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## European migration governance in the context of uncertainty

Deliverable 1.5



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*Abstract*

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Migration processes are uncertain and volatile, eluding precise conceptualization, definition, and measurement. Their embeddedness into complex migration driver environments, coupled with a high-level human agency of different actors involved in migration decisions – prospective migrants, intermediaries, and policymakers – hampers both prediction and efficient policy responses. Therefore, uncertainty and complexity as inherent features of international migration flows create challenges for the governance of migration both in the short and longer term.

This paper aims to unpack the implications and transmission of migration-related uncertainties on European migration governance. We specifically address what effect uncertainty has on migration-related policy responses, as well as who assesses and communicates what kind of migration-related uncertainty. Using the so-called Syrian ‘refugee crisis’ and environment-induced migration as illustrative cases of how uncertainty affects European migration decision-making across a range of time horizons, we show that in the context of uncertainty European states rather fine-tune existing policies than making major changes. This pivot towards the status quo, especially for immigration, coincides with a negativity bias, whereby policies respond more strongly to perceived ‘unfavourable’ rather than equivalent ‘favourable’ migration trends, signifying some degree of ‘loss aversion’ among the decision makers – but also highlighting considerable subjectivity of what is considered ‘favourable’. Finally, we also reflect of the reverse direction of the relationship between policy and uncertainty, scant legal options for migrating contributing to the greater unpredictability of flows and decisions. We discuss this as a very important area of further enquiry.

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# 1. Introduction

In 2003, the Immigration and Nationality Directorate of the UK Home Office commissioned a report to some key experts in the field of migration research to assess the magnitude of future migration flows to the UK after the enlargement of the European Union (EU) in 2004. The ten countries that were expected to join the EU on 1 May 2004 were Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia. Due to the scarcity of historical data on migration from these countries and, specifically, the eight central and eastern European (CEE) countries (the ‘Accession eight’, A8, excluding Cyprus and Malta) to the EU, the econometric forecasts and projections of migration from these countries to the UK and Germany assumed that post-accession migration would “*exhibit the same [sic!] migration patterns, and react in the same way [sic!] to economic variables, as past migration countries*” (p.8 of the Home Office report, Dustmann et al. 2003)<sup>1</sup>.

The Home Office report estimated for the period up to 2010 an increase in net immigration between 5,000 and 13,000 per year for the UK (compared to between 20,000 and 210,000 for Germany). The former of which was an underestimation by an order of magnitude, when compared to the estimated net annual migration of just over 50,000 of the nationals of the A8 countries between 2004 and 2010, according to the Office for National Statistics<sup>2</sup> – which number itself remains highly uncertain, as it is based on a random sample from a border survey. Uncertainty in the Home Office forecasts was reported by saying that “*predictions need to be evaluated with some caution*”. But “*even in the worst-case scenario, migration to the UK as a result of Eastern enlargement of the EU is not likely to be overly large. The evidence brought together indicates that net migration from [the accession countries] to the UK will be broadly in line with current migration movements*” (Dustmann et al., 2003, p.8).

As a response to this high-level expertise and assessment of future migration to the UK, the UK government refrained from implementing a transition period aimed at protecting national labour markets from supply ‘shocks’, like most other EU member states did at the time. This was due to the perception that a significant increase in immigration flows as a result of the free mobility regime is very unlikely. However, while numbers increased unexpectedly, in the next round of EU enlargement in 2007, the UK restricted access to its

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<sup>1</sup> We sidestep here the question, whether the EU citizens exercising their treaty rights with respect to the freedom of movement are indeed migrants: from a statistical point of view, yes, but the legal perspective can be open to different interpretations.

<sup>2</sup> See, for example, Office for National Statistics data on migration to the UK by broad citizenship groups: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/longterminternationalmigration200citizenshipuk> (as of 20 December 2022)

labour market for Bulgarians and Romanians. Some more restrictions followed later on for other third-country nationals, in order to reach the political ‘target’ of the net migration below 100,000 per year – the aim set and upheld by successive Conservative governments in the 2010s, but not achieved with much success<sup>3</sup>. Failure in getting even close to this target has ultimately, even if indirectly, contributed to the Brexit referendum, with its well-known outcome and the still-unfolding consequences, including migration-related ones. Was uncertainty, and its miscalculation, the ‘root cause’ of a massive governance crisis and subsequent shifts in the UK migration policy? Did it contribute to mismanaged expectations of the policy makers and the general public? What exactly is the role and effect of future migration-related uncertainty on migration governance? How is uncertainty assessed, communicated, perceived, and turned into political decisions on migration governance? And is migration governance itself a source of uncertainty?

The premise of this study is that good judgements by ‘uncertainty experts’ and effective communication to knowledgeable political actors are necessary – although on their own not sufficient – for good political decisions and a well-functioning migration governance system. At the same time, there seems to be a tendency amongst the decision makers, as well as indeed the general public, to pivot to ‘clear’, if misleading, black-and-white narratives, which ignore uncertainty. We hereby assume that political decision makers in a governance system – whether they are legislators, bureaucrats, or judges – rely on similar information and the same kinds of cognitive processes common to all human beings. While we are aware that “the policy-maker” cannot be treated as a monolithic bloc without partisan preferences, we assume that collective decisions follow similar cognitive constraints as decisions of an individual decision maker.

In a context of limited information, individuals tend to rely on a smaller number of legislators who possess a better understanding of the issue at hand and share a common set of preferences to adopt a collective decision (Ringe, 2009), following a rational mimesis behaviour (Munier & Rondé, 2001). Therefore, individual cognitive constraints shape *ex ante* the political space in which policy choices are made (Hix, 1999). From this perspective, we can fairly assume that partisanship does not remove uncertainty and incomplete information in the migration governance process, nor the behaviors triggered by uncertainty. We specifically assess the relevance of some fundamental cognitive biases and heuristics that may explain some trends and patterns in political decisions in the context of migration-related uncertainties. In the mentioned situation of the UK in 2003, for instance,

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<sup>3</sup> See the comment by M Sumption and PW Walsh for the Migration Observatory briefing series, via: <https://migrationobservatory.ox.ac.uk/resources/briefings/long-term-international-migration-flows-to-and-from-the-uk> (as of 20 December 2022).

path-dependent thinking and a *status quo bias* led to the assumption that past migration trends and patterns from the new Central and Eastern European member states of the EU would not change substantively and can therefore be extrapolated for periods after their accession, and therefore the UK government opted for a free mobility regime without a transitional period.

In the following section, we trace the process from the identification and assessment of migration-related uncertainty, via various modes and means of its communication, to its effects on policymaking and political decisions about adaptations of the migration governance regime. Inspired by the framework developed by van der Bles et al (2019), the elaboration on the migration governance process is structured along three fundamental questions in the context of migration uncertainty, namely *who* assesses and communicates *what* kind of migration-related uncertainty, and *to what effect*? We hereby develop a migration-focused typology for each of these *w*-questions, which forms a conceptual framework for unpacking the migration-related uncertainty-governance nexus. We specifically explore government goals, objectives, beliefs in the context of uncertainty regarding the developments of migration-related governance crises. The way European migration governance responds to foreseeable and unforeseeable events and systemic shocks illustrates the link between governmental strategy and (un-)preparedness when facing diffuse or mixed forms of different types of uncertainty. By elaborating on notions of bounded rationality in migration policymaking, we discuss implications in form of path-dependent thinking, loss aversion or a status quo bias on the course of action and inaction in migration governance in the context of uncertain migration futures either in form of sudden-onset high-impact events (such as the outbreak of an armed conflict), or for slow but steadily changing migration-inducing developments, such as climate change.

