Uncertainty, populism and foreign direct investment: the state of play in economic research

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Abstract

This paper provides a synthesized, critical overview of the latest economic literature regarding the linkage between three concepts – uncertainty, populism and foreign direct investment. It starts with summarising ways to measure uncertainty in a direct and an indirect manner (with their respective advantages and limitations) and estimate its effects on populism and foreign direct investment. Later on, the paper focuses on the link between populism and foreign direct investment, exploring the possible role of uncertainty in this context. While heightened uncertainty and populism are typically associated with negative economic (including a decline in foreign direct investment) and non-economic outcomes, the nature of these effects and their interpretation are complex and leave room for further investigation. The implications of the research on this topic are wide reaching not only for economic stakeholders, but also for public sector policy practitioners.

Keywords: foreign direct investment, uncertainty, populism

1 INTRODUCTION

Recent global events have demonstrated the heightened uncertainty[1] of the contemporary world, to which terrorism, health issues, political tensions and wars have all contributed. For example, since the 2008 global financial crisis and the subsequent European debt crisis, economic and policy uncertainty has been rising (Ahir, Bloom and Furceri, 2022). It surged in 2016 with the unexpected Leave vote in the United Kingdom (UK), which was followed by the China – United States (US) trade tensions in 2018 (ibid, 2022). In 2020, the Covid-19 pandemic surged as a key driver of global uncertainty, dropping back recently only to be overtaken by uncertainty arising from the war in Ukraine, the renewed trade uncertainty associated with sanctions on Russia and the mounting Middle-East conflicts (ibid, 2024). While each episode is different, the common denominator is greater geo-economic division and more polarized politics, especially in Europe and the US. These trends are associated with the rise in global uncertainty, and it seems they are here to stay.

Another important phenomenon characterising the modern world is populism[2]. It has been on the rise globally, especially in the last decade (Guriev and Papaioannou, 2022). Populism became particularly salient with the rise of the Tea Party Movement in the US in 2010 (ibid, 2022), followed by Orban's rise to power in Hungary (Funke, Schularick and Trebesch, 2023). Populist parties had political success in

[1] Uncertainty is generally defined as lack of knowledge about the probabilities of the future state of events (Sniazhko, 2019). As explained more precisely by Knight (2021), there is a conceptual difference between risk and uncertainty, although they are sometimes used interchangeably. Risk refers to the situations where decision makers do not know the outcome, but they know the probability distribution governing that outcome. Uncertainty applies to situations characterised by both an unknown outcome and an unknown probability distribution.

[2] Although there is no consensus in the literature on what populism is (Guriev and Papaioannou, 2022), researchers usually quote Mudde and Kaltwaser's (2017) definition: a thin-centered (i.e. heterogeneous) ideology, considering society to be separated in two antagonistic groups – the pure people and the corrupt elite. There is no room for pluralism, protection of minorities and diversity of opinions. Other contemporary definitions which add authoritarianism, nativism, affinity for tradition and oversimplification of solutions to difficult problems are considered to be special cases of the above-mentioned description (Guriev and Papaioannou, 2022).

the 2014 European Parliament elections and they also did well in France and the United Kingdom (Guriev and Papaioannou, 2022). The year 2015 saw a populist coalition come to power in Greece and a populist party getting into office in Poland (Funke, Schularick and Trebesch, 2023). 2016 was associated with significant populist upswings manifeste by Brexit and the election of Donald Trump (Guriev and Papaioannou, 2022). Both 2017 and 2018 saw further strengthening of the positions of populist politicians and parties in France, Germany and Italy (Rooduijn et al., 2023). Incoming political elections in the US are exposing Trump's strengthening position in the race to be the new president, after his loss in 2020 US presidential election (Wolff, 2024). Apart from traditional strongholds of left-wing populist movements in Venezuela, Ecuador and Bolivia a surge of authoritarian far-right populism is visible in Brazil, Philippines, Turkey and India (Funke, Schularick and Trebesch, 2023).

The above-mentioned list shows that while populism was once a phenomenon confined to developing democracies, it is now gaining power in some of the world's most established democracies and most systemically important countries (Rooduijn et al., 2023; Funke, Schularick and Trebesch, 2023). While the effects of populism in power were once limited to a country's local political institutions, the effects of today's populism often reshape global financial and trade flows as well as foreign policy for years to come (Guriev and Papaioannou, 2022; Wolff, 2024).

It is no wonder then, that both uncertainty and populism, in their own right, have attracted the attention of social scientists. Academic exploration of uncertainty, its drivers and effects has gained ground especially in the last few years with the publication of uncertainty indexes based on text search (Cascaldi-Garcia et al., 2023), while research into populism assumed prominence after the 2016 election of Donald Trump and the strengthening of populist voting in Europe (Guriev and Papaioannou, 2022). However, the study of these two respective concepts has been done in a somewhat piecemeal way, focusing often on one determinant of uncertainty or populism and without trying to put these two concepts within the same contextual framework. We decided to fill the gap in this respect, and furthermore, to link the two with the concept of foreign direct investment (FDI)[3], which is considered to be especially sensitive to any source and form of uncertainty (Dixit, 2011; Choi, Furceri and Yoon, 2021; Gulen and Ion, 2016).[4]

Consequently, the aim of this survey article is to bring more clarity to the view on the relationship between uncertainty, populism and FDI by giving a synthesized, critical overview of the latest economic literature on the topic. While heightened uncertainty and populism are typically associated with negative economic (including a decline in

[3] Foreign direct investment is defined as net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments (World Bank, 2024).

