

Boutchkova, M., Doshi, H., Durnev, A., & Molchanov, A. (2012). Precarious politics and return volatility. *The Review of Financial Studies*, 25(4), 1111-1154.

Brown, R. L., Durbin, J., & Evans, J. M. (1975). Techniques for testing the constancy of regression relationships over time. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, 37(2), 149-163.

Chow, S. C., Cunado, J., Gupta, R., & Wong, W. K. (2017). Causal relationships between economic policy uncertainty and housing market returns in China and India: Evidence from linear and nonlinear panel and time series models. *Studies in Nonlinear Dynamics & Econometrics*, 22(2), 20160121.

Durmaz, N. (2011). Housing Prices and Fundamentals: The Role of a Supply Shifter. *Economics Bulletin*, 31(3), 2468-2479.

Durmaz, N. (2015). Industry Level J-Curve in Turkey, *Journal of Economic Studies*, 42, 689-706.

Durmaz, N. (2024). The effects of policy uncertainty on stock prices: revisiting with selected countries. *Ekonomika*, 103(3), 57-69.

Durmaz, N., Bian, S., & Gu, Y. (2025). Economic policy uncertainty and housing prices: evidence from Northern and Southern Europe, *International Journal of Housing Markets and Analysis*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJHMA-10-2024-0157.

El-Montasser, G., Ajmi, A. N., Chang, T., Simo-Kengne, B. D., André, C., & Gupta, R. (2016). Cross-country evidence on the causal relationship between policy uncertainty and housing prices. *Journal of Housing Research*, 25(2), 195-211.

Huang, W. L., Lin, W. Y., & Ning, S. L. (2020). The effect of economic policy uncertainty on China's housing market. *The North American Journal of Economics and Finance*, 54, 100850.

Jeon, J. H. (2018). The impact of Asian economic policy uncertainty: Evidence from Korean housing market. The *Journal of Asian Finance, Economics and Business*, 5(2), 43-51.

Jermann, U., & Quadrini, V. (2012). Macroeconomic effects of financial shocks. *American Economic Review*, 102(1), 238-271.

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

Kim, K. H. (2004). Housing and the Korean economy. *Journal of Housing Economics*, 13(4), 321-341.

Laurenceson, J., & Chai, J. (2003). *Financial Reform and Economic Development in China*. Cheltenham, UK: Edward Elgar.

Leblang, D., & Bernhard, W. (2006). Parliamentary politics and foreign exchange markets: The world according to GARCH. *International Studies Quarterly*, 50(1), 69-92.

Nguyen, C., & Nguyen, H. (2017). Monetary Policy and Residential Housing Bubbles in Japan: a quantile regression approach. *The Ritsumeikan Economic Review*, 65(4).

Nkoro, E., & Uko, A. (2016). Autoregressive Distributed Lags (ARDL) cointegration technique: Application and interpretation. *Journal of Statistical and Econometrics Methods,* 5, 63-91.

Nunns, P. (2021). The causes and economic consequences of rising regional housing prices in New Zealand. *New Zealand Economic Papers*, 55(1), 66-104.

Pesaran, H., Yongcheol, S., & Smith, R. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics,* 16, 289-326.

Ronald, R., & Chiu, R. L. (2010). Changing housing policy landscapes in Asia Pacific. *International Journal of Housing Policy*, 10(3), 223-231.

Shi, S., Jou, J. B., & Tripe, D. (2014). Can interest rates really control house prices? Effectiveness and implications for macroprudential policy. *Journal of Banking & Finance*, 47, 15-28.

Wadud, I. M., Bashar, O. H., & Ahmed, H. J. A. (2012). Monetary policy and the housing market in Australia. *Journal of Policy Modeling*, 34(6), 849-863.

Wang, S., Zeng, Y., Yao, J., & Zhang, H. (2020). Economic policy uncertainty, monetary policy, and housing price in China. *Journal of Applied Economics*, 23(1), 235-252.