

Politics, Policy, and International Stock Returns

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Abstract

Politics and policy are theoretically distinct, though interrelated, factors affecting the economy. Using novel measures of political stability and confidence in economic policy we document predictable variation in stock market returns and economic growth across countries. International business cycles, country characteristics, and standard international risk factors do not account for the return patterns across countries. Portfolio sorts on political stability and confidence in economic policy generate a new cross-section of stock market returns in both developed and emerging markets. Investment strategies that exploit the politics-policy predictability generate annualized abnormal returns as large as 8.8% for developed markets, and 25.5% for emerging markets. Bivariate sorts yield much higher abnormal returns than univariate sorts, confirming the importance of disentangling the two. Higher political stability and confidence in economic policy also forecast higher economic growth across countries. Our results suggest that international financial markets underreact to the predictable economic effects of political stability and economic policy.

JEL Classification: E62, F30, G15, G18.

Keywords: political uncertainty, political risk, economic policy, international financial markets, stock indices.

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1 Introduction

Politics shape policies and policies create politics, and our paper makes a step in disentangling the effects of politics and policy as distinct determinants of international stock market returns. Our point of departure is the work of Douglass C. North (1991b), co-recipient of the 1993 Nobel Memorial Prize in Economic Sciences, on institutions as ‘the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction’, and his classification of rules into “political (and judicial) rules, economic rules, and contracts”. Contracts are firm specific, giving rise to idiosyncratic risk, but political and economic policy variables create systematic risks that should be priced in the markets. North also argues for separating the analysis of the underlying political rules from the economic policy choices, but the interaction between politics and policies makes disentangling the two difficult. The present study is the first to document the importance of disentangling politics from policy in establishing and interpreting their effects on the international stock markets. We show that the impact of politics and policy on market returns is economically large and statistically significant, their effects are almost additive, and international risk factors or country characteristics can not account for the return patterns across countries.

North describes two channels through which rules affect economic performance, and consequently asset prices. First, by constraining the choices of maximizing agents, rules reduce uncertainty in exchange thereby determining the “uncertainty discount”, and, second, together with the technology employed, they determine “transaction and transformation costs”. Most financial economists would also agree that both politics and policy influence expected cash flows, and the uncertainty about their impact can affect the rate at which future cash flows are discounted. After establishing the significant impact of politics and policy on international stock market returns we investigate empirically the importance of these two channels.

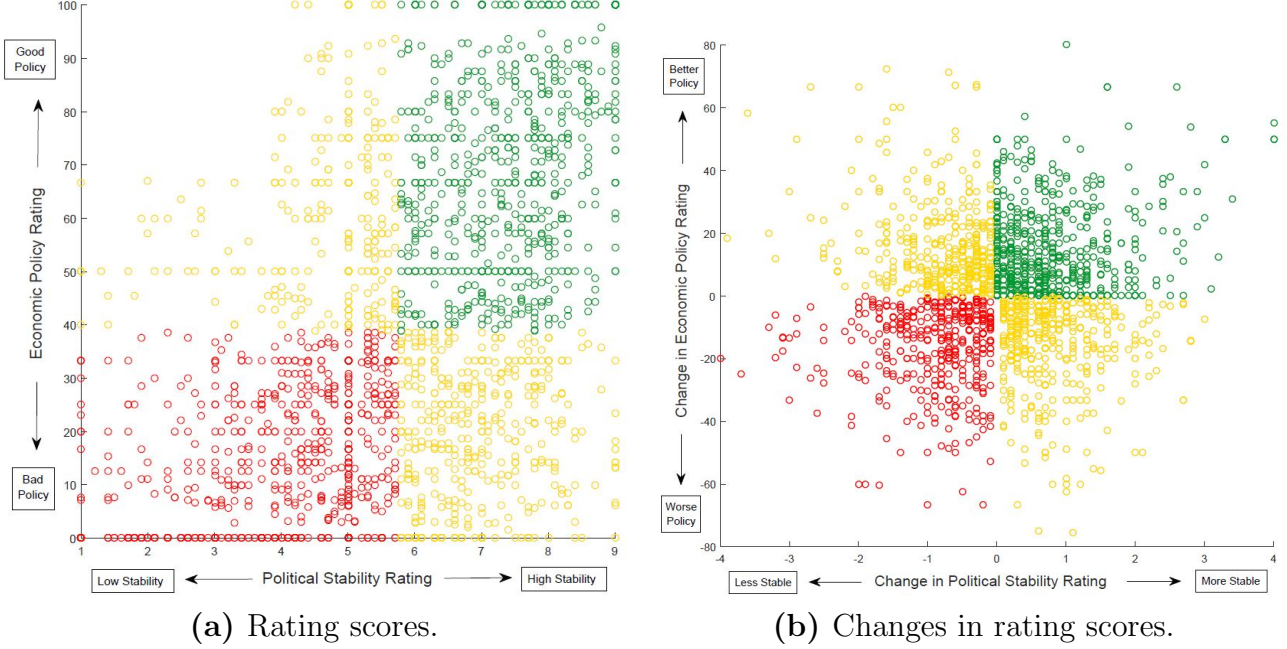
While the distinction of politics vis-à-vis policy is well established in the political science literature, in empirical finance studies the two are confounded. There is a latent assumption in most empirical works that politics matter because of the policies they usher in. Event studies around elections, a preferred method in empirical studies (Leblang and Mukherjee (2005); Bernhard and Leblang (2006); Julio and Yook (2012); Kelly et al. (2016); Jens (2017); among others), confound a political event (elections) with a change of policy depending on the election outcome. This may not imply loss of information (e.g., changing from a Republican to a Democrat president in the US signals significant policy changes), or it may not be relevant if one wishes to study the effect of elections without disentangling the politics from the policy aspect. In general, however, confounding the two entails loss of information. For instance, in parliamentary democracies a coalition government must be forged around some agreed policy program, as was the case of the recent German and Italian elections, and the policy implications do not depend solely on the political event. Or, a country may be on a specific policy path no matter which party wins the elections, such as was the case of Greece implementing a fiscal adjustment program under a liberal government, a coalition of liberals with the socialists, and the radical left. It is difficult to disentangle the two empirically.

To disentangle politics and policy we rely on North, and consider two measurable variables from the classes of political and policy rules, respectively, namely *political stability* and *confidence in government economic policy*, from a novel database of experts’ surveys —World Economic Survey (WES)— conducted by the Ifo Institute for Economic Research (Becker and Wohlrabe, 2007; Stangl, 2007). In Figure 1 we plot our measures of politics and policy ratings for 42 countries during 1992-2016, and observe that politics and policy do not move in tandem. Countries with highly rated policies and low rated politics, and vice versa, are not just few isolated cases, but rather we observe them often. This observation lends empirical support to North’s argument for separating the analysis of the underlying political rules from the economic policy choices, and

Figure 1

Political stability and economic policy

Plots of the ratings of political stability and economic policy for 42 economies during 1992-2016 from the Ifo World Economic Survey of Becker and Wohlrabe (2007); Stangl (2007). Panel (A) plots the levels of ratings. Panel (B) the changes in ratings.



(a) Rating scores.

(b) Changes in rating scores.

motivates our empirical study.

We identify the impact of politics and policy on asset prices by comparing the stock market performance of countries with ex-ante different politics and policy ratings. If politics and policy have significant impacts on asset prices, they can be identified by the differential performance of countries with heterogeneous ratings, *ceteris paribus*. Our research design proceeds in four steps. First, we establish that portfolios sorted on political stability or/and economic policy exhibit large and significant differences in average stock returns. Using Fama-MacBeth predictive regressions, we further confirm the significance of politics and policy, even after controlling for other variables well-known to predict the cross-section of country returns. Second, we estimate several international asset pricing models, and we show that most of the cross-country heterogeneity in expected returns cannot be explained by corresponding risk heterogeneity, regardless of the reference asset pricing model. Third, we identify economic growth as a plausible channel through which politics and policy affect stock market returns. Last, we perform several robustness tests to mitigate potential concerns including alternative measures of political stability and economic policy, alternative portfolio construction techniques, and data mining.

Our main empirical findings are as follows. First, we find abnormal returns on both bivariate and univariate sort portfolios, with the former being (almost) additive of the latter, and the results are consistent when using alternative datasets measuring political stability or policy uncertainty, although our dataset covers a broader cross-section spanning a longer time period. Second, since the new dataset covers a broad set of countries, we provide empirical evidence for both developed and emerging markets. Political stability and economic policy have different effects on stock returns for the two market classifications. Improvements in politics and policy lead to positive stock market returns for developed markets, but negative for emerging markets. In developed markets, countries with high political stability (economic policy) outperform countries with low political stability (economic policy) by about 4.2% (4.8%) per annum. Countries

with both high political stability and economic policy outperform countries with low political stability and economic policy by about 5.9% per annum. For emerging markets, the pattern in average returns is reversed. Specifically, countries with high political stability (economic policy) underperform countries with low political stability (economic policy) by about 10.5% (12.6%) per annum. Countries with both high political stability and economic policy underperform countries with low political stability and economic policy by about 13.9% per annum. These patterns hold even after controlling for country-level characteristics well-known to predict cross-country returns. We investigate whether the variation in average cross-country returns is due to differences in expected returns (risk premia) or abnormal returns by constructing investment long-short strategies exploiting the politics or/and policy predictability in cross-country returns. We find that these strategies yield abnormal returns as large as 8.8% for developed markets, and 25.5% for emerging markets, robust to different specifications of asset pricing models.

To understand the underlying economic channels driving the results, we investigate the relation among politics, policy and countries' fundamentals. Specifically, we test for the hypothesis that politics and policy have heterogeneous impacts on the stock market performance of countries with different politics and policy ratings due to differential effects on countries' future cash-flows. According to the expected cash-flows hypothesis, countries with high political stability and economic policy have higher expected economic growth than countries with low political stability and economic policy, consistent with their higher realized returns in developed markets, and vice versa in emerging markets. The empirical evidence shows that the pattern of future economic growth is consistent with the pattern in realized returns only for developed markets. Developed countries with high political stability and confidence in economic policy have high future economic growth and stock market returns. Emerging countries with high political stability and confidence in economic policy, however, have high future economic growth, but low stock market returns.

Overall, the empirical evidence on the positive predictability of future economic growth, along with the evidence on abnormal returns, suggests market mispricing of predictable economic effects of political stability and economic policy. This is particularly true for emerging economies, where the positive predictability of cash-flows works against the negative stock market returns.

We start with a narrative of few countries to witness the impact of major events on politics, policy, and stock market returns, and to show how these impacts are often in different directions. The narrative highlights the complexity of the processes under study and the need to disentangle politics from policy. We follow this by placing our contribution in the existing literature on political science and economics that informs the distinction between politics and policy, and the international asset pricing literature.

The rest of the paper is organized as follows. Section 2 describes the data including summary statistics of the novel measures of political stability and economic policy from WES. Sections 3 and 4 are the core of the paper. We first establish the economic and statistical importance of politics and policy in predicting international stock market returns. We then document that portfolio strategies exploiting the politics or/and policy predictability generate sizable abnormal returns. We further document the politics or/and policy predictability of economic growth. Section 5 carries out robustness tests of the main empirical findings. Section 6 concludes with a discussion. Appendix A provides additional details on the WES data.

1.1 Narrative Evidence on Politics and Policy

Our first example that politics are not indicative of policies is the post-colonial development of Barbados and Jamaica (Henry and Miller, 2008). From 1960 to 2002, Barbados experienced on

average 2.2.% GDP growth per capita annually, compared to 0.8% of Jamaica, and the income gap between the two islands increased almost five-fold. The divergence cannot be attributed to differences in institutions, as both countries maintained the Common Law inherited from the English Crown for property rights, independence of judiciary, and balance of government power. By contrast, their economic policies had been strikingly different. Jamaica proceeded, at least up to the 1980's, with state interventions, nationalizations, import barriers, exchange controls, income redistribution, budget deficits, and expansionary monetary policy. Barbados adhered mainly to budget discipline, monetary control, absence of tariffs, flexible exchange rate, and attention to competitiveness. Stable political institutions notwithstanding, the fate of the two islands was determined by their economic policies.