[4] As described in greater detail in section 3.

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foreign direct investment) and non-economic outcomes[5], the nature of these effects and their interpretation are complex and leave room for further investigation.

The paper contributes to the research literature by offering a summarised presentation of the most important principles and latest findings, complete with the current scientific limitations and possible open questions regarding the topic. It can be of use to researchers in social sciences, (foreign) investors and other stakeholders including public policy practitioners, as it also strives to improve the basis for open discussions and informed decision-making in public policy creation and implementation regarding this complex and cross-cutting issue.

The paper is organised in the following way: after the introduction, section 2 presents various manners to measure uncertainty with their comparative advantages and limitations. Section 3 describes key features of the empirical relationship between uncertainty and FDI. Section 4 introduces the concept of populism by firstly defining it, then exploring its determinants and finally establishing whether uncertainty can also stimulate populism. Section 5 concentrates on the relationship between populism and FDI, focusing where appropriate on the role of uncertainty in this context. Looking ahead, section 6 offers a critique of the topic in the context of public sector (structural and fiscal) policies. The last section brings everything together and outlines avenues for further research.

2 UNCERTAINTY

Although uncertainty is one of the defining features of our times, the challenge of understanding its impact stems from the fact that it is not directly observable and thus not easy to quantify accurately. Researchers have grappled with this issue, relying on different methods to measure uncertainty (Cascaldi-Garcia et al., 2023). In general, it is possible to discern that empirical approximations of uncertainty regarding economic research in the field can be divided according to whether they are direct or indirect. Direct approximations draw on news, survey and econometric based measures, while indirect measures are based on analyses of markets and elections.

News based (text search) approximations of uncertainty are often based on frequency counts of specified search terms in important newspapers or reports (Baker, Bloom and Davis, 2016; Husted, Rogers and Sun, 2020; Caldara et al., 2020; Ahir, Bloom and Furceri, 2022). In particular, they use the daily count of articles containing uncertainty-related terms. Subsequently, the raw count has to be scaled by the total number of articles in the newspaper as well as normalised by its standard deviation. The resulting index may aggregate a set of newspapers and is also scaled to produce the final index with a mean of 100 (Cascaldi-Garcia et al., 2023).

[5] As described in greater detail in sections 3, 4 and 5 (including, inter alia, Avom, Njangang, and Nawo, 2020; Ogbonna et al., 2022; Julio and Yook, 2016; Jahn and Stricker, 2022; Bloom et al., 2019; Balduzzi et al., 2020; and Funke, Schularick and Trebesch, 2023).

News-based measures reflect the perceptions of large segments of society (including writers, editors and readers) and are effectively available in real time. Moreover, they are usually related to a broader sense of uncertainty (concerns about who will make a policy decision, what policy will be undertaken, when it will take place and what impact it will have) (Baker, Bloom and Davis, 2016; Husted, Rogers and Sun, 2020; Caldara et al., 2020; Ahir, Bloom and Furceri, 2022).

Specific examples include several indexes measuring economic policy, monetary policy and trade policy uncertainty as well as the world uncertainty index. So far, one of the most frequently used is the Index of Overall Economic Policy Uncertainty (EPU index)[6] constructed by Baker, Bloom and Davis (2016) for the USA (relatively more detailed) and 22 other countries and country aggregates. In a similar vein, Husted, Rogers and Sun (2020) created an index measuring uncertainty regarding Federal Reserve Board monetary policy, while Caldara et al. (2020) constructed a measure of uncertainty about USA trade policy. The latest index in this respect, the World Uncertainty Index (WUI), was constructed by Ahir, Bloom and Furceri (2022), counting the frequency of the word "uncertainty" in country reports by the Economist Intelligence Unit for 143 countries. They also scale raw counts by the total number of words in each report in order to make it comparable across the countries. The relative advantage of WUI index compared to EPU results from its wider time and country coverage – it includes not only developed but also developing countries and its data are available from 1952. Furthermore, it is based on the single source – the EIU reports, and is created following a standardized procedure and structure, making the values comparable across time and countries (Ahir, Bloom and Furceri, 2022).

Survey-based measures of uncertainty use surveys of individual businesses, households and market participants (Altig et al., 2022; Leduc and Liu, 2016; Scotti, 2016; Rossi and Sekhposyan, 2015). They directly measure the uncertainty respondents perceive with respect to economic activity, expenditures and sales, offering the relative advantage of more specificity regarding particular segments of society conveying uncertainty and the time horizon over which the uncertainty prevails. However, they can appear to be relatively outdated compared to other categories, especially in case of fast-breaking news and events potentially inducing uncertainty. This category can be subdivided in *ex ante* and *ex post* surveys. The former focus on the expectations about future, while the latter compare expectations and realisations (Cascaldi-Garcia et al., 2023).

Examples include the Survey of Business Uncertainty (Altig et al., 2022), which is a panel survey of one-year-ahead uncertainties companies perceive about their sales and employment as well as a measure of consumers' perceived uncertainty (Leduc and Liu, 2016) about car purchases over the next 12 months based on the University of Michigan Survey of Consumers. Scotti (2016) constructs a macroeconomic uncertainty index using weighted averages of the square of economic data surprises. The latter are

[6] Despite methodological concerns laid down by Čižmešija, Lolić and Sorić (2017).