In the concluding discussion, we also touch upon the other part of the uncertainty-governance nexus, by asking how migration policymaking itself contributes to various forms of migration-related uncertainty. Based on the assumption that migration policy is a core element of the individual migration decision process, migration governance itself functions (often) as a fundamental, yet uncertain driver of large-scale migration movements. Again, in the example of the UK in the early 2000s, the decision of the UK government NOT to follow most EU member states in implementing a transitional period of restricted labour market access created a new situation and opportunity for many Central and Eastern Europeans who may not have considered emigration without this unexpected window of opportunity. At the same time, the outcome was clearly dependent on the decisions of other countries (some which were known at the time, such as for Germany and Austria, intending to use the maximum allowable seven-year transition periods, see e.g. Czarzasty 2004): if all countries opened at the same time, fewer people would have moved to the UK, as the pool of countries with unrestricted labour market access would have been broader.

The remainder of this paper is structured as follows. Section 2 elaborates on the role of actors and experts in identifying and assessing migration-related uncertainty, while section 3 explores the various forms of epistemic and aleatory uncertainty that experts and policymakers alike are facing in the context of informing and executing migration policies. Section 4 unpacks the effects of risk and uncertainty on the decision-making of migration policy makers referring to certain heuristics and biases in the decision-making process to explain some empirical policy trends. Section 5 concludes with some repercussions of uncertain (and sometimes erratic) policy changes on migration decisions of potential or actual migration, hereby affecting population movements in sometimes unexpected and often undesired ways. This study hereby contributes to a better understanding of empirical patterns and some 'anomalies' in migration policy trends, addressing the complexity and implications of migration policy decisions under uncertainty and information constraints.

## 2. What is migration-related uncertainty?

As a fuller classification and typology of different sources and facets of migration uncertainty is discussed elsewhere (Bijak and Czaika 2020a), here we just offer a summary. We aim here to underline that both the levels as well as dominant sources of uncertainty vary across different types of migration flows (Bijak et al. 2019), such as between conflict- and environment-induced migration, as discussed later in two illustrative cases presented throughout this report.

In a nutshell, at a very high level of generality, uncertainty can be seen as either reducible through better knowledge about migration facts or features, or through better analytical and modelling techniques (*epistemic uncertainty*), or as inherently irreducible random variability (*aleatory uncertainty*). Migration uncertainty can be also related to different facets of migration: definitions, explanations, measurements, predictions – and in this context, be a characteristic of volumes, drivers, timing, composition, or directions of migration flows. The main sources of migration uncertainty include lack of knowledge about drivers, the impact of these drivers on migration flows themselves, and the future directions in which the drivers, their impact, and finally migration as such will develop. The reasons for the lack of knowledge and evidence on drivers are manifold. Some of them are of the epistemic nature and are potentially surmountable given better insights and more complete states of knowledge. The **epistemic uncertainty** can have many levels, including uncertainty about the facts, about the links between migration and its specific drivers and driver environments, as well as uncertainty about the evidence about the migration-related facts (such as its measurement), but at least some of the related knowledge can be gained from research and analysis into processes and their meta-characteristics. It is worth stressing that the epistemic uncertainty is reducible *in principle*; in practice, the cost or difficulty of gathering the required data or information may be prohibitive.

At the same time, the relative role of epistemic uncertainty decreases over time, as the analysis looks increasingly further into the future from a fixed starting point. At longer horizons, **aleatory uncertainty** increasingly dominates, and accumulates over time, through increasingly less predictable impact of successive chance events. As this type of uncertainty cannot be reduced through greater knowledge, its management calls for approaches based on preparedness and contingency planning, instead of focusing of prediction and explanation, some aspects of which can be futile (Bijak and Czaika 2020ab). Other aleatory aspects involve human agency in decision making, the impact of unpredictable shocks or technological changes, and similar disruptive events (*idem*).

To go back to the example of the UK migration predictions following the 2004 EU enlargement mentioned in the Introduction, the Home Office report (Dustmann et al. 2003) did explicitly acknowledge some of the related uncertainty, by constructing two scenarios of possible migration developments based on different assumptions on some of the underlying economic drivers. Still, in this case, other sources of uncertainty proved overpowering, rendering this forecasting attempt ultimately unsuccessful: the main omission was the lack of acknowledgement of the upcoming shift to the whole European migration system. In statistical parlance, the models used assumed stationarity – continuation of past trends and economic fundamentals – where these were about to change abruptly, leading to a ‘new equilibrium’ or steady state in migration flows.

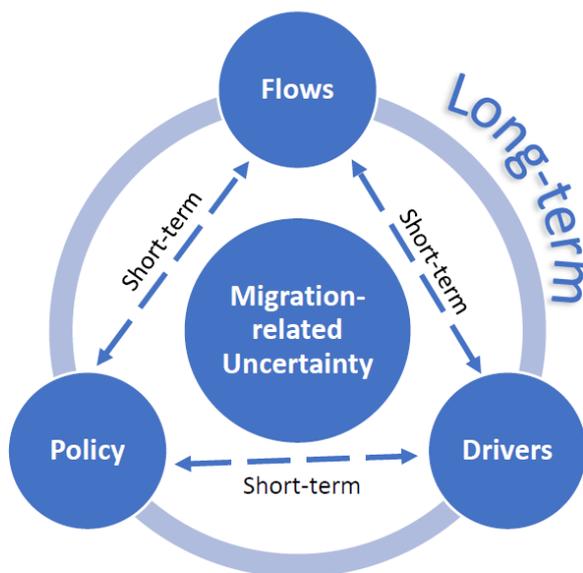
In other words, the uncertainty related to the future development of selected drivers, which were included in the Home Office report (Dustmann et al. 2003), proved much less consequential than some other aspects of epistemic uncertainty, notably, policy changes in other EU member states. Here, the crucial omission was an *ex-ante* analysis of which countries would not open their labour markets to the new EU nationals for as long as legally possible (seven years), such as Germany or Austria (Czarzasty 2004), leading to a diversion of migration flows to those countries that did open up immediately in 2004, such as the United Kingdom, Ireland or Sweden, on which the new mobility concentrated. In addition, quite crucially, the aleatory uncertainty, including random variability of flows, was not taken into the account. As a result, the Home Office study acknowledged one small aspect of uncertainty, but without accounting for far more substantive sources.

Generally, migration-related uncertainty arises across at least three fundamental dimensions (Figure 1). Firstly, migration drivers range and interact very widely, covering economic cycles and shocks, demographic transitions, socio-cultural changes in values and norms, technological progress, or anything similar that has the capacity to affect the fundamental opportunity space of (potential) migration, both in the short and longer term. Secondly, migration-relevant policies often respond to already identified or anticipated changes of certain migration drivers (e.g., demographic shifts, labour market needs, conflict, climate change etc.). Yet by their response, migration governance creates some uncertainty (uncertain outcomes and effects), not only regarding the drivers addressed by a policy

intervention or change, but ultimately also regarding the affected migration flows. Migration flows are therefore the third dimension of uncertainty in this triad.

At the same time, migration flows can change for a clearly identifiable reason (a change in a fundamental driver, a policy change), but they do not necessarily, or sometimes they do but in an unexpected way. In fact, migration flows generally fluctuate, not only over a longer time period, but also during the year, and often for reasons that may be not immediately obvious. Thus, migration flows are a source of epistemic but also aleatory uncertainty in this system. We posit that in the long term, migration drivers, policies, and flows are systemically interlinked, that is, it is almost impossible to identify cause-effect relationships between the three dimensions as they change conjointly along systemic trajectories.