Using the WES dataset, which provides the backbone for our analysis, we identify several contemporary examples, Table 1.

Table 1

Events of Changes in Politics and Policy

Data for a group of countries from the Ifo World Economic Survey (Becker and Wohlrabe, 2007; Stangl, 2007) highlight big swings in political stability and economic policy ratings. We highlight events that precipitated changes. Political stability scores range from 1 to 9, and economic policy scores range from 0 to 100, with higher scores denoting more stable governments and more confidence in their policies.

COUNTRY	DATE	EVENT	POLITICAL STABILITY			ECONOMIC POLICY			Return Country	Return MSCI World
			Before	After	Change	Before	After	Change		
China	Nov 1, 2000–Oct 31, 2001	China dealing with Taiwan independence request	4.7	5.3	0.6	66.7	23.1	-43.6	-36.71%	-25.24%
Russia	May 1, 2001–Apr 30, 2002	Putin succeeds Yeltsin and implements reforms	4.5	3.5	-1	11.1	33.3	22.2	118.49%	-13.53%
UK	Nov 1, 2008–Apr 29, 2011	Elections, Gordon Brown and the Labor Party strongly defeated by Cameron	7.4	6.6	-0.8	0	33.3	33.3	62.68%	55.40%
Ireland	Nov 1, 2010–Apr 30, 2012	Ireland asks and receives support from IMF and EFSF, collapse of coalition government and elections	6.7	6.6	-0.1	0	66.7	66.7	19.73%	10.35%
Italy	Nov 1, 2010–Oct 31, 2012	Silvio Berlusconi resigns, Mario Monti becomes prime minister	5.1	4.3	-0.8	13	37	24	-24.04%	12.64%
Greece	May 1, 2011–Oct 31, 2012	Second bailout conditional on further austerity measures, prime minister Papandreu resigns	6.1	2.3	-3.8	0	0	0	-57.23%	-2.08%
Japan	Nov 1, 2012–Oct 31, 2013	Shinzo Abe gets elected, launching “Abenomics”	3.9	5.0	1.1	5.9	39.4	33.5	33.73%	26.48%
Spain	Nov 1, 2012–Apr 30, 2014	Spain asks assistance from EFSF for banking sector, receives up to EUR 100bn conditional on economic reforms	5.3	4.7	-0.6	4.2	22.9	18.7	54.37%	34.84%
Portugal	Nov 1, 2012–Oct 31, 2014	Financial credibility jeopardized by phase of high political instability	6.1	4.8	-1.3	0	23.5	23.5	8.87%	38.18%
France	Nov 1, 2013–Oct 30, 2015	Manuel Valls appointed prime minister after Jean-Marc Ayrault resignation following poor election results	6.1	5	-1.1	6.2	7.7	1.5	0.43%	11.80%

The events in Greece in 2011-2012 provide a characteristic case of policy creating politics, but politics leaving policies unaltered. During this period, the European Commission, European Central Bank, and International Monetary Fund, were negotiating austerity measures with the Greek government in exchange for financial assistance. When an agreement was reached, Prime Minister George Papandreou resigned and the country entered a period of political uncertainty, whereas the markets were not convinced that Greece could implement the agreed measures. Political stability plummeted and confidence in economic policy remained mired at the worst possible rating. The Athens stock market suffered losses of about 57% whereas the MSCI World index registered minor losses 2% during this period. A mirror image of the Greek situation was observed in Japan in 2012-2013. With the election of Shinzo Abe as Prime Minister, confidence in his three-arrows economic policy, “Abenomics”, improved significantly, but the stability score improved marginally on expectations that the new government would be as short-lived as its five predecessors. The MSCI Index for Japan registered modest gains compared to the World index.

China and Russia represent two big Asian economies that, at about the same period 2000-2002, witnessed opposite and big shifts in politics and policies. The ascend of Vladimir Putin to the presidency of Russia saw a deterioration in political stability, accompanied by a significant increase in government economic policy confidence. As a result of the commodities boom of the time, and prudent fiscal policies, Russia witnessed eight years of economic growth. China, on the other hand, saw a slight improvement in political stability but a significant decrease in government policy confidence. Interestingly, as Russia and China were mirror images of each other when it comes to politics and policy, and one might expect symmetric performances of their stock markets, Russia registered phenomenal gains and China modest losses, compared to the World index. On the other hand, Italy, that in 2010 experienced almost identical changes of its political and policy variables as Russia a decade earlier, experienced stock market losses about 35% vis-à-vis the index compared to the big gains of Moscow exchange.

Table 1 provides data for a few countries with significant swings in political stability or economic policy ratings. Changes are some times in the same direction, other times in opposite directions, and often only one variable changes. Comparing 22 developed economies and 20 emerging markets, ranked by political stability and economic policy, we notice several countries with significant differences in their two rankings, Appendix Table A2. For instance, the following countries are in the top half, according to politics score, but at the bottom half on policy confidence (difference in parentheses): Japan (16), France (14), USA (14), and Hungary (15). The reverse is true for China (-19), Colombia (-19), and Peru (-23). The Kendall- τ correlation coefficient between politics and policy rankings is 0.34 for all countries, and even lower for developed (0.29) and emerging (0.02) economies. Ranking by political stability is not indicative of ranking by economic policy.

The implications of changes in politics and policies for stock market returns are intuitive for some cases. Simultaneous improvements in politics and policies for Japan lead to market gains. Ireland with virtually constant political stability and significant improvement in policy also witnessed gains. Greece stock market suffered significant losses as both politics and policies deteriorated. However, mixed signals from politics and policies in Russia and China have opposite effects on stock market returns, and the same is true when comparing the mixed signals from politics and policies of the UK, France, Spain, and Portugal. Politics worsened and confidence in policies improved, but UK and Spain outperformed the MSCI index, while France and Portugal underperformed. Overall, these selected events provide simple evidence on how politics and policy are distinct and have different impact on international stock markets.

1.2 Related Literature

The distinction between politics and policy is well established in the political science literature since the work of North (1991a,b), although (Schattschneider, 1935, p. 288) had argued much earlier that “new policies create a new politics”. It did not take long for scholars to start addressing the question of how institutional arrangements affect economic policy and economic performance (Persson and Tabellini, 1999; Persson, 2002; Persson and Tabellini, 2004), including public finance (Persson et al., 2000), and corporate investment and employment activity (Cohen et al., 2011). Theoretical explanations of the links between various aspects of political risk and economic policy risk have been advanced by Przeworski and Limongi (1993); Svensson (1998); Acemoglu (2005).

“Politics” is a broad term, and several aspects of institutional arrangements have been identified to measure political risks (Kobrin, 1979). Components of political risk include political stability (Mauro, 1995; Alesina et al., 1996; Jong-A-Pin, 2009), corruption (Mauro, 1995), and legal and administrative restrictions (Mauro, 1995; La Porta et al., 1997). The effect of political stability on economic growth have been investigated empirically in (Barro, 1991; Alesina et al., 1996; Aisen and Veiga, 2013; Gurgul and Lach, 2013), among others. Given the availability of experts’ survey data, our paper focuses on political stability as the main dimension of politics, and investigates its impact on both economic growth and stock market returns on a large sample of developed and emerging countries. However, our innovation is not in using a new measure of politics, but in extending this strand of literature from a univariate to a bivariate setting, aligning with North’s argument for separating the analysis of politics from the policy choices of economic agents.

Our paper contributes to a growing literature about the effects of politics or policy on financial markets. Early evidence on the impact of political instability on financial markets is provided by Bittlingmayer (1998), who documents that political events were the main source of financial volatility during the German transition from Imperial to Weimar Republic. More recently, Pástor and Veronesi (2012, 2013) build general equilibrium models featuring government policy uncertainty, and more generally, political uncertainty as main sources of risk premia, and provide supporting empirical evidence based on the measure of policy uncertainty from Baker et al. (2016). Brogaard and Detzel (2015) also use the policy uncertainty index in Baker et al. (2016) to document the negative impact of economic policy uncertainty on US stock market returns. Henry (2000b,a) documents that economic policies such as financial liberalization and economic reforms create abnormal returns for equities and lead to private investment booms, and Gulen and Ion (2015) document a strong negative relationship between policy uncertainty and corporate investment. Our choice of the two variables —political stability and confidence in government economic policy— is motivated by the work of (Pástor and Veronesi, 2013; Kelly et al., 2016) who document a risk premium for political uncertainty and (Pástor and Veronesi, 2012; Brogaard and Detzel, 2015) who establish the impact of policy uncertainty on asset prices.

Political uncertainty has been examined also in the context of the relationship with foreign direct investments (Busse and Hefeker, 2007), sovereign bond spreads (Bekaert et al., 2014), and interest rates (Caporale and Caporale, 2008). Several papers have used election events to identify the impact of political uncertainty on equity, bond, currency and options markets (Leblang and Mukherjee, 2005; Bernhard and Leblang, 2006; Białkowski et al., 2008; Boutchkova et al., 2012; Kelly et al., 2016) and corporate investment (Julio and Yook, 2012). Similarly, political cycles have been used to identify the impact of government policies on asset prices (Santa-Clara and Valkanov, 2003; Belo et al., 2013) and investment and employment activity (Cohen et al., 2011). We contribute to this literature by disentangling politics from policy, and investigating their impact on a large sample of cross-country stock market returns. Importantly,

we measure directly political stability and confidence in economic policy through semi-annual experts' surveys rather than indirectly via election events that have much lower frequency, and often confound politics and policy.

As a by-product of our analysis, we also contribute to the literature on the political risk sign paradox (Perotti and Van Oijen, 2001; Lehkonen and Heimonen, 2015; Dimic et al., 2015) holding that politically safer countries have higher stock market returns than politically riskier countries. Our findings for developed markets provide further evidence, and highlight how the positive predictability of cash-flows provides a plausible economic channel driving the empirical evidence on the political risk sign paradox.

Finally, our empirical findings are related to the empirical international asset pricing literature investigating the importance of multiple factors in pricing the cross-section of country returns (Adler and Dumas (1983); Bekaert and Hodrick (1992); Ferson and Harvey (1993); Lustig et al. (2011); Brusa et al. (2014); among others). Our work emphasizes the role of politics and policy in predicting the cross-section of country returns, and investigates the risk-return properties of equity investment strategies exploiting the politics-policy predictability.

In reviewing the literature we noted that politics and policy are often confounded. While the lack of distinction does not pose methodological problems on previous findings, we recognize that political science literature attaches importance to distinguishing politics and policy, and our work uncovers significant differential impacts on international stock market returns and the real economy. Political stability and economic policy are theoretically distinct variables, and, historically, they do not move in tandem. To the best of our knowledge, this is the first study where such distinction takes center stage.

2 Data

In this section, we describe the data used in the empirical analysis and explain the construction of the measure of political stability and confidence in economic policy.

2.1 Political Stability and Economic Policy Data

Our main source of data for political stability and confidence in economic policy is the Ifo World Economic Survey (WES) (Becker and Wohlrabe, 2007; Stangl, 2007).¹ This is a survey of national experts conducted by the Ifo Institute for Economic Research in Munich, in cooperation with the Paris based International Chamber of Commerce, and financial support from the European Commission. The survey is conducted semi-annually and results are announced in February and August of each year. We use data for 22 developed markets and 20 emerging markets during the period from January 1992 to December 2016, based on the Morgan Stanley Capital International (MSCI) classification of a country for each year.²

¹Data at www.cesifo-group.de/ifoHome/facts/Survey-Results/World-Economic-Survey.html, last accessed February 2018.