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measured by computing deviations of recent economic data releases from consensus expectations in Bloomberg forecasts an hour before the data are released. Finally, Rossi and Sekhposyan (2015) construct a measure of professional forecasters' uncertainty based on the realizations of GDP growth, relative to the unconditional forecast error distribution from nowcasts and forecasts of the Survey of Professional Forecasters.

Instead of relying on the perceptions of market participants and forecasters, **econometric based measures** of uncertainty use a lack of predictability, more specifically, situations where market participants' economic activity is less forecastable and thus characterised by high uncertainty (Jurado, Ludvigson and Ng, 2015; Ludvigson, Ma and Ng, 2021). Such measures offer the relative advantage of being underpinned by statistical inference and a rather wide perspective. However, they are available at lower frequencies and can differ when estimated on *ex post* revised data versus real-time data (Cascaldi-Garcia et al., 2023). Jurado, Ludvigson and Ng (2015) and Ludvigson, Ma and Ng (2021) compute indexes of macroeconomic and financial uncertainty as respective aggregates of the conditional volatility of the unforecastable component of a set of US economic and financial variables. Those indexes distinguish between uncertainty and traditionally used measures of volatility.

Indirect approximations of uncertainty in the field include those that derive from studies of markets and those based on discussions of elections.

Market-based measures of uncertainty are derived from financial markets. They are usually calculated as a measure of volatility or other higher-order moments of returns in a market over a certain amount of time (Cascaldi-Garcia et al., 2023). One of the most widely known examples is VIX – the Chicago Board of Options Exchange's Volatility Index. This index measures market participants' expectations concerning the volatility of the S&P 500 index over the next 30 days. Researchers and market participants have often used it to measure fear or uncertainty regarding the US equity market. It has the advantage of being available in real time and at intraday frequency and consequently market participants tend to use it during crises, in the case of events that are unfolding rapidly.

Following the approach of Durnev (2010), Gao, Murphy and Qi (2019), Jens (2017), Julio and Yook (2012) as well as Çolak, Durnev and Qian (2017). Julio and Yook (2016) laid the foundation for the recent strand of literature **approximating uncertainty indirectly through elections** and measuring the outcomes pertinent for this study. The timing of elections becomes the alternative for measuring variation in political uncertainty. When opposing candidates in an election promote different policies, uncertainty about an election outcome also entails uncertainty about policies to be carried out after the elections. Thus, the outcomes of national elections are relevant for the decisions of market participants. This assumption tends to be supported by many authors who found that probability of policy changes appears to rise around elections (including Białkowski, Gottschalk and Wisniewski, 2008; Boutchkova et al., 2012; Baker, Bloom and Davis, 2016). The sources of election data are usually the Database of Political Institutions (Scartascini, Cruz and Keefer, 2021) or the Psephos dataset administered by Adam Carr (2024).

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However, even if researchers consider elections to be exogenous indicators for periods of high uncertainty and examine their impact on a dependent variable, it is still difficult to generalise these conclusions. This is because elections tend to be foreseeable events and can be anticipated up to a certain point, while many other uncertainty-generating events cannot be foreseen. Furthermore, according to Gulen and Ion (2016), the election indicator does not capture how much the level of uncertainty rises during the elections and it also assumes that uncertainty does not change during non-election times. Due to those drawbacks, some authors prefer to use uncertainty indexes (Hsieh, Boarelli and Vu, 2019).

3 UNCERTAINTY AND FOREIGN DIRECT INVESTMENT

Economic research on the impact of uncertainty has focused on various aspects such as macroeconomic issues (output, investment and inflation), microeconomic phenomena (firm level investment or the health sector) and financial topics (equity returns or corporate strategy) (including Rjiba, Jahmane and Abid, 2020; Arslan et al., 2015; Merow and Urban, 2020; Phan, Sharma and Tran, 2018).

In the context of the paper, at this point we turn our attention to the authors who studied the relationship between uncertainty and economic activity from a theoretical perspective, particularly with regards to investment. Firstly, according to Keynes (1937) investment tends to depend on the opinions regarding future events and therefore, any negative opinions about future events will consequently reduce the investment. There are several theoretical predictions about the relationship between uncertainty and investment. Traditionally, according to real-option theory, as explained by Bernanke (1983) and later expanded by Rodrik (1991), Bertola and Caballero (1994) and Bloom (2009), if investments are (even partially) irreversible, uncertainty increases the value of waiting and delaying investment until some of the uncertainty has been resolved. A complementary concept of the financial frictions theory (Arellano, Bai and Kehoe, 2019; Choi et al., 2018) specifies that a rise in credit spreads, because of the bondholder compensations required due to the increased uncertainty, sets off prolonged declines in investment. Conversely, there is the alternative option, to expand, as defined by Abel and Eberly (1996), which may prevail during disruptions, thus reversing the usual response to uncertainty. With this approach, firms may decide on costly expansion or pre-emption in some business aspects, instead of facing a costly reversibility that might delay their investment.

It can be argued that such theoretical considerations regarding the relationship between uncertainty and investment are even more pertinent for foreign direct investment which should be relatively more sensitive to uncertainty (Julio and Yook, 2016[7]; Dixit, 2011; Choi, Furceri and Yoon, 2021; Gulen and Ion, 2016). Just like domestic investors, foreign investors face fixed sunk costs, but these are considered higher for foreign investors (Choi, Furceri and Yoon, 2021). In particular, foreign

[7] Julio and Yook (2016), among other things, empirically prove that foreign flows of capital are more sensitive to uncertainty than domestic investment as magnitudes of FDI decline are significantly larger than those of domestic investment.