**Figure 1:** The triad of migration-related uncertainty



One example for long-term migration-related uncertainty is climate change and its impact on environment-induced migration. The two main reasons for uncertainty regarding this type of migration flows include (1) the pace, magnitude and geographical distribution of future global warming are still uncertain and (2) methodological uncertainties about estimating the effect on the nexus between environmental degradation and migration (Czaika and Münz 2022, Wright et al. 2021). As IPCC (2007) states: “Estimates of the number of people who may become environmental migrants are, at best, guesswork”. Despite a certain consensus that climate change is a real fact and threat to human livelihoods that requires “to act now” (see, for example, European Green Deal 2020), how quickly it extends, where to and how severe it will be is still relatively uncertain (Pörtner et al. 2022). This relates primarily to the lack of appropriate data, but also the difficulty in isolating the effect of a ‘causal complex’ that concerns only environmental factors and not others (Fitch 2020, Wright et al. 2021).

The challenge of isolating individual drivers is especially true for slow-onset (gradual) environmental changes, which entail multiple uncertainties, “given the multiple factors at play in decisions to migrate and in long-term development processes” (Wright et al. 2021) as climate change is often just one driver among others that influence people to migrate (IOM 2015). This could also include conflict induced by depleted resources that were caused through climate change. The effects of slow-onset environmental degradation on migration flows are generally “more complex to assess, quantify, and predict” as it has a relatively indirect impact on human mobility and is thus more challenging to measure directly (Czaika and Münz 2022). In addition, climate change, often manifested in highly diverse environmental degradations across ecosystems and regions, can cause different types of migration: (1) voluntary adaptation, (2) involuntary displacement, (3) organized relocation, and (4) voluntary and involuntary immobility (Pörtner et al. 2022, p. 1079).

The reason for methodological uncertainty is further aggravated by the absence of a commonly agreed definition of environment-induced migration. Although the International Organization for Migration (IOM) has put forward such a definition<sup>4</sup>, it is not internationally accepted, nor legally binding (IOM 2022). Part of the problem is terminology as forecasting models often use also different definitions of migrants, hereby under- or overcounting migrant numbers (Czaika and Münz (2022). Some forecasting models do not even explicitly address uncertainty (see Bijak 2010). Scenario studies further depend strongly on the assumption on uncertainty made, creating possible biases (de Valk et al. 2022). The consequences are very diverse long-term predictions of environment-induced migration, with very wide ranges and margins or errors, making it hard to get a clear picture of the future of such migration flows.

As an illustration, according to IOM (2022), citing Byravan and Rajan (2010), forecasts vary from “25 million to 1 billion” environmental migrants by 2050, with 200 million being the most widely cited estimate. The World Bank (Clement et al. 2021) also estimates that 216 million people could move within their own countries by 2050 because of slow-onset climate change impacts. For the same period, UN’s IPCC (2021) predicts, however, that 143 million people are likely to be uprooted by rising seas, drought, searing temperatures, and other climate catastrophes, providing a lower estimate. UNDESA (2020) in contrast forecasts a much higher number, due to water stress and water scarcity. The latter estimates that 700 million people could be already displaced by 2030.

This wide range of figures reflect the high level of epistemic and aleatory uncertainty

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<sup>4</sup> “Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad” (IOM 2007, 33, see: <https://environmentalmigration.iom.int/environmental-migration>).

regarding drivers, policies and (types of flows) in the area of environmentally induced migration, in particular regarding long time horizons of several decades. Slow-changing, long-term developments in migration drivers such as changing climatic conditions in combination with uncertain policy responses including political will and ability to mitigate greenhouse gas emissions, and adapt to environmental impacts such as building dams against sea-level-rises, new plants against desertification, new sources of income for agricultural sectors, but also preventive measures regarding sudden-onset events including early warning systems, create a configuration of factors that does not allow for reliable planning. In the short term, however, the number of displacements due to sudden-onset environmental shocks has fluctuated around 30 million per year over the past two decades (Czaika and Münz 2022), making this figure a good estimate in the short-term, i.e., for the next few years, but certainly not for longer time horizons.

### 3. Who identifies and assesses migration-related uncertainty?

A key question in the context of uncertainty and migration governance has to do with identifying the main agents *who* assess and communicate migration-related uncertainty. Arguably, the former group can in principle involve various migration experts: individual scientists, research groups and institutions, think tanks, state organisations, such as national statistical institutes, research departments within ministries, other organs of the public administration, interested private companies, and so on. In some cases, providers of this information can be defined within a legal instrument, as in the case of a recent EU-level attempt to provide a legal template – the Migration Preparedness and Crisis Blueprint – for managing unforeseen events related to migration and ensuring preparedness, which discusses the roles of responsibilities of different EU bodies and member states in this context<sup>5</sup>.

The question of communication can be more challenging. Besides the technical experts listed above, who may or may not have appropriate communication skills allowing them to reach their intended target audiences with clear and unambiguous messages – this group may also potentially include communication and PR professionals, journalists, and other representatives of the media experts in visualisation of data and other types of information, and many others<sup>6</sup>. For them, the challenge may be the opposite than for the experts: they

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<sup>5</sup> Commission Recommendation (EU) 2020/1366 of 23 September 2020 on an EU mechanism for preparedness and management of crises related to migration, OJ L 317, 1.10.2020, p. 26–38, <http://data.europa.eu/eli/reco/2020/1366/oj>

<sup>6</sup> See, for example, the idea of hiring dedicated ‘data translator’ to aid businesses, but also, by extension, policy makers: <https://www.forbes.com/sites/bernardmarr/2018/03/12/forget-data-scientists-and-hire-a-data-translator-instead/?sh=498c39b2848a>, accessed on 23 January 2023.

may possess the right skills and tools for effective communication but would need detailed advice on the content of the message, to make sure it remains rigorous and valid (for a discussion on demographic uncertainty, relevant to migration topics, see e.g., Bijak et al. 2015).

Across different areas of policymaking, there exist several good practices regarding the analysis and communication of uncertainty. In a recent example, the UK Parliamentary Office for Science and Technology (POST 2022) formally defined main areas of uncertainty as “[...] statistical uncertainty, [...] limited data or low-quality research, contested research or disagreement between experts, or a complete lack of evidence”, and provided clear guidance on the related communication. Their recommendations include clarity (and readability) of the language, focus on clear inclusion of information about uncertainty, such as margins of errors, quality of the data and studies, as well as providing sufficient – and relevant – contextual information.

Other suggestions, made from the perspective of the producers of uncertain knowledge, such as researchers, academics, and other experts, include making greater use of narrative storytelling in conveying information and advice about complex phenomena and processes, but doing it in such a way that uncertainty becomes a key element of the stories (Dahlstrom 2014). One example relevant to migration predictions is the use of risk management framework, which would be familiar to many decision makers, as a template for telling a story about the uncertainty (predictability) and impact of different types of migration flows (Bijak et al. 2019). This approach speaks to the practice already existing in some areas of the government: for example, in the UK, irregular migration flows are included in the National Risk Register of civil contingencies (HM Government 2020). Visualising uncertainty (see Spiegelhalter et al. 2011) provides another natural, compelling, and persuasive way for communicating it to the users, including in the policy domain.

As a possible broader framework, encompassing some of the suggestions above, and considering the relationships between *producers* and *users* of uncertain knowledge, Patt (2009) advocated the use of dialogue and establishing of trust between the producers and users of uncertain knowledge as a ‘first-best’ approach to uncertainty communication. The ‘second-best’ solution suggested by Patt (2009) would involve offering the decision makers a minimum set of information to allow them to determine if they need more and whether they should request it. The latter approach would lead to an iterative participatory and deliberative process of decision advice and support, with two-way feedback through established communication channels.

Explicitly including the perspective of the recipients or end users of scientific advice (*to whom* this advice is addressed) in the communication template is also pronounced in other recommendations for effective policy dialogue, with Manski (2011) explicitly cautioning against “incredible certitude” in communicating science. In practical terms, Fischhoff and

Davis (2014) focused on choices, decisions, and outcomes, when proposing their six-step protocol for summarising uncertainty at the different stages of the policy and policy advice processes. The possibility of using formal decision analysis to support policy decisions for outcomes with known (or at least knowable) probabilities, remains an open possibility (Bijak and Czaika 2020b).