²MSCI has indices for 46 countries, but we exclude the four for which WES has no data, i.e., Singapore, Indonesia, Kuwait, and Saudi Arabia. All results in the paper are based on dynamic sets of classification of developed and emerging markets according to MSCI, and for the majority of the years during the sample period there were 22 developed and 20 emerging markets. Using a static classification, based on a country's status for the majority of the years, yields no significant changes in empirical results. The last classification in our sample period lists the following developed countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong-Kong, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain,

The WES surveys national experts in economics (54%), business (19%), natural sciences (10%), with the remaining 17% from professional and applied sciences, other social sciences, law, or humanities. About 65% of the experts work for international corporations, 10% in economic research institutes, 10% in chambers of commerce, 5% for consulates and embassies, and 10% are affiliated with international organizations, foundations, media and the press, or small scale enterprises. The panelists are in leading positions or engaged in economic research, and over 40% have a PhD. WES surveys from 6 to 50 experts per developed country, with an average 16.4 and median 14.1, and 5 to 48 experts per emerging economy, with average 10.5 and median 13.4. For additional details see Appendix Table A1.

The survey provides longitudinal data to “enable[] analysis of economic, financial, political and investment climate across countries and how it has changed over time” (Stangl, 2007, p. 488-489), and is well-suited for our work. While the survey has been used previously in several studies (Kawasaki et al., 1982, 1983; Nerlove, 1983; Becker and Wohlrabe, 2007), to the best of our knowledge, we are the first to use it for analysis in financial markets.

The variables we construct are based on answers to the following questions:

1. “[A]ssess the importance of the following problems the economy of your country is facing at present: Lack of confidence in the government’s economic policy.”
2. “[A]ssess the importance of the following factors which influence the climate for foreign investors in this country: political instability is absent, low or high.”

The survey participants assign 100 or 0 to the lack of confidence question, with 100 denoting total lack of confidence. For political instability, “absent” receives the value 9, “low” receives 5, and “high” receives 1. WES reports the average of the experts’ answers to each question, so that political stability is rated from 1 (low) to 9 (high), and policy confidence rated from 100 (low confidence) to 0 (high confidence). For ease of interpretation, and consistency between the two variables, we linearly transform the policy ratings to denote by 0 the lowest confidence and 100 the highest confidence. These two measures encompass the multiple dimensions of political stability in a single variable and, salient to our study, differentiate political stability from economic policy.

Figure 2 illustrates the distribution of experts’ assessments for developed and emerging markets during the testing period, and summary statistics are given in Table 2. The average score for political stability is 6.73 for developed markets, and 4.59 for emerging markets, with corresponding standard deviations of the ratings of 1.16 and 1.41, respectively. The most stable developed countries were the Scandinavian, Switzerland and the US, whereas low scores are associated with Spain, Greece, and Belgium. For emerging markets low stability is associated with Israel, Turkey, and Egypt, whereas Chile is among the most stable.

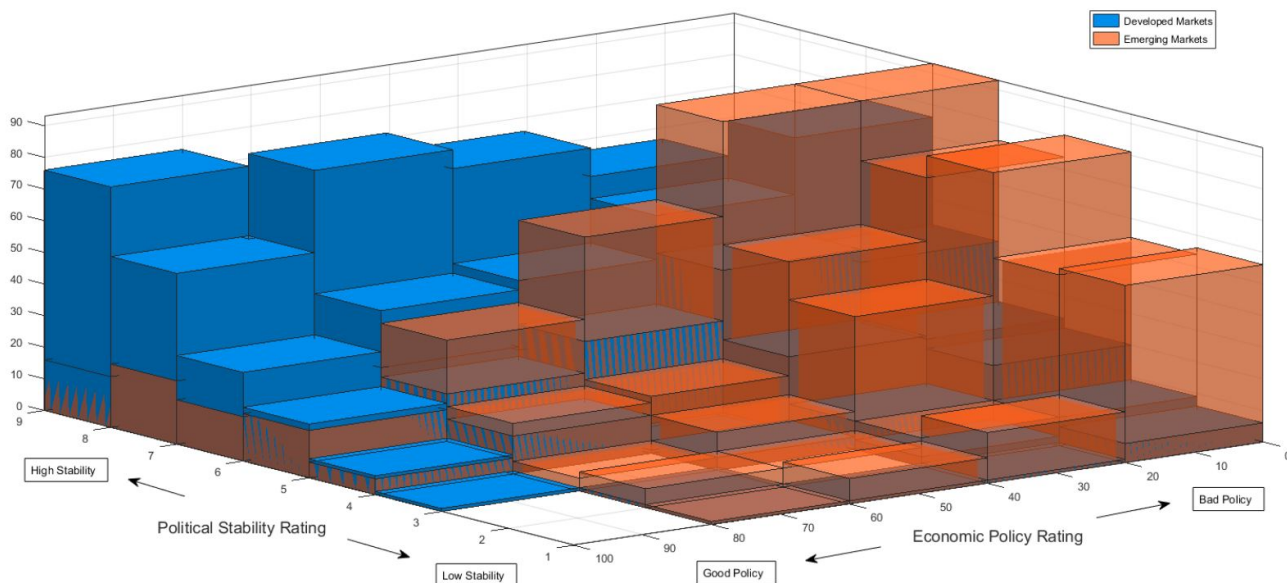
The average scores for confidence in economic policy is 46.09 for developed markets, and 30.34 for emerging markets, with corresponding standard deviations of 24.98 and 22.35, respectively. The Nordic countries and Canada are highly rated developed countries, along with China and Chile for emerging markets. There is sufficient variability of the variables over time, and, as expected, the differences between developed and emerging markets are significant. As shown in Figure 2, we further note that the two market segments occupy distinct locations in the space of the two variables.

Another, highly regarded, source of data for economic policy uncertainty is Baker et al. (2016),

Sweden, Switzerland, UK, US. The emerging countries are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Israel, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey.

Figure 2

Distribution of WES Political Stability and Economic Policy, 1992-2016



constructed using natural language processing of newspaper articles and used in some of the studies cited above (Pástor and Veronesi, 2012, 2013; Brogaard and Detzel, 2015; Gulen and Ion, 2015; Leduc and Liu, 2016). This data covers only twelve developed and eight emerging markets, from the total of 42 countries we study. We use the measure of economic policy uncertainty of Baker et al. (2016) and the assessment of the World Bank for political stability (World Bank, 2018) for robustness tests. However, these datasets do not admit to bivariate tests since they have different periodicity and have few countries in common.

2.2 Financial and Economic Country Data

We use Datastream for real GDP growth, unemployment rate, inflation, primary balance as a ratio to GDP, debt-to-GDP ratio, growth rate of industrial production, the slope of the term structure between the 10-year and 3-month interest rates, and VIX. Stock market returns are from the MSCI Global Market Indices (Investable) denominated in USD. Following Brusa et al. (2014) we use the MSCI Investable Indices (since MSCI Investable Indices were created in 1994, we use the standard MSCI Indices for 1992 and 1993), and also also use the standard MSCI Indices for robustness test.

We obtain the factors for testing the World CAPM, International CAPM, Fama-French three-factors (abbreviated, FF3), Carhart, and Fama-French five-factors (abbreviated, FF5) directly from Kenneth French's website.³ Data for the CAPM Redux are from Hanno Lustig's website.⁴ The data ends at June 30, 2015, and we construct carry trade and dollar factors until the end of our testing period using FX spot and forward data from Thomson-Reuters.

We have monthly data for returns, quarterly for macro and financial variables, and semi-annually for the politics and policy variables. We carry out the empirical analysis using the finer discretization possible that avoids any data interpolation. In particular, for the returns regressions, we align all data on a semi-annual basis by compounding appropriately all quarterly and monthly

³http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#Developed

⁴<https://people.stanford.edu/hlustig/data-and-code>

data. We estimate the asset pricing models using monthly data, and the predictive regressions of economic growth using quarterly data.

Table 2

Summary statistics of political stability and confidence in economic policy, WES, 1992-2016

	Developed markets				Emerging markets				
	Stability		Policy		Stability		Policy		
	Mean	StDev	Mean	StDev	Mean	StDev	Mean	StDev	
Austria	7.63	0.78	50.51	21.75	Czech republic	4.95	1.59	34.14	28.87
Belgium	5.70	1.39	41.60	22.69	Hungary	5.62	1.35	16.74	16.59
Denmark	7.38	0.96	64.67	24.66	Poland	4.90	1.50	26.84	20.19
Finland	7.93	0.78	61.33	31.63	Russia	3.95	1.58	15.67	13.73
France	6.69	1.07	30.16	22.92	Brazil	4.83	1.72	32.48	23.73
Germany	7.36	0.47	30.42	22.44	Chile	6.97	1.08	62.01	30.70
Greece	6.19	2.32	29.20	30.31	Colombia	4.20	1.48	41.95	23.99
Ireland	7.07	0.92	60.34	33.09	Mexico	4.67	1.17	26.37	23.00
Italy	4.01	1.32	15.24	13.36	Peru	3.71	1.39	39.55	24.02
Netherlands	7.33	1.11	62.86	24.66	Israel	3.96	1.85	26.03	21.02
Norway	7.60	1.17	72.38	26.04	Turkey	3.79	1.51	23.18	21.97
Spain	6.09	1.52	39.17	28.37	China	5.27	0.73	62.04	22.40
Sweden	6.67	1.19	51.01	27.93	India	4.47	1.68	36.89	24.70
Switzerland	7.94	0.75	65.71	19.49	South Korea	4.94	0.76	21.89	18.61
UK	6.88	1.41	44.44	29.34	Malaysia	5.36	1.59	44.80	32.76
Canada	6.49	1.32	68.69	23.42	Philippines	4.30	1.57	31.47	30.29
USA	7.21	0.93	35.88	27.03	Taiwan	4.37	1.45	6.72	12.53
Hong-Kong	5.71	1.19	30.99	22.42	Thailand	3.16	1.26	17.79	19.43
Japan	5.95	0.99	18.68	14.90	Egypt	3.89	1.44	12.32	16.76
Australia	7.18	1.21	53.59	27.65	South Africa	4.48	1.46	27.91	21.68
New Zealand	6.27	1.12	50.23	28.31					
Portugal	6.83	1.53	36.90	27.08					
Averages	6.73	1.16	46.09	24.98		4.59	1.41	30.34	22.35

3 Impact of Political Stability and Economic Policy

To investigate the relationship among politics, policy, and stock returns, we form portfolios sorted on political stability or/and economic policy confidence and compare top quintile and the bottom quintile portfolios. We refer to these portfolios as the politics-, policy-, and politics-policy portfolios, respectively, with H denoting the top and L the bottom quintiles. This portfolio sorts approach is a convenient way to investigate our research question. By construction, these portfolios maximize the spread in the politics and policy variables and, thus, differences in their average returns can be more accurately attributed to differences in the sorting variables.

3.1 Politics-Policy Portfolios

On the last day of the month of each WES announcement we create equally-weighted portfolios of the MSCI Investable Indices sorted by political stability and economic policy ratings. We form portfolios based on univariate sorts on political stability or economic policy confidence, and portfolios based on unconditional bivariate sorts on both politics and policy variables. We consider separate portfolios for developed and emerging markets. The portfolios are rebalanced semi-annually according to the public release of the Ifo survey.

For univariate sorts, each portfolio represents on average about 8-9 markets, and for bivariate sorts, each portfolio represents on average about 4-5 markets, which mitigates concerns that our results could be driven by few markets only. Table 3 shows the average annualized returns of the politics-policy portfolios over the sample period 1992-2016. In developed markets, the high political stability portfolio outperforms the low political stability portfolio by about 4.2% p.a., and this difference is statistically significant at conventional levels. Likewise, the high economic policy portfolio outperforms the low economic policy portfolio by a statistically significant 4.8%. The average returns of double-sorted portfolios exhibit a fairly monotonically increasing pattern in both politics and policy dimensions. The spread portfolio that is long on high politics-policy and short on low politics-policy generates an average return of about 5.9% per annum. In all cases, the spread portfolios generate sizable Sharpe ratios ranging from 0.37 to 0.42.