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investors have limited information about the host country as well as weaker protection from its legal and political institutions. Furthermore, they may even encounter legal bias and have to bear the risk of expropriation. Additionally, they are exposed to exchange rate risk. Potentially different tax treatments and restrictive regulations concerning capital repatriation also make FDI relatively irreversible.

As the above-mentioned theoretical predictions about the relationship between uncertainty and investment did not result in a consensus, the nexus between uncertainty and (foreign direct) investment appears to be primarily an empirical issue.

Empirical findings on the topic point out that, although heightened uncertainty seems to be generally associated with worse FDI outcomes, the nature and magnitude of the effects critically depend on the type of the uncertainty and the characteristics of the countries involved in the cross-border flows (e.g. their degree of economic and institutional development).

Using EPU as an indicator of uncertainty, Hsieh, Boarelli and Wu (2019) demonstrate that the increase in uncertainty in the US is associated with an upsurge in outward FDI. Additionally, an increase in the level of uncertainty in the host country results in a decrease in FDI from US companies into that geographical area. Employing WUI as a new measure of economic policy uncertainty, Avom, Njangang, and Nawo (2020) find that WUI reduces foreign direct investment globally. The magnitude of the effect is more important in emerging and developing than in advanced countries.

Using both domestic economic policy uncertainty and the world uncertainty index on a panel of developed economies, Canh et al. (2020) show that, although domestic economic policy uncertainty has a negative effect on FDI inflows, an increase in the global (world) economic policy uncertainty increases FDI inflows into the country. These findings may imply the existence of safe havens for foreign direct investors in globally turbulent times as well as a systematic aversion to global uncertainty. Jardet, Jude and Chinn (2023) also found evidence of flight to safety in case of persistent global uncertainty, implying redirection of FDI towards advanced countries. Apart from that, overall they established a negative relationship between global uncertainty and FDI in all the locations, while host-country uncertainty induced a negative effect on FDI flows only for emerging countries and to a lesser extent than the global outcome. Finally, Bonaime, Gulen and Ion (2018) confirm the strong negative association between EPU and mergers and acquisitions at macro and firm level. In accordance with a real-option theory, the effect is exacerbated for less reversible deals.

A particularly interesting strand of the literature explores how the relationship between uncertainty and FDI may vary, depending on the type and degree of institutional development. Looking at the economic governance institutions, Ogbonna et al. (2022) find that weak institutions in Africa intensify the adverse effect of uncer-

tainty on FDI instead of mitigating it. Regarding the role of financial development in the interplay between the uncertainty and FDI, the results are rather heterogeneous and seem to be primarily of an empirical nature. Choi, Furceri and Yoon (2021) have established that higher financial development in a host country mitigates the adverse effect of uncertainty on FDI inflows, while both Ogbonna et al. (2022) for Africa and Jardet, Jude and Chinn (2023) at the global level demonstrate that financial development does not play a significant role in this context. On the other hand, Nguyen and Lee (2021) establish the importance of disaggregating financial development into sub-categories of financial institutions and financial markets. According to their findings, the adverse effects of uncertainty on FDI inflows are likely to be exacerbated by a high development of financial markets.

In a similar vein, Zhu, Jia and Wu (2019) investigate how a specific type of investment irreversibility (bankruptcy costs) influence the relationship between uncertainty and FDI flows. According to their findings, higher bankruptcy costs can exacerbate negative effects of uncertainty (approximated through EPU) on FDI. In accordance with the real-option theory, the bankruptcy resolution channel does not exist for foreign portfolio flows. Furthermore, the above-mentioned channel only exists in high political risk countries.

While previously described findings reflect the usage of EPU, WUI and VIX indexes, there are also authors who undertook empirical research using elections as approximations of uncertainty. Key exponents of this approach are Julio and Yook (2016) who, in accordance with the real-option theoretical perspective, show a significantly negative effect of policy uncertainty (approximated through election time) on FDI just before an election in the host country and an increase in FDI after the uncertainty is resolved. While this effect is present for FDI (which is relatively irreversible), it does not exist for foreign portfolio flows. Chen, Nie and Ge (2019) as well as Honig (2020) also find the negative effect of uncertainty on FDI at the global level. Whereas Chen, Nie and Ge (2019) find the negative effect to be especially strong in less democratic countries, Honig (2020) finds more evidence of adverse effect in developing than in advanced countries. Agbloyor (2019) and Gossel (2020) focus on Africa, performing a similar analysis. While Gossel (2020) finds a negative effect of the election year on the FDI inflows in the sub-Saharan area, Agbloyor (2019) cannot find a significant influence of elections in this respect. Finally, Jahn and Stricker (2022), using both elections and WUI as an alternative measure of uncertainty, find that reinvested earnings significantly drop in an election period compared to other FDI sub-types, as predicted by the real-option theory. However, this only holds for high-income countries. In other countries, equity investment is negatively affected, while a higher political quality will moderate the effect.

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4 POPULISM

So far, the paper has focused on the relationship between uncertainty and FDI. Now we turn our attention to populism – another important phenomenon of modern times. We want to explore what happens when we throw populism in the mix between uncertainty and FDI. However, in order to do this, firstly it is necessary to define this concept, explore its determinants, and then establish if there is a link between uncertainty and populism.