In practice, depending on the type of migration, the agents providing the policy makers with their own uncertainty analysis can be manifold, and the related communication can follow along a range of different channels, with various legal and political implications. To illustrate this, we focus on the European policymaking during and in the wake of the Syrian ‘asylum crisis’ of 2015–16.

### **Illustrative case: Communicating migration uncertainty following the Syrian crisis**

The group of actors providing European Union’s policymakers with data on migration has significantly expanded over time. At the time of writing this report, three levels of data are used by the European Union Agency for Asylum (EUAA, formerly European Asylum Support Office, EASO) to forecast asylum-related migration flows (Albertinelli et al. 2020). The first draws on the Global Database of Events, Language and Tone (the GDELT project) to extract proxies of asylum migration drivers from conflict, negative and disruptive events (see Carammia et al. 2022). The second level concerns data on detections of illegal border-crossing at the EU’s borders by Frontex. The third level considers asylum recognition rates to estimate pull factors towards individual Member States.

These levels were not yet used in 2015-2016, when EASO could rely on less coordinated data from Frontex, Eurostat – which also coordinates statistics on international protection based on the information provided by National Authorities – and data on the number of asylum applications provided by the Member States. The latter have improved over time, partly thanks to the support provided by an international Expert Group on Refugee and Internally Displaced Persons Statistics (EGRIS) set up in 2016 following a joint proposal by Statistics Norway, Eurostat, the Turkish Statistical Institute (TURKSTAT) and the Office of the United Nations High Commissioner for Refugees (UNHCR). The group has developed a set of international recommendations for refugee statistics and operational instructions. While the guidelines include and discuss errors in estimates and mention, among the indicators of the International Quality Framework for statistical data, “communicating about quality”, there is no recommendation on how to communicate uncertainty (EGRIS, 2018). Statistics provided by Eurostat are used also by the European Migration Network, which is formed by migration and asylum experts and are an important source of knowledge for EU policy makers. Under the coordination of the European Commission, the network connects National Contact Points located in all member states (except Denmark due to the opt-out on justice and home affairs issues) and Norway.

Despite the interconnectedness among those actors and the variety of potential knowledge providers available, our research suggests that, at least until 2016 during the Syrian crisis and with few exceptions, institutions tended to rely mostly on one specific source, with the risk of creating silos in the discussion of data and additional layers of uncertainty. An analysis of key public migration policy documents produced by the European Commission and the Council – legislative and non-legislative documents, such as the 2015 European Agenda for Migration, or the 2012 Action Plan on Migratory Pressures, the Council conclusions as well as all the minutes of the Justice and Home Affairs council meetings – during the Syrian refugee crisis between 2011 and 2016 describes well these micro-network constellations of knowledge production and consumption. While the overall political salience of illegal border crossings and related detections may explain the prevalence of Frontex and EMN reports as sources of the debates, it is interesting to observe how the Council and the Justice and Home Affairs (JHA) Directorate-General officials rarely refer in the documents analysed to EASO/EUAA or UNHCR data and rather focuses on Frontex quarterly or annual report or, to some extent, to EMN reports. The only exception was 2015, when the EU entered a full migration crisis-mode, JHA Council reported of having been briefed by “a number of EU and United Nations agencies (Frontex, the European Asylum Support Office (EASO), Europol, UNHCR and International Organisation for Migration)” (JHA Council, 2015, 11969/15). This uneven representation is also due, in part, to the public nature of the documents analyzed, which might include only publicly available data, and to the selective and strategic choice of the topics to be referred to, namely irregular migration more than international protection,

Conversely, the European Commission seems to rely on – or quote – a broader range of sources. The nature of the document (political or operational), the core competence of the institution analyzed (the European Commission or the Council) and the problem pressure experienced by the actors (Mastenbroek et al., 2022) surely matter in the choice of data provider. This is, however, particularly crucial for our analysis. Indeed, the provision of data is accompanied – and often framed – by implicit narratives (Albertinelli et al. 2020, Boswell, Geddes, and Scholten 2011; Hadj Abdou and Pettrachin 2022) and different types and levels of uncertainty may lead to different policy outputs, as discussed more thoroughly in Section 2 of this paper. The quarterly and annual reports produced by Frontex, for instance, are characterized by the higher levels of uncertainty, and this is clearly acknowledged in the dedicated sections on the quality of available data, since “the number of detections of illegal border-crossing and refusals of entry are both functions of the amount of effort spent detecting migrants and the actual flow of irregular migrants to the EU. Increased detections of illegal border crossing might be due to a real increase in the flow of irregular migrants or may in fact be an outcome of more resources made available to detect migrants” (Frontex Annual Report 2013).

On the other hand, and despite some limitations that still exist (Albertinelli et al. 2020), data on asylum provided by EASO/EUAA have become more reliable over time, especially since the launch in 2012 of the Early warning and Preparedness System (EPS), the involvement of UNCHR in data collection for those countries where the organisation is present, and the production of harmonised guidelines for refugee statistics. The expansion of the EUAA since 2016 might have also contributed significantly to improved forecasting. As mentioned before, the 2020 EU Blueprint for managing unforeseen migration, formalises some of the channels for providing warnings and other information for policymakers to help with preparedness. Even though it is still too early to assess the effectiveness of the mechanism provided by the Blueprint more comprehensively, the explicit acknowledgement of both migration uncertainty and of the need for formal, efficient channels of communication, with specified responsibilities of different actors, may ensure a more complete informational basis and realistic assessment of future migration for migration governance.

#### 4. How does uncertainty affect migration policy responses and responsiveness?

Migration policy decisions are made in a context of both known and unknown sources of uncertainty regarding future drivers and flows of migration. Information and knowledge about the future itself and about future migration-related developments are incomplete, and whether migration will develop in a desired or rather undesired direction from the point of view of the responsible decision-makers depends to a large extent on factors and circumstances that are ex ante unknown. In these situations, when they face high levels of uncertainty, political actors usually resort to decision heuristics (Vis 2019). For instance, imitation of past and comparable policy decisions, or emulation of reliable practices of other (international) actors are shortcuts taken where comprehensive ex ante evaluations and impact analyses are not available.

Migration policy interventions are based on information and prospects regarding the factors influencing future international migration processes, such as global and local economic development, political or social crises in various countries of origin, slowly but steadily progressing demographic or climatic developments, or sudden-onset developments and shocks that are difficult to forecast.

How do political actors make decisions regarding often far-reaching migration policy measures in an uncertain context that is characterised by incomplete information? Insights from behavioural sciences and the concept of 'bounded rationality' (Simon 1983) may provide us with some answers. In their seminal work, Daniel Kahneman and Amos Tversky (1979, 1992) developed their *prospect theory* in response to observation of some fundamental empirical anomalies that contradicted the predictions and implications of the dominant

expected utility theory (Neumann and von Morgenstern 1944). According to prospect theory, people generally dislike losses more than they favour gains. This insight, simple at first sight, implies that people are generally more willing to take higher risks in order to avoid losses than to achieve a corresponding gain. If this applies to human decisions in general, we should expect this to be also the case for political decisions.