Interestingly, there is a reversal in the pattern of average portfolio returns in emerging markets. Specifically, the high political stability portfolio underperforms by about 10.5% the low political stability portfolio. Likewise, the high minus low economic policy portfolio generates about -12.6% per annum. The average returns of double-sorted portfolios exhibit a monotonically decreasing pattern in both politics and policy dimensions. The spread portfolio that is long on high politics-policy and short on low politics-policy generates an average return of about -13.9% per annum. In all cases, the spread portfolios generate large Sharpe ratios ranging from 0.54 to 0.56 in absolute value.

These empirical findings suggest that politics and policy have first-order impacts on stock market returns, and that such impacts are substantially different for developed and emerging markets. Average returns are positively related to both political stability and economic policy for developed markets, but they are negatively related for emerging markets.

3.2 Politics, Policy and Country Characteristics

The previous analysis provides preliminary evidence on the predictability of the cross section of stock market returns across countries by the political stability and economic policy confidence variables. However, these variables could be correlated with other country characteristics known

Table 3**Average Returns of Politics-Policy Portfolios**

We report annualized average returns of both univariate- and bivariate-sorts portfolios based on political stability and economic policy ratings. “H - L” and “H/H - L/L” are the returns of the high minus low, and high/high minus low/low spread portfolios, respectively. Returns are in percentages. The asterisk (*) denotes statistical significance at least at the 10% level. The sample period is from January 1992 to December 2016.

(A) Univariate Sorts						
	Developed Markets			Emerging Markets		
	Policy	Stability		Policy	Stability	
High	9.47	9.48		4.04	7.21	
Medium	8.48	8.32		8.80	9.29	
Low	4.67	5.30		16.60	17.73	
H-L	4.81*	4.18*		-12.56*	-10.52*	
p-value	(0.04)	(0.07)		(0.01)	(0.01)	
Sharpe Ratio	0.42	0.37		-0.56	-0.56	
(B) Bivariate Sorts						
Stability	Policy			Policy		
	Low	Medium	High	Low	Medium	High
High	4.32	8.64	8.63	11.45	8.73	3.39
Low	2.72	6.96	4.15	17.25	15.14	7.10
H/H-L/L	5.91*			-13.86*		
p-value	(0.06)			(0.01)		
Sharpe Ratio	0.38			-0.54		

to predict stock market returns. To identify the marginal predictive power of each variable, we run standard Fama and MacBeth (1973) regressions (Fama and MacBeth, 1973) of semi-annual stock market returns for developed and emerging countries on political stability, economic policy confidence, and other country-level characteristics.

Table 4 reports the results for four different empirical specifications. In the first specification (Row 1) we include a constant and the political stability variable. In the second specification (Row 2), we include a constant and the confidence in economic policy variable. In the third specification (Row 3), we include a constant and both politics and policy variables. In the last specification (Row 4), we add to the previous bivariate specification other well-known stock market returns predictors as control variables. Following the literature, we include macroeconomic variables such as *GDP* growth rate (Birz and Lott, 2011; Brogaard and Detzel, 2015) and *unemployment* log growth rate (Clare and Thomas, 1994; Boyd et al., 2005), and financial variables, namely the *slope* of the term structure as the difference between the 10-year and 3-month interest rates (Chen et al., 1986) and the depreciation of the national *currency* with respect to the USD.

The politics and policy variables contain information about future stock market returns across countries beyond the information in all the other country characteristics. The slope coefficients for both politics and policy variables are positive for developed markets and negative for emerging markets, consistently with the evidence on portfolio sorts. In all cases, both variables are statistically significant, even after controlling for other country characteristics.

Following Harvey (2017), we interpret the economic significance of the regression coefficients as the marginal increase in future returns if a country were to improve its political stability and economic policy ratings and move up to the next quartile. Using the coefficients from univariate

Table 4**Fama-MacBeth Cross-Sectional Regressions**

This table reports the results of Fama and MacBeth (1973) cross-sectional regressions of semi-annual returns on lagged country characteristics. Returns are computed for the semester following the month of the release of the politics and policy variables. “Stability” denotes political stability, “Policy” denotes confidence in economic policy, “GDP” is the GDP growth rate, “Unemployment” is the unemployment rate, “Slope” is the slope of the term-structure of interest rates, and “Currency” is the depreciation of the national currency with respect to the USD. Panel A reports results for developed markets, and Panel B for emerging markets. Variables are orthogonalized, and all regression coefficients are scaled by 100. p-values with Newey-West correction (1987) are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. Sample period is from January 1992 to December 2016

(A) Developed Markets

Row	Stability	Policy	GDP	Unemployment	Currency	Slope
1	0.43* (0.10)					
2		0.03* (0.03)				
3	2.99* (0.06)	2.29* (0.10)				
4	3.06* (0.05)	2.27* (0.10)	0.97 (0.65)	-0.95 (0.60)	0.55 (0.62)	-2.91 (0.16)

(B) Emerging Markets

Row	Stability	Policy	GDP	Unemployment	Currency	Slope
1	-0.75* (0.01)					
2		-0.06* (0.05)				
3	-5.71* (0.01)	-4.86* (0.09)				
4	-4.22* (0.03)	-5.52* (0.08)	-5.81 (0.14)	-2.21 (0.65)	0.00 (0.99)	0.63 (0.88)

regressions in Table 4 we calculate that a developed economy improving its economic policies will have an average increase in future annualized stock market returns of 2.5%.⁵ Similarly, if a developed country improves its political stability up to the next quartile, its future annualized stock market returns will increase on average by 3.5%.⁶

The economic significance is even larger for emerging markets. Future stock market returns for an emerging economy deteriorates on average by 5.5% per annum following an improvement in its economic policy ratings. Similarly, an improvement in political stability for an emerging

⁵Economic policy ratings range from 0 to 100, with each quartile corresponding to an increment of 25 points. Hence, future stock market returns improve by $0.025\% \times 50$ per semester, or 2.50% per annum.

⁶Political stability ratings range from 1 to 9, with each quartile corresponding to a change of 2 points on average. Hence, future stock market returns improve by $0.43\% \times 4$ per semester, or 3.45% per annum.

economy yields on average a decrease of 6.0% per annum in future stock market returns.

4 Understanding the Impact of Politics and Policy

4.1 Risk Premia or Abnormal Returns?

The previous analysis shows differences in the realized returns of the politics-policy portfolios, with these differences being considerably larger in emerging markets. In this section, we investigate whether the observed pattern in realized returns of these portfolios can be attributed to variation in expected returns (risk-premia) or abnormal returns.

Differences in expected returns would be consistent with a risk story requiring developed countries with higher political stability and better economic policy to be riskier than countries with lower political stability and worst economic policy, with the reverse being true for emerging markets. In contrast, if the pattern in the returns of the politics-policy portfolios is due to abnormal returns, it would suggest that the market misprices systematically the impact of politics and policy on stock returns. In other words, abnormal returns would occur when the political stability and economic policy ratings deviate systematically from what the market anticipates. To address this question, we impose the structure of a multifactor asset pricing model to formally control for risk and test for the presence of abnormal returns in the politics-policy portfolios.

The unconditional average returns of political stability and economic policy spread portfolios (H-L) over the entire sample period are large and statistically significant in both developed and emerging markets. Thus, we focus our analysis on the risk and return properties of portfolios that capture the pattern in returns across countries in a simple manner. We consider politics, policy, and politics-policy spread portfolios. Each portfolio represents a long-short investment strategy that is long the top quintile portfolio and short the bottom quintile portfolio along each dimension of interest.

Following the international asset pricing literature, we consider different asset pricing models including World CAPM, International CAPM, International Fama-French three-factors, International Carhart, International Fama-French five-factors, and CAPM Redux. By allowing for several risk factors, we maximize the ability of the asset pricing models to explain the time-series variation in the expected returns of the test portfolios, thus minimizing the likelihood that omitted risk factors could be responsible for our findings.

We test for abnormal returns by estimating the regression

$$R_{j,t+1} = \alpha_j + \sum_{i=1}^N \beta_{j,i} \times R_{i,t+1}^* + \epsilon_{j,t+1} \quad (1)$$

where $R_{j,t+1}$ is the monthly excess return on test portfolio j , $\beta_{j,i}$ is the portfolio j loading on risk factor i , and $R_{i,t+1}^*$ is the monthly excess return of the risk factor i for each alternative asset pricing model. If the average returns of the politics-policy portfolios are explained by exposure to standard international risk factors, then the intercept - α - should be statistically indistinguishable from zero.

Table 5 reports the politics, policy, and politics-policy portfolios' alphas from monthly time-series regressions of Eq. (1) for all the alternative international asset pricing models. In all asset pricing models specifications, we can reject at conventional levels the hypothesis that the

abnormal returns of the policy spread portfolio are zero. For developed markets, the abnormal returns of the policy spread portfolio range from 4.0% per annum in the International Fama-French five-factor model to 5.7% per annum in the International Fama-French three-factor model. For emerging markets, the alphas of the policy spread portfolios are negative and range from -15.0% per annum in the International Fama-French five-factor model to -10.1% per annum in the International CAPM.

The abnormal returns for the politics spread portfolio are also as large as 4.45% per annum in the International Fama-French three-factor model for developed markets, and -13.2% per annum in the International Carhart for emerging markets. The statistical significance of these alphas is strong for emerging markets, while it is relatively weaker for developed markets depending on the asset pricing model specification, in line with the literature consensus that current asset pricing models do not explain well average returns of emerging markets. We attribute this relatively weaker significance to the low variability of political stability ratings within developed markets. However, the importance of political stability is established also for developed markets when considered jointly with the economy policy ratings. The abnormal returns of the politics-policy portfolio are mostly statistically significant at conventional levels across asset pricing models. For developed markets the alphas range from 6.4% per annum in the International CAPM to 8.8% per annum in the International Fama-French three-factor model. For emerging markets, the alphas stay negative and large, ranging from -19.3% per annum to -25.5% per annum. The significantly larger alphas for double-sorted portfolios, compared to univariate portfolios, emphasize the importance of disentangling politics and policy.

These results suggest that most of the differences in returns across politics, policy, and politics-policy portfolios are due to abnormal returns rather than risk premia. Consistently with the large mispricings across all international asset pricing models, financial markets seem to under-react to the predictable effects of political stability and economic policies.

Table 5

Abnormal Returns on Politics-Policy Portfolios

This table reports the average annualized abnormal returns (alphas) of the politics, policy, and politics-policy spread portfolios. Portfolios are rebalanced semi-annually with portfolio monthly excess unhedged returns calculated monthly in USD. Panel A reports results for developed markets, and Panel B for emerging markets. The abnormal returns of these portfolios are obtained from several alternative international asset pricing models: World CAPM, International CAPM, International Fama-French three-factors, International Carhart, International Fama-French five-factors, and CAPM Redux. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

(A) Developed Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	4.70* (0.03)	5.72* (0.01)	5.62* (0.01)	4.04* (0.06)	4.67* (0.03)	4.72* (0.03)
Politics Spread Portfolio (H-L)	3.49* (0.10)	4.45* (0.05)	4.36* (0.06)	2.99 (0.21)	3.69* (0.09)	3.74* (0.09)
Politics-Policy Spread Portfolio (H/H-L/L) -policy and stability	6.61* (0.06)	8.81* (0.02)	8.25* (0.03)	6.43* (0.09)	6.41* (0.07)	7.03* (0.05)

(B) Emerging Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-10.67* (0.01)	-12.66* (0.01)	-12.82* (0.00)	-15.00* (0.00)	-10.14* (0.01)	-10.18* (0.01)
Politics Spread Portfolio (H-L)	-11.73* (0.00)	-12.77* (0.00)	-13.15* (0.00)	-13.00* (0.00)	-11.00* (0.01)	-11.00* (0.01)
Politics-Policy Spread Portfolio (H/H-L/L) -policy and stability	-20.04* (0.01)	-23.36* (0.01)	-23.54* (0.01)	-25.54* (0.00)	-19.31* (0.02)	-19.42* (0.03)

4.2 Politics, Policy and Economic Growth

The previous analysis shows a statistically reliable and economically meaningful link among politics, policy, and average stock returns across countries. Moreover, country characteristics, and exposure to standard international risk factors do not account for the pattern in returns across countries. In this section, we investigate the relation among politics, policy and countries' fundamentals to better understand the underlying economic links potentially driving these empirical findings. We focus our analysis on the following plausible cash-flow channel. Specifically, we test the hypothesis that developed countries with high political stability and confidence in economy policy earn high stock market returns because of high future cash-flow growth. If a country economically benefits by its politics and policy, then these benefits should be reflected in terms of increases in a country's fundamental performance, such as increases in economic growth. Unlike developed countries, the reverse holds true for emerging countries. That is, we test the hypothesis that emerging countries with high political stability and confidence in economy policy earn low stock market returns because of low future cash-flow growth.