Although there is no consensus in the literature on what populism is (Guriev and Papaioannou, 2022), Mudde and Kaltwasser's (2017) definition offers its most general description. Populism is presented as a "political style", rather than a set of policy proposals, considering society to be separated into two homogeneous, antagonistic groups: "the pure people and the corrupt elite". It implies heterogeneous objectives and offers no room for pluralism, protection of minorities or diversity of opinions. There is little need for independent experts or agencies, parliaments and media as they serve the elite and obstruct people's direct rule. Anti-elite sentiment also includes the opposition to globalisation and supranational institutions, considered "elite projects" distanced from normal people. The anti-elite aspect also means that populists reject the need for democratic checks and balances because they tend to favour simpler majority rule. Pastor and Veronesi (2021) define populism as a political ideology, which is nationalist, anti-immigrant and anti-elite, while Rodrik (2021) defines it as a political viewpoint claiming to represent "people's common interests". However, for right-wing populists the latter include opposition to minorities and foreigners, while left-wing populists display opposition to the interests of financial elites.

Academic interest in populism has resulted in the existence of various studies exploring the key drivers of populism. The latter can be boiled down to the insecurity generated by structural changes in the economy and culture. Consequently, key determinants of populism include trade and financial globalisation, technological progress, labour market deregulation, immigration, as well as cultural issues. The empirical literature on the topic is large and displays both consistent patterns and some conflicting findings.

Global, **cross-border trade** has grown steadily since the fall of tariff, quota and non-trade barriers in the late 1980s (World Bank, 2024). Trade growth was particularly fast in emerging economies, especially in China since its entry into the World Trade Organization in 2001 (World Bank, 2024; Pavcnik, 2017). The surge of China and other emerging economies as leading global exporters disproportionately affected low-skilled and middle-skilled workers in advanced countries, generating persistent unemployment and income losses in import-competing regions as the production of goods with low human-capital intensity shifted to low-wage countries (Pastor and Veronesi, 2021). Middle-skilled jobs were especially affected because their relatively higher wages made them prone to outsourcing and offshoring (Guriev and Papaioannou, 2022). At the same time, as noticed by Rodrik (2021),

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governments also became increasingly ineffective at delivering offsetting policies of compensation and redistribution for losers in the trade globalisation process. Those failures of compensation were compounded by the failures of representation (Hays, 2009), as a large fraction of voters felt that their problems were not being adequately understood and addressed in the existing political arena. Empirical works corroborating the positive effect of the trade globalisation shock on increased populist vote include Autor et al. (2020), Dippel et al. (2017), Barone and Kreuter (2021), Caselli, Fracasso and Traverso (2020), Malgouyres (2017), Colantone and Stanig, (2018a, 2018b), Steiner and Harms (2023).

Financial globalisation and the related crises have also been studied as a potential driver of populism. The free flow of short-term finance across national borders and the build-up of considerable financial liabilities led to the Global Financial Crisis of 2008-2009 (Barros and Santos Silva, 2019). It was followed by a brief recovery, and subsequently by the European sovereign debt crisis that resulted in the recession of 2011-2013 (Blanchard and Brancaccio, 2019; Åslund and Dombrovskis, 2011). Many private banks were bailed out using taxpayers' money, which reinforced the view that governments were really defending the interests of financial elites instead of the people (Gyöngyösi and Verner, 2022; Ahlquist, Copelovitch and Walter, 2020). The crisis exposed some European governments to a risk of default, leading to the enforcement of stronger fiscal discipline. It limited further the governments' ability to spend on welfare state and redistribution policies, while the weakening of social safety nets led to an extensive feeling of unfairness (Guiso et al., 2024; Dustmann et al., 2017; Lechler, 2019; Dehdari, 2022; Gidron and Mijs, 2019; Fetzer, 2019; Fetzer, Sen and Souza, 2023; and Dal Bó et al., 2018). The austerity was often the part of economic adjustment programmes imposed by supranational institutions – International Monetary Fund and European Union (Åslund and Dombrovskis, 2011). Whereas the citizens in southern Europe were opposing the idea of imposed austerity, taxpayers in northern Europe feared that they would end up paying the debts of profligate southern countries. The result of these two opposing perspectives was the pervasive decline of support for the European integration project and the parallel growth of anti-globalization and eurosceptic forces (Guiso et al., 2024; Fetzer, 2019; Fetzer, Sen and Souza, 2023; and Dal Bó et al., 2018). Conversely, Bergh and Kärnä (2021) find no association between populist parties and the globalisation index, while Funke, Schularick and Trebesch (2016) find that only financial crises cause vote swings towards far-right populist parties.

Technological progress through artificial intelligence, machine learning and robotization penetrates various industries as many tasks become routine and automation replaces jobs. The winners of this process have mostly been high skilled "knowledge workers", whose cognitive occupations complement technology, while losers have been low- and middle-skilled workers whose routine jobs are easier to automate (Im et al., 2019). In particular, the information technology revolution led to a job polarization, implying a decrease in the relative number of routine middle-income jobs and growth in the share of non-routine jobs at the two ends of

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the income distribution: cognitive, high-income type or the manual, low-income type (Autor, 2014; Frey, Berger and Chen, 2018; Anelli, Colantone and Stanig, 2019). Regarding wages, the former have seen their income diverging from those of the middle-class, which fell closer to the group of low-skilled and low-income workers (Gallego, Kurer and Schöll, 2018).

As described above, technological progress was intertwined with the transformation of labour relations and wages, in particular **labour market deregulation**. The presence of losers in such arrangements was significantly associated with populist voting (Gozgor, 2023; Dal Bó et al., 2018). Populist parties fared worse in countries that spent more on passive labour market policies (providing income for workers experiencing unemployment). Cuts to those programmes were strongly associated with increased support for populist parties (Foster and Frieden, 2024). Similar implications regarding the role of flexicurity arrangements as a tool against (right-wing) populism also stem from the work of Bergh and Kärnä (2022).

