



# The real and financial effects of policy uncertainty (by Ľuboš Pástor)



**Ľuboš Pástor** is Charles P. McQuaid Professor of Finance at the University of Chicago, research associate at the NBER and CEPR. Pástor received his Ph.D. in finance at the University of Pennsylvania in 1999. His research interests lie mainly in the area of finance and asset management. Pástor has published more than 20 articles in the top financial journals.

<sup>1</sup> Readers interested are referred to [www.policyuncertainty.com](http://www.policyuncertainty.com) for further details about the index.

The presentation of Professor Pástor focused on the issue of political uncertainty surrounding future government measures and their impacts on the financial market and real economy. By real implications the author means the effect of political uncertainty on real variables such as investment, output, or employment, whereas by financial implications he means the effect on asset returns, their volatility and correlation.

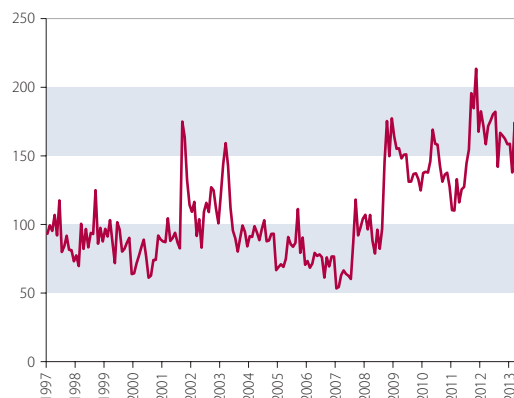
This research area is very topical. Due to the ongoing financial crises and economic recession in Europe, the level of political uncertainty regarding future economic policy measures has increased significantly; see Figure 1. For example, European citizens are currently concerned about government measures related to fiscal consolidation (e.g., tax hikes, expenditure cuts, etc.), structural reforms (e.g., the retirement age, labour market protection, etc.), and the banking union (e.g., deposit insurance policy, legacy issues, etc.).

The structure of Professor Pástor's presentation can be divided into three sections. In the first one he briefly explained how policy uncertainty can be measured in practice. Section 2 discussed the real and financial implications of policy uncertainty. Pástor made recommendations for the EU/EMU countries in Section 3.

## SECTION 1

In order to analyse the effects of policy uncertainty on either real or financial variables, some quantitative index (measure) of this specific uncertainty must be used. Professor Pástor relies on the Policy Uncertainty Index constructed as a weighted average of the following three components: (1) the number of words "uncertainty" and "policy" mentioned in 10 major US newspapers; (2) the number of federal tax code provisions set to expire soon; (3) disagreement among forecasters about future inflation and government spending.<sup>1</sup> It can be easily seen from Figure 1 that the European Policy Uncertainty Index peaked during the last financial crises (i.e. 2008-onwards).

**Fig. 1 European Policy Uncertainty Index**



Source: Scott Baker, Nicholas Bloom and Steven J. Davis at [www.PolicyUncertainty.com](http://www.PolicyUncertainty.com).

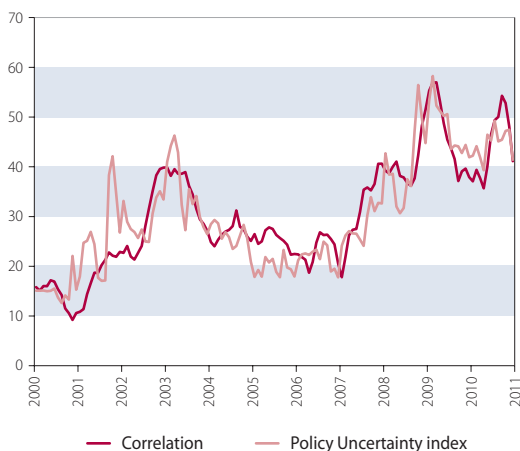
## SECTION 2

From the theoretical standpoint, there are two main economic channels through which policy uncertainty impacts on real variables:

1) The real channel is related to a trade-off between returns from early, but possibly irreversible, investments of economic agents (i.e. firms and households) and benefits from waiting and postponing investment decisions. Agents have an option to wait, and the value of this option rises with uncertainty. A nice example of this channel might be a well-known fact that households postpone their major purchases (i.e. purchases of cars or housing) when perceived uncertainty increases.