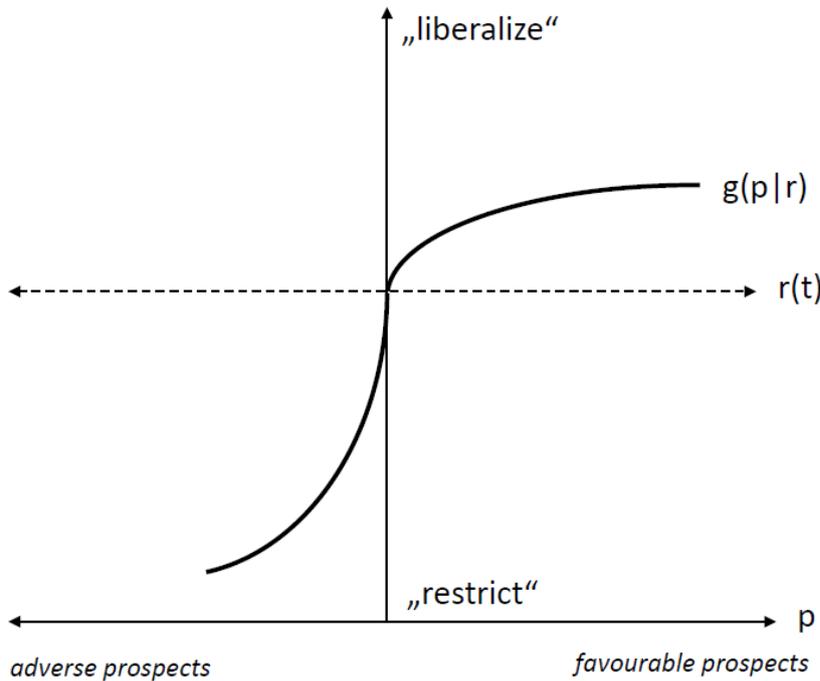
According to the prospect theory – and in contrast to reference-independent expected utility theory – (migration) policy actors with decision power may assess choices between alternative migration-related outcomes as either (relative) gains or losses, depending on the point of reference. Reference-independent behavioural models of absolute expected utility assume that a certain outcome does not depend on the status quo or any other reference point. According to prospect theory, however, decision makers would even reverse their preferences and risk attitudes depending on whether future developments are assessed as (politically) beneficial or detrimental. Accordingly, for example, an increase in *undocumented immigration* from 5 to 10 percent of total immigration would be (dis-)valued more strongly than a decrease in regular immigration from 95 to 90 percent of total immigration, although both developments would be effectively equivalent.

This *framing effect* implies that a political decision-maker who hopes to increase political approval by a reduction in irregular immigration is more likely to work and decide politically towards this development (e.g., by turning towards more restrictive measures on irregular immigration) if an objectively changing composition of the immigrant population is portrayed (and discursively framed!) negatively (more irregular migration) than if it was referenced with regard to regular immigration. According to expected utility theory, the way that information is formulated or communicated should have no influence on the (rational) evaluation of the information and thus on the decision itself. However, information, especially regarding future developments, if presented in such a way that it is perceived as either a potential gain or a loss by referring to a reference point rather than focusing on absolute change (Mercer 2005).

### **The migration governance function**

The three main features of prospect theory may be translated into a migration governance response function  $g$  (Figure 2). First, migration policymakers evaluate prospective migration outcomes  $p$  relative to (or, formally, conditional on) a reference point  $r_0$  which separates migration-related prospects into a domain of gains and a domain of losses. In the migration policy context, it has to be stressed that ‘gains’ and ‘losses’ are defined purely through the intended policy aims and can variably relate to increases or decreases in migration flows, depending on the current policy objectives. The interpretation of ‘positive’ and ‘negative’ needs also to be made with this caveat in mind.

**Figure 2:** Migration governance in the context of uncertain prospects



Source: Own elaboration, based on Kahnemann and Tversky (1979).

The properties of an S-shaped migration governance function can formally be expressed by  $p$  representing migration-related prospects, with the point of reference being potentially time-dependent,  $r_0 = r_0(t)$ . Formally, the governance response function has therefore the form  $g = g(p|r_0)$ , as it depends on prospects  $p$ , conditional on the reference point  $r_0$ .<sup>7</sup> The existence of a reference point is a crucial and widely accepted assumption, and it is usually the status quo, or another declared objective that determines whether future migration-related prospects are evaluated as positive (domain of *gains*) or negative (domain of *losses*). Secondly, diminishing sensitivity of the migration governance function implies that the farther a given (or anticipated) loss or gain from the reference point (e.g., the current level of migration), the smaller is its impact on policymakers' utility – in other words, that the changes in gains or losses lead to ever-smaller responses (Figure 2). Thirdly, political decision-makers tend to respond more strongly negatively to (anticipated) losses than they respond positively to (anticipated) equally sized gains. This observation is generally called *loss aversion* and is reflected by the steeper slope of the migration governance function in the domain of losses.

<sup>7</sup> Prospect function  $p$  is endogenous to the definition of a reference point, which frame migration-related outcomes as positive (desired) or negative (undesired). For instance, in 2000, the German Green Card that was introduced with the declared objective to recruit up to 20'000 (Indian) IT engineers sparked only little interest with several hundred visa applications. This way considered as a failure; it may have been framed and evaluated differently if the target number of visa takers was ex ante defined more modestly.

Another often-overlooked feature of Kahnemann and Tversky's prospect theory is the role of probability weighting, by which small probabilities of prospective events are usually overweighted, and large probabilities are underweighted. This implies that very unlikely but high-impact (or just highly-conspicuous and therefore given a lot of media and policy attention) future events or developments influence policy responses disproportionately compared to more likely developments.

These features of a migration governance function have the following implications:

- Policymakers assess migration futures not in absolute terms but in relation to a reference point, which is often **reference-dependent** on the status quo migration situation or another set policy objective (e.g., “net immigration below 100'000” as in the case of the UK). However, reference points themselves are not necessarily fixed or static, but may adjust over time.
- Policy makers treat future gains differently from losses. The migration governance function encodes losses (both direct losses in terms of unwanted migration outcomes, but also more indirect effects on political approval and support<sup>8</sup>) as more adverse than equal-sized gains are favoured. As for any other human decision maker, also for political actors ‘loom losses larger than gains’, which is generally termed as **loss aversion** (Samuelson and Zeckhauser 1988). It is increasing the complexity when political decision makers process migration-related information – and their subsequent decisions – regarding how the information is framed by information providers or by their own framing biases.
- A standard migration policy response in situations when governments face adverse migration-related prospects and hereby find themselves in the domain of political loss, is that policies become more restrictive, often first and sometimes only in political discourses (“tough language”), but regularly also in regulative practice, by changing laws and regulations towards more restrictive arrangements. According to prospect theory though, governments do not respond ‘symmetrically’ in contexts of gains or losses, respectively. Political reactions are usually stronger in the domain of losses than in situations of the ‘positive equivalent’; that is, changes towards more liberal arrangements are smaller in scale compared to those towards more restrictiveness in the context of adverse migration-related prospects. This is

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<sup>8</sup> Here, one recent example might be the UK migration after Brexit – the presumed goal of reducing net migration from the EU has been achieved, but it has been more than compensated by an increase in non-EU net migration, while causing labour shortages all across the economy (see, e.g., <https://www.bbc.co.uk/news/business-60039923>, accessed on 23 January 2023).

confirmed by an established **negativity bias**, by which policymakers place more weight on negatively framed information than on positively framed information.<sup>9</sup>

We posit that the **status quo bias** in migration governance is a stylised fact, which is manifested by a limited willingness of policymakers to adapt laws, regulations, and policies (unless for symbolic reasons!) in contexts of high uncertainty. This may have several reasons. Sometimes it may have to do with the relevance of **sunk costs** - referring to decisions that cannot be reversed (or only at very high economic or political-reputational costs), which can lead to a continuation of existing practices regardless of their effectiveness leading to path-dependent policy trajectories. In such situations, migration policymakers prefer the current state of affairs, thus resisting new regulations, criteria, procedures, technologies, or other attempts at reforms. In complex decision environments where multiple policy options are present, the default option of doing nothing, or doing a little ('symbolic politics'), is then dominant. In general, heuristics play an important and often unnoticed role in the decision making of political actors, which are often (mal-)perceived as acting and deciding on the basis of full information and unbounded and unbiased decision capacity. In fact, policymakers refer to heuristics when facing an information overload, or when information is of poor quality (reliability), or when uncertainty still prevails (Sullivan et al., 1993). **Availability** and **representativeness** are heuristics that policymakers may often use in such situations. For instance, migration policy makers may allocate resources and political action according to the representativeness of relevant stereotypes, such as deservingness, power, or migrant profiles. Alternatively, they may allocate resources and decide upon policy interventions according to the similarity of the case situation with recent and more memorable experiences. A related policymaking feature is an obvious **anchoring bias** that affects migration governance when the decision-making process has been disproportionately influenced by a past or salient event ("no more 2015 refugee crisis").