The existing studies on the relationship between **immigration** and the rise of populism offer mixed evidence. Studies finding that immigration increases populist support include Dustmann, Vasiljeva and Damm (2019), Barone et al. (2016), Halla, Wagner and Zweimuller (2017), Edo et al. (2019), Becker and Fetzer (2016). On the other hand, Colantone and Stanig (2018a), Alabrese et al. (2019), Steinmayr (2021), Vertier, Viskanic and Gamalerio, (2023) and Lonsky (2021) produced the opposite results. Guriev and Papaioannou (2022) explain the lack of consensus in several ways. Firstly, it may be the question of magnitude. If the concentration of immigrants in an area is small, the contact theory suggests that their encounters will lead to empathy and increased understanding. If, on the other hand, the concentration of immigrants is large, it may result in fear of non-integration and an increased populist vote (as demonstrated by Vertier, Viskanic and Gamalerio, 2023). Secondly, there is also a distinction between refugees in transit and settlement. While settlement implies increased contact and rising empathy, these factors are not likely to be present in case of refugees in transit (Guriev and Papaioannou, 2022). Moreover, host communities may also be more open to high-skilled immigrants as opposed to the low-skilled ones (Moriconi, Peri and Turati, 2022; Mayda, Peri and Steingress, 2022). Finally, immigration may affect the populist vote in different ways: either via the economic impact or through culture and identity issues. As demonstrated by Algan et al. (2017) and Margalit (2019), negative migration attitudes at the individual level are consistently driven mostly by previous exposure to economic shock (e.g. Chinese import shock, loss of employment due to automation). According to their findings, this type of economic distress also seems to prompts more cultural concerns about immigration.

Apart from monetary issues, people also care deeply about **non-monetary factors** such as culture (in this context culture is a generic term including also ideology, religion, moral values, status loss and social connection). Economic and cultural factors are often seen as highly intertwined (Rodrik, 2021; Colantone and Stanig, 2019). Although theoretical studies have modelled the interaction between culture,

economics and support for populism, high quality empirical analysis is rare (positive examples are Di Tella and Rodrik, 2020; as well as Grossman and Helpman, 2021). This type of econometric exercise can be problematic if culture is endogenous to the economic determinants and the issue is not addressed in an adequate methodological manner (Guriev and Papaioannou, 2022; Margalit, 2019; Colantone and Stanig, 2019). Further research is necessary in this respect, with economists increasingly collaborating with social psychologists as well as scientists investigating culture to explain politico-economic issues.

So far, the paper has focused on various drivers of populism such as trade and financial globalisation, technological progress, labour market deregulation, immigration and cultural issues. Can **uncertainty** also be one of the determinants of populism? According to Gozgor (2022), when studying the factors stimulating populist voting, it is important to distinguish between economic uncertainty and economic insecurity. It implies making the difference between (economic) uncertainty and (economic) grievances, losses, scarcity and crises that can cause (economic) insecurity, as discussed by Golder (2016). Consequently, Gozgor (2022) is the first author to study empirically the effects of uncertainty (as measured by the WUI index) on populist voting behaviour in EU countries. Using various econometric estimation techniques, controls and robustness checks, the author demonstrates that uncertainty increases total populism and right-wing populist voting behaviour.

5 POPULSIM AND FOREIGN DIRECT INVESTMENT: IS THERE A ROLE FOR UNCERTAINTY?

After explaining key characteristics of populism as well as its potential determinants including uncertainty, let us turn our attention to the relationship between populism and FDI focusing, where appropriate, on the role of uncertainty in this context.

Firstly, the existing research points towards substantial economic and noneconomic costs of populist countries. Funke, Schularick and Trebesch (2023) prove that in the medium and long run, practically all populist countries exhibit subpar economic and institutional results evidenced by a significant decline in real GDP and consumption, independence of the judiciary, election quality, press and media freedom. Research studies focusing on the effects of Brexit, Donald Trump's election victory in 2016 in the USA, populist episodes in Southern Europe (Italy, Greece) and Central and Eastern Europe (Hungary, Poland) also establish significant medium-term costs. They are visible in terms of lower inward FDI and overall investment, capital flight, stagnating wages, poor growth, rising inflation and weakening of institutions[8] (Sampson, 2017; Dhingra et al., 2017; Breinlich et al., 2020; Serwicka and Tamberi, 2018; Broadbent et al., 2023; Breinlich et al., 2022; Born et al., 2019a, 2019b; Fajgelbaum et al., 2020; Magyar, 2016; Brzezinski and Najsztub, 2017; Bloom et al., 2019; Balduzzi et al., 2020).

[8] With the exception of robust economic performance in Poland (according to Guriev and Papaioannou (2022: 806), possible reasons for which include previously implemented reforms in Poland, improved tax collection in the country and immigration of Ukraine workers due to conflict and subsequent war with Russia).

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Secondly, according to the latest findings in the area of international business, populist governments and policies can, in themselves, constitute a source and proxy of (political) uncertainty (Sallai and Schnyder, 2021; Sallai et al. 2024; Carballo Perez and Corina, 2023; Alcaraz, Maartinez-Suarez and Montoya, 2023; Devinney and Hartwell, 2020; Stöckl and Rode, 2021). Populist governments are unpredictable for multi-national companies (MNCs) because they can oppose business elites on their platform to defend "the people". For example, they can adopt policies discriminating against foreign companies (e.g. public procurement or subsidies favouring domestic companies) or even, in more extreme instances, impose special taxes on foreign operations in the host country or forced buyouts. Such measures can be adopted and enforced, without due legal procedures. Conversely, populists may use nationalist mobilisation as a rhetorical tool during the election campaign, but without any real intention to put it into practice once they have come into power.