We measure a country's economic growth as either industrial production growth (Chen et al., 1986) or GDP growth (Brogaard and Detzel, 2015). We run panel regression of future cash-flow growth at different forecasting horizons, and include as main explanatory variables political stability and confidence in economic policy. We include as control variables country fixed effects, macroeconomic variables such as *unemployment* (Clare and Thomas, 1994; Boyd et al., 2005), *debt-to-GDP* ratios (Grammatikos and Vermeulen, 2012), *primary balance* (Darrat, 1990), and *CPI inflation* (Gultekin, 1983; Kaul, 1987), and financial variables such as depreciation of the national *currency* with respect to USD, *slope* of the term structure of interest rates (Chen et al., 1986), and the volatility index *VIX* (Bollerslev et al., 2009).

Table 6 and Table 7 report the results of future industrial production growth forecasts up to 12 months for developed markets and emerging markets, respectively. The regression coefficients and R^2 increase with the forecasting horizons, although the rate of increase tapers off. For developed markets, confidence in economy policy is statistically and economically significant for all forecasting horizons, while political stability exhibits instead a relatively weaker forecasting power. We attribute this relatively weaker forecasting power to the low variability of political stability ratings within developed markets. For emerging markets, both politics and policy variables are strongly statistically and economically significant for all forecasting horizons up to 12 months. Political stability and confidence in economic policy predict positively future economic growth in both developed and emerging economies. Table 8 and Table 9 report similar results when we use future GDP growth as a proxy of cash-flow growth. These findings suggest a direct economic link among politics, policy and returns through expected cash-flow effects.

The empirical evidence shows that the pattern of future economic growth is consistent with the pattern in realized returns only for developed markets. Developed countries with high political stability and confidence in economic policy have high future economic growth and stock market returns. Emerging countries with high political stability and confidence in economic policy, have high future economic growth, but low stock market returns. Therefore, this empirical evidence contributes to our understanding of the positive relationship among politics, policy and stock market returns in developed countries, but it is at odds with the negative relationship among politics, policy and stock market returns in emerging countries. The finding for developed markets are in line with the so-called political risk sign paradox (Perotti and Van Oijen, 2001; Lehkonen and Heimonen, 2015; Dimic et al., 2015), holding that politically safer countries have higher stock market returns than politically riskier countries. The evidence on the positive predictability of cash-flows provides a plausible economic channel driving the empirical findings on the political risk sign paradox.

Table 6**Politics, Policy and Industrial Production Growth for Developed Markets**

This table reports panel regressions of future industrial production growth rates at different forecasting horizons for developed markets. Forecasting variables include country fixed effects, economic policy ratings (Policy), political stability ratings (Stability), depreciation of the national currency with respect to USD (Currency), unemployment rate (Unemployment), debt-to-GDP ratio (Debt-to-GDP), primary balance as fraction of GDP (Primary Balance), inflation rate (Inflation), slope of the term structure of interest rates (Slope), and VIX index (VIX). Stability is orthogonalized with respect to policy. Coefficients are multiplied by 10^2 for stability, currency and unemployment, 10^3 for policy, slope, and VIX, 10^4 for debt-to-GDP and primary balance. p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. Sample period is from January 1992 to December 2016.

	3m	6m	9m	12m
	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)
Policy	0.10*	0.17*	0.22*	0.26*
	(0.01)	(0.01)	(0.02)	(0.06)
Stability	0.08	0.17	0.23	0.25
	(0.20)	(0.15)	(0.20)	(0.28)
Currency	-1.01	-2.37	-1.84	2.77
	(0.31)	(0.22)	(0.25)	(0.18)
Unemployment	-1.79*	-2.66*	-3.43*	-3.08*
	(0.01)	(0.02)	(0.02)	(0.02)
Debt-to-GDP	0.50	1.18	1.82	2.55
	(0.17)	(0.13)	(0.14)	(0.15)
Primary balance	2.86	5.07	8.09	10.27
	(0.27)	(0.33)	(0.30)	(0.35)
Inflation	-0.05	-0.29*	-0.69*	-1.08*
	(0.32)	(0.01)	(0.00)	(0.00)
Slope	1.32*	2.66*	3.78*	4.50*
	(0.06)	(0.06)	(0.07)	(0.09)
VIX	-0.74*	-1.07*	-1.28*	-1.40*
	(0.00)	(0.00)	(0.00)	(0.00)
N	1926	1926	1926	1923
R^2	0.08	0.09	0.10	0.10

Table 7**Politics, Policy and Industrial Production Growth for Emerging Markets**

This table reports panel regressions of future industrial production growth rates at different forecasting horizons for emerging markets. Forecasting variables include country fixed effects, economic policy ratings (Policy), political stability ratings (Stability), depreciation of the national currency with respect to USD (Currency), unemployment rate (Unemployment), debt-to-GDP ratio (Debt-to-GDP), primary balance as fraction of GDP (Primary Balance), inflation rate (Inflation), slope of the term structure of interest rates (Slope), and VIX index (VIX). Stability is orthogonalized with respect to policy. Coefficients are multiplied by 10^2 for stability, currency and unemployment, 10^3 for policy, slope, and VIX, 10^4 for debt-to-GDP and primary balance. p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. Sample period is from January 1992 to December 2016.

	3m	6m	9m	12m
	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)
Policy	0.12* (0.04)	0.23* (0.06)	0.31* (0.09)	0.37* (0.10)
Stability	0.31* (0.00)	0.63* (0.00)	0.84* (0.00)	0.92* (0.01)
Currency	-3.37* (0.06)	-6.93* (0.04)	-4.22 (0.37)	-3.58 (0.47)
Unemployment	-0.38 (0.67)	2.37* (0.05)	3.04 (0.12)	2.82 (0.33)
Debt-to-GDP	-1.86 (0.23)	-3.15 (0.29)	-3.89 (0.38)	-3.77 (0.51)
Primary balance	-14.97* (0.01)	-23.21* (0.01)	-30.45* (0.01)	-37.04* (0.02)
Inflation	-0.17 (0.18)	-0.71* (0.00)	-1.11* (0.00)	-1.27* (0.00)
Slope	0.79* (0.01)	1.46* (0.01)	1.81* (0.02)	1.95* (0.02)
VIX	-0.73* (0.00)	-0.68* (0.02)	-0.57 (0.17)	-0.40 (0.46)
N	1105	1103	1101	1099
R^2	0.07	0.010	0.09	0.08

Table 8**Politics, Policy and GDP Growth for Developed Markets**

This table reports panel regressions of future GDP growth rates at different forecasting horizons for developed markets. Forecasting variables include country fixed effects, economic policy ratings (Policy), political stability ratings (Stability), depreciation of the national currency with respect to USD (Currency), unemployment rate (Unemployment), debt-to-GDP ratio (Debt-to-GDP), primary balance as fraction of GDP (Primary Balance), inflation rate (Inflation), slope of the term structure of interest rates (Slope), and VIX index (VIX). Stability is orthogonalized with respect to policy. Coefficients are multiplied by 10 for inflation, 10^2 for currency and unemployment, 10^3 for stability, primary balance, slope, and VIX, 10^4 for policy, and 10^5 for debt-to-GDP. p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. Sample period is from January 1992 to December 2016.

	3m	6m	9m	12m
	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)
Policy	0.44*	0.78*	1.06*	1.21*
	(0.02)	(0.02)	(0.02)	(0.05)
Stability	0.11	0.48	0.79	0.89
	(0.75)	(0.44)	(0.37)	(0.45)
Currency	-0.30	-0.84	-0.12	1.28
	(0.56)	(0.25)	(0.86)	(0.12)
Unemployment	-1.59*	-2.21*	-2.53*	-2.94*
	(0.01)	(0.02)	(0.02)	(0.02)
Debt-to-GDP	0.43	2.301	4.85	7.73
	(0.79)	(0.52)	(0.43)	(0.39)
Primary balance	0.18	0.41*	0.63	0.81
	(0.16)	(0.1)	(0.11)	(0.16)
Inflation	-1.02*	-2.51*	-4.17*	-5.74*
	(0.00)	(0.00)	(0.00)	(0.00)
Slope	-0.11	-0.19	-0.30	-0.38
	(0.80)	(0.82)	(0.80)	(0.79)
VIX	-0.30*	-0.51*	-0.69*	-0.80*
	(0.00)	(0.00)	(0.00)	(0.00)
N	1988	1988	1988	1988
R^2	0.09	0.12	0.12	0.12

Table 9**Politics, Policy and GDP Growth for Emerging Markets**

This table reports panel regressions of future GDP growth rates at different forecasting horizons for emerging markets. Forecasting variables include country fixed effects, economic policy ratings (Policy), political stability ratings (Stability), depreciation of the national currency with respect to USD (Currency), unemployment rate (Unemployment), debt-to-GDP ratio (Debt-to-GDP), primary balance as fraction of GDP (Primary Balance), inflation rate (Inflation), slope of the term structure of interest rates (Slope), and VIX index (VIX). Stability is orthogonalized with respect to policy. Coefficients are multiplied by 10 for inflation, 10^2 for currency and unemployment, 10^3 for stability, primary balance, slope, and VIX, 10^4 for policy, and 10^5 for debt-to-GDP. p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. Sample period is from January 1992 to December 2016.

	3m	6m	9m	12m
	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)	<i>b</i> (p-val)
Policy	0.72* (0.00)	1.53* (0.00)	2.13* (0.00)	2.67* (0.01)
Stability	1.02* (0.02)	2.09* (0.01)	2.66* (0.01)	2.86* (0.02)
Currency	-2.36* (0.01)	-4.77* (0.01)	-5.69* (0.01)	-5.31* (0.02)
Unemployment	-0.56* (0.07)	0.05 (0.85)	0.32 (0.61)	0.29 (0.73)
Debt-to-GDP	-7.92 (0.26)	-14.28 (0.27)	-20.61 (0.31)	-23.57 (0.39)
Primary balance	0.05 (0.83)	0.13 (0.77)	0.19 (0.76)	0.27 (0.75)
Inflation	-0.32 (0.48)	-1.68* (0.03)	-3.90* (0.00)	-5.41* (0.00)
Slope	0.52* (0.00)	0.96* (0.00)	1.31* (0.00)	1.57* (0.00)
VIX	-0.31* (0.00)	-0.41* (0.00)	-0.46* (0.01)	-0.46* (0.03)
N	1142	1142	1142	1142
R^2	0.13	0.16	0.17	0.16

5 Robustness Tests

We carry out several robustness tests of abnormal returns, and find that our results are robust to (i) alternative measures of political stability and economic policy, (ii) alternative sample periods including the 2008 global financial crisis and 2011 eurozone crisis for developed markets, and the Asian emerging market crisis of 1997, (iii) alternative portfolios based on conditional sorts and long-short positions in extreme deciles, (iv) holdings in the standard MSCI Indices, value-weighted portfolios, portfolios in local returns and with hedged returns.