### **Illustrative case 1: How uncertainty in environment-induced migration affects policy**

Examining policy responses at the EU level regarding environment-induced migration, three main biases can be identified which reflect how the EU deals with uncertainty regarding this type of migration, namely status quo, anchoring and negativity bias.

While climate change as a global phenomenon is high on the European political agenda, with mitigation of greenhouse gas emissions and adaptation to its long-term detrimental implications considered necessary, future scenarios are still affected by high uncertainty. And migration itself is rarely considered a major consequence. For instance, there is only

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<sup>9</sup> Negativity bias is a well-established cognitive bias that occurs even when adverse events and positive events are of the same magnitude, meaning that negative events are felt more intensely.

one reference in the communication on the European Green Deal that mentions a link between climate change and migration. Moreover, the concept of environment-induced migrants as beneficiaries, who can rely on aid and support, is only, if at all, referred to in the context of EU citizens (Barwise and Linklater 2022). This demonstrates a **status quo bias** in the EU policy response in this area, indicated by a hesitant and inactive wait-and see attitude regarding environment-induced migration. This confirms the assumption that high uncertainties regarding likelihood and impact, policy responses or changes are limited. While in the EU New Pact on Migration and Asylum from 2020 it is stated that policies on climate change and migration should not be isolated, they are indeed as well treated separately (Scissa 2022). While the European Parliament speaks of “climate refugees”<sup>10</sup>, that is also often taken up by the media, this concept does not capture the reality, but rather adds to confusion and thus, uncertainty. First, the 1951/67 UN Refugee Convention does not include climate change as a reason for receiving protection and second, most environmental-induced migrants are internally displaced and not all are forced to move.

Overall, the EU started rather late and reluctantly in addressing environment-induced migration, forced or voluntarily, internally, or internationally (Kraler, Katsiaticas and Wagner 2020, Blocher 2015). By the end of 2019, for example, fewer than one in five countries had mentioned either migration, displacement, or planned relocation in the context of environmental or climate change in their Nationally Determined Contributions (NDCs) (Wright 2021). It has been suggested that “[t]he general ‘policy style’ with regard to environment-related migration is cautious. [...] policies suggested or adopted so far rather aim at promoting existing initiatives or re-framing existing measures (e.g., development policies) as also being relevant for addressing environment-related migration” (Anmer et al. 2014, p. 26). The hesitant policy response is possibly also explained by contestations about who is accountable and financially responsible for environmental degradation and its consequences (Anmer et al. 2014), and also as a consequence of the 2015 crisis experience. Although international policy responses, such as the Global Compact for Safe, Orderly, and Regular Migration (2018), have called on countries to address environment-induced migration and support those displaced, most initiatives are “neither legally binding nor sufficiently developed to support” environment-induced migrants (Podesta 2019).

Only very recently, in 2021, with the EU Strategy on Adaptation to Climate Change and the Concept for an Integrated Approach on Climate Change and Security, the need for supporting and providing resilience for environment-induced migration started being more widely addressed (European Commission 2022). However, it remains unclear how much

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<sup>10</sup> See, for example:

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698753/EPRS\\_BRI\(2021\)698753\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698753/EPRS_BRI(2021)698753_EN.pdf).

indeed will be put into practice, and to what extent the EU and its member states are able and willing to act substantively (Czaika and Münz 2022). Possibly, in practice, a **status quo bias** will remain, with a limited willingness to indeed implement the EU Strategy and Concept mentioned above. While in 2022 the EU holds the presidency of the Platform on Disaster and Displacement (PDD), successor of the Nansen initiative for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, the EU has so far tried to consider environment-induced migration mainly through external cooperation and development aid. However, many operations are still only short-term (European Commission 2022). Moreover, large uncertainty remains in regard of how effective the development assistance has indeed been to hinder the adverse effects of climate change. In addition, also development project can induce displacement and may create negative environmental impacts on its own (Special Rapporteur on the human rights of internally displaced persons 2022).

When there have been policy responses to environment-induced migration, they have been mainly restrictive, showing a negativity bias, often using a security lens. As Maas et al. (2021) points out: “In the face of uncertainty, organisations and bureaucrats cannot rely on standard procedures and tend to act restrictively – if they act at all”. Migration uncertainty in the context of environmental change can be (mis-)used as a rationale for justifying other political objectives, such as cutting down on immigration (Maas et al. 2021). Climate change has been repeatedly considered a “threat multiplier” and “driver for instability and conflict” (Blocher 2015, Council of the European Union 2022). The UN Security Council considered climate change and environment-induced migration as a threat multiplier and a security risk (Security Council Report 2021). The NATO Climate Change and Security Action Plan (2021) even warns that climate change and environment-induced migration could create “conditions that can be exploited by state and non-state actors that threaten or challenge the Alliance”. Environment-induced migration can therefore be instrumentalised to realise other political, social, or economic objectives (Hugh and Sikirsky 2022).

### **Illustrative case 2: The EU response in the context of uncertainty of the Syrian crisis**

The EU decision making processes from the beginning of the Arab Spring uprisings in 2011 until what became known as the 2015 ‘asylum crisis’ provides another interesting example on the implications of uncertainty of migration future on the EU migration policy and governance, as well as on European politics and society more broadly. First, as widely assumed in political science (Walker, Marchau, and Kwakkel 2013), decision makers dislike uncertainty during the policy making process and in the knowledge base. Policy outputs and preparatory documents rarely mention uncertainty, and this holds true also when referred sources (such as the Frontex risk assessments) account for higher degrees of unpredictability. In their discussion of the strategies to communicate direct uncertainty

about a fact, number or scientific hypothesis, Van der Bles et al. describe nine levels of alternative expressions, ranging from “a full explicit probability distribution” (cat. 1) – that suggests a highly precise magnitude of uncertainty – to “explicit denial that uncertainty exists” (cat. 9) (van der Bles et al. 2019). Most publicly available reports from Frontex, EASO/EUAA, EMN, Eurostat and UNHCR from 2011 to 2015 use expressions that belong to mid-level categories, such as rounded numbers, qualifying verbal statements, or lists of possibilities or scenarios. These magnitudes of uncertainty, however, find little to no space in policy outputs, publicly available debates such as the Justice and Home Affairs (JHA) ministerial meetings or the European Commission’s working documents, where the existence of uncertainty is either informally mentioned or not mentioned at all. The European Agenda for Migration of 2015, for instance, depicts a supposedly clear scenario where “with the summer arriving, the flow of people to frontline Member States will continue in the months to come (2015 European Agenda for Migration, p. 4)”. These sorts of statements rule out uncertainty and the possibility of undefined futures. In the case of the Syrian crisis, few exceptions exist and mostly refer to the outset of the upheavals when the EU was admittedly “taken by surprise” (European Commission 2011). In its 2011 Communication on Migration, for instance, the European Commission avows that “by its very nature, irregular immigration is a phenomenon which is difficult to quantify. However, certain indicators may provide guidance.” (European Commission, 2011b). The attempt to control uncertainty is important because, as suggested later on in the Communication: “weaknesses at some sections of the external border undermine confidence in the credibility of the Union’s ability to control access to its territory and undermine mutual trust. Citizens also need to feel reassured that external border controls are working properly” (ibid. pp.7). The absence of explicit mentions of uncertainty should not be taken as an indication that decision makers are not aware of it. On the contrary, the European Agenda for Migration, for instance, indirectly acknowledges the lack of stability of the migration trends, by reflecting on the institutional shortcomings of the EU’s migration system and arguing that “emergency measures have been necessary because the collective European policy on the matter has fallen short”. On a similar note, the 2012 Action Plan on Migratory pressure is presented as a “living document which is updated on a regular basis in order to be capable of responding to migratory pressures, which can change rapidly” (European Commission 2012, p. 3). To some extent, we can argue that the refugee crisis has shifted what Walker et al. call “the location of uncertainty” (ibid., p.224), from “uncertainty about external factors” to uncertainty about “the system response to the external factors or policy changes” – as was reflected in the adoption of the 2020 Blueprint, as mentioned before, which provided a significant step up in acknowledging uncertainty and attempting to shape appropriate responses to unpredictable events.