Furthermore, populist policies affect different MNCs in different ways, as demonstrated by the literature on the topic (Sallai et al., 2024). At country level, political uncertainty for an MNC is especially high if there are domestic competitors or if there are alternative sources of FDI from ideologically aligned countries. At sectoral level, political uncertainty is relatively higher in less strategically important sectors (particularly in terms of inward technology transfer). Finally, at firm level, the lack of investment capacity or ownership advantages due to unique technology can increase the relative level of political uncertainty for an MNC. The absence of protection from home country or of the positioning in local community through social expenditure can also result in an increased level of uncertainty for an MNC.

There are only a few studies trying to establish econometrically the relationship between populism and FDI, and they have been done primarily at firm level in the context of international business literature. Alcaraz, Martinez-Suarez and Montoya (2023) analyse the relationship between populist leaders and populist parties in Latin America on the one hand and internationalisation decisions (green-field investment) by local companies in the countries of the region. Their research underlines the crucial role of domestic political factors for foreign investment decisions. According to their findings, populist leaders in the home countries tend to discourage green-field investment by Multilatinas, while at the same time populist parties usually have the opposite effect on the firms in this geographical region. The authors give several reasons for such outcomes: populist leaders in the home countries may discourage internationalisation decisions by Multilatinas because of political instability caused by the survival prospects of populists in the region, who are often forced to leave office in dramatic circumstances. Moreover, legislative acts introduced by populist leaders may considerably increase the time and resources needed by firms to determine the extent to which policy decisions can influence their operations, positively or negatively. In such circumstances, they may postpone their decisions until uncertainty has been resolved. On the other hand, populist political parties are often perceived by firms to be political outsiders without the skills and experience required for government and legislation. This perception may encourage firms to seek green-field investment abroad.

In the similar vein, Carballo Perez and Corina (2023) explore the relationship between populism and foreign investment by US firms in developed countries. They stress the importance of host country political factors as well as potential mitigating circumstances. The firm level FDI is moderately significant and undermined by populism in the host countries. This negative effect seems to be palliated by country level institutions and firm level internationalisation. The threat of the populist leaders to alter "the rules of the game" is less credible in host countries with strong institutions, while multinational companies with higher levels of internationalisation can develop broader perspectives on different economic and political conditions and have greater operational flexibility in the case of actual change in the operational environment promoted by populist rhetoric. This is currently the only study on the topic distinguishing between populism and other sources of aggregate uncertainty (controlled for through the EPU index). While the firm level FDI is moderately significant, the EPU index seems not to play an important role in this context.

6 UNCERTAINTY, POPULISM AND FOREIGN DIRECT INVESTMENT IN THE CONTEXT OF PUBLIC SECTOR (STRUCTURAL-FISCAL) POLICIES: A LOOK AHEAD

As described above, according to research, there has recently been a rise in both uncertainty and populism. They have become features of modern society policymakers have to contend with. Indeed, uncertainty has proven to be one of the factors prompting rising populist responses (Gozgor, 2022).

Within this context, a new public policy paradigm has started taking shape – economic security (Williams, 2023; Von der Leyen, 2020). The key idea is to try to reduce the uncertainty for the country's economy, brought about by market fluctuations, pandemics, geostrategic tensions and conflicts. Williams (2023) sees it as a response to four big shocks – the global recession of 2020, geopolitical shocks, energy crisis and artificial intelligence. The recession caused by the COVID pandemic, the collapse of supply chains and the surging inflation decreased confidence in the incumbent economic system seen as a source of instability and prompted governments to introduce public policies in order to address the challenges. The increased geo-economic tensions between China and USA, the war caused by Russian invasion of Ukraine and the ensuing energy crisis (coupled with rising inflation) as well as the conflict in the Middle East have also shattered the notion of successful economic and political integration. Finally, the artificial intelligence boom has amplified fear among workers for their jobs (Rodrik, 2021). All these events have increased the sense of uncertainty among both policy makers and the electorate.

In order to minimise uncertainty, the governments are trying to interlink national security and economic policy through increased self-reliance, economic security and strategic autonomy. As described by Williams (2023), apart from raising tariffs (Trump presidency), many governments are resorting to subsidies and domestic-content requirements to create national champions in strategic industries such as artificial intelligence, computer chips and electric vehicles. Western governments

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are using policy tools like bans on exports and international investment from geopolitical adversaries especially in sensitive industries used both for civil and defence purposes. Besides the digital transition, they are also building up clean technologies in the fight against climate and energy uncertainty. The examples include South Korea giving tax breaks to semiconductor companies, the Chips Act and Inflation Reduction Act in USA, Green Deal Industrial Plan in Europe and EU arrangements to assist communication and microelectronic sectors.

Juhász et al. (2022) empirically demonstrate that policy makers are turning their attention towards industrial policy measures in order to persuade companies to locate or expand activities in their respective countries, in strategic industries such as semiconductor industry or sustainable energy. Private companies, at the same time, respond to such government signals by talking about bringing back production to their home-country, leaving China or keeping higher stock of raw materials and finished goods in order to be able to draw on them in the event of supply chain failure. On the other hand, some firms will want to invest directly on foreign soil, when international trade is difficult, thus adapting to the protectionism elsewhere.