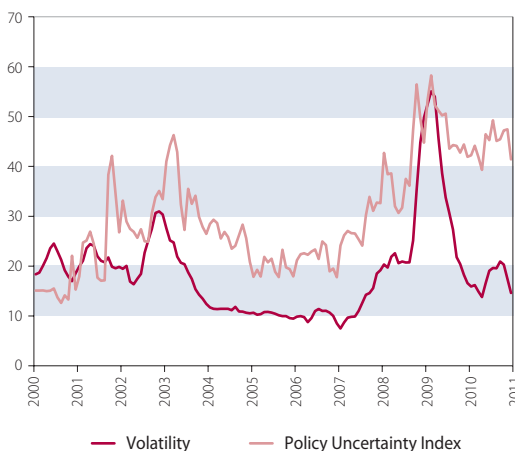


**Fig. 2 European Policy Uncertainty Index and S&P 500 correlation**



Source: Pástor and Veronesi, 2013, *Political uncertainty and risk premia*, Working paper.

**Fig. 3 European Policy Uncertainty Index and S&P 500 volatility**



Source: Pástor and Veronesi, 2013, *Political uncertainty and risk premia*, Working paper.

2) The financial channel is related to the fact that policy uncertainty, contrary to other forms of uncertainty, is not diversifiable. This means that higher policy uncertainty increases the risk premium and, thus, costs of borrowing, which subsequently reduces firms' investments and constrains households' purchases.

Pástor presented empirical evidence from various research studies using both macro- and micro-level data. The results suggest the following: (i) an increase in policy uncertainty negatively impacts real macroeconomic variables such as GDP, investment, and employment; (ii) the effect of policy uncertainty is stronger for firms with a higher degree of investment irreversibility and/or finance constraint.

New theoretical results about the financial effects of policy uncertainty follow from a general equilibrium model developed by Pástor and Veronesi.<sup>2</sup> The model comprises two types of policy-based uncertainty: (i) uncertainty about future government measures; and (ii) uncertainty about the impact of ongoing government measures. This model allows formal analysis of the effects of political news on stock prices. The results concerning the financial effects of policy uncertainty can be summarised as follows. First, policy uncertainty increases the risk premium embedded in stock prices. Moreover, the premium tends to be larger in bad economic conditions (e.g., recessions). The intuition is that the government is more likely to change its policy in weaker economic conditions, and so uncertainty about which new policy will be adopted matters more when the economy is weak. Second, policy

uncertainty makes stock prices more volatile and more correlated, especially in bad economic conditions. Both theoretical findings are supported by empirical evidence using the US data; see Figures 2 and 3. Figure 2 depicts the co-movement between the Policy Uncertainty Index in the US and the average pairwise correlation of stock returns from the S&P 500 index. Figure 3 shows the co-movement of the Policy Uncertainty Index in the US with stock volatility. Both pictures clearly illustrate that the behaviour of stock prices (correlation and/or volatility) is closely related to policy uncertainty in the economy.

As Professor Pástor pointed out, similar results apply to electoral uncertainty, or uncertainty about the results of national elections. In particular, firms tend to cut (or postpone) their investments by almost 5% during election years as a direct consequence of the irreversibility of their investments. A similar pattern in firms' behaviour can be found in the international context as well. For example, Pástor illustrated that the US firms cut their foreign direct investment by 14-21% during election years.

### SECTION 3

Based on the above-mentioned theoretical and empirical findings, Professor Pástor concluded that Europe would benefit from a reduction in policy uncertainty by speeding up structural reforms, clarifying the plans for fiscal consolidation, and finalizing banking regulations.

*(Compiled by Marián Vávra)*

<sup>2</sup> See Pastor and Veronesi (2013): *Political uncertainty and risk premia*, Working paper, University of Chicago.