The analysis also suggests that, however rarely mentioned, epistemic uncertainty tends to

prevail in the EU narrative more than aleatory uncertainty. Incomplete information is associated with a lack of knowledge about migration flows that can be reduced and controlled, rather than to the intrinsic unpredictability of migration as a social phenomenon. This holds also true for the type of uncertainty communicated by the experts and knowledge providers described before. Accordingly, policy responses focus on establishing early warning mechanisms, enhancing preparedness plans and collaborations with countries of origin and transit to “provide a realistic picture of the likely success of migrants' journey (European Commission 2015, p. 5) and “develop an effective situational picture to feed into policymaking and response preparation at national and European levels (European Commission 2015, p. 11).

Eventually, a closer look at the EU responses to the events between 2011 and 2016 through the lens of uncertainty adds one plausible explanation to the status quo tendency argument put forward by many EU scholars both in the migration realm and beyond (Hadj Abdou and Pettrachin 2022; Guiraudon 2018; Trauner and Servent 2016). The high level of uncertainty – actual and perceived – of the first phase of the uprisings in North African countries, and of the war in Syria afterwards, led to what can be defined ‘accelerated fine-tuning’ of the EU toolbox to deal with migratory pressures. While the EU immediately intensified both its activity – at the level of the Council and the Commission – and the number of policy outputs produced – at a pace of three Communications or Action Plans on migration per year between 2011 and 2014 – the magnitude of changes was rather limited. Most of the provisions involved “continuing, stepping up or concluding” already existing activities (European Commission 2012) or outputs that were already in the EU pipeline.

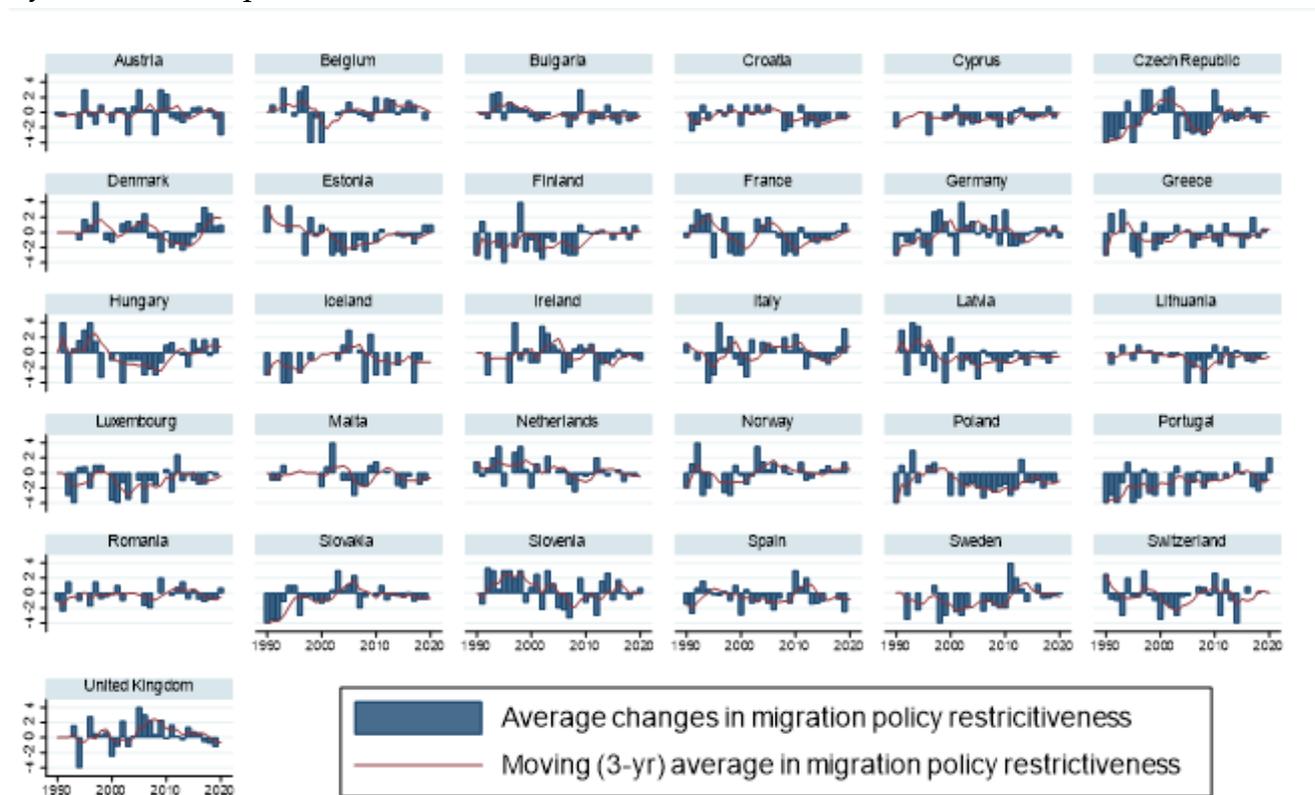
Conversely, 2015 marks a turning point both in how uncertainty is acknowledged by EU policy makers and in the relative magnitude of the response, including more IT systems, the interoperability regulation for better data collection and the significant expansion of EASO. As noted above, as the EU enters the full crisis mode – with the word *crisis* figuring for the first time as item of the agenda of literally all JHA council meetings – the expressions of uncertainty fade in policy documents, and the EU establishes more substantive tools, such as the launch of the EU Trust Fund for Africa or the EU-Turkey deal. While we agree with existing scholarship that 2015 was far from a watershed for the “core” of EU migration policies (Guiraudon 2018; Trauner and Servant 2016), the comparison with the previous years characterised by high levels of uncertainty is telling of a shift in policy makers’ behaviour.

### **Coda: Migration uncertainty, path dependency and the power of the Status Quo**

Exemplified by policy responses in the context of the aleatory ‘shock’ of the Syrian crisis as well as in the context of epistemic uncertainty regarding the long-term implications of

climate change on international and global migration, we identify some commonalities. European migration policy making is in general characterised by a mix of different migration policy measures, both towards more restrictive as well as more liberal arrangements, often even implemented at the same time. However, most policy changes are increasingly minor in scale, underlining the proposition of a dynamic status quo. We can observe a fluctuation around a certain ‘state of policy’ without a very clear trend towards more restrictive or more liberal migration governance regimes (Figure 3). Over the past three decades, European migration governance has been to a large extent a trial-and-error policymaking, including some ‘symbolic’ policymaking for the sake of ‘doing something’.