5.1 Alternative Measures of Politics and Policy

To eliminate common method bias (Podsakoff et al., 2003) and validate the WES data, we test for robustness of abnormal returns to alternative measures of the politics and policy variables, obtained from World Bank (2018) assessments for political stability, and from Baker et al. (2016) for economic policy uncertainty. As shown in Table 10, the results are robust to these measures of political stability and economic policy variables. The economic policy uncertainty index of Baker et al. (2016) is also used by Brogaard and Detzel (2015) to establish that policy uncertainty suppresses US stock market returns. Our results are consistent with this study, although, we focus on disentangling the political stability effect from the economic policy effect. Our results also highlight that the WES measure of confidence in economic policy is consistent with lower policy uncertainty as measured by the index of Baker et al. (2016).

5.2 Crises and Great Recession

We perform the empirical asset pricing tests for the period January 2008 to December 2016, which covers the Great Recession, and for the period June 1997 to December 2003, which covers the Asian crisis. These tests help us establish robustness for different time periods, but also, and most importantly, to demonstrate the effect of political stability and confidence in economic policies during a crisis. There are only 108 observations for the developed markets' crisis periods, and an additional 186 observations for emerging markets' crisis periods. To overcome small-sample problems, we bootstrap standard errors with 5,000 replications, and generate statistically significant results for both markets as shown in Table 11. These results confirm that our main findings on abnormal returns are not spurious and hold during crises periods. Abnormal returns are on average higher by about 6.0% per annum for developed markets, suggesting that markets underreact more to the predictable effects of political stability and economic policies during crises than in normal times. The opposite is noted for emerging markets. These findings are in line with our main empirical evidence about abnormal returns during the entire sample period.

Table 10

Abnormal Returns on Portfolios based on Alternative Measures of Politics and Policy

This table reports the average annualized abnormal returns (alphas) of the politics and policy spread portfolios. Panel A reports results for politics portfolios based on the political stability measure from World Bank (2018). Panel B reports results for policy portfolios based on the policy uncertainty index from Baker et al. (2016). Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from 1997 to 2016 for the number of countries reported in parenthesis.

(A) Alternative Politics Portfolios

Developed Markets (22 countries)						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Politics Spread Portfolio (H-L)	6.62* (0.06)	7.55* (0.04)	8.36* (0.03)	5.26 (0.15)	6.17* (0.09)	6.10* (0.09)

Emerging Markets (20 countries)						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Politics Spread Portfolio (H-L)	-12.17* (0.03)	-13.74* (0.02)	-15.30* (0.01)	-12.63* (0.05)	-10.58* (0.06)	-11.39* (0.05)

(B) Alternative Policy Portfolios

Developed Markets (12 countries)						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	6.97* (0.02)	5.85* (0.04)	6.99* (0.02)	4.57 (0.15)	6.95* (0.02)	6.97* (0.02)

Emerging Markets (8 countries)						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-20.73* (0.01)	-19.00* (0.04)	-17.61* (0.04)	-16.34* (0.08)	-21.21* (0.01)	-20.66* (0.01)

Table 11

Abnormal Returns during Great Recession and Asian Crisis of 1997

This table reports the average annualized abnormal return (alphas) of the politics, policy, and politics-policy spread portfolios. Panel A reports results for developed markets based on 108 monthly observations during the Great Recession from January 2008 to December 2016. Panel B reports results for emerging markets based on 186 monthly observations including also the Asian crisis from June 1997 to December 2003. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level.

(A) Developed Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	7.77* (0.01)	7.74* (0.01)	7.71* (0.01)	4.69* (0.09)	6.53* (0.03)	8.04* (0.01)
Politics Spread Portfolio (H-L)	6.25* (0.05)	6.23* (0.05)	5.62* (0.08)	2.92 (0.36)	5.40* (0.07)	6.52* (0.04)
Politics-Policy Spread Portfolio (H/H-L/L)	11.83* (0.04)	11.80* (0.04)	11.12* (0.06)	5.34 (0.40)	10.40* (0.07)	12.50* (0.04)

(B) Emerging Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-7.05 (0.16)	-9.26* (0.08)	-9.72* (0.06)	-12.30* (0.02)	-6.18 (0.21)	-6.24 (0.19)
Politics Spread Portfolio (H-L)	-7.79* (0.07)	-8.85* (0.05)	-9.18* (0.04)	-9.53* (0.05)	-7.24* (0.08)	-7.00* (0.09)
Politics-Policy Spread Portfolio (H/H-L/L)	-14.49* (0.07)	-18.33* (0.03)	-18.70* (0.02)	-22.34* (0.02)	-12.91* (0.10)	-12.44 (0.12)

5.3 Alternative Portfolio Sorts

We now create portfolios using alternative portfolio sorts. We first use bivariate sorting of policy conditional on political stability rating. Countries are sorted into three equal groups based on political stability ratings, and within each group we construct portfolios in the extreme quintiles sorted by economic policy ratings. The resulting portfolios consist on average of 4 positions for developed economies, and 5 for emerging markets. We also create long-short portfolios consisting of countries in the extreme deciles. Table 12 and Table 13 show that abnormal returns are robust to conditional sorting, and, as expected, much larger when forming long-short portfolios based on extreme deciles rather than quintiles.

5.4 Alternative Portfolio Return Estimates

We consider now returns of portfolio sorts invested in the standard MSCI Indices rather than the MSCI Investable Indices. Table 14 shows economically and statistically significant abnormal returns across all asset pricing models and for both developed and emerging markets. Alphas for portfolios exploiting jointly the politics and policy variables range from 7.4% to 9.8% for developed markets. For emerging markets, the alphas are remarkably large ranging from -20.4% to -26.7%. Non-zero alphas are also observed for univariate sorts, but, as expected, their values are smaller than with bivariate sorts.

We also test for abnormal returns in market capitalization weighted portfolios, and obtain consistent results as shown in Table 15.⁷ Alphas for double-sorted portfolios are large and statistically significant, in the range of 7.5% to 8.9% for developed, and -23.3% to -31.8% for emerging markets. For univariate sorts on political stability the statistical significance is weak, which we attribute to the relatively low variability of political stability for developed markets and the fact that few countries carry relatively large weights with little variability in political stability in emerging markets.

Finally we carry out robustness tests for a salient point of our findings. In particular, our tests with the International CAPM and CAPM Redux have established that abnormal returns can not be explained when accounting for currency risk factors, which are significant for international asset returns (Eun and Resnick, 1988; Lustig et al., 2011). However, all tests were done in home currency returns (USD). While this is common practice when testing international asset portfolios, we also test portfolio returns denominated in local currency for robustness. As shown in Table 16, the main results are robust to the currency of denomination.

We also test portfolios using currency-hedged returns. Monthly currency-hedged returns are computed by recording stock market prices in local currency at the beginning of each month t , converting them to USD using spot rates, and then converting prices in USD at time $t + 1$ using the one-month forward rate available at time t . We test portfolio hedged returns only for developed markets, since for emerging markets we do not have forward rates for an average of 38% of the observations over all countries and time periods. There are also several failures of covered interest rate parity for emerging markets as shown in (Verdelhan, 2018). Results are summarized in Table 17, showing persistently significant non-zero alphas, confirming that our findings are not due to currency movements. A comparison of Table 4 and Table 17 shows significantly higher alphas with hedged returns across all asset pricing models. This observation is consistent with the international asset pricing literature arguing that it pays to hedge exchange risk of stock portfolios (Glen and Jorion, 1993; Beltratti et al., 2004).

⁷From the developed markets we exclude US and Hong Kong in univariate sorts, and Italy in bivariate sorts, since they carry excessive weights up to 93%, for several time periods.

Table 12**Abnormal Returns on Conditional Double-Sorted Portfolios**

This table reports the average annualized abnormal returns (alphas) of the politics-policy spread portfolios based on conditional sorts. Panel A reports results for developed markets, and Panel B for emerging markets. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

(A) Developed Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Politics-Policy Spread Portfolio (H/H-L/L)	8.64* (0.02)	11.05* (0.01)	11.22* (0.01)	8.29* (0.04)	8.41* (0.02)	8.88* (0.02)

(B) Emerging Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Politics-Policy Spread Portfolio (H/H-L/L)	-13.80* (0.03)	-16.97* (0.01)	-17.42* (0.01)	-19.76* (0.01)	-12.60* (0.05)	-13.16* (0.06)

Table 13**Abnormal Returns on Extreme Deciles Portfolios**

This table reports the average annualized abnormal returns (alphas) of the politics, policy, and politics-policy spread portfolios based on extreme deciles. Panel A reports results for developed markets, and Panel B for emerging markets. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

(A) Developed Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	4.01 (0.13)	5.25* (0.05)	5.52* (0.05)	3.04 (0.27)	4.21* (0.11)	4.22 (0.11)
Politics Spread Portfolio (H-L)	5.27* (0.10)	6.03* (0.07)	6.42* (0.05)	3.46 (0.34)	5.55* (0.08)	5.65* (0.08)
Politics-Policy Spread Portfolio (H/H-L/L)	8.71* (0.06)	12.44* (0.01)	12.54* (0.01)	10.33* (0.04)	7.95* (0.08)	8.89* (0.05)

(B) Emerging Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-10.43* (0.03)	-11.95* (0.02)	-12.64* (0.01)	-16.27* (0.00)	-9.45* (0.05)	-9.50* (0.06)
Politics Spread Portfolio (H-L)	-14.12* (0.02)	-15.66* (0.01)	-13.44* (0.02)	-17.15* (0.01)	-12.88* (0.02)	-13.96* (0.01)
Politics-Policy Spread Portfolio (H/H-L/L)	-20.53* (0.02)	-24.12* (0.01)	-21.47* (0.02)	-26.27* (0.01)	-19.57* (0.03)	-22.57* (0.02)

Table 14

Abnormal Returns on Portfolios based on the standard MSCI Indices

This table reports the average annualized abnormal returns (alphas) of the politics, policy, and politics-policy spread portfolios based on standard MSCI Indices. Panel A reports results for developed markets, and Panel B for emerging markets. Returns are in percentages. Bootstrapped p-values correction are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

(A) Developed Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	4.66* (0.03)	5.66* (0.01)	5.97* (0.01)	4.23* (0.06)	4.77* (0.03)	4.82* (0.03)
Politics Spread Portfolio (H-L)	3.72* (0.10)	4.71* (0.05)	4.43* (0.07)	3.69 (0.14)	3.91* (0.10)	3.98* (0.09)
Politics-Policy Spread Portfolio (H/H-L/L)	7.59* (0.05)	9.85* (0.01)	9.19* (0.03)	8.09* (0.06)	7.45* (0.05)	8.05* (0.04)

(B) Emerging Markets

Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-11.09* (0.01)	-12.58* (0.00)	-13.06* (0.00)	-15.18* (0.00)	-10.64* (0.01)	-10.77* (0.01)
Politics Spread Portfolio (H-L)	-12.28* (0.00)	-13.26* (0.00)	-13.92* (0.00)	-13.85* (0.00)	-11.56* (0.01)	-11.58* (0.01)
Politics-Policy Spread Portfolio (H/H-L/L)	-21.06* (0.01)	-24.16* (0.00)	-24.81* (0.00)	-26.74* (0.00)	-20.36* (0.01)	-20.70* (0.02)

Table 15

Abnormal Returns on Value-Weighted Portfolios

This table reports the average annualized abnormal returns (alphas) of the politics, policy, and politics-policy spread portfolios based on market capitalization weights. Panel A reports results for developed markets, and Panel B for emerging markets. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