Furthermore, there will be limits to handouts by governments fiscally exhausted after the big fiscal stimuli undertaken in response to global shocks such as the global financial crisis (2007-2008 leading to the European debt crisis) and COVID pandemic (coupled with the energy crisis and geopolitical conflicts). In such circumstances fiscal policy is constrained, even more so, if we take into account fiscal challenges posed by demographic trends, defence concerns as well as green and digital transition. Moreover, fiscal and monetary policies are tools useful for regulating the macroeconomy in the short term, but it is structural reforms that should improve country's medium to long-term performance through increasing potential growth and resilience (Blanchard and Johnson, 2011).

According to macroeconomic theory, giving free-market oriented supply-side policies greater influence in the economy should stimulate productivity, increase economic incentives, initiate the adoption of efficiency-enhancing technology and increase investment in physical and human capital. However, Alesina et al. (2024) demonstrate a significant slowdown in structural reforms worldwide from the 1990s. They explain it by reform fatigue after significant structural reforms undertaken in previous decades as well as rising populist tendencies. Nevertheless, the structural reform agenda remains substantial worldwide. Consequently, the authors try to clarify why the liberalisation measures, which are theoretically so beneficial for treating weak productivity and growth, are so unpopular and difficult to carry out among both policy makers and the electorate. According to their findings, the electoral impact of reforms is contingent on their timing regarding the electoral and business cycles. Reforms seem to be politically costly, when carried out close to elections, but are typically benign when undertaken earlier in the political cycle. Furthermore, liberalisations implemented during recessions are more likely to be penalised by the electorate than reforms done during the robust part of the economic

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cycle. These findings are complementary to the evidence that growth payoffs from doing the difficult, technical work of structural reforms do not come quickly and the electorate does not perceive positively the lag between the reform and the visible economic benefits. Moreover, structural reforms cause immediate losses versus delayed economic benefits, and losers may be voicing their opposition very strongly (even if they are in a minority). Thirdly, the electorate may not be able to distinguish between various causes of recession and may attribute them wrongly to the implementation of the reform. Finally, policy makers should be especially wary of reforms that cause large distributional effects together with small and delayed growth benefits. Consequently, in the super-election year (EU Parliament, France, UK, USA, followed by elections in Germany expected for 2025), politicians will probably be chary about deep structural reforms, especially as they do not want to be blamed for the ensuing job losses, in the climate of mounting populist tendencies. Right now, it seems that rising uncertainty and (especially far right) populism are here to stay. Scientific research points towards their many shortcomings regarding economic performance and societal well-being. The policy makers have their work cut out for them to come up with an approach that will ultimately deliver the prosperity and security the electorate wants. If economists cannot contribute with the answers in the process, populist insurgents will.

7 CONCLUSION

Uncertainty is one of the defining features of our time; yet, it is not directly observable. Researchers in economics trying to establish empirically the effects of uncertainty have grappled with this issue in various manners, mostly trying to approximate it in direct and indirect ways at macro, sectoral and firm level. Each of those approaches has its merits and limitations. Studies focusing on the effects of uncertainty on FDI were rather eclectic in this respect, at first using elections as a measure of uncertainty, and with the appearance of uncertainty indexes, such as economic policy index and world uncertainty index, papers on the topic started gaining ground. The relationship between the two seems to be primarily an empirical issue. Although empirical studies in general establish a negative relationship between uncertainty and FDI, the nature and magnitude of the effects often hinge on the type of uncertainty and the characteristics of the countries involved in foreign capital flows.

Populism is another feature of modern politics evoking strong interest among researchers and societies affected by it. The key drivers of populism can be boiled down to the insecurity generated by structural change in the economy and culture. They can be subdivided into globalisation of trade and finances, technological progress, labour market deregulation, immigration and cultural issues. Very recent research has established that while studying the empirical determinants of populism, it is important to distinguish between (economic) uncertainty on the one hand, and (economic) losses, grievances scarcity and crises that can cause (economic) insecurity on the other, because both factors contribute to the strengthening of populism.

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The relationship between populism and FDI offers fertile ground for researchers interested in the role of uncertainty. For some of them, populism in itself constitutes a source of and a proxy for uncertainty, while few have made distinction between uncertainty and other sources of economic insecurity leading to populism, when exploring the nexus between populism and FDI. Looking from the macroeconomic perspective, the relationship between uncertainty, populism and FDI has been too little studied. In a similar vein, at the firm level, there have been only a handful of studies regarding the relationship between populism and FDI, only one of them applying the above-mentioned distinction.

Overall, the comprehensive survey of these three concepts and their empirical links demonstrates that there are still various open questions to be answered in order to reach a more structured understanding on the interconnection among uncertainty, populism and FDI. Those include the various types of FDI and their in-depth relationship with uncertainty; the role of home country, host country or global level uncertainty and their empirical links, policy implications regarding empirical findings on the determinants of populism, e.g. compensations for losers in the process of structural change that has added to their sense of economic insecurity. It would be useful to explore the interlinkage between populism, FDI, and the role of uncertainty in this context, not only from the firm or international business perspective, but from the macroeconomic perspective as well. There is also potential to include other researchers from behavioural economics, social and political psychology to study deeper the concepts of uncertainty and populism. More generally, as researchers are exploring new aspects of uncertainty and populism, it would be valuable to study policy solutions that deliver a better future both in economic and non-economic terms.

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