**Figure 3:** European migration policymaking under uncertainty: fluctuations around a dynamic status quo



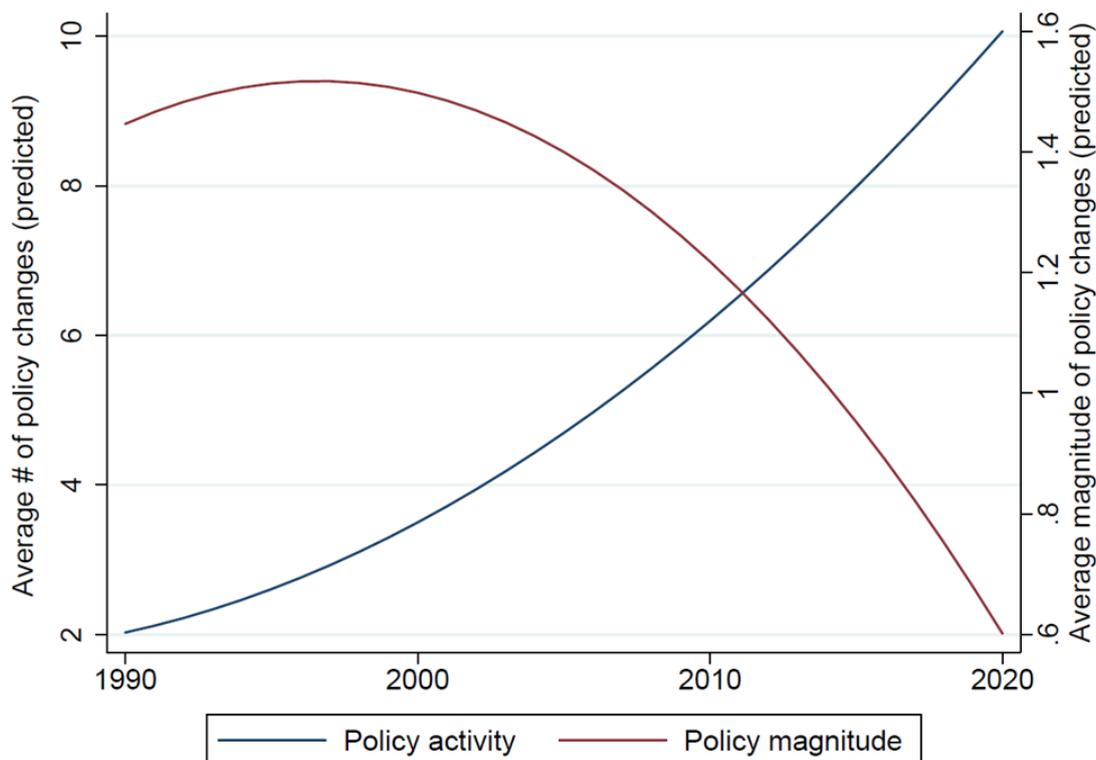
Source: own elaboration, based on DEMIG-QuantMig migration policy database

Note: This figure is based on Czaika et al. (2021) who have identified for 31 European countries in the period 1990-2020 about 2800 migration policy changes towards more liberal (less restrictive) policy arrangements together with and about 2000 policy changes towards more restrictive arrangements across the four policy areas of border enforcement, admission, integration, and return.

The fluctuation of European migration governance around a ‘dynamic’ status quo, or rather, a *steady state*, is further indicated by the acceleration of policy activity (increasing frequency in policy changes) over the past three decades while the magnitude of policy change was continuously decreasing over the past two to three decades (Figure 4). These trends can be epitomized as an ‘accelerating fine-tuning’ of European migration governance in the context

of growing ‘politicisation’ and ‘complexification’ of migration and migration policymaking, with the consequence that policymakers want to stay in the ‘safe haven’ avoiding major policy reforms or systemic changes that may be at risk of failure given the increasing number and frequency of political, economic and societal crises, or at least the perceptions thereof.

**Figure 4:** European migration policymaking under uncertainty: ‘accelerated fine-tuning’



Source: own elaboration, based on DEMIG-QuantMig migration policy database

Note: Policy activity is measured by the average number of migration policy changes per across 31 European countries (EU plus three and the UK). Policy magnitude is the average size of all ~5000 migration policy changes identified in the DEMIG-QuantMig migration policy database. The size of a policy change is measured on a 0-4 scale (cf. to methodology in Czaika et al. 2021).

In times of crises and high uncertainty about the near and far future, it is politically ‘bounded rational’ to respond just as much needed to appear politically and publicly ‘in control’. Any major policy change that would ‘break the path’ for the sake of a new migration governance regime, or at least, some major policy innovations would not be fit for purpose in the context of uncertain development of major migration drivers on the one hand, and government responses of other EU and non-EU states. The status quo is therefore an important reference point by which path-dependent policymaking trajectories around the status quo bear the lowest risk of failure. Navigating uncertainty by inaction rather than action is in line with a so-called ‘regret aversion bias’ by which political actors rather try to avoid anticipated negative outcomes that result from action than from inaction. To that end,

despite the really encouraging example of a swift action to offer temporary protection across the EU for people from the Ukraine following the Russian invasion in February 2022, whether the 2020 EU Blueprint on migration preparedness will lead to long-term and durable changes in attitudes and increase in responsiveness, also for crises of smaller, yet still consequential magnitudes, remains to be seen.

## 5. Conclusion: Migration governance as cause and consequence of uncertainty

We have argued so far that migration governance is a recipient of migration-related uncertainty by which policymakers must deal and cope with epistemic and aleatory uncertainty, stemming from knowable and unknowable developments in future drivers and flows of migration. Yet migration governance is also a producer of uncertainty, often due to unknown responses and adaptations to changing drivers and flows, but also due to other factors that are often not directly related to migration drivers or flows. For instance, elections leading to changes in governments and shifts in policy priorities, incidences of high public and media attention such as acts against or committed by migrants, such as the burning of refugee camps in Eastern Germany in the early 1990s or more recently in the notorious Moria camp on the Greek island of Lesbos.

In addition, unexpected policy changes at the European level, with implications for national policies, such as the EU-Turkey deal, new Schengen visa regulations for certain third country nationals, or the unexpected implementation of the Temporary Protection Directive 2001/55/EC, are examples of policy shifts with significant implications on migration drivers and flows. At the same time, it can be argued that scant availability of legal migration routes additionally exacerbates the uncertainty related to searching for alternative options and channels for migrating, sometimes with tragic consequences.

Our review indicates that while over past decades all European Union member states have developed a sophisticated migration governance system or regime with hundreds of specific laws, regulations, administrative directives and other rules, major reforms in migration governance have becoming rare; policy changes are becoming smaller in scale but more frequent (cf. Figure 4). The accelerating fine-tuning of migration policy changes creates a mixture of governance uncertainty that entails a significant amount of institutional 'noise', i.e., some unpredictable variability in migration governance, exacerbating the uncertainty for decision-making migrants even further.

This variability, and thus, uncertainty, in migration governance interlinks with the uncertainty that migration governance is aiming to tackle regarding certain migration driver-flow combinations. The uncertainty of future migration about the volume, composition, direction, and dynamic, and the uncertainty of how migration governance is both responding to and reinforcing uncertain migration futures create a complex uncertainty-governance nexus that requires further exploration.

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This report has only scratched the surface in disentangling some key elements of this nexus by highlighting *who* assesses and communicates *what* kind of migration-related uncertainty, and *to what effect*. More empirical investigation, in particular in-depth case studies, are needed to explore how these three elements are possibly interlinked, for instance in such a way that some actors (*who*) may only communicate incomplete, biased, and selective information (*what*) with certain implications for and impacts on policymakers and their decision-making.

In addition, the methodological framework proposed by van der Bles et al. (2019) included several other questions, such as *in what form* uncertainty is communicated, and *to whom*, which may be important in the context of studying migration policy developments. Thus, while the current report does not aspire to offering definite answers or recommendations, we think that the presented argumentation and analysis, even if by necessity fragmented, warrants further attention in the migration policy scholarship.

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