(A) Developed Markets						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	5.44* (0.03)	5.29* (0.04)	5.56* (0.03)	3.48 (0.15)	5.46* (0.03)	4.94* (0.04)
Politics Spread Portfolio (H-L)	3.40 (0.18)	3.20 (0.20)	3.64 (0.17)	2.00 (0.44)	4.04* (0.10)	3.62 (0.15)
Politics-Policy Spread Portfolio (H/H-L/L)	8.02* (0.03)	8.88* (0.02)	8.56* (0.03)	8.56* (0.04)	7.52* (0.04)	7.74* (0.04)

(B) Emerging Markets						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-14.63* (0.01)	-16.90* (0.00)	-16.39* (0.00)	-19.48* (0.00)	-14.24* (0.01)	-14.35* (0.01)
Politics Spread Portfolio (H-L)	-6.68 (0.17)	-8.76* (0.08)	-8.38* (0.10)	-10.22* (0.06)	-5.63 (0.24)	-5.45 (0.25)
Politics-Policy Spread Portfolio (H/H-L/L)	-24.11* (0.01)	-28.00* (0.00)	-27.86* (0.00)	-31.77* (0.00)	-23.29* (0.01)	-24.55* (0.01)

Table 16

Abnormal Returns on Local Currency Portfolios

This table reports the average annualized abnormal returns (alphas) of the politics, policy, and politics-policy spread portfolios denominated in local currency. Panel A reports results for developed markets, and Panel B for emerging markets. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

(A) Developed Markets						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	3.93* (0.06)	5.25* (0.01)	5.30* (0.02)	4.28* (0.05)	4.00* (0.05)	4.17* (0.04)
Politics Spread Portfolio (H-L)	2.53 (0.22)	3.83* (0.07)	3.89* (0.07)	2.77 (0.22)	2.23 (0.27)	2.45 (0.24)
Politics-Policy Spread Portfolio (H/H-L/L)	5.61 (0.12)	8.12* (0.03)	7.66* (0.05)	6.49* (0.11)	5.11 (0.15)	5.61 (0.14)

(B) Emerging Markets						
Portfolio Strategy (%)	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	-17.84* (0.00)	-18.63* (0.00)	-19.28* (0.00)	-22.17* (0.00)	-17.48* (0.00)	-18.19* (0.00)
Politics Spread Portfolio (H-L)	-20.99* (0.00)	-20.65* (0.00)	-20.63* (0.00)	-21.83* (0.00)	-21.15* (0.00)	-21.57* (0.00)
Politics-Policy Spread Portfolio (H/H-L/L)	-30.88* (0.00)	-32.08* (0.00)	-31.99* (0.00)	-36.15* (0.00)	-30.83* (0.00)	-31.99* (0.00)

Table 17**Abnormal Returns on Currency-Hedged Portfolios**

This table reports the average annualized abnormal returns (alphas) of the politics, policy, and politics-policy spread portfolios based currency-hedged returns in developed markets. Returns are in percentages. Bootstrapped p-values are in parenthesis. The asterisk (*) denotes statistical significance at least at the 10% level. The sample data are monthly from January 1992 to December 2016.

Portfolio Strategy (%)	Developed Markets					
	World CAPM	Intl FF3	Intl Carhart	Intl FF5	Intl CAPM	CAPM Redux
Policy Spread Portfolio (H-L)	4.12* (0.08)	5.62* (0.01)	5.73* (0.02)	5.28* (0.03)	4.17* (0.07)	4.31* (0.07)
Politics Spread Portfolio (H-L)	1.72 (0.48)	3.26 (0.19)	3.47 (0.16)	2.52 (0.32)	1.48 (0.53)	1.78 (0.46)
Politics-Policy Spread Portfolio (H/H-L/L)	6.26* (0.07)	9.34* (0.01)	9.15* (0.02)	8.36* (0.04)	5.86* (0.10)	6.37* (0.08)

6 Concluding Remarks

We study the impact of politics and policy on international stock market returns and their relationship to country fundamentals. Our main empirical findings are summarized as follows. First, political stability and confidence in economic policy predict the cross-section of country returns and economic growth. Improvements in politics and policy forecast large positive stock market returns for developed markets, but negative for emerging markets. Second, unlike the differential impact on financial markets, politics and policy forecast positively future economic growth regardless of the markets classification. Third, we document that the cross-country return heterogeneity is mainly due to abnormal returns regardless of the reference international asset pricing model.

Our results for developed markets are in line with the political risk sign paradox. However, the evidence on the positive predictability of cash-flows, contributes to shed light on a plausible economic channel behind it. In line with earlier evidence on the positive relationship between political stability and economic growth (Barro, 1991; Alesina et al., 1996), these empirical findings support the cash-flow channel. In emerging markets, we find instead that increased stability and confidence in economic policy are associated with higher future cash-flows, but lower stock market returns. These findings are consistent with a discount rate channel, whereby politics and policy uncertainty command risk-premia (Pástor and Veronesi, 2012). However, our findings on large abnormal returns based on existing asset pricing models cannot fully confirm the discount rate channel, thus leaving open the possibility of missing risk factors for emerging markets.

Taken together, the empirical evidence on the predictability of future economic growth, along with the evidence on abnormal returns, suggests market mispricing of predictable economic effects of political stability and economic policies, particularly for emerging economies. This evidence then motivates the question of why investors do not anticipate systematic differences in political stability and economic policies into prices. While we cannot provide a conclusive answer, we can conjecture several plausible explanations. First, investors could perceive the political stability and economic policy ratings to be only noisy and incomplete signals of the multidimensional aspects of politics and policy, so they do not anticipate systematic differences across countries. Second, even if political stability and economic policy ratings could be informative about systematic differences in the multidimensional aspects of politics and policy, investors with incomplete information could find rather difficult identifying and learning systematic differences in their impact on economic growth, given the limited sample size of the available data, and possibly their high correlation with international business cycles.

Our inference concerning the relation between politics, policy and stock market returns rests also on the ability to distinguish between risk and mispricing. Tests using a large number of international asset pricing models show that these models fail to explain the politics, policy and politics-policy premia, suggesting that the market is systematically surprised by the actual impact of politics and policy.

The results from these tests are always subject to the joint hypothesis problem (Fama, 1991), and so the failure of these models certainly does not prove that our results arise from mispricing, but can also be interpreted as evidence of a missing risk factor. This is particularly true for emerging economies, where the predictable cash-flow effects work against stock market returns. However, the evidence on abnormal returns based on a large number of different international asset pricing models is overall robust.

To avoid the pitfall of data mining we perform an extensive set of robustness tests. Ultimately, the concern of data mining can be dispelled only after we accumulate enough out-of-sample data. However, we can safely argue that the overall evidence along with the robustness of the main

findings over different sample periods mitigate this concern.

Have we provided evidence of a causal link from politics and policy on future stock market returns? Answering this question in the affirmative requires resolution of potential endogeneity problems. Our finding of a link among politics, policy and future stock market returns could be driven by unobserved country characteristics that are correlated with our measures of politics and policy, and are also the main cause of the observed pattern in returns. The controls for well-known country characteristics, business cycle variables, and risk measures offer evidence that is consistent with causation. Our work is a first step in disentangling the effects of politics and policy, which are distinct dimensions among the determinants of stock market returns.

References

- ACEMOGLU, D. (2005): “Politics and economics in weak and strong states,” *Journal of Monetary Economics*, 52, 1199–1226.
- ADLER, M. AND B. DUMAS (1983): “International portfolio choice and corporation finance: A synthesis,” *The Journal of Finance*, 38, 925–984.
- AISEN, A. AND F. J. VEIGA (2013): “How does political instability affect economic growth?” *European Journal of Political Economy*, 29, 151 – 167.
- ALESINA, A., S. ÖZLER, N. ROUBINI, AND P. SWAGEL (1996): “Political instability and economic growth,” *Journal of Economic Growth*, 1, 189–211.
- BAKER, S. R., N. BLOOM, AND S. J. DAVIS (2016): “Measuring economic policy uncertainty,” *The Quarterly Journal of Economics*, 131, 1593–1636.
- BARRO, R. J. (1991): “Economic growth in a cross section of countries,” *The Quarterly Journal of Economics*, 106, 407–443.
- BECKER, S. O. AND K. WOHLRABE (2007): “Micro data at the Ifo Institute for Economic Research: The Ifo Business Survey, usage and access,” Working Paper 47, Ifo Institute for Economic Research.
- BEKAERT, G., C. R. HARVEY, C. T. LUNDBLAD, AND S. SIEGEL (2014): “Political risk spreads,” *Journal of International Business Studies*, 45, 471–493.
- BEKAERT, G. AND R. J. HODRICK (1992): “Characterizing Predictable Components in Excess Returns on Equity and Foreign Exchange Markets,” *The Journal of Finance*, 1992, 47, 467—509.
- BELO, F., V. D. GALA, AND J. LI (2013): “Government spending, political cycles, and the cross section of stock returns,” *Journal of Financial Economics*, 107, 305–324.
- BELTRATTI, A., A. LAURENT, AND S. ZENIOS (2004): “Scenario Modeling of Selective Hedging Strategies,” *Journal of Economic Dynamics and Control*, 28, 955–974.
- BERNHARD, W. AND D. LEBLANG (2006): *Democratic processes and financial markets: Pricing politics*, New York, NY: Cambridge University Press.
- BIAŁKOWSKI, J., K. GOTTSCHALK, AND T. P. WISNIEWSKI (2008): “Stock market volatility around national elections,” *Journal of Banking & Finance*, 32, 1941–1953.
- BIRZ, G. AND J. R. LOTT (2011): “The effect of macroeconomic news on stock returns: New evidence from newspaper coverage,” *Journal of Banking & Finance*, 35, 2791–2800.
- BITTLINGMAYER, G. (1998): “Output, stock volatility, and political uncertainty in a natural experiment: Germany, 1880–1940,” *The Journal of Finance*, 53, 2243–2257.
- BOLLERSLEV, T., G. TAUCHEN, AND H. ZHOU (2009): “Expected stock returns and variance risk premia,” *The Review of Financial Studies*, 22, 4463–4492.
- BOUTCHKOVA, M., H. DOSHI, A. DURNEV, AND A. MOLCHANOV (2012): “Precarious politics and return volatility,” *Review of Financial Studies*, 25, 1111–1154.
- BOYD, J. H., J. HU, AND R. JAGANNATHAN (2005): “The stock market’s reaction to unemployment news: Why bad news is usually good for stocks,” *The Journal of Finance*, 60, 649–672.

- BROGAARD, J. AND A. DETZEL (2015): “The asset-pricing implications of government economic policy uncertainty,” *Management Science*, 61, 3–18.
- BRUSA, F., T. RAMADORAI, AND A. VERDELHAN (2014): “The International CAPM Redux,” WP 2014-11, Saïd Business School, Oxford University, Available at SSRN <https://ssrn.com/abstract=2462843>.
- BUSSE, M. AND C. HEFEKER (2007): “Political risk, institutions and foreign direct investment,” *European Journal of Political Economy*, 23, 397–415.
- CAPORALE, B. AND T. CAPORALE (2008): “Political risk and the expectations hypothesis,” *Economics Letters*, 100, 178 – 180.
- CHEN, N.-F., R. ROLL, AND S. A. ROSS (1986): “Economic Forces and the Stock Market,” *Journal of Business*, 59, 383–403.
- CLARE, A. D. AND S. H. THOMAS (1994): “Macroeconomic factors, the APT and the UK stockmarket,” *Journal of Business Finance & Accounting*, 21, 309–330.
- COHEN, L., J. COVAL, AND C. MALLOY (2011): “Do powerful politicians cause corporate downsizing?” *Journal of Political Economy*, 119, 1015–1060.
- DARRAT, A. F. (1990): “Stock returns, money, and fiscal deficits,” *Journal of Financial and Quantitative Analysis*, 25, 387–398.
- DIMIC, N., V. ORLOV, AND V. PILJAK (2015): “The political risk factor in emerging, frontier, and developed stock markets,” *Finance Research Letters*, 15, 239–245.
- EUN, C. S. AND B. G. RESNICK (1988): “Exchange Rate Uncertainty, Forward Contracts, and International Portfolio Selection,” *The Journal of Finance*, 43, 197–215.
- FAMA, E. F. (1991): “Efficient capital markets: II,” *The journal of finance*, 46, 1575–1617.
- FAMA, E. F. AND J. D. MACBETH (1973): “Risk, return, and equilibrium: Empirical tests,” *Journal of Political Economy*, 81, 607–636.
- FERSON, W. E. AND C. R. HARVEY (1993): “The Risk and Predictability of International Equity Returns,” *The Review of Financial Studies*, 6, 527–566.
- GLEN, J. AND P. JORION (1993): “Currency Hedging for International Portfolios,” *Journal of Finance*, 48, 1865–1886.
- GRAMMATIKOS, T. AND R. VERMEULEN (2012): “Transmission of the financial and sovereign debt crises to the EMU: Stock prices, CDS spreads and exchange rates,” *Journal of International Money and Finance*, 31, 517–533.
- GULEN, H. AND M. ION (2015): “Policy uncertainty and corporate investment,” *The Review of Financial Studies*, 29, 523–564.
- GULTEKIN, N. B. (1983): “Stock market returns and inflation: Evidence from other countries,” *The Journal of Finance*, 38, 49–65.
- GURGUL, H. AND L. LACH (2013): “Political instability and economic growth: Evidence from two decades of transition in CEE,” *Communist and Post-Communist Studies*, 46, 189 – 202.
- HARVEY, C. R. (2017): “Presidential address: The scientific outlook in financial economics,” *The Journal of Finance*, 72, 1399–1440.
- HENRY, P. B. (2000a): “Do stock market liberalizations cause investment booms?” *Journal of Financial Economics*, 58, 301–334.

- (2000b): “Stock market liberalization, economic reform, and emerging market equity prices,” *The Journal of Finance*, 55, 529–564.
- HENRY, P. B. AND C. MILLER (2008): “Institutions vs. Policies. A tale of two islands,” Working Paper 14604, National Bureau of Economic Research, Cambridge, MA.
- JENS, C. E. (2017): “Political uncertainty and investment: Causal evidence from U.S. gubernatorial elections,” *Journal of Financial Economics*, 124, 563 – 579.
- JONG-A-PIN, R. (2009): “On the measurement of political instability and its impact on economic growth,” *European Journal of Political Economy*, 25, 15–29.
- JULIO, B. AND Y. YOOK (2012): “Political uncertainty and corporate investment cycles,” *The Journal of Finance*, 67, 45–83.
- KAUL, G. (1987): “Stock returns and inflation: The role of the monetary sector,” *Journal of Financial Economics*, 18, 253–276.
- KAWASAKI, S., J. MCMILLAN, AND K. F. ZIMMERMANN (1982): “Disequilibrium dynamics: An empirical study,” *The American Economic Review*, 72, 992–1004.
- (1983): “Inventories and price inflexibility,” *Econometrica*, 51, 599–610.
- KELLY, B., L. PÁSTOR, AND P. VERONESI (2016): “The price of political uncertainty: Theory and evidence from the option market,” *The Journal of Finance*, 71, 2418–2480.
- KOBRIN, S. J. (1979): “Political risk: A review and reconsideration,” *Journal of International Business Studies*, 10, 67–80.
- LA PORTA, R., F. LOPEZ-DE SILANES, A. SHLEIFER, AND R. W. VISHNY (1997): “Legal determinants of external finance,” *Journal of Finance*, 52, 1131–1150.
- LEBLANG, D. AND B. MUKHERJEE (2005): “Government partisanship, elections, and the stock market: Examining American and British stock returns, 1930–2000,” *American Journal of Political Science*, 49, 780–802.
- LEDUC, S. AND Z. LIU (2016): “Uncertainty shocks are aggregate demand shocks,” *Journal of Monetary Economics*, 82, 20–35.
- LEHKONEN, H. AND K. HEIMONEN (2015): “Democracy, political risks and stock market performance,” *Journal of International Money and Finance*, 59, 77 – 99.
- LUSTIG, H., N. ROUSSANOV, AND A. VERDELHAN (2011): “Common risk factors in currency markets,” *The Review of Financial Studies*, 24, 3731–3777.
- MAURO, P. (1995): “Corruption and growth,” *The Quarterly Journal of Economics*, 110, 681–712.
- NERLOVE, M. (1983): “Expectations, plans, and realizations in theory and practice,” *Econometrica: Journal of the Econometric Society*, 51, 1251–1279.
- NORTH, D. C. (1991a): “Institutions,” *Journal of Economic Perspectives*, 5, 97–112.
- (1991b): *Institutions, Institutional Change, and Economic Performance*, Cambridge, UK: Cambridge University Press.
- PÁSTOR, L. AND P. VERONESI (2012): “Uncertainty about government policy and stock prices,” *The Journal of Finance*, 67, 1219–1264.

- (2013): “Political uncertainty and risk premia,” *Journal of Financial Economics*, 110, 520–545.
- PEROTTI, E. AND P. VAN OIJEN (2001): “Privatization, stock market development, and political risk,” *Journal of International Money and Finance*, 20, 43–69.
- PERSSON, T. (2002): “Do political institutions shape economic policy?” *Econometrica*, 70, 883–905.
- PERSSON, T., G. ROLAND, AND G. TABELLINI (2000): “Comparative politics and public finance,” *Journal of Political Economy*, 108, 1121–1161.
- PERSSON, T. AND G. TABELLINI (1999): “Political economics and macroeconomic policy,” *Handbook of Macroeconomics*, 1, 1397–1482.
- (2004): “Constitutions and Economic Policy,” *The Journal of Economic Perspectives*, 18, 75–98.
- PODSAKOFF, P. M., S. B. MACKENZIE, J.-Y. LEE, AND N. P. PODSAKOFF (2003): “Common method biases in behavioral research: A critical review of the literature and recommended remedies.” *Journal of Applied Psychology*, 88, 879–903.
- PRZEWORSKI, A. AND F. LIMONGI (1993): “Political Regimes and Economic Growth,” *Journal of Economic Perspectives*, 7, 51–69.
- SANTA-CLARA, P. AND R. VALKANOV (2003): “The presidential puzzle: Political cycles and the stock market,” *The Journal of Finance*, 58, 1841–1872.
- SCHATTSCHEIDER, E. (1935): *Politics, Pressures, and the Tariff*, New York, NY: Prentice-Hall.
- STANGL, A. (2007): “European Data Watch,” *Schmollers Jahrbuch*, 127, 487–596.
- SVENSSON, J. (1998): “Investment, property rights and political instability: Theory and evidence,” *European Economic Review*, 42, 1317 – 1341.
- VERDELHAN, A. (2018): “The Share of Systematic Variation in Bilateral Exchange Rates,” *The Journal of Finance*, 73, 375–418.
- WORLD BANK (2018): “DataBank. Worldwide Governance Indicators (Political Stability and Absence of Violence/Terrorism),” Available at http://databank.worldbank.org/data/reports.aspx?Report_Name=WGI-Table&Id=c3ea4d8b, The World Bank.

A The Ifo World Economic Survey

Table A1

Number of experts surveyed by the Ifo World Economic Survey (WES)

	1992-2016		2004-2016	
	Mean	StdDev	Mean	StdDev
Developed Markets				
Australia	10.69	2.37	10.10	2.86
Austria	13.48	9.05	17.31	10.37
Belgium	15.25	5.39	18.92	1.81
Canada	10.80	3.10	12.06	2.09
Denmark	7.38	2.37	8.00	1.81
Finland	17.72	8.07	24.13	3.32
France	17.90	5.37	18.27	3.79
Germany	50.31	14.53	59.96	10.77
Greece	10.48	5.74	15.13	1.98
Hong Kong	7.33	2.53	7.00	2.90
Ireland	6.93	3.43	7.83	3.95
Italy	21.95	7.67	27.54	4.94
Japan	30.21	4.98	30.81	2.93
Netherlands	15.43	4.47	18.58	2.28
New Zealand	10.12	2.96	10.40	3.11
Norway	6.08	2.35	6.98	2.19
Portugal	11.93	5.23	15.33	2.93
Spain	25.00	9.46	31.85	4.00
Sweden	13.32	5.68	15.90	5.14
Switzerland	14.77	3.74	17.12	2.27
United Kingdom	17.46	4.79	16.50	3.94
United States	27.30	8.85	31.87	5.88
Emerging Markets				
Brazil	21.63	7.03	26.81	3.50
Chile	8.87	4.61	12.15	2.62
China	48.14	39.94	84.96	14.98
Colombia	10.79	2.95	11.87	2.84
Czech Republic	10.05	4.91	13.12	2.74
Egypt	5.15	2.67	5.59	2.75
Hungary	11.30	3.99	11.58	2.66
India	13.17	4.27	15.69	2.45
Israel	4.69	2.37	6.15	1.42
Malaysia	7.39	3.33	7.83	2.61
Mexico	12.65	3.15	13.73	2.17
Peru	8.94	7.16	13.44	2.93
Philippines	5.94	2.85	7.88	2.06
Poland	17.21	11.06	20.50	8.84
Republic of Korea	9.64	2.43	10.04	1.51
Russia	20.81	14.10	31.92	9.60
South Africa	20.46	6.66	25.65	2.77
Taiwan	10.18	7.26	16.31	4.68
Thailand	8.48	3.32	8.87	2.06
Turkey	11.86	6.80	16.21	2.18

Table A2**Ranking of countries by political stability and economic policy rating.**

We rank the 22 developed and 20 emerging economies in our sample according to their average political stability and economic policy rating over the period 1992–2016, using WES data.

Ranking	Country	Stability	Ranking	Country	Policy
1	Switzerland	7.94	1	Norway	72.38
2	Finland	7.93	2	Canada	68.69
3	Austria	7.63	3	Switzerland	65.71
4	Norway	7.60	4	Denmark	64.67
5	Denmark	7.38	5	Netherlands	62.86
6	Germany	7.36	6	China	62.04
7	Netherlands	7.33	7	Chile	62.01
8	USA	7.21	8	Finland	61.33
9	Australia	7.18	9	Ireland	60.34
10	Ireland	7.07	10	Australia	53.59
11	Chile	6.97	11	Sweden	51.01
12	UK	6.88	12	Austria	50.51
13	Portugal	6.83	13	New Zealand	50.23
14	France	6.69	14	Malaysia	44.80
15	Sweden	6.67	15	UK	44.44
16	Canada	6.49	16	Colombia	41.95
17	New Zealand	6.27	17	Belgium	41.60
18	Greece	6.19	18	Peru	39.55
19	Spain	6.09	19	Spain	39.17
20	Japan	5.95	20	Portugal	36.90
21	Hong-Kong	5.71	21	India	36.89
22	Belgium	5.70	22	USA	35.88
23	Hungary	5.62	23	Czech Republic	34.14
24	Malaysia	5.36	24	Brazil	32.48
25	China	5.27	25	Philippines	31.47
26	Czech Republic	4.95	26	Hong-Kong	30.99
27	South Korea	4.94	27	Germany	30.42
28	Poland	4.90	28	France	30.16
29	Brazil	4.83	29	Greece	29.20
30	Mexico	4.67	30	South-Africa	27.91
31	South-Africa	4.48	31	Poland	26.84
32	India	4.47	32	Mexico	26.37
33	Taiwan	4.37	33	Israel	26.03
34	Philippines	4.30	34	Turkey	23.18
35	Colombia	4.20	35	South-Korea	21.89
36	Italy	4.01	36	Japan	18.68
37	Israel	3.96	37	Thailand	17.79
38	Russia	3.95	38	Hungary	16.74
39	Egypt	3.89	39	Russia	15.67
40	Turkey	3.79	40	Italy	15.24
41	Peru	3.71	41	Egypt	12.32
42	Thailand	3.16	42	Taiwan	